

Research Proposal Guiding Tool for M & D Studies

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This Open Educational Resource (OER) guides postgraduate students through the literature review, research framework, methodology, data collection, and data analysis sections of a research proposal. It explains what to address in each section and how the sections connect. The guide encourages students to use relevant scholarship published within the past five years, synthesise sources in their own words, justify their methodological choices, and explain how those choices will be applied in their studies.

The purpose of this OER is to help students write a coherent, well-supported research proposal. It provides practical prompts for moving beyond lists of definitions to explain what each study will investigate, why its chosen methods are suitable, and how the research will be conducted. Students can use the guide while drafting or reviewing their proposals, and supervisors can use it to support feedback and discussion.

Research Title: Include the main topic and context in a concise, specific title

Components of a Strong Research Title

THE FORMULA



EXAMPLE

The Impact of Social Media Use on Academic Performance among University Students

Figure 1: Example of how to structure your research title.

A title need not always name the population, but it should make the study context clear.

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N.B: Use relevant sources published within the past five years (2021–2026) to support your discussion. Choose sources that address the concept or method and, where possible, studies relevant to your topic and context. If an original theory or framework source is older, cite it alongside recent scholarship that applies or critiques it.

Synthesise sources in your own words: compare their arguments, explain what matters for your study, and state your position. Cite sources to support decisions, then explain how you will apply those decisions. Avoid listing several near-identical definitions.

Table 1: What the sources should do in each section

Section	Use sources to...	Then explain in your own words...
Introduction and background	Establish the context, describe what is known about the topic, and show how the issue has developed in the relevant setting.	What the reader needs to understand before considering the research problem.
Rationale of the study	Show why further investigation is needed, drawing on gaps, conflicting findings, or needs identified in recent research.	Why this particular study should be undertaken now and in the chosen context.
Significance of the study	Show who may benefit from the findings and what contribution related studies suggest is needed.	How the findings could contribute to knowledge, practice, policy, or future research. Keep these as potential contributions, not promised outcomes.
Problem statement	Provide evidence that the problem exists, identify who or what it affects, and show what remains unknown or unresolved.	State the specific problem your study will address and why it leaves unresolved matters.
Literature/scholarship review	Compare findings related to each research question and identify patterns, disagreements, and gaps. Use methodology sources	What the literature shows collectively, and how the gap connects to your study.

Section	Use sources to...	Then explain in your own words...
	briefly to justify the type of review.	
Research framework	Explain the selected theory or concepts and show how recent researchers have applied or critiqued them.	Which ideas will guide your study, and how will you use them?
Research philosophy	Support the selected philosophical position and its assumptions about reality, knowledge, and values.	How do these assumptions relate to your problem and the knowledge you seek?
Research paradigm	Explain the selected paradigm and show how recent researchers use it to guide inquiry.	How the paradigm guides the evidence you will seek and its interpretation, building on the philosophy section.
Research type	Clarify the purpose of an exploratory, descriptive, explanatory, or other relevant type of inquiry.	Why does that purpose fit your research questions?
Research approach	Support the choice of a qualitative, quantitative, or mixed methods approach.	This approach will produce the evidence needed to answer your questions.
Research design	Explain the features and appropriate use of the selected design.	How will you apply the design in your study?
Population	Support the definition of the study population and provide credible contextual information where needed.	Who or what belongs to the population, and how you estimated its size.
Sampling	Justify the selected strategy and provide guidance on the sample size for the design.	How you will select participants, cases, or documents, including your inclusion and exclusion criteria.
Data collection methods and instruments	Explain and justify each method and instrument you plan to use.	What data will you collect, from which sources, and through which steps?
Data analysis and interpretation	Support the selected analysis strategy and its key procedures.	How you will prepare, analyse, and interpret the data to answer each research question.

Table 1 guides your use of sources; it does not form part of the proposal.

1.1 INTRODUCTION AND BACKGROUND

This section should have at least two paragraphs. Introduce the topic and move from the wider context to the setting of your study. Use recent sources to establish what is known and why the topic merits investigation.

Briefly indicate the issue that leads to the study. Develop the specific gap and its consequences in the problem statement rather than repeating that argument here.

1.2 RATIONALE FOR THE STUDY

Explain why the study is needed now and in this context. Use recent sources to show a gap, unresolved issue, or need that the research can investigate. If your own observations prompted the study, distinguish them from published evidence. Address the following prompts in a coherent narrative:

- What issue prompted the study?
- What evidence or observations indicate a need to investigate it?
- What remains unknown or unresolved?
- Why is this setting suitable for investigating that issue?

