

UUMCOB Postgraduate Research Talk Series 3/2024

The Art of Writing and Structuring the Literature Review

Prof. Dr. Roslan Abdul Hakim
OYAGSB/SEFB

























OUTLINE OF PRESENTATION

- Introduction
- What is literature review?
- Why literature review is important?
- How to write the literature review?
- Closing Remarks

























WHAT IS THE UNDERLYING GOAL OF A RESEARCH?

- To generate or produce new ideas
- To enlighten; to clarify
- To provide an informed debate
- To find the "truth"
- Research Methodology consists of two aspects
 - the abstract and the empirical.

























- Research Methodology consists of two aspects
 the abstract and the empirical.
- Literature review (i) description on the subject matter of the topic, (ii) theory, and (iii) past empirical studies.

























ON SCIENTIFIC INQUIRY - WHERE DO WE DRAW THE LINE BETWEEN SCIENTIFIC RESEARCH AND PLAIN COMMONSENSE?

Scientific knowledge/inquiry – should equip people with the ability to look at the most mundane phenomena and identify problems.

The important thing it seems to be the ability to abstract the crucial details from the mass; know what is important and what is not, what should be included and what should be excluded.

A good researcher, obtain and process (browse?) the data analytically.

























WHAT IS CREATIVITY AND WHO GETS IT?

DEFINITION: Creativity is the ability to think about a task or a problem in a new or different way, or the ability to use the imagination to generate new ideas. Creativity enables you to solve complex problems or find interesting ways to approach tasks. If you are creative, you look at things from a unique perspective.

DEFINITION: creativity in science is the ability to produce something **novel** and valuable. The most difficult part. Needs imagination and perhaps luck.

Who decide the novelty and value? As judged by experts in the field. (Changes by time and field?)

























ARTISTIC RESEARCH TOOLS FOR SCIENTIFIC MINDS

- Ladd, George W. (1979). Artistic Research Tools for Scientific Minds. American Journal of Agricultural Economics, 61(1), 1–11.
- doi:10.2307/1239494

Articles

Artistic Research Tools for Scientific Minds

George W. Ladd

The topics of this paper are frequently-used, versatile research tools: subconscious mental processes (imagination and intuition), chance (including serendipity) and writing. Conditions that may stimulate subconscious mental processes to generate useful ideas are discussed. They are doubt, venturesome attitude, diversity, thorough preparation, tension, temporary abandonment, relaxation, writing, exchange with colleagues, freedom from distraction, and deadlines. Various forms of chance and their roles in research and problem solving are discussed. It is argued that writing is not only a research-reporting tool but is also valuable in performing research.

Key words: chance, imagination, intuition, serendipity, writing.

Two criteria that we teachers apply in selecting topics that we want students to learn are (a) frequency of application and (b) versatility. But, in violation of our own criteria, we pay little attention in our courses to the

tools that they were taught as students, and their careers are affected by luck.

On the criteria of versatility, consider. Linear programming is one of the most versatile tools available to economists. But there

























ARTISTIC RESEARCH TOOLS FOR SCIENTIFIC MINDS

- Subconscious mental process. Imagination and intuition. How to stimulate subconscious mental process?
 - Doubt
 - Venturesome attitude
 - Tension
 - Thorough preparation
 - Writing
 - Temporary abandonment
 - Exchange with colleagues
 - Deadline
- Chance
- Writing

















