

Lesson 1

Section one

1. Title

The title summarizes the main idea or ideas of your study. A good title contains the fewest possible words that adequately describe the contents and purpose of your research paper.

The title is without doubt the part of a paper that is read the most, and it is usually read first. If the title is too long it usually contains too many unnecessary words, e.g., "A Study to Investigate the..." On the other hand, a title which is too short often uses words which are too general. For example, "African Politics" could be the title of a book, but it does not provide any information on the focus of a research paper.

2.1. Effective titles in academic research papers have several characteristics.

- Indicate accurately the subject and scope of the study.
- Avoid using abbreviations.
- Use words that create a positive impression and stimulate reader interest.
- Use current nomenclature from the field of study.
- Identify key variables, both dependent and independent.
- May reveal how the paper will be organized.
- Suggest a relationship between variables which supports the major hypothesis.
- Is limited to 10 to 15 substantive words.
- Do not include "study of," "analysis of" or similar constructions.
- Titles are usually in the form of a phrase, but can also be in the form of a question.
- Use correct grammar and capitalization with all first words and last words capitalized, including the first word of a subtitle. All nouns, pronouns, verbs, adjectives, and adverbs that appear between the first and last words of the title are also capitalized.
- In academic papers, rarely is a title followed by an exclamation mark. However, a title or subtitle can be in the form of a question.

2. Abstract

Every proposal should have an abstract. The abstract forms the reader's initial impression of the work. Some reviewers read only the abstract. Thus it is the most important single element in the proposal.

To present the essential meaning of the proposal, the abstract should summarize the significance of the work, major objectives of the project, the procedures to be followed to accomplish the objectives, and the potential impact of the work. Though it appears first, the abstract should be edited last, as a concise summary of the proposal. Length depends on sponsor's guidelines (from ½ to 2 pages).

3. Proposed Table of Contents

Brief proposals with few sections usually do not need a table of contents. Long and detailed proposals may require, in addition to a table of contents, a list of illustrations (or figures) and a list of tables. If all of these sections are included, they should follow the order mentioned, and

each should be numbered with lower-case Roman numerals. The table of contents lists all major parts and divisions, including the abstract.

Lesson 2

Section Two

1. The Background Study

One of the preliminary steps to completing a thesis is the background study for it. The background study for a thesis includes a review of the area being researched, current information surrounding the issue, previous studies on the issue, and relevant history on the issue. The purpose of a background study is to help you to prove the relevance of your thesis problem and to further develop your thesis.

2. The statement of the problem

A statement of the problem is used in research work as a claim that outlines the problem addressed by a study. A good research problem should address an existing gap in knowledge in the field and lead to further research. Writing a statement of the problem should help you clearly identify the purpose of the research project you will propose. Often, the statement of the problem will also serve as the basis for the introductory section of your proposal, directing your reader's attention quickly to the issues that your proposed project will address.

2.1 What are the key characteristics of a statement of the problem?

A good research problem should have the following characteristics:

1. It should address a gap in knowledge.
2. It should be significant enough to contribute to the existing body of research
3. It should lead to further research
4. The problem should render itself to investigation through collection of data
5. It should be of interest to the researcher and suit his/her skills, time, and resources
6. The approach towards solving the problem should be ethical

2.2 How to write a problem statement

After you have identified a [research problem](#) for your project, the next step is to write a problem statement. An effective problem statement is concise and concrete. It should:

- Put the problem in **context** (what do we already know?)
- Describe the **precise issue** that the research will address (what do we need to know?)
- Show the **relevance** of the problem (why do we need to know it?)
- Set the **objectives** of the research (what will you do to find out?)

Step 1: Contextualize the problem

The problem statement should frame your research problem in its particular context and give some background on what is already known about it.

Step 2: Show why it matters

The problem statement should also address the relevance of the research: why is it important that the problem is solved?

This doesn't mean you have to do something groundbreaking or world-changing. It's more important that the problem is researchable, feasible, and clearly addresses a relevant issue in your field.

