

Chapter 2

*Defining and Formulating a
Research Problem*

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Learning Objectives

- Define the management dilemma
- Discuss the significance of a literature review
- Explain the procedure of a literature review
- Discuss the concept of a research problem
- Describe the steps to formulate a research problem



Management Dilemma



- Literature review helps in understanding the management dilemma in a better way by providing essential information and relevant insights associated with the dilemma.
- It further helps in evaluating the decision alternatives by providing insights about probable outcomes.



Literature Review

A literature review forms the basis for advancing knowledge, facilitates theory development, discovers new research areas and closes old ones.

Process of literature review:

- First, to understand the management dilemma and find solution to it, researchers and managers explore a wide variety of books, articles and other sources of business research.
- At the end of your research, you present a brief description or summary as well as a critical evaluation of how your literature review' fits in with a larger field of study.





The purpose of a literature review is to:

- Place each source of study in the context of its contribution to understanding a research problem
- Describe the inter relationship of different variables of study
- Identify new ways to interpret previous research on the topic being studied
- Identify any gaps that exist in the literature
- Resolve conflicts among previously conducted studies
- Locate your own research within the context of existing literature
- Generate an idea of sample size
- Get a tentative value of variances in the variables of interest
- Identify the type of relationship that exists among variables
- Identify the method of analysis that can possibly be used in the research



Importance of a Literature Review

Reasons for conducting a literature review

Assess the current state of research on a topic

Once you have identified a topic of interest, you should search relevant sources of information to determine what is already known about the topic and how extensively the topic has already been researched.

Identify the experts on a topic

A literature review will help you to identify the experts on your topic of research.

Identify the key questions about a topic that need further research

By reviewing what has already been written on a topic, you may uncover new angles that need further exploration.

Determine methodologies used in previous studies

A literature review helps to identify which methodologies in the previous researches have been most beneficial in analysing a topic.



Functions of a Literature Review

Providing a context to your research

A literature review helps to place the research in the context of what is already known about the topic.

Providing a shape to your research problem

By understanding the topic better, one will be able to conceptualise the research problem clearly and precisely.

Improving your research methodology

A literature review will help to discover the methodologies used by other researchers which will give an idea whether their methodologies worked for them and what problems they faced by employing them.



Catering to knowledge base

A literature review helps to know what others are doing in your field, which theories have been proposed and what gaps exist.

Ensuring novelty in your research

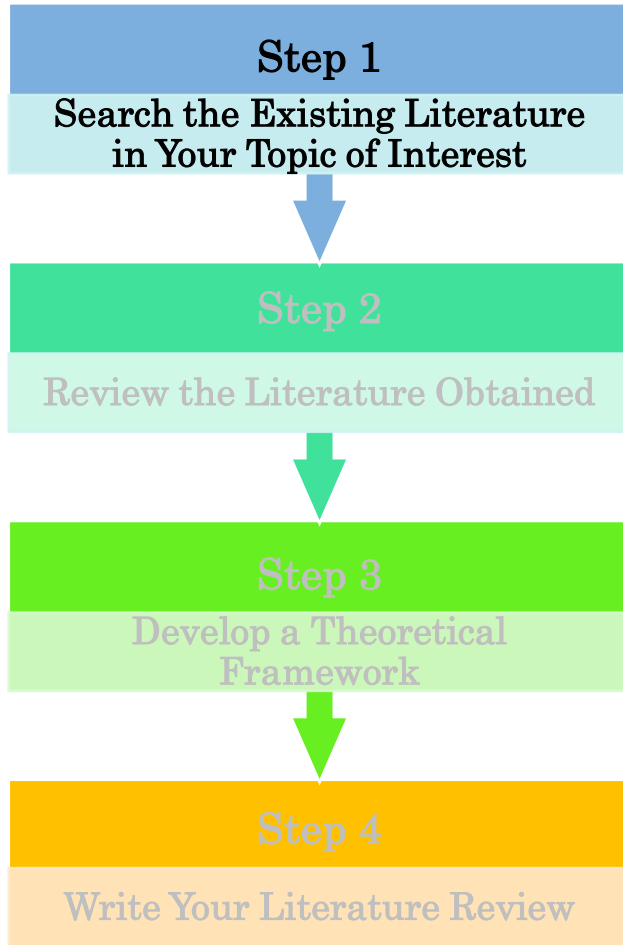
a literature review saves effort in trying to rediscover something that is already known or published.

Helps you in formulating a research hypothesis

After the literature review is completed, the research hypothesis is constructed using the research question. Therefore, literature review helps in formulating the research hypothesis.