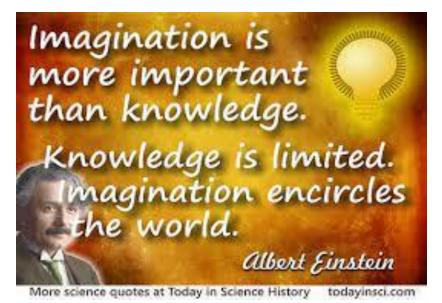


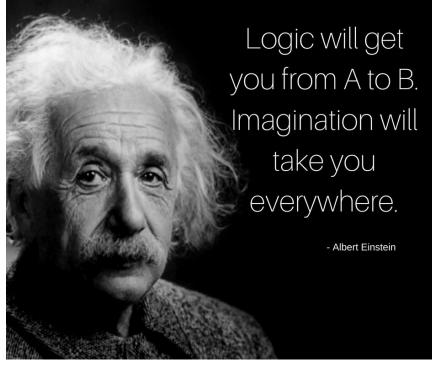






SCIENCE AND IMAGINATION





















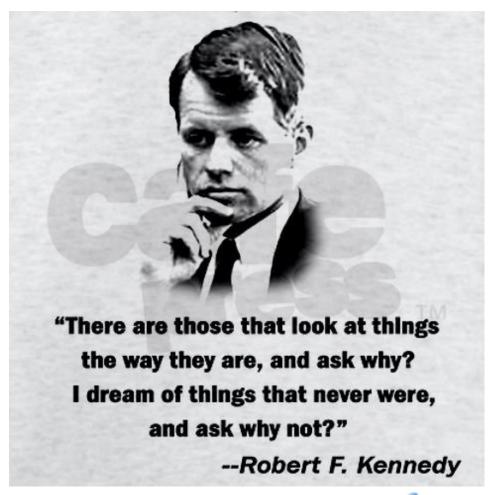








SCIENCE AND IMAGINATION



















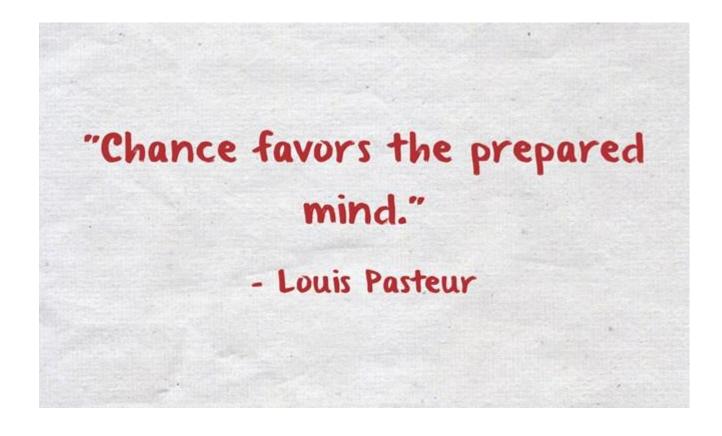








LUCK CAN BE INFLUENCED OR CONTROLLED?



