Step 3: Set your aims and objectives

Finally, the problem statement should frame how you intend to address the problem. Your goal should not be to find a conclusive solution, but to seek out the reasons behind the problem and propose more effective approaches to tackling or understanding it.

The aim is the overall purpose of your research. It is generally written in the infinitive form:

- The aim of this study is to **determine**...
- This project aims to **explore**...
- I aim to **investigate**...

The objectives are the concrete steps you will take to achieve the aim:

- [Qualitative methods](#) will be used to **identify**...
- I will use [surveys](#) to **collect**...
- Using statistical analysis, the research will **measure**...

The aims and objectives should lead directly to your research questions.

3.The Purpose of a research

The research purpose is a statement of "why" the study is being conducted, or the goal of the study. The goal of a study might be to identify or describe a concept or to explain or predict a situation or solution to a situation that indicates the type of study to be conducted (Beckingham, 1974).

The purpose statement identifies the variables, population and setting for a study. Every study has an explicit or implicit purpose statement. The research purpose should be stated objectively or in a way that does not reflect particular biases or values of the researcher.

Lesson 3

4. The significance of the research (Rationale)

In simple terms, the significance of the study is basically the importance of your research. The significance of a study must be stated in the Introduction section of your research paper. While stating the significance, you must highlight how your research will be beneficial to the development of science and the society in general. You can first outline the significance in a broader sense by stating how your research will contribute to the broader problem in your field and gradually narrow it down to demonstrate the specific group that will benefit from your research. While writing the significance of your study, you must answer questions like:

- Why should your research be published?
- How will this study contribute to the development of your field?

5. Research question/s

A good research question is essential to guide your research paper, project or thesis. It pinpoints exactly what you want to find out and gives your work a clear focus and purpose. All research questions should be:

- **Focused** on a single problem or issue
- **Researchable** using primary and/or secondary sources
- **Feasible** to answer within the timeframe and practical constraints
- **Specific** enough to answer appropriately
- **Complex** enough to develop the answer over the space of a paper or thesis
- **Relevant** to your field of study and/or society more broadly

you might have multiple research questions, but they should all be clearly connected and focused around a central research problem.

5.1 How to write a research question

The process of developing your research question follows several steps:

- Choose a broad topic
- Do some preliminary reading to find out about topical debates and issues
- Narrow down a specific niche that you want to focus on
- Identify a practical or theoretical research problem that you will address

When you have a clearly-defined problem, you need to formulate one or more questions. Think about exactly what you want to know and how it will contribute to resolving the problem.

Example research problem	Example research question
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The teachers at school X do not have the skills to recognize or properly guide gifted children in the classroom.	What practical techniques can teachers at school X use to better identify and guide gifted children?
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5.2 Types of research questions

Both [qualitative and quantitative research](#) require research questions. The kind of question you use depends on what you want to find out about and the [type of research](#) you want to do. It will shape your [research design](#).

The table below shows some of the most common types of research questions. Bear in mind that many academic research questions will be more complex than these examples, often combining two or more types.

Research question type	Formulation
Descriptive research	What are the characteristics of X?
Comparative research	What are the differences and similarities between X and Y?
Correlational research	What is the relationship between variable X and variable Y?
Exploratory research	What are the main factors in X? What is the role of Y in Z?
Explanatory research	What is the impact of Y on Z? What are the causes of X?

6. Definition of key terms

It is an important step in the research process to identify the key concepts of your topic. From these key concepts you will generate the keywords needed to search in different sources.

Lesson 4

Section Three

A literature review is an objective, critical summary of published research literature relevant to a topic for research. It provides an overview of current knowledge and creating familiarity with a research on a particular area which allows you to identify relevant theories, methods, and gaps in the existing research.

Conducting a literature review involves collecting, evaluating and analyzing publications (such as books and journal articles) that relate to your research question. There are five main steps in the process of writing a literature review:

1. **Search** for relevant literature
2. **Evaluate** sources
3. **Identify** themes, debates and gaps
4. **Outline** the structure
5. **Write** your literature review

A good literature review doesn't just summarize sources – it analyzes, synthesizes, and critically evaluates to give a clear picture of the state of knowledge on the subject.