1.3 SIGNIFICANCE OF THE STUDY

Explain the potential value of the study by addressing these questions:

- What potential difference could the findings make?
- Who could benefit from the findings, and how?
- What could the study contribute to existing knowledge?
- How could the findings inform practice, policy, or future research?

Use recent sources that help support the potential contribution. Identify who could benefit and how, but do not promise outcomes before conducting the study. Focus on possible contributions rather than repeating the rationale or problem statement.

1.4 PROBLEM STATEMENT

Formulate a problem statement and link it with the introduction and background. Outline the specific issue or challenge your study will address. The problem should be narrowed down enough to be researchable but broad enough to be significant. Explain the nature and scope of the problem, including who or what it affects and how it manifests. To

formulate a sound problem statement, answer the following guiding questions and then combine your responses into a coherent narrative:

- What is the problem? Describe the specific issue, gap, or situation that needs investigation.
- Where and among whom does it occur? Identify the setting and people affected.
- What evidence shows that it is a problem? Use relevant research, reports, or observations.
- What is already known, and what remains unclear? Show the gap in current knowledge.
- Why does the problem matter? Explain its consequences for practice, policy, or research.
- Why is this study needed? State what understanding the proposed study will contribute.

In short, tell us what is happening, what we know about it, what we still need to understand, and why that matters. The problem statement builds the case for the study; the research questions then state precisely what the study will investigate.

1.5 RESEARCH QUESTIONS

1.5.1 Formulate the main research question that is aligned with your research title.

N.B., In a quantitative study, and in the quantitative strand of a mixed methods study, when the questions call for testing predictions, formulate appropriate hypotheses. A hypothesis is a testable prediction about a relationship or difference between variables. Examples follow:

Table 2: Types of hypotheses

Type	What it predicts	Example
Null hypothesis (H_0)	No relationship or difference	There is no difference in achievement between students who use virtual labs and those who do not.
Alternative hypothesis (H_1)	A relationship or difference exists	There is a difference in achievement between the two groups.
Directional hypothesis	The expected direction of the result	Students who use virtual labs will achieve higher scores.
Non-directional hypothesis	A difference or relationship, without predicting its direction	Achievement will differ between students who use virtual labs and those who do not.

Simple hypothesis	A relationship between one independent and one dependent variable	Virtual lab use is associated with achievement.
Complex hypothesis	Relationships involving more than two variables	Virtual lab use and digital literacy are associated with achievement and engagement.

Hypotheses can belong to more than one type. For example, “*Students who use virtual labs will achieve higher scores*” is both an alternative and a directional hypothesis.

In a qualitative study, researchers usually frame research questions rather than hypotheses, because they aim to explore experiences or meanings rather than test a prediction.

1.5.2 Formulate sub-research questions that develop distinct aspects of the main question. Include only as many as the study needs. The following are possible areas of inquiry, not a required formula:

Sub-question 1 → Meaning

Sub-question 2 → Influencing factors

Sub-question 3 → Barriers

Sub-question 4 → Supports

N.B If you study quantitative or mixed methods, include the hypothesis.

1.6 Aim and objectives of the study

1.6.1 Formulate your study aim, which is aligned to the main research question.

1.6.2 Formulate your study’s objectives that are aligned with the sub-research questions.

1.7. LITERATURE/SCHOLARSHIP REVIEW

Briefly explain the purpose of the literature review in your study and identify the type of review you will undertake. Justify your choice. Use all the research questions as subheadings to organise the discussion. Under each heading, compare and synthesise relevant scholarship, identify areas of agreement or debate, and show what remains unknown. End by explaining how the identified gap leads to your study’s research framework.

1.8 RESEARCH FRAMEWORK

Explain whether your study uses a theoretical framework, a conceptual framework, or both, and justify this choice. Introduce the selected theory, concepts, or model using relevant scholarship. Synthesise its main ideas and show specifically how they relate to

your research problem and questions. Explain how the framework will guide aspects of the study, such as data generation, analysis, or interpretation.

1.9. RESEARCH METHODOLOGY AND DESIGN

Briefly show how the philosophy, paradigm, research type, approach, design, participants, and methods fit together. Include a diagram only if it makes these relationships clearer.