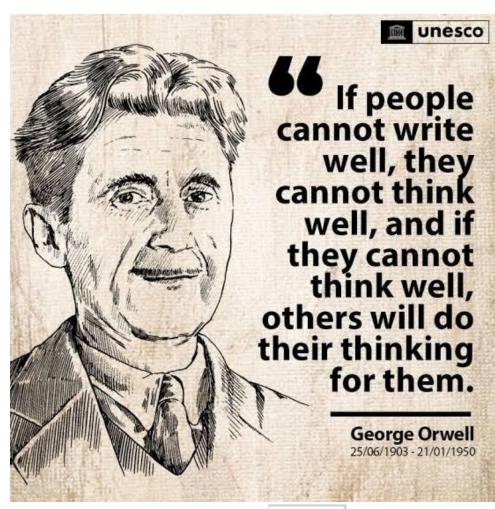








THINKING AND WRITING

















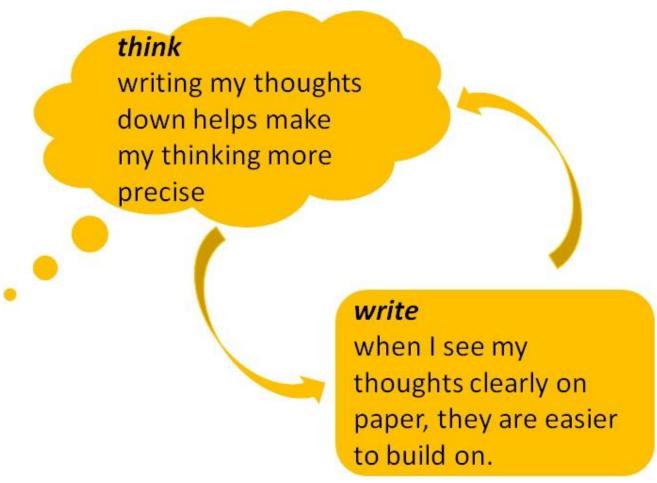


























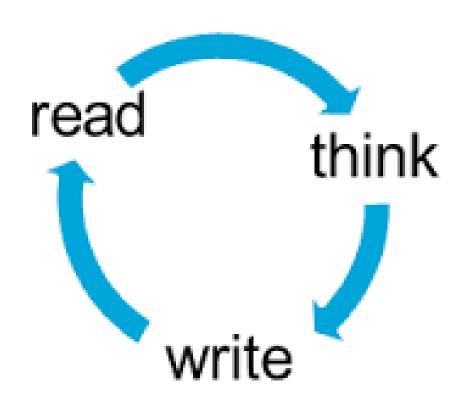




































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www.ithinkwell.com.au















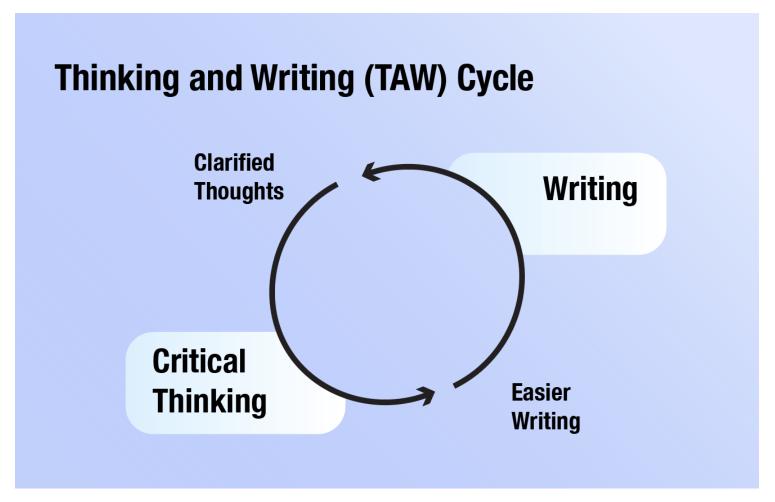








































"Have a clear, specific idea of what you want to achieve from your goal."

SETTING GOALS IS THE FIRST STEP IN TURNING THE INVISIBLE INTO THE VISIBLE.