3.1 Why write a literature review?

When you write a thesis, [dissertation](#), or [research paper](#), you will have to conduct a literature review to situate your research within existing knowledge. The literature review gives you a chance to:

- Demonstrate your familiarity with the topic and scholarly context
- Develop a [theoretical framework](#) and [methodology](#) for your research
- Position yourself in relation to other researchers and theorists
- Show how your research addresses a gap or contributes to a debate

You might also have to write a literature review as a stand-alone assignment. In this case, the purpose is to evaluate the current state of research and demonstrate your knowledge of scholarly debates around a topic.

The content will look slightly different in each case, but the process of conducting a literature review follows the same steps.

3.2. Step 1: Search for relevant literature

Before you begin searching for literature, you need a clearly defined [topic](#).

If you are writing the literature review section of a dissertation or research paper, you will search for literature related to your [research problem](#) and [questions](#).

If you are writing a literature review as a stand-alone assignment, you will have to choose a focus and develop a central question to direct your search. Unlike a dissertation research question, this question has to be answerable without collecting original data. You should be able to answer it based only on a review of existing publications.

3.2.1 Search for literature using keywords and citations

Start by creating a list of keywords related to your research topic and question. Some useful databases to search for journals and articles include:

- Your university's library catalogue
- [Google Scholar](#)
- [JSTOR](#)
- [EBSCO](#)
- [Project Muse](#) (humanities and social sciences)

Read the [abstract](#) to find out whether an article is relevant to your question. When you find a useful book or article, you can check the bibliography to find other relevant sources.

To identify the most important publications on your topic, take note of recurring citations. If the same authors, books or articles keep appearing in your reading, make sure to seek them out.

You can find out how many times an article has been cited on Google Scholar – a high citation count means the article has been influential in the field, and should certainly be included in your literature review.

3.3 Step 2: Evaluate and select sources

You probably won't be able to read absolutely everything that has been written on the topic – you'll have to evaluate which sources are most relevant to your questions.

For each publication, ask yourself:

- What question or problem is the author addressing?
- What are the key concepts and how are they defined?
- What are the key theories, models and methods? Does the research use established frameworks or take an innovative approach?
- What are the results and conclusions of the study?
- How does the publication relate to other literature in the field? Does it confirm, add to, or challenge established knowledge?
- How does the publication contribute to your understanding of the topic? What are its key insights and arguments?
- What are the strengths and weaknesses of the research?

Make sure the sources you use are [credible](#), and make sure you read any landmark studies and major theories in your field of research.

The scope of your review will depend on your topic and discipline: in the sciences you usually only review recent literature, but in the humanities you might take a long historical perspective (for example, to trace how a concept has changed in meaning over time).

Take notes and cite your sources

As you read, you should also begin the writing process. Take notes that you can later incorporate into the text of your literature review.

It is important to keep track of your sources with [citations](#) to [avoid plagiarism](#). It can be helpful to make an [annotated bibliography](#), where you compile full citation information and write a paragraph of summary and analysis for each source. This helps you remember what you read and saves time later in the process.

3.4. Step 3: Identify themes, debates, and gaps

To begin organizing your literature review's argument and structure, you need to understand the connections and relationships between the sources you've read. Based on your reading and notes, you can look for:

- **Trends and patterns (in theory, method or results):** do certain approaches become more or less popular over time?
- **Themes:** what questions or concepts recur across the literature?
- **Debates, conflicts and contradictions:** where do sources disagree?
- **Pivotal publications:** are there any influential theories or studies that changed the direction of the field?
- **Gaps:** what is missing from the literature? Are there weaknesses that need to be addressed?

This step will help you work out the structure of your literature review and (if applicable) show how your own research will contribute to existing knowledge.

Lesson 5

3.5. Step 4: Outline your literature review's structure

There are various approaches to organizing the body of a literature review. You should have a rough idea of your strategy before you start writing.

Depending on the length of your literature review, you can combine several of these strategies (for example, your overall structure might be thematic, but each theme is discussed chronologically).