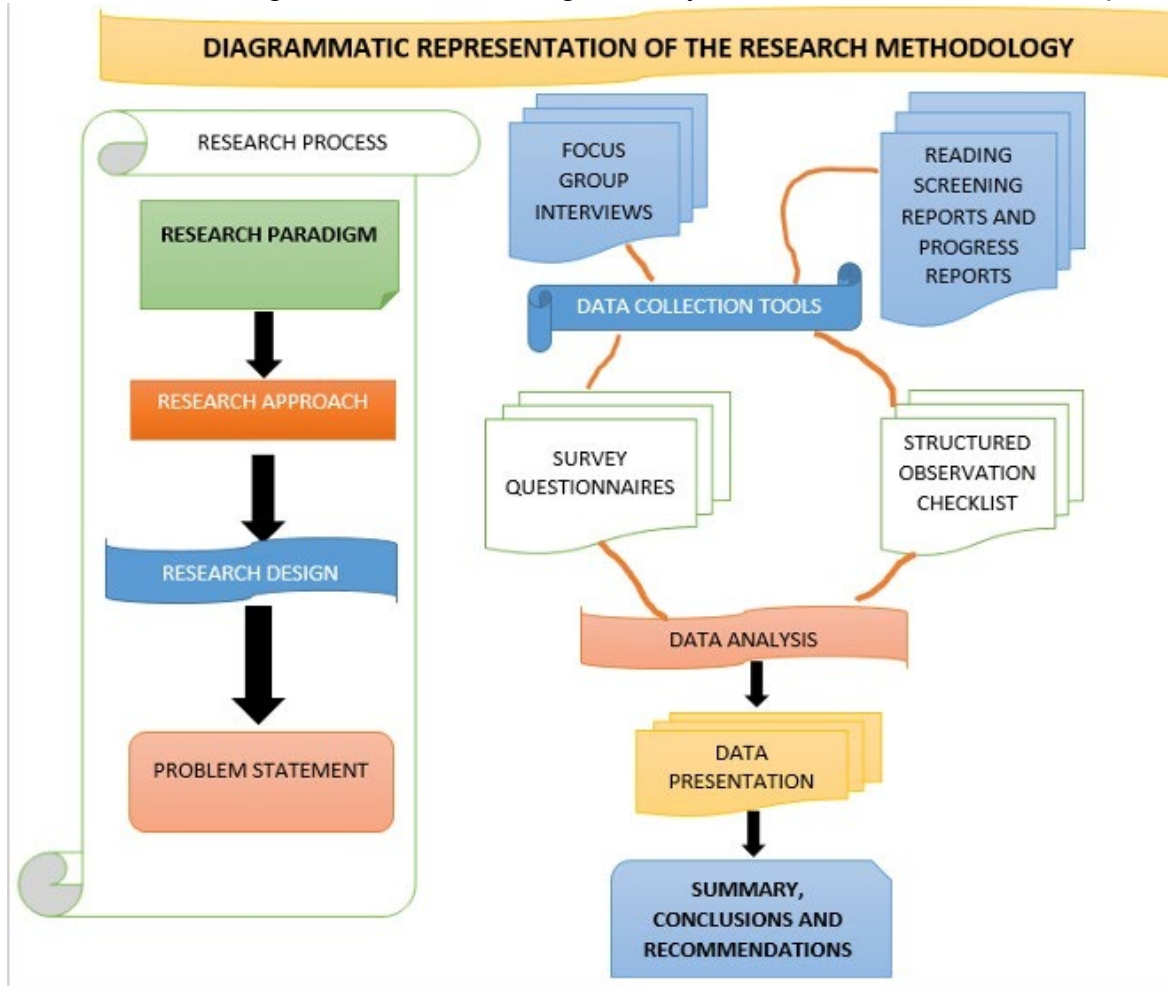


Figure 2: Research Methodology (Mphahlele, 2018)

Please use this figure as an example. It is not compulsory to use a figure. Conclude the section with a sentence linking the research methodology and research philosophy.

Use [this link](#) to access a summary of Philosophies, Paradigms, Approaches, Designs, and Methods

1.9.1 Research philosophy

Identify and justify the philosophical position that underpins your study. Using relevant recent sources, explain your assumptions about the nature of reality (ontology), how knowledge about that reality can be developed (epistemology), and the role of values in

the research (axiology). Do not define these terms in isolation. Show how your assumptions relate to the research problem, the kind of knowledge you seek, and your role as a researcher. Conclude by explaining how this philosophical position informs the research paradigm discussed in the next section.