-Tony Robbins

















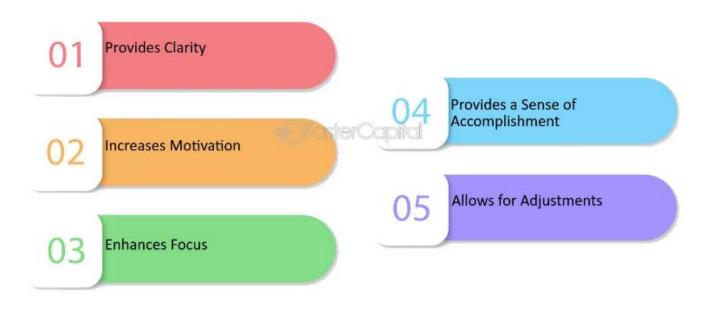








The Importance of Setting Clear Goals

















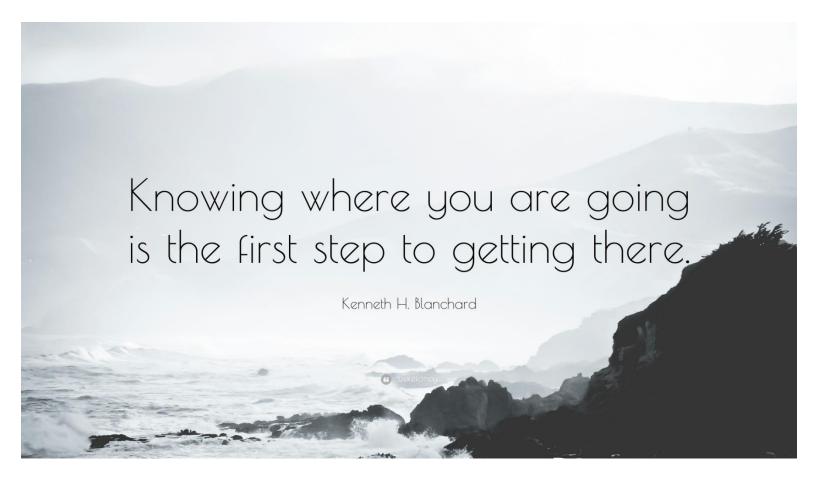


























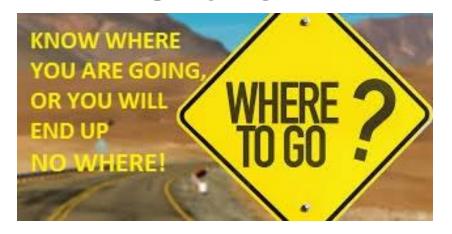


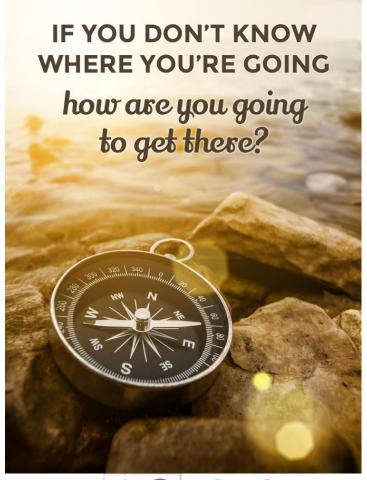


























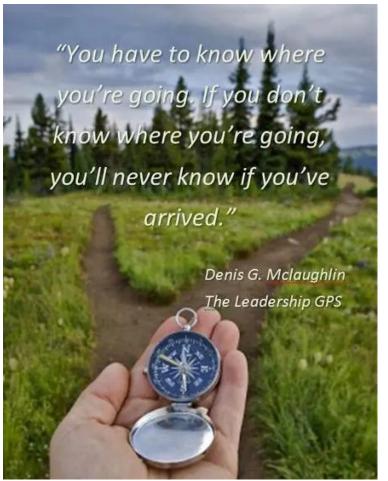






























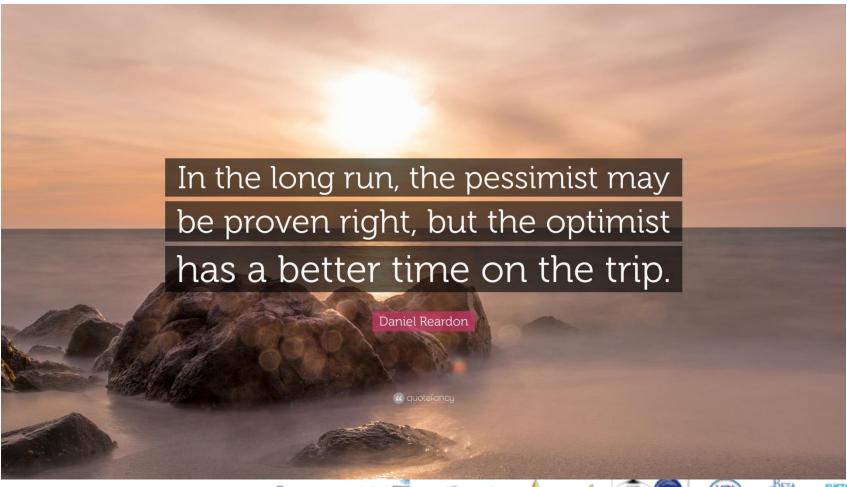








OPTIMISM AS IMPORTANT TRAIT



















































A Literature Review IS...

- a selective, integrated analysis and synthesis of what has been researched and published on a particular topic
- a process, typically starting from selecting a topic to review and concluding with writing a manuscript to report the published works on the topic
- an iterative process: you may have to keep coming back to previous stage(s) to refine your topic, modify the search statements, and/or revise a working thesis, etc.

























A Good Literature Review IS NOT...

- a mere summary of what you have read on a topic
- a summary of everything that is reported on a topic
- an annotated bibliography

























...BUT IS

- a critical summary of relevant and selective literature on the topic
- written in clear language
- a piece of research on its own

























...AND DOES

- situate and focus your research in context
- use credible and most relevant sources
- add value to the existing knowledge on the topic

























Definition of a Literature Review

A literature review

- surveys scholarly articles, books and other sources (e.g. dissertations, conference proceedings) relevant to a particular issue, area of research, or theory.
- provides a short description and critical evaluation of work critical to the topic.
- offers an overview of significant literature published on a topic.

(Lyons, 2005)

























Definition

A literature review surveys prior research published in books, scholarly articles, and any other sources relevant to a particular issue, area of research, or theory, and by so doing, provides a description, summary, and critical evaluation of these works in relation to the research problem being investigated. Literature reviews are designed to provide an overview of sources you have used in researching a particular topic and to demonstrate to your readers how your research fits within existing scholarship about the topic.

























- "Review" means an overview summarizing major parts and bringing them together to build a picture of a topic.
- "The Literature" means the major writings especially scholarly writings - on the topic. (i.e what is written on the topic by others). "It is the body of scholarly, professional information that is used by professionals and scholars working on that topic area"
- "The literature" may include:
 - journal articles
 - books
 - Information from the net
 - published essays
 - government reports, and so on.

























• "A Literature Review Surveys scholarly articles, books, and other sources (e.g., dissertations, conference proceedings) relevant to a topic for a thesis or dissertation. Its purpose is to demonstrate that the writer has insightfully and critically surveyed relevant literature on his or her topic in order to convince an intended audience that the topic is worth addressing"

~from Writing the Successful Thesis and Dissertation: Entering the Discussion

By Irene L. Clark

























- The aim of a literature review is to show your reader that you have read, and have a good grasp of, the main published work concerning a particular topic or question.
- For Dissertation or thesis, the review will be guided by research objectives or by issues or thesis you are arguing, and will provide the framework for your further work.

