3.5.1. Chronological

The simplest approach is to trace the development of the topic over time. However, if you choose this strategy, be careful to avoid simply listing and summarizing sources in order.

Try to analyze patterns, turning points and key debates that have shaped the direction of the field. Give your interpretation of how and why certain developments occurred.

3.5.2. Thematic

If you have found some recurring central themes, you can organize your literature review into subsections that address different aspects of the topic.

For example, if you are reviewing literature about inequalities in migrant health outcomes, key themes might include healthcare policy, language barriers, cultural attitudes, legal status, and economic access.

3.5.3. Methodological

If you draw your sources from different disciplines or fields that use a variety of [research methods](#), you might want to compare the results and conclusions that emerge from different approaches. For example:

- Look at what results have emerged in [qualitative versus quantitative research](#)
- Discuss how the topic has been approached by empirical versus theoretical scholarship
- Divide the literature into sociological, historical, and cultural sources

3.5.4. Theoretical

A literature review is often the foundation for a [theoretical framework](#). You can use it to discuss various theories, models, and definitions of key concepts.

You might argue for the relevance of a specific theoretical approach, or combine various theoretical concepts to create a framework for your research.

3.6. Step 5: Write your literature review

Like any other academic text, your literature review should have an [introduction](#), a main body, and a [conclusion](#). What you include in each depends on the objective of your literature review.

3.6.1. Introduction

The introduction should clearly establish the focus and purpose of the literature review.

If you are writing the literature review as part of your dissertation or thesis, reiterate your central problem or research question and give a brief summary of the scholarly context. You can emphasize the timeliness of the topic (“many recent studies have focused on the problem of x”) or highlight a gap in the literature (“while there has been much research on x, few researchers have taken y into consideration”).

3.6.2. Body

Depending on the length of your literature review, you might want to divide the body into subsections. You can use a [subheading](#) for each theme, time period, or methodological approach.

As you write, you can follow these tips:

- **Summarize and synthesize:** give an overview of the main points of each source and combine them into a coherent whole
- **Analyze and interpret:** don’t just [paraphrase](#) other researchers—add your own interpretations where possible, discussing the significance of findings in relation to the literature as a whole
- **Critically evaluate:** mention the strengths and weaknesses of your sources
- **Write in well-structured paragraphs:** use [transitions](#) and [topic sentences](#) to draw connections, comparisons and contrasts

Literature review paragraph example

The example below is taken from the body of a literature review on the relationship between national identity and nature conservation. This paragraph discusses how humanities scholars have approached the concept of wilderness.

Early work in environmental humanities tended to take a sharply critical approach to wilderness, focusing on the cultural construction of supposedly ‘natural’ landscapes. The rise of climate change awareness in the 1980s had been framed by narratives about “the end of nature” (McKibben 1989), in which a once-pristine wilderness is degraded by humans to the point of disappearance. In response to this popular discourse, environmental historian William Cronon critiqued the concept of a pure, pristine nature to be preserved from human influence, arguing that ideas like “wilderness” are themselves products of particular human cultures and histories. In his influential essay ‘The Trouble with Wilderness’ (1995), Cronon traces how the ideal of untouched wilderness, anxiety over its loss, and the political will to preserve it has been central to American national identity, entwined with religious motifs and colonial frontier mythologies. Following Cronon, the racial and class politics of wilderness preservation was a theme taken up by several scholars in the late 1990s and early 2000s, who researched the material effects of conservation politics on indigenous and rural Americans (Catton 1997; Spence 1999; Jacoby 2001). The US National Park system became the dominant paradigm for analyzing relations

between conservation, nationhood and nationalism. However, this approach has sometimes led to a narrowly US-centric perspective that fails to engage closely with the meanings and materialities of “wilderness” in different contexts. Recent work has begun to challenge this paradigm and argue for more varied approaches to understanding the socio-political relations between nation and nature.

The example combines the thematic and chronological approaches. This section of the literature review focuses on the theme of wilderness, while the paragraph itself is organized chronologically.