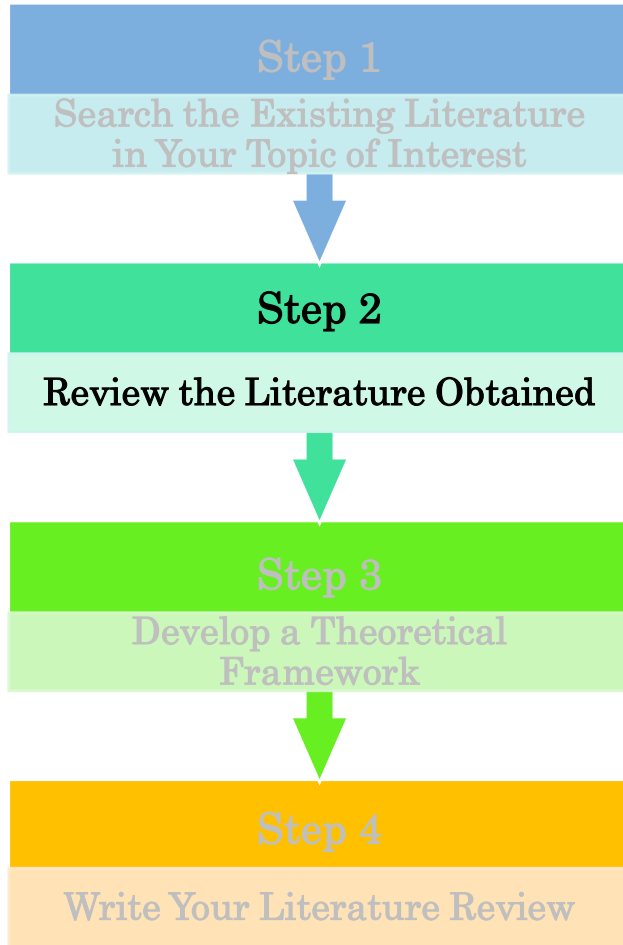
Process of a Literature Review



To search the existing literature, compile a bibliography and/or a list of references, which is a list of books on your topic of interest. To save time, you can go through the following sources:

- Indices of journals on your research topic
- Abstracts of articles on your research topic
- Citation indices
- Digital libraries

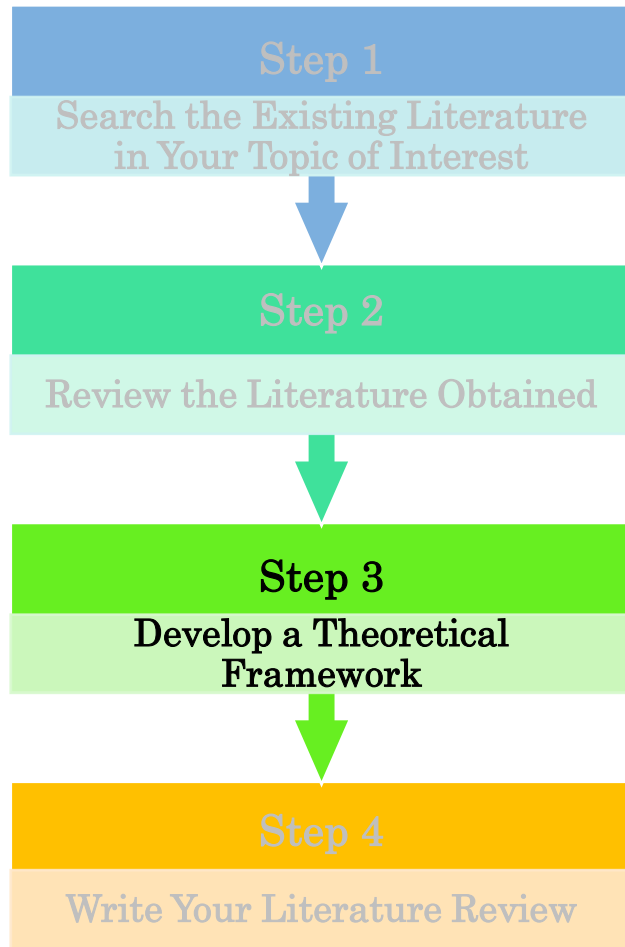




After identifying the relevant journals and books, start reading them and evaluate them critically to compile themes and issues that are associated with your research topic. Do a critical evaluation of the literature to:

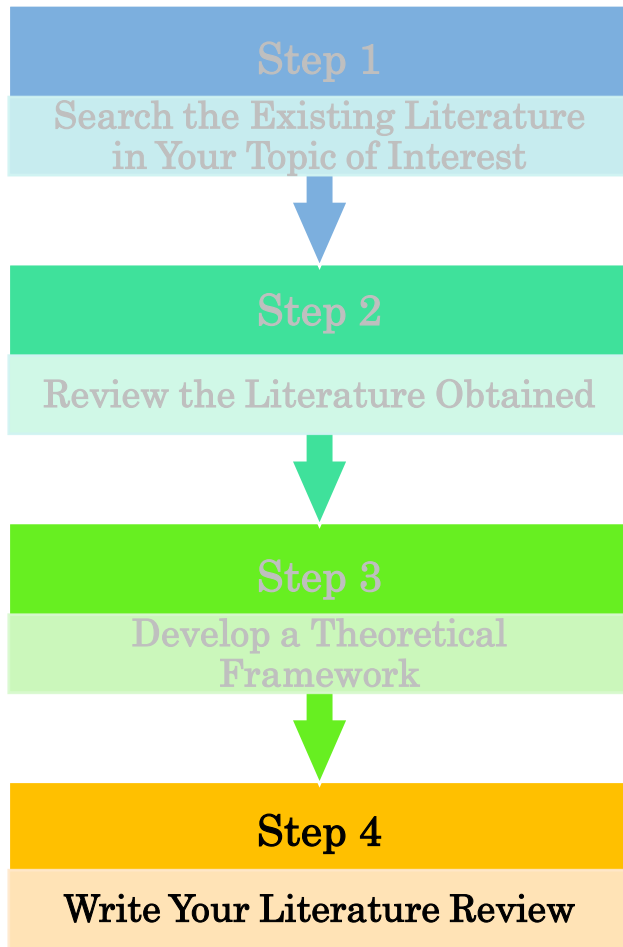
- Identify the proposed theories, critics and methodologies.
- Assess whether the knowledge relevant to your theoretical framework has been confirmed beyond doubt
- Discover different perspectives among researchers and write down your opinions about their validity
- Find the gaps that are present in the existing body of knowledge





Sort out the information obtained from the literature sources according to the theoretical framework. Theoretical framework will provide you a foundation and guide to read further. It is quite possible as you read further that you change your framework. However, this is part of a research process.





To do so:

- a. Start your review with a theme or points that you want to focus
- b. Organise and list all the themes you want to discuss and relate.
- c. Identify and describe various theories relevant to your field of research
- d. Describe the gaps that exist in the body of knowledge in your field
- e. Explain recent advances and current trends in your field of research
- f. Compare & evaluate findings based on:
 - Assumptions of research
 - Hypotheses
 - Variables selected
 - Theories related to the topic of research
 - Research designs applied
- g. Potential future work speculated by the researchers
Acknowledge, cite and quote sources of research. Give credit to the works of other researchers



How to Write a Literature Review

- Some strategies of writing a literature review are as follows

Find a focus

As you read the existing body of knowledge in your topic, consider and pick any of the following themes to focus and organise your review:

- Which themes connect your sources together?
- Do they present a single or multiple solutions?
- Are there any gaps in the existing themes?
- How effectively do they present the material?
- Do they reveal a trend in the field?

State the focus

Write a simple statement in your literature review that tells readers what to expect.

Example: The current trend in treatment for cancer combines surgery, medicine and natural healing.



Present information

Organise the information you want to present in the following way:

- **Cover the basic categories:** The three basic categories are:
 - i. **Introduction:** It gives a quick idea of the topic of your literature review, such as your central theme.
 - ii. **Body:** It contains your discussion of sources. It can be organized chronologically, thematically or methodologically (discussed further).
 - iii. **Conclusions/recommendations:** It provides the conclusion you have drawn from reviewing literature.
- **Organise the body:** Once you have the basic categories in place, consider how you will organise the sources themselves within the body of your review.
- **Consider additional sections:** Sometimes you might need to add additional sections for your study, such as:
 - ✓ **Current situation:** This provides necessary information for the readers to understand the topic or focus of the literature review.
 - ✓ **History:** This presents the chronological progression of the field.
 - ✓ **Methods and/or standards:** This presents the criteria used to select the sources in your literature review.



Compose your study

Guidelines to follow during writing the review are:

- Refer to several other sources when making a point.
- Selectively highlight only the most important points in each source.
- Avoid using any direct quotes. This is because the survey nature of the literature review does not allow for in-depth discussion or detailed quotes from the text. However, if you do want to use quotes to emphasise a point, then use short quotes sparingly.
- Summarise and synthesise your sources within each paragraph and throughout the review.
- Maintain your own voice by starting and ending a paragraph with your own ideas and own words.
- When paraphrasing a source that is not your own, remember to represent the author's information/opinions accurately and in your own words.