- Your review should not be simply a description of what others have published in the form of a set of summaries,
- but should take the form a critical discussion

























- Showing insight and an awareness of differing arguments
- Theories and approaches
- It should be a synthesis and analysis of the relevant published work,
- linked at all times to your own purpose and rationale.























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- The literature review should:
 - Compare and contrast different authors' views on an issue
 - Group authors who draw similar conclusions
 - Criticize aspects of methodology
 - Note areas in which authors are in disagreement























- Highlight exemplary studies
- Highlight gaps in research
- Show how your study relates to previous studies
- Show how your study relates to the literature in general
- Conclude by summarizing what the literature says



WHAT IS A LITERATURE REVIEW?

- A literature review is a compilation, classification, and evaluation of what other researchers have written on a particular topic. A literature review normally forms part of a research thesis but it can also stand alone as a self-contained review of writings on a subject. In either case, its purpose is to:
 - Place each work in the context of its contribution to the subject under review;
 - Describe the relationship of each work to the others under consideration;
 - Identify new ways to interpret, and shed light on any gaps in, previous research;
 - Resolve conflicts amongst seemingly contradictory previous studies;
 - Identify areas of prior scholarship to prevent duplication of effort;
 - Point the way forward for further research;
 - Place an original piece of research in the context of existing literature.
- You can think of the above points as goals to be achieved in the process of writing a literature review. Before you can achieve any of these goals, however, you need to narrow down the possible subject areas into a relatively well-defined problem/issue, research question, or research objective.

























WHY LITERATURE REVIEW IS IMPORTANT?























IMPORTANCE OF A GOOD LITERATURE REVIEW

 A literature review may consist of simply a summary of key sources, but in the social sciences, 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, but a synthesis is a re-organization, or a reshuffling, of that information in a way that informs how you are planning to investigate a research problem.























CONDUCTING A LITERATURE REVIEW CAN HAVE SEVERAL BENEFITS:

- It can give you a general overview of a body of research with which you are not familiar.
- It can reveal what has already been done well, so that you do not waste time "reinventing the wheel."
- It can give you new ideas you can use in your own research.
- It can help you determine where there are problems or flaws in existing research.
- It can enable you to place your research in a larger context, so that you can show what new conclusions might result from your research.

























PURPOSE OF LITERATURE REVIEW

- The purpose of a literature review is to show "that the writer has studied existing work in the field with insight" (Haywood and Wragg, 1982).
- The purposes of the review are:
 - To define and limit the problem you are working on
 - To place your study in an historical perspective
 - To avoid unnecessary duplication
 - To evaluate promising research methods
 - To relate your findings to previous knowledge and suggest further research.



























WHY SHOULD YOU CARE FOR THE LITERATURE REVIEW?

- Show your knowledge of the topic
- Help identify the gap in research
 (justification); explain why you carry out the
 research; determine the research is
 worthwhile doing, worthwhile investigating
- Basis for methodology; guide you to determine what method is appropriate
- Basis for theoretical or conceptual model

























WHY DO LITERATURE REVIEW?

- To identify gaps in the research area
- To avoid inventing the wheel
- To continue from what others have completed.
- To know other people working in the field
- To measure the depth of knowledge of the subject.

























AIM OF THE LITERATURE REVIEW

- To show the reader (your supervisor, examiner) that you have read, and have a good grasp of, the main published work concerning a particular topic or question in your field (guided by your research objective or by the issue or thesis you are arguing and will provide the framework for your further work).
- To present to the reader a critical discussion, showing insight and an awareness of differing arguments, theories and approaches.
- It is synthesis and analysis of the relevant published work, linked at all times to your own purpose and rationale.

























WHY WRITE A LITERATURE REVIEW?

- Literature reviews provides a guide to a particular topic.
- Provide a solid background for the research investigation.
- Gives an overview and acts as a stepping stone.
- Places the planned study in an historical perspective.
- Helps to keep up to date with what is current in the field.
- Helps avoid unnecessary duplication of research...
- Emphasizes the credibility of the writer in his or her field.
- Helps in suggesting research in a specific previously unexplored direction.
- (Comprehensive knowledge of the literature of the field is essential to most research)

























WHY ARE LITERATURE REVIEWS NECESSARY?

- They are necessary for several reasons.
 - They are an essential part of the research process.
 - They give an overview of a topic's theoretical background.
 - Researchers use literature reviews to identify gaps in existing knowledge and to set the context for their research studies.
 - Students can be asked to complete a literature review as part of their course to help them understand a topic more deeply.
 - Writing a literature review can enable a student to demonstrate what they have learned about a topic and develop their own connecting ideas within that topic further.

