3.6.3. Conclusion

In the conclusion, you should summarize the key findings you have taken from the literature and emphasize their significance. This section is the reviewer’s opportunity to justify a research proposal. Therefore, the idea should be clearly re-stated and supported according to the findings of the review.

If the literature review is part of your thesis or dissertation, show how your research addresses gaps and contributes new knowledge, or discuss how you have drawn on existing theories and methods to build a framework for your research.

Lesson 6

Section Four

4.1. Research Design

Research design is the framework of research methods and techniques chosen by a researcher to set a plan of what data to gather, from whom, how and when to collect the data, and how to analyze the data obtained along with procedures & instruments to be used to find answers to research questions.

This section must be well-written and logically organized because you are not actually doing the research, yet, your reader must have confidence that it is worth pursuing. The reader will never have a study outcome from which to evaluate whether your methodological choices were the correct ones. Thus, the objective here is to convince the reader that your overall research design and proposed methods of analysis will correctly address the problem and that the methods will provide the means to effectively interpret the potential results. Your design and methods should be unmistakably tied to the specific aims of your study.

4.2. Sample (sampling procedure)

A sample is a subset of individuals from a larger population. Sampling means selecting the group that you will actually collect data from in your research. For example, if you are researching the opinions of students in your university, you could take a sample of 100 students.

There are two types of sampling methods:

- **Probability sampling** involves random selection, allowing you to make statistical inferences about the whole group.
- **Non-probability sampling** involves non-random selection based on convenience or other criteria, allowing you to easily collect initial data.

Probability sampling methods

Probability sampling means that every member of the population has a chance of being selected. If you want to produce results that are representative of the whole population, you need to use a probability sampling technique.

There are four main types of probability sample.

1. Simple random sampling

In a simple random sample, every member of the population has an equal chance of being selected. Your sampling frame should include the whole population.

To conduct this type of sampling, you can use tools like random number generators or other techniques that are based entirely on chance.

2. Systematic sampling

Systematic sampling is similar to simple random sampling, but it is usually slightly easier to

conduct. Every member of the population is listed with a number, but instead of randomly generating numbers, individuals are chosen at regular intervals.

3. Stratified sampling

This sampling method is appropriate when the population has mixed characteristics, and you want to ensure that every characteristic is proportionally represented in the sample.

You divide the population into subgroups (called strata) based on the relevant characteristic (e.g. gender, age range, income bracket, job role).

From the overall proportions of the population, you calculate how many people should be sampled from each subgroup. Then you use random or systematic sampling to select a sample from each subgroup.

4. Cluster sampling

Cluster sampling also involves dividing the population into subgroups, but each subgroup should have similar characteristics to the whole sample. Instead of sampling individuals from each subgroup, you randomly select entire subgroups.

If it is practically possible, you might include every individual from each sampled cluster. If the clusters themselves are large, you can also sample individuals from within each cluster using one of the techniques above.

This method is good for dealing with large and dispersed populations, but there is more risk of error in the sample, as there could be substantial differences between clusters. It's difficult to guarantee that the sampled clusters are really representative of the whole population.

Non-probability sampling methods

In a non-probability sample, individuals are selected based on non-random criteria, and not every individual has a chance of being included. This type of sample is easier and cheaper to access, but you can't use it to make valid statistical inferences about the whole population.

Non-probability sampling techniques are often appropriate for exploratory and qualitative research.

1. Convenience sampling

A convenience sample simply includes the individuals who happen to be most accessible to the researcher.

This is an easy and inexpensive way to gather initial data, but there is no way to tell if the sample is representative of the population, so it can't produce generalizable results.

2. Voluntary response sampling

Similar to a convenience sample, a voluntary response sample is mainly based on ease of access. Instead of the researcher choosing participants and directly contacting them, people volunteer themselves (e.g. by responding to a public online survey). so you can't be sure that their opinions are representative of all students.

3. Purposive sampling

This type of sampling involves the researcher using their judgement to select a sample that is most useful to the purposes of the research.