Revise

- Finally, revise your review.
- Make sure that it follows the outline.
- Rewrite the language of your review to present information in the most concise manner possible.
- Avoid unnecessary jargon or slang; use familiar terminology.
- Verify that you have documented your sources and formatted the review appropriately.



Types of Sources for Review

Secondary data are used as the source of a literature review

Different
types of
sources from
which
literature is
reviewed are

- Some sources provide first-hand information that is highly relevant for the study. Such sources contain a high level of detail.
- **Example:** reports, theses, emails, letters, conference proceedings, company reports, autobiographies, official reports, research articles, etc.

- The researcher may also refer to data sources containing low level of detail.
- **Example:** review articles, academic journals, books, newspapers, documentaries, encyclopaedias, dictionaries, bibliographies and citation indexes.



The Concept of a Research Problem

A research problem is a statement about an area of concern, a condition to be improved, a problem to be resolved or a troubling question in academic literature, which needs to be deliberately investigated.

The research problem is a problem statement in theoretical or practical context. It does not state how to do something.

Exploratory (formulative) research studies involve finding a problem or the hypothesis to be tested.



The Need of Defining a Research Problem

It is important to formulate a research problem carefully to clearly indicate what you intend to achieve through research.

A well-formulated research problem helps to:

- Separate irrelevant data from relevant data
- Keep the research work on track
- Ensure efficient and focused literature review and other studies
- Keep the research centred around the problem



Conditions and Components of a Research Problem

A research problem exists if the four conditions are met. They are:

There must be a problem whose solution is presently not known.

There must be an individual, group or organisation to which the problem can be attributed.

There must be minimum two courses of action, which a researcher can pursue.

There must be at least two feasible outcomes of the course of action. Out of the two outcomes, one outcome should be more preferable to the other.



The components of a research problem on the basis of conditions

Individual, Group, or Institution

There must be somebody to whom the research problem can be attributed.

The individual/group/organisation is the one that is facing the problem or difficulty.

Research Objectives

There must be a purpose for which the research is conducted.

Every research is carried out to meet some predefined objectives.

Environment

It refers to the environment in which any problem exists.

Examples of environment are economic, social and political environments.



Identifying a Research Problem

Personal Interest

Academic research is a time- and effort-consuming process. A researcher can consistently pursue it only if he/she is personally interested in resolving the problem.

Knowledge and Competence

Selection of a research problem depends on the researcher's knowledge in the field of interest and his/her capability to perform research successfully.

Availability of Resources

If sufficient resources such as time and money are available to research a problem, then the problem is selected.

Relative Importance

If a problem is relatively important and urgent, then it is selected as an immediate solution and it can benefit the society.



Usefulness and Significance

The practical usefulness of a problem is also a major motivation for a researcher to attend it.

Timelines of the Problem

Some problems take little time to be resolved, while others take a considerable time.

Data Availability

A researcher would select a problem, which has sufficient and relevant data available.

Novelty

If a problem is around a current topic of interest, then it is more likely to be picked up for research.



Formulating a Research Problem

Formulating a research problem is a three-step process

Defining the Research Problem

Identifying the Variables

Evaluating the Research Problem



Defining the Research Problem

The first step of formulating a research problem is to mention the problem in the form of a question or statement to make it clearer and understandable.

Major issues and elements of research should be divided into subparts for better understanding.

It is also important to state the problem in a manner that indicates relationship between two or more variables.

Identifying the variables

All the variables involved in a research problem should be defined in a manner so that they can be measured or expressed quantitatively or qualitatively.

Example: For a hypothesis: In ABC, higher rewards lead to lower levels of absenteeism, the variables of interest would be rewards & level of absenteeism.



Evaluating the research problem

Originality: The research problem should be unique. Any topic, on which a lot of research has already been done, should be avoided because it would be difficult to highlight anything new in that topic.

Importance: The research study should be significant enough to either become the basis of any new theory or pose some problems for further research.

Feasibility: This refers to the chances of conducting a successful research. You should take up a problem, which is feasible for you to conduct a research.

A research problem may not be feasible because of the following reasons:

- Lack of skills and competencies of the researcher
- Lack of interest and enthusiasm of the researcher
- High cost involved in the research study
- Time constraint
- Administrative constraints, like lack of cooperation from administrative authorities



Thank You