Breakdown of Literature Review

Summarize

Criticize

Highlight Gaps

Compare and Contrast

Synthesize

Descriptive vs Analytical Review

Descriptive	**Analytical**
Summarizes what other people have found without saying what these findings mean for your investigation.	Synthesizes the work and succinctly passes judgement on the relative merits of research conducted in your field.
Usually a chronological list of who discovered what, and when.	Reveals limitations or recognizes the possibility of taking research further, allowing you to formulate and justify your aims for your investigation.
"Green (1975) discovered..."; "In 1978, Black conducted experiments and discovered that..."; "Later Brown (1980) illustrated this in ...";	There seems to be an agreement on x (see Brown 1980, Black 1978, Green 1975). However, Green (1975) sees x as a consequence of y, while Black (1978) puts x and y as ... While Green's work has some limitations since.., its main value lies in ...

Definition

According to the APA(2001, 7):

> *"Review articles, including meta-analyses, are critical evaluations of material that has already been published. By organizing, integrating, and evaluating previously published material, the author of a review article considers the progress of current research toward clarifying a problem."*

Functions of Review Paper

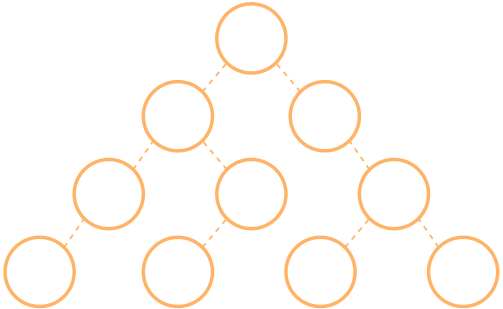
- Summarizes literature
- Organizes literature
- Evaluates literature
- Synthesizes literature

- Identifies patterns and trends in literature
- Shows relationship between different studies
- Identifies contradictions, gaps, and inconsistencies
- Resolves conflicts amongst seemingly contradictory previous studies

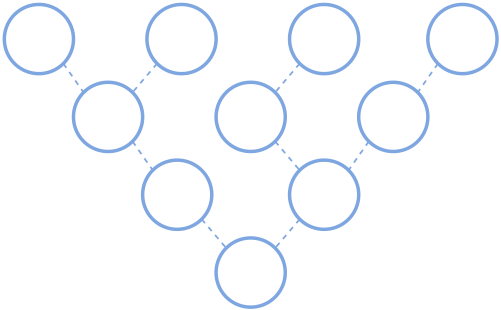
- Finds new ways to interpret prior research
- Provides new approaches to stimulate further research
- Recommends new research areas

Analysis vs Synthesis

Analysis



Synthesis

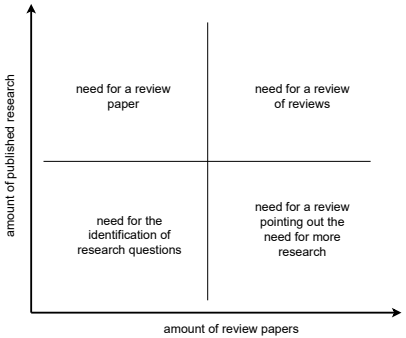


Steps in Writing a Review Paper

- Choose a topic
- Choose type of review and target journal(s)
- Read with purpose and take notes
- Brainstorm: put all ideas on a sheet of paper
- Prepare an outline
- Present the outline orally and get feedback
- Prepare draft
- Present each section of manuscript and get feedback
- Revise the draft
- Get it reviewed by others
- Revise, revise, revise

Choosing a Topic

- Interesting to you
- Within your expertise
- Important aspect of the field
- Well-defined issue but not too specific
- Shorter review $\rightarrow$ narrower topic
- Longer review $\rightarrow$ topic that is wide enough and enough articles are available to discuss
- Focused but relevant to broader audience $\rightarrow$ Discuss wider implications of reviewed topic for other disciplines



Choosing a Topic

If a few review papers already exist, you can still write one

- Highlight in your review paper $\rightarrow$ **approaches**, **limitations**, and conclusions of past review papers
- Find a **new angle** not covered adequately in past review papers
- Incorporate **new material** that accumulated after previous review papers were published