THE LITERATURE REVIEW SHOULD:

- Compare and contrast different authors' views on the topic of research
- Groups those authors who have drawn similar conclusions
- Be Critical of the methodology aspects
- Points out areas of disagreement between authors
- Highlight exemplary studies
- Highlight gaps in research
- Shows how the planned study relates to previous studies
- Shows how the planned study relates to the literature in general
- Concludes by summarizing what the literature says.

(Caulley (1992) of La Trobe University)























IMPORTANCE OF A GOOD LITERATURE REVIEW

- The analytical features of a literature review might:
 - Give a new interpretation of old material or combine new with old interpretations,
 - Trace the intellectual progression of the field, including major debates,
 - Depending on the situation, evaluate the sources and advise the reader on the most pertinent or relevant research, or
 - Usually in the conclusion of a literature review, identify where gaps exist in how a problem has been researched to date.

























THE PURPOSE OF A LITERATURE REVIEW IS TO:

- Place each work in the context of its contribution to understanding the research problem being studied.
- Describe the relationship of each work to the others under consideration.
- Identify new ways to interpret prior research.
- Reveal any gaps that exist in the literature.
- Resolve conflicts amongst seemingly contradictory previous studies.
- Identify areas of prior scholarship to prevent duplication of effort.
- Point the way in fulfilling a need for additional research.
- Locate your own research within the context of existing literature [very important].























WHAT MAKES A GOOD LITERATURE REVIEW?

- A good literature review:
 - clearly delimits the subject matter to be reviewed
 - covers all important relevant literature
 - is up-to-date
 - provides an insightful analysis of the ideas and conclusions in the literature
 - points out similarities and differences, strengths and weaknesses in the literature
 - identifies gaps in the literature for future research
 - identifies the context for which the literature is important.

























THE LITERATURE REVIEW

In your literature review, you should:

- clarify your understanding of the field
- explain the rationale for your research
- place your research within a broader context
- evaluate the results of previous research
- define key concepts and ideas
- identify research in related areas that are generalisable or transferable to your topic
- identify relevant methodological issues.

























THE LITERATURE REVIEW

- A literature review ensures that you are at least familiar with the body of research in your field before starting your own investigations.
- Writing a literature review also provides practice in critical thinking. Once you have applied critical thinking skills to the findings of past researchers, you are in a better position to apply these same skills to your own work.

























HOW TO WRITE THE LITERATURE REVIEW?

























- What are the 3 parts of literature review?
- Just like most academic papers, literature reviews also must contain at least three basic elements: an introduction or background information section; the body of the review containing the discussion of sources; and, finally, a conclusion and/or recommendations section to end the paper.

























FEATURES OF A LITERATURE REVIEW

Section	Purpose
Introduction	Provides overall context Mentions a range of topics Provides signposting Orientates the reader Introduces the need to read
Body	A series of different paragraphs, each dealing with an individual topic Leads us logically to the conclusion Follows a logical structure for the reader
Conclusion	Summarises the main points made in the Literature Review Provides the writer's own views Leads to the writer's own research

























WHAT IS THE STRUCTURE OF A LITERATURE REVIEW?

- In writing a literature review you need to demonstrate your intellectual ability to recognize relevant information and to synthesize and evaluate it according to the tentative guiding research question/thesis statement you have developed. Your reader wants to know: a) what literature exists, but also b) your informed evaluation of the literature. While reviewing the literature, you need to be answering questions such as:
 - What are the main ideas and contributions that form the core of the literature?
 - Which papers are important and which ones are not?
 - Have there been controversies and how have they been resolved?
 - What are the common assumptions made in the papers you are reviewing?
 - What are the current deficiencies/mistakes and unresolved issues as you see them?
 - Are there important connections to other topics?
 - Has the emphasis been more empirical or theoretical? Why?

























WHAT IS THE STRUCTURE OF A LITERATURE REVIEW?

- In your literature review you should:
 - group research studies and other relevant literature according to a common theme
 - summarize each item of the literature appropriately according to its significance
 - compare and evaluate each item of the literature
 - provide topic sentences at the beginning of paragraphs and summary sentences at the end of sections to help the reader understand what the main issues are.

























WHAT IS THE STRUCTURE OF A LITERATURE REVIEW?

- Some students find that the most difficult part at this stage is to group the papers they have chosen for review so that their analysis weaves a logical story of how the literature fits together and has progressed over time. For this reason, I have provided below some general guidelines on how you might classify different writings on your topic. You may use the following sub-headings to classify what you have read, or you may narrow the focus of your review to deal with some of these categories only. Or there may be still other categories that are more appropriate for your research. For example:
 - research outcomes
 - research methods
 - theories
 - applications
 - integration of the works of others
 - criticism of previous work
 - building of bridges between related topics
 - identification of central issue(s).

