1.9.2 Research paradigm

Identify the research paradigm that will guide the study and justify its suitability for the research problem. Building on the philosophical position discussed in Section 1.9.1, explain how this paradigm shapes the way you will investigate the problem, the kind of evidence you will seek, and how you will interpret your findings. Show how the paradigm supports the methodological decisions that follow, without repeating your discussion of ontology, epistemology, and axiology. Conclude by linking the paradigm to the research type selected for the study.

1.9.3 Research type

State the purpose or type of inquiry your study undertakes, such as exploratory, descriptive, or explanatory, using the terminology appropriate to your field. Explain why this purpose fits the research questions. Keep this distinct from the research approach discussed next. Link this section with the research approach section.

1.9.4 Research approach

Identify whether the study uses a qualitative, quantitative, or mixed methods approach. Justify the choice in relation to the research questions, the type of evidence needed, and the paradigm. Conclude the section with a sentence linking the research approach and design.

1.9.5 Research design

Identify the specific design within your chosen approach and explain why it is suitable. Describe how the design will be applied in this study, including its setting, cases, groups, or phases where relevant. Conclude the section with a linking sentence linking the research design, population, and sampling.



Figure 3: Qualitative research designs

Choose the design that fits the research question and intended contribution. Some labels describe the purpose of a study, while others describe its structure or tradition. For example, a case study may be explanatory and involve multiple cases. State both features where relevant.

Table 3: Specific Qualitative Designs, contributions, methodological practices, and analysis

Specific design	What it helps the researcher understand or produce	Implication for data analysis	Key Methodological Steps
Descriptive phenomenology	Describes the essential features of a lived experience shared by participants.	Examine participants' accounts closely to develop a description of the experience and its common features. Explain how you will attend to your own prior assumptions.	• Bracketing • Horizontalization • Textural and Structural Synthesis
Interpretative (hermeneutic) phenomenology	Explores how people make sense of a lived experience within their personal and social contexts.	Interpret the meanings participants give to their experiences while considering context and the researcher's role in interpretation.	• Formulate an Open Research Question • Select a Homogeneous Sample • Gather Immersive Data

Specific design	What it helps the researcher understand or produce	Implication for data analysis	Key Methodological Steps
			• Apply the Hermeneutic Circle • Engage in Reflexivity • Code and Extract Themes • Write and Rewrite
Interpretative phenomenological analysis (IPA)	Examine in detail how particular individuals make sense of significant experiences.	Analyse each participant's account in depth before looking for patterns across accounts.	• Reading and Re-reading • Initial Noting • Developing Emergent Themes • Searching for Connections Across Emergent Theme • Idiographic attention and the double hermeneutic • Mapping out how themes from different participants interact
Exploratory case study	Investigates a bounded case when the issue, processes, or relevant factors are not yet well understood.	Examine various sources of evidence to identify key processes, perspectives, and questions arising in the case.	Case bounding and multiple sources of evidence: specify what belongs to the case and examine relevant perspectives or records.
Descriptive case study	Provides a detailed account of a bounded case and its context.	Organise and interpret evidence to show what happened, who was involved, and how the case operated.	Case bounding, contextual description, and a clear chain of evidence: show how observations, accounts, and documents support the description.
Explanatory case study	Investigates how or why something happened within a bounded case.	Analyse patterns and possible explanations across evidence sources, while considering rival explanations.	Pattern matching and consideration of rival explanations: seek evidence that supports or challenges possible explanations.
Classical grounded theory	Develops a theory that explains a social process or pattern of action.	Compare data continuously, develop concepts and categories, and refine an emerging theory through further data collection.	Constant comparison, theoretical sampling, and memo writing: allow emerging concepts to guide further data collection and analysis.