It is often used in qualitative research, where the researcher wants to gain detailed knowledge

about a specific phenomenon rather than make statistical inferences. An effective purposive sample must have clear criteria and rationale for inclusion.

4. Snowball sampling

If the population is hard to access, snowball sampling can be used to recruit participants via other participants. The number of people you have access to “snowballs” as you get in contact with more people.

4.3. Research Instruments

There are many types of research tools; however, the one you choose must go according to your research objectives. To choose the proper one or ones you must answer the following questions: What are you really planning to find out? How are you going to find out?

OBSERVATION

Is one of the very important methods for obtaining comprehensive data in qualitative research especially when a composite of both oral and visual data become vital to the research.

It is divided in structured and unstructured observation. The difference between them is that structured observation is carried out with an observation guide and it is nonparticipant. However, an unstructured observation does not need an observation guide and can be participant or nonparticipant.

Structured observation

To carry out a structured observation you must first select the variables or indicators you are about to observe, it means you typically have some prior knowledge about the behavior or event of interest. Taking into account the participants, and environment where it will take place. The observation notes must be compared periodically to check their reliability. Keep in mind that you might need a close or open observation notes in form of observation grid.

Unstructured observation

No restriction is placed on what the observer would note: all behaviors in the episode under study are monitored.

Participant observation / non-participant observation

To be a participant observer is to be part of the community and feel and live what the target population goes through. In other words the observer becomes part of the community members and enjoys all the rights the community members have. On the other hand, non-participant observer is the one that carries the role of a visitor with the only right to observe their behavior and environment without participating in their activities. He can only take notes of the activities he observes.

INTERVIEW

It is an interaction in which oral questions are posed by the interviewer to elicit oral response from the interviewee. Interviewing has a variety of forms including: individual, face-to-face interviews and face-to-face group interviewing. The asking and answering of questions can be mediated by the telephone or other electronic devices (e.g. computers technology such as Skype). Interviews can also be structured or unstructured.

Structured Interview

The Structured Interviews are formal because, sets of questions known as interview questionnaire are posed to each interviewee visited and the responses are recorded on a standardized schedule.

Unstructured Interview

The Unstructured Interview is the less formal type in which although sets of questions may be used, the interviewer freely modifies the sequence of questions, changes the wording and sometimes explains them or adds to them during the interaction.

QUESTIONNAIRE

A questionnaire is a data collection instrument consistant of a series of questions for the purpose of gathering information from respondents. Each question should contribute to testing one or more hypothesis/ research question established in the research design.

Questions could be:

- **Open format questions** that are without a predetermined set of responses.
- **Closed format questions** that take the form of a multiple-choice question.

Questionnaire has advantages over some other types of **surveys** in that they are cheap, do not require as much effort from the questioner as verbal or telephone surveys.

DOCUMENT ANALYSIS

Document analysis is a form of qualitative research that uses a systematic procedure to analyze documentary evidence and answer specific research questions. Document analysis requires repeated review, examination, and interpretation of the data in order to gain meaning and empirical knowledge of the topic being studied.

Lesson 7

4.4. DATA COLLECTION PROCEDURE

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes. Data collection starts with determining what kind of data (quantitative, qualitative) required followed by the selection of a sample from a certain population. After that, you need to use a certain instrument to collect the data from the selected sample.

4.4.1. DATA Collection

Data are organized into two broad categories: qualitative and quantitative.

Qualitative Data Collection: Qualitative data are mostly non-numerical and usually descriptive or nominal in nature. This means the data collected are in the form of words and sentences. Often (not always), such data captures feelings, emotions, or subjective perceptions of something. 'How' and 'why' are often asked in qualitative studies and tend to use unstructured methods of data collection to fully explore the topic. Qualitative questions are open-ended. Qualitative methods include focus groups, group discussions, documents analysis, observations and interviews. Combining two or more data collections methods, for instance interviews as well as focus groups ('data triangulation') enhances the credibility of the study.

Qualitative approaches are good for further exploring the effects and unintended consequences of a program. They are, however, expensive and time consuming to implement. Additionally the findings cannot be generalized to participants outside of the study and are only indicative of the group involved.