Ranges of Literature to Study

- Background materials **broadly relevant** to topic
- Studies addressing issues **closely related** to your topic
- Literature **directly related** to topic
- Start with MOST **RECENT** and **work BACKWARDS** to oldest

Remember your purpose:

- Read with purpose
- Write with purpose

Search and Re-search the Literature

- **Keep track** of search items you use
- Use **key descriptors** to record
- Use a **paper management system**
- Not just research papers, but also seek **previous review** papers
- **Take notes as you read** → Decide on format: Word Processor or Excel Spreadsheet
  - Be **selective** while reading → may not need to read every paper from start to finish
  - Pay **attention** to **discussion** section → summarize results and contextualize them
  - While reading, see "**big picture**" → Should provide an overview of the state of research
  - Find information **relevant** to you, note it, and move on
  - Use **quotation marks** if provisionally **copying** verbatim from literature → Then reformulate such quotes in your own language
  - **Note** down **references** already at this stage in order to avoid misattributions

Points to Consider When Reviewing a Literature

- Provenance

  Author's **credential**? Author's arguments supported by evidence (e.g. primary historical material, case studies, narratives, statistics, recent scientific findings)?

- Objectivity → Unbiased

  Author's perspective **even-handed** or prejudicial? Is contrary data considered or is certain pertinent information ignored to prove the author's point?

- Persuasiveness

  Which of the author's theses are most/least **convincing**?

- Value

  Author's arguments and conclusions convincing? Does the work ultimately **contribute** in any significant way to an understanding of the subject?

Evaluate Strength and Weakness of Each Paper

- What is **new**, **different**, or **controversial**?
- What **evidence** is **lacking**, inconclusive, contradicting, or too limited?
- What **research designs** or **methods** seem **unsatisfactory**?

Read critically

- Research aims of the paper?
- Is research aim achieved? If so, how?
- Any problems with methodology?
- Was it a strong or weak research design/model?
- What can we take from it?
- What needs to be avoided?
- What should be done differently?

Key Aspects of Critical Reading

- Identify **evidence** to back-up AND challenge key points
- Detect **inconsistencies and mistakes** in authors' reasoning
- Detect **bias**, premature conclusions, lacking evidence
- Distinguish between **fact** and **opinion**
- Evaluate **conflicting** opinions/research
- Suggest **new** or **different** solutions
- Construct your **own arguments** and **opinions**

Structure of a Review Paper

- Introduction

  An **overview** of the **topic** under consideration, along with the **objectives** of the literature review

- Main body

  Critical analysis, evaluation of topically relevant research/data; Break into sub-headings

- Conclusion

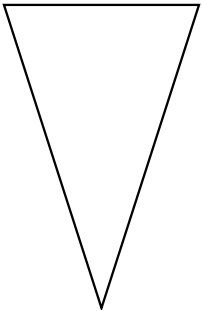
  Summarize the **key points** from your review

Abstract

- Descriptive
- Identifies the purpose of the paper
- Approach the reviewer has taken
- Describes the major areas to be covered in the paper

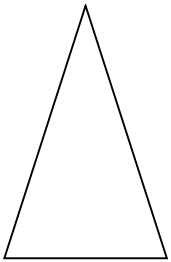
Introductions

- **Introduce** the topic
- Provide some **background** to the topic
- Demonstrate **importance** or need for the review
- **Motivation**/rationale for addressing this topic
- Indicate **scope** of literature review
- Clearly define **exactly what** this article will **discuss**
- Provide an **overview** of the article



Conclusions

- Briefly **restate** the **rationale** for your review and the purpose of the article
- **Summarize** the **main findings** of your review
- Provide **closure**
- **Implications** for future research $\rightarrow$ where research in this field should go from here



Main Body

Structure of Main body can be prepared by brainstorming and concept map

- Brainstorming Phase
- Organizing Phase
- Layout Phase
- Linking Phase
- Finalizing the Concept Map

Main Body

Structure of Main body can be prepared by brainstorming and concept map

- Brainstorming Phase
  - Identify facts, terms, and ideas associated with the topic
  - Write them on small notes, one per note, in very brief form
  - Write down everything $\rightarrow$ Do not worry about redundancy, relative importance, or relationships at this point
  - Generate largest possible list you can
- Organizing Phase
- Layout Phase
- Linking Phase
- Finalizing the Concept Map