Specific design	What it helps the researcher understand or produce	Implication for data analysis	Key Methodological Steps
Straussian grounded theory	Develops an explanatory account of a process through systematic category development.	Use iterative coding and comparison to examine relationships among categories and build an explanation.	Constant comparison, theoretical sampling, memo writing, and category linking, including axial coding where consistent with the procedure adopted.
Constructivist grounded theory	Develops an interpretation of a process while recognising that findings are constructed through interactions between participants and the researcher.	Use iterative coding, comparison, and memo writing; explain the researcher's interpretative role.	Reflexivity, constant comparison, theoretical sampling, and reflexive memo writing: acknowledge the researcher's role in constructing the account.
Traditional ethnography	Develops an in-depth understanding of a group's shared practices and meanings over time.	Interpret sustained observations, interviews, and artefacts together within the group's cultural setting.	Sustained engagement, participant observation, field notes, and thick description: examine practices in their everyday setting.
Focused ethnography	Examines a specific practice or issue within a defined group or setting.	Analyse closely targeted observations and interviews to explain the selected practice in context.	Targeted observation, intensive fieldwork, and contextual field notes: concentrate on a clearly defined aspect of group practice.
Critical ethnography	Examines cultural practices alongside questions of power, inequality, or exclusion.	Interpret participants' accounts and observed practices in relation to the power structures affecting the group.	Researcher positionality, reflexivity, and attention to marginalised perspectives: examine whose interests and voices shape the setting.
Analytic autoethnography	Uses the researcher's position within a setting to explain a wider social process or practice.	Examine personal records and experience in dialogue with concepts and other evidence to develop a broader interpretation.	Analytic reflexivity; systematic personal records or field notes; engagement with theory and, where appropriate, other informants.
Evocative autoethnography	Connects the researcher's personal experience with wider cultural meanings through a compelling account.	Develop and interpret a reflexive narrative that links significant experiences to the social or cultural issue.	Reflexive writing; attention to significant scenes and relationships; ethical representation of others in the account.
Life-history narrative inquiry	Explores how a person understands experiences across	Analyse the sequence of events, turning points, context, and meaning within the person's account.	Attention to chronology, turning points, and co-construction of the account: work with

Specific design	What it helps the researcher understand or produce	Implication for data analysis	Key Methodological Steps
	the course of their life.		participants' stories while retaining their context.
Practical action research	Investigates a local practice problem while trying out and refining an improvement.	Analyse evidence across cycles of planning, action, observation, and reflection.	Cycles of planning, action, observation, and reflection: use evidence from each cycle to refine practice.
Participatory action research	Produces knowledge and action with participants who help define the problem and shape the research process.	Analyse and interpret evidence collaboratively where feasible, showing how participants' input informs each cycle of action.	Shared decision-making, co-inquiry, and collective reflection: involve participants meaningfully in defining the problem and interpreting progress.

These practices are not interchangeable checkboxes. For example, bracketing has a particular role in descriptive phenomenology, while reflexivity is central to interpretative traditions and remains valuable across qualitative research. Name the practice you will use, explain how you will carry it out, and show why it fits your chosen design and tradition