- It is important to think of knowledge in a given field as consisting of three layers. First, there are the primary studies that researchers conduct and publish. Second are the reviews of those studies that summarize and offer new interpretations built from and often extending beyond the primary studies. Third, there are the perceptions, conclusions, opinion, and interpretations that are shared informally among scholars that become part of the body of epistemological traditions within the field.
- In composing a literature review, it is important to note that it is often this third layer of knowledge that is cited as "true" even though it often has only a loose relationship to the primary studies and secondary literature reviews. Given this, while literature reviews are designed to provide an overview and synthesis of pertinent sources you have explored, there are a number of approaches you could adopt depending upon the type of analysis underpinning your study.

























- Argumentative Review
 - This form examines literature selectively in order to support or refute an argument, deeply embedded assumption, or philosophical problem already established in the literature. The purpose is to develop a body of literature that establishes a contrarian viewpoint. Given the value-laden nature of some social science research [e.g., educational reform; immigration control], argumentative approaches to analyzing the literature can be a legitimate and important form of discourse. However, note that they can also introduce problems of bias whenthey are used to make summary claims of the sort found in systematic reviews

























- Integrative Review
 - Considered a form of research that reviews, critiques, and synthesizes representative literature on a topic in an integrated way such that new frameworks and perspectives on the topic are generated. The body of literature includes all studies that address related or identical hypotheses or research problems. A welldone integrative review meets the same standards as primary research in regard to clarity, rigor, and replication. This is the most common form of review in the social sciences.

























Historical Review

 Few things rest in isolation from historical precedent. Historical literature reviews focus on examining research throughout a period of time, often starting with the first time an issue, concept, theory, phenomena emerged in the literature, then tracing its evolution within the scholarship of a discipline. The purpose is to place research in a historical context to show familiarity withstate-ofthe-art developments and to identify the likely directions for future research.

























- Methodological Review
 - A review does not always focus on what someone said [findings], but how they came about saying what they say [method of analysis]. Reviewing methods of analysis provides a framework of understanding at different levels [i.e. those of theory, substantive fields, research approaches, and data collection and analysis techniques], how researchers draw upon a wide variety of knowledge ranging from the conceptual level to practical documents for use in fieldwork in the areas of ontological and epistemological consideration, quantitative and qualitative integration, sampling, interviewing, data collection, and data analysis. This approach helps highlight ethical issues which you should be aware of and consider as you go through your own study.

























Systematic Review

 This form consists of an overview of existing evidence pertinent to a clearly formulated research question, which uses prespecified and standardized methods to identify and critically appraise relevant research, and to collect, report, and analyze data from the studies that are included in the review. The goal is to deliberately document, critically evaluate, and summarize scientifically all of the research about a clearly defined research problem. Typically it focuses on a very specific empirical question, often posed in a cause-and-effect form, such as "To what extent does A contribute to B?" This type of literature review is primarily applied to examining prior research studies in clinical medicine and allied health fields, but it is increasingly being used in the social sciences.

























Theoretical Review

 The purpose of this form is to examine the corpus of theory that has accumulated in regard to an issue, concept, theory, phenomena. The theoretical literature review helps to establish what theories already exist, the relationships between them, to what degree the existing theories have been investigated, and to develop new hypotheses to be tested. Often this form is used to help establish a lack of appropriate theories or reveal that current theories are inadequate for explaining new or emerging research problems. The unit of analysis can focus on a theoretical concept or a whole theory or framework.

























 NOTE: Most often the literature review will incorporate some combination of types. For example, a review that examines literature supporting or refuting an argument, assumption, or philosophical problem related to the research problem will also need to include writing supported by sources that establish the history of these arguments in the literature.

























WRITING TIP

Break Out of Your Disciplinary Box!

 Thinking inter disciplinarily about a research problem can be a rewarding exercise in applying new ideas, theories, or concepts to an old problem. For example, what might cultural anthropologists say about the continuing conflict in the Middle East? In what ways might geographers view the need for better distribution of social service agencies in large cities than how social workers might study the issue? You don't want to substitute a thorough review of core research literature in your discipline for studies conducted in other fields of study. However, particularly in the social sciences, thinking about research problems from multiple vectors is a key strategy for finding new solutions to a problem or gaining a new perspective.

