Main Body

Structure of Main body can be prepared by brainstorming and concept map

- Brainstorming Phase
- Organizing Phase
  - Spread out your notes on flat surface $\rightarrow$ to read all easily and together
  - Create groups and sub-groups of related items
  - Group items to emphasize hierarchies
  - Identify terms that represent those higher categories
  - Feel free to rearrange items and introduce new items that you omitted initially
- Layout Phase
- Linking Phase
- Finalizing the Concept Map

Main Body

Structure of Main body can be prepared by brainstorming and concept map

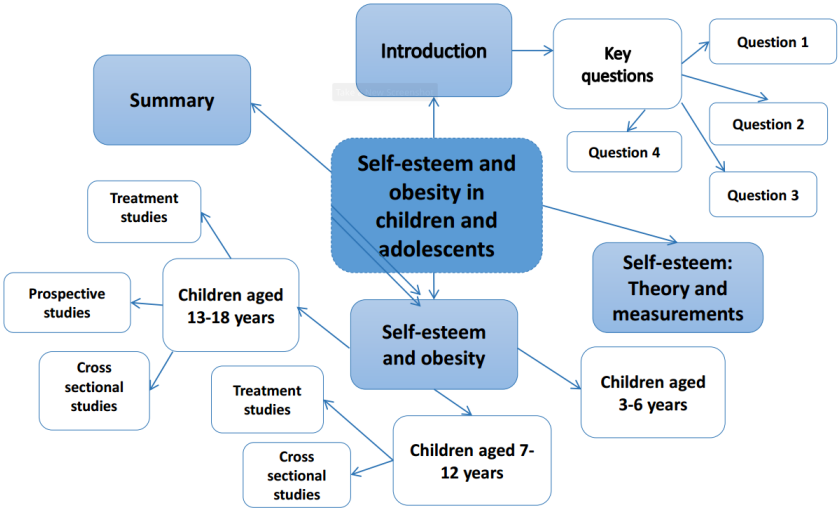
- Brainstorming Phase
- Organizing Phase
- Layout Phase
  - On large sheet of paper $\rightarrow$ arrange to best represents your collective understanding of interrelationships and connections among groupings
  - Feel free to rearrange things at any time during this phase
  - Within sub-grouping, place closely related items near to each other
- Linking Phase
- Finalizing the Concept Map

Main Body

Structure of Main body can be prepared by brainstorming and concept map

- Brainstorming Phase
- Organizing Phase
- Layout Phase
- Linking Phase
  - Use lines with arrows to connect and show relationship between connected items
  - Write a word/short phrase by each arrow to specify relationship $\rightarrow$ Many arrows can originate or terminate on particularly important concepts
- Finalizing the Concept Map

Main Body


Introduction
Key questions
Question 1
Question 2
Question 3
Question 4
Summary
Self-esteem and obesity in children and adolescents
Treatment studies
Prospective studies
Children aged 13-18 years
Cross sectional studies
Self-esteem: Theory and measurements
Self-esteem and obesity
Children aged 3-6 years
Treatment studies
Cross sectional studies
Children aged 7-12 years

Outline

Prepare an outline before you start writing

- Helps organize your thoughts about your review
- Bulleted list of topics
- Order in logical sequence and hierarchy
- Partition topics into subcategories
- Identify gaps
- Eliminate unnecessary content

Outline

	INTRO 10% of the word count	Go from the broad to the specific. Introduce the general topic, why it is an important area, then state what you will specifically do to investigate it further.
Main Body	**Section 1** (First theme)	Sub-point 1 (First sub-theme) Sub-point 2 (Second sub-theme) Sub-point 3 (Third sub-theme)
	Section 2 (Second theme)	Sub-point 1 Sub-point 2 Sub-point 3
	Section 3 (Third theme)	Sub-point 1 Sub-point 2 Sub-point 3
	CONCLUSION 10% of the word count	Go from the specific to the broad. State the conclusions you can draw from the points you've made in the essay, and connect this learning to the general topic. End by posing a question for future research in the field.

Utilizing Graphics

- Prepare figures, tables, and verbal descriptions of data
- Order logically and hierarchically
- Utilize charts or figures to depict key points
- Combine results from different authors $\rightarrow$ create your own figures and tables
- For a historical perspective, you may include a timeline that depicts significant discoveries in the field