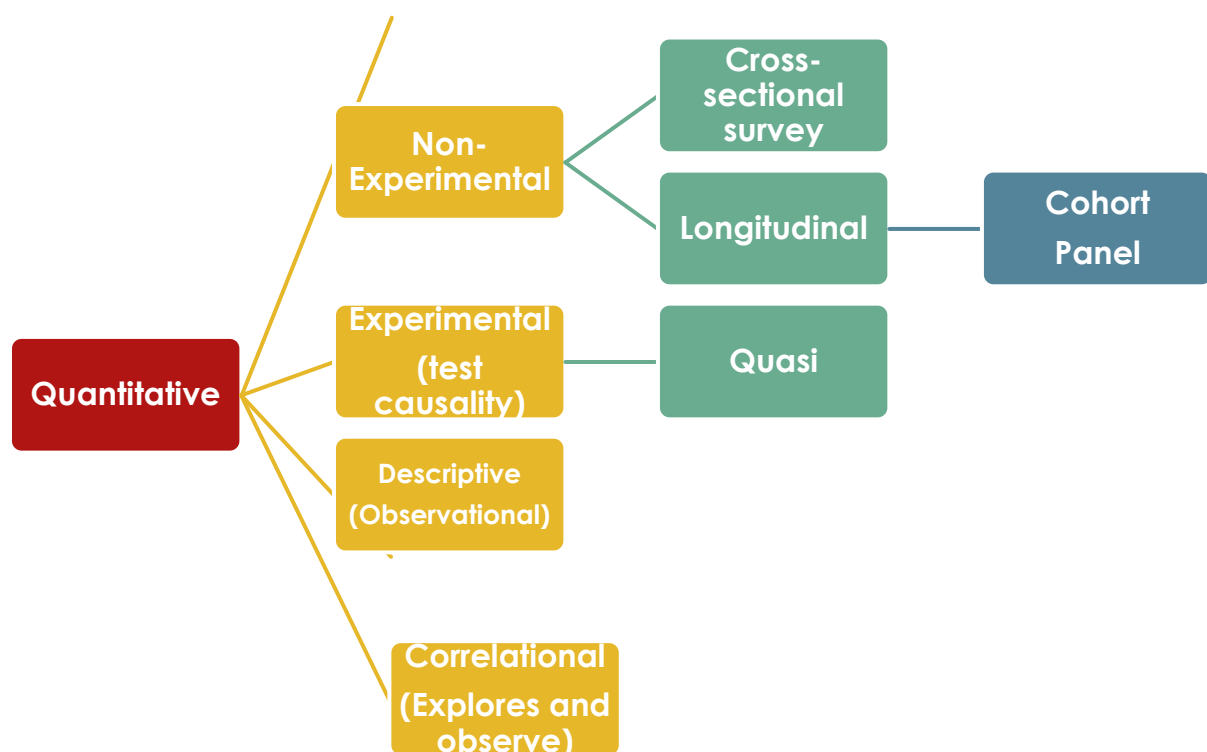


Figure 4: Quantitative research designs

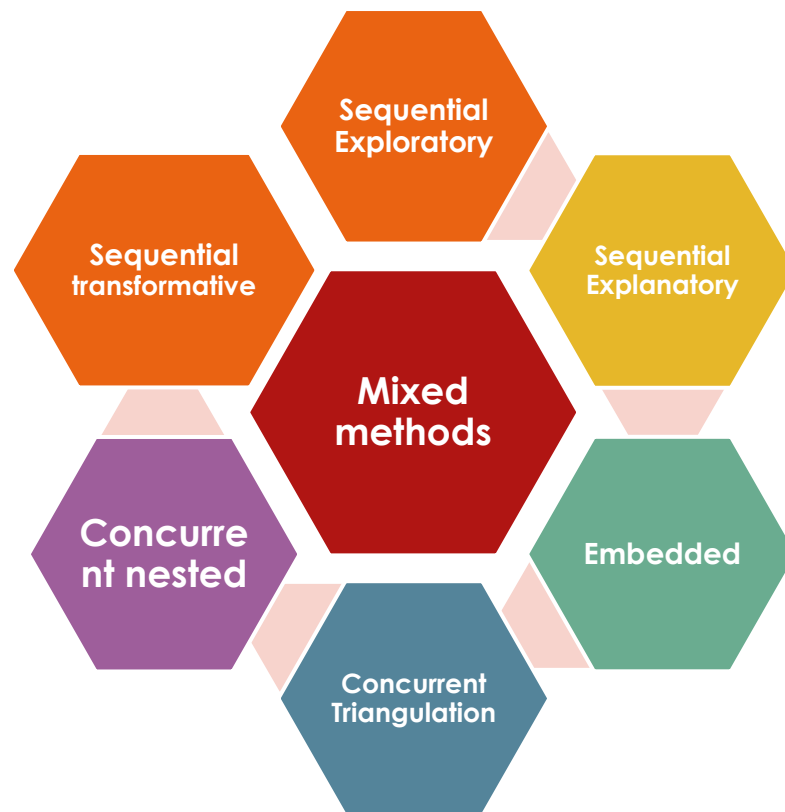


Figure 5: Mixed Methods research designs

1.9.6 Population

Identify the group, cases, or materials to which the study relates. Describe their relevant characteristics and setting. Where possible, provide a reliable estimate of the population size and explain how you obtained it. Conclude the section with a linking sentence that links the population and the sampling section.

1.9.7 Sampling

Explain who or what will be selected, how the selection will take place, and why that strategy suits the specific research design. Support the sampling decision with relevant methodological sources published within the past five years. Do not select a strategy only because it is commonly associated with a qualitative, quantitative, or mixed methods approach. A multiple-case study, for example, requires the researcher to explain both how cases will be selected and how participants or documents will be selected within each case.

Begin by identifying the unit of selection: individual participants, groups, institutions, cases, events, or documents. State the population or source pool, the proposed sample size, the inclusion and exclusion criteria, and the recruitment or selection steps. Explain how you will determine whether the sample is adequate for the study's purpose and design. If you cannot give a final number at the proposal stage, provide an estimated range and explain how the final number will be determined.