ANOTHER WRITING TIP

- Don't Just Review for Content!
- While conducting a review of the literature, maximize the time you devote to writing this part of your paper by thinking broadly about what you should be looking for and evaluating. Review not just what scholars are saying, but how are they saying it. Some questions to ask:
 - How are they organizing their ideas?
 - What methods have they used to study the problem?
 - What theories have been used to explain, predict, or understand their research problem?
 - What sources have they cited to support their conclusions?
 - How have they used non-textual elements [e.g., charts, graphs, figures, etc.] to illustrate key points?
- When you begin to write your literature review section, you'll be glad you
 dug deeper into how the research was designed and constructed because
 it establishes a means for developing more substantial analysis and
 interpretation of the research problem.

























YET ANOTHER WRITING TIP

- When Do I Know I Can Stop Looking and Move On?
- Here are several strategies you can utilize to assess whether you've thoroughly reviewed the literature:
 - Look for repeating patterns in the research findings. If the same thing is being said, just by different people, then this likely demonstrates that the research problem has hit a conceptual dead end. At this point consider: Does your study extend current research? Does it forge a new path? Or, does is merely add more of the same thing being said?
 - Look at sources the authors cite to in their work. If you begin to see the same researchers cited again and again, then this is often an indication that no new ideas have been generated to address the research problem.
 - Search Google Scholar to identify who has subsequently cited leading scholars already identified in your literature review [see next sub-tab]. This is called citation tracking and there are a number of sources that can help you identify who has cited whom, particularly scholars from outside of your discipline. Here again, if the same authors are being cited again and again, this may indicate no new literature has been written on the topic.

























CLOSING REMARKS

























AN EXCELLENT LITERATURE REVIEW

- Requires reading extensively
- Writing again and again
- Thinking over what you have written
- Being critical
- Rewriting
- Discussing with others

























WHAT CONTITUTES A GOOD LITERATURE REVIEW?

 A good literature review, therefore, is critical of what has been written, identifies areas of controversy, raises questions and identifies areas which need further research.























HOW MANY LITERATURES SHOULD REVIEW?

- Ideally the literature review should be an exhaustive review/survey of all the relevant literature on the topic.
- There is no definite answer on how many literature should indicate an "exhaustive" review of the literature. It depends on supervisor, topic, method, etc.

























SOME POINTS TO REMEMBER

- Literature review must be written in a formal, academic style.
- Keep the writing clear and concise, avoiding colloquialisms (go bananas go insane or be very angry, wanna want to, gonna going to, y'all you all, go nuts go insane or be very angry, look blue -look sad, buzz off go away)and personal language.
- Always aim to be objective and respectful of others' opinions; this is not the place for emotive language or strong personal opinions. If you thought something was rubbish, use words such as "inconsistent", "lacking in certain areas" or "based on false assumptions"
- When introducing someone's opinion, don't use "says", but instead an appropriate verb which more accurately reflects this viewpoint, such as "argues", "claims" or "states".
- Use the present tense for general opinions and theories, or the past when referring to specific research or experiments

























SOME POINTS TO REMEMBER

 Your literature review should present your synthesis of previous research and lay the foundation for understanding your research and appreciating its value.

























AVOID PLAGIARISM

- At all times avoid plagiarising of your sources.
- Always separate your source opinions from your own hypothesis. Making sure you consistently reference the literature you are referring to.
- When you are doing your reading and making notes, it might be an idea to use different colours to distinguish between your ideas and those of others.

























AVOID THESE MISTAKES

- Remember that your literature review is a highly considered list and that you make reference to published literature only where necessary. Therefore, your objective in writing a literature review is NOT to do the following:
 - list as many articles and names as possible;
 - try to refer to every piece of literature in the area (this is not possible anyway).
- Remember that, when writing the literature review, you need to demonstrate that you can scan the literature efficiently and appraise information critically. It is, therefore, a bad sign when every paragraph begins with the names of the researchers: "Smith (1992) said...", "Jones (1995) claims...", etc. Instead, organize your review into useful, informative sections that present themes or identify trends.

























COMMON MISTAKES TO AVOID

- These are the most common mistakes made in reviewing social science research literature.
 - Sources in your literature review do not clearly relate to the research problem;
 - You do not take sufficient time to define and identify the most relevant sources to use in the literature review related to the research problem;
 - Relies exclusively on secondary analytical sources rather than including relevant primary research studies or data;
 - Uncritically accepts another researcher's findings and interpretations as valid, rather than examining critically all aspects of the research design and analysis;
 - Does not describe the search procedures that were used in identifying the literature to review;
 - Reports isolated statistical results rather than synthesizing them in chi-squared or meta-analytic methods; and,
 - Only includes research that validates assumptions and does not consider contrary findings and alternative interpretations found in the literature.





