Quantitative Data Collection : Quantitative data is numerical in nature and can be mathematically computed. Quantitative data measure uses different scales, which can be classified as nominal scale, ordinal scale, interval scale and ratio scale. Often (not always), such data includes measurements of something. "What", "how many?" and "how often?" are often asked in quantitative studies. They use a systematic standardized approach and employ methods such as surveys and questionnaires.

Quantitative approaches have the advantage that they are cheaper to implement, are standardized so comparisons can be easily made and the size of the effect can usually be measured. Quantitative approaches however are limited in their capacity for the investigation and explanation of similarities and unexpected differences.

The Quantitative data collection methods rely on random sampling and structured data collection instruments. They produce results that are easy to summarize, compare, and generalize. If the intent is to generalize from the research participants to a larger population.

Mixed Methods to Collect Data: Mixed methods approach as design, combining both qualitative and quantitative research data, techniques and methods within a single research framework. Mixed methods approaches may mean a number of things, i.e. a number of different types of methods in a study or at different points within a study or using a mixture of qualitative and quantitative methods. Mixed methods used to reduce weaknesses that stem from using a

single research design. Using this approach to gather and evaluate data may assist to increase the validity and reliability of the research.

4.5. DATA Analysis

To answer your research questions, you will have to analyze the data you collected.

Qualitative Data analysis

Different types of data analysis can be applied in qualitative research. A basic distinction is made between data analysis as inductive – i.e. analysis start from the collected data, which successively could lead to the discovery of themes or concepts – or as deductive – the analysis starts from a framework, for instance predetermined themes or categories based on a theory or the literature, or the analysis is a mix of an inductive or deductive approach. This depends on the perspective or aims of the research.

There are several general principles in qualitative data analysis that lead to 'good practices', like the importance of transparency, validity, reliability, comparison and reflexivity. It is important to note down decisions and steps in a logbook.

Approaches

There are many different approaches to qualitative data analysis, like content analysis, structural analysis or framework analysis. The choice is related to the aims of the study. The most basic form is content analysis, an approach in which the categorization of themes is central. Other approaches focus on, for instance, the context in which events are storied , or the thematic framework in which data can be classified.

Quantitative Data Analysis

To analyze numerical data, you will probably use statistical methods. These generally require applications such as Excel, SPSS or SAS.

Statistical methods can be used to analyze averages, frequencies, patterns, and correlations between variables. When creating your research design, you should clearly define your variables and formulate hypotheses about the relations between them. Then you can choose appropriate statistical methods to test these hypotheses.

Approache

A quantitative approach is often concerned with finding evidence to either support or contradict an idea or hypothesis you might have.

4.6. TIME TABLE (TIME SCALE) (optional)

Showing that you understand the need to plan your research carefully and have thought about how long the different tasks might take you. It doesn't need to be very detailed and it may of course change later, but it's essential that you show you've thought about whether your project is achievable in the time available.

Example

I predict that this research project will take <x> months / years. I propose a rough timescale, as follows:

<here, make a list of tasks that will need completing as part of your research project, and how

long you predict each will take in terms of weeks or months. End with a final count of months. If you have a predicted start date, you can begin with this and work towards a proposed end date.>

4.7. Anticipated problems and limitations

To show awareness of the limitations of the study , what problems may be met in carrying it out , and how they will be dealt with.

Lesson 8

Section Five

5.1. REFERENCES

you must cite the sources you used in research proposal, this section can take two forms, so consult with your supervisor about which one is preferred.

1. **References** -- lists only the literature that you actually used or cited in your proposal.
2. **Bibliography** -- lists everything you used or cited in your proposal, with additional citations to any key sources relevant to understanding the research problem.

This section normally does not count towards the total page length of your research proposal.

Example

Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge:Cambridge University Press.

5.2. APPENDICES

An **appendix** contains supplementary material that is not an essential part of the text itself but which may be helpful in providing a more comprehensive understanding of the **research** . If two or more appendices are included in a proposal, they should be designated Appendix A, Appendix B, etc.