For every design, make the alignment explicit: "This study uses [design]. Therefore, [unit of selection] will be selected through [strategy] because [reason linked to the research question and design]."

Avoid stating only that the study will use *purposive sampling or random sampling*. Name the specific form, describe how it will work in practice, and justify it. For example, a qualitative multiple case study might purposively select three institutions that meet stated criteria, then use criterion sampling to select participants at each institution. A quantitative survey that aims to estimate results across defined subgroups might use stratified random sampling, provided a suitable sampling frame is available.

Describe how your sampling decision limits the claims you can make. Purposive sampling may provide rich insight, while population-wide prevalence claims require a suitable quantitative design and sampling strategy. Table 4 illustrates how sampling decisions should align with particular designs.

Table 4: Aligning Sampling Strategies with Research Approaches and Designs

Research approach and design	Sampling decisions to explain
Qualitative: phenomenology	Select people who have experienced the phenomenon and can describe it in depth. Explain the experience that qualifies them, how you will identify them, and why the proposed number can support detailed analysis.
Qualitative: case study	Define the boundaries of the case and justify its selection. If there are several cases, explain why each was chosen. Then explain how participants, activities, and documents will be selected within each case.
Qualitative: grounded theory	Explain the initial participant selection and how emerging analysis may guide later theoretical sampling. Describe how you will assess whether further data are needed to develop the emerging theory.
Qualitative: ethnography or narrative inquiry	Explain how participants, settings, events, or stories will provide access to the culture or experiences under study. Account for the time and depth of engagement the design requires.

Research approach and design	Sampling decisions to explain
Qualitative: autoethnography	Explain why the researcher's experience provides a suitable starting point for the research question. Specify how relevant periods, events, interactions, documents, or artefacts will be selected. If other people's accounts will be included, explain their selection and consent separately.
Quantitative: survey or descriptive design	Define the target population and sampling frame. Explain whether participants will be selected through simple random, stratified, cluster, systematic, or another suitable strategy. Justify the sample size in relation to the intended estimates and analyses
Quantitative: comparative or experimental design	Explain how participants or groups will be selected and, where relevant, how they will be assigned to conditions. Sampling and assignment are different decisions. Justify the number needed for the planned comparisons or statistical tests.
Mixed methods: convergent design	Explain the sampling strategy for the quantitative and qualitative strands. State whether the strands will involve the same participants, overlapping samples, or different groups, and how that choice will allow the findings to be brought together.
Mixed methods: explanatory sequential design	Explain the quantitative sample first. Then show how quantitative results will guide the selection of participants for the qualitative follow-up, for example, by selecting participants with different response patterns.
Mixed methods: exploratory sequential design	Explain the qualitative sample used to explore the issue or develop an instrument. Then explain how the subsequent quantitative sample will be selected to test or extend what was developed.

1.9.8 Data collection methods and instruments

Explain what data you need for each research question, where those data will come from, and how you will obtain them. Choose methods that fit the specific design. For example, a phenomenological study may use detailed accounts of lived experience, while a case study may draw on interviews, observations, and documents to understand its context.

Distinguish between a method and an instrument. An interview is a method; an interview guide is an instrument. Observation is a method; an observation schedule or field-note

template is an instrument. A questionnaire can serve as the instrument used to collect survey responses.

For each method in your proposal:

1. Identify the research question it will help answer and the type of data it will produce.
2. State who or what will provide the data, where collection will take place, and in what order.
3. Name the instrument and describe its sections or main areas of inquiry.
4. Explain how you will develop, review, pilot, or adapt the instrument.
5. Describe the procedure: recruitment, consent, administration or facilitation, duration, recording, language, and secure handling of the data.
6. Justify why the method and instrument suit the design, using relevant methodological sources published within the past five years.

Table 5: Data collection methods and instruments suited to common research designs

Research Design	Suitable Methods	Possible Instruments	What students should explain
Qualitative			
Phenomenology	In-depth interviews; participants' written accounts; relevant reflective materials	Open-ended interview guide; written reflection prompts	How the questions will elicit detailed accounts of participants' lived experiences of the phenomenon.
Case study	Interviews; observations; document and record analysis; artefact review	Interview guides; observation schedule; document review guide; field notes	How each source will help describe and understand the bounded case. For multiple cases, explain what data will be collected in each case.
Grounded theory	Interviews; observations; relevant documents or interactions, collected in stages	Flexible interview guide; observation notes; analytic memos	How emerging analysis may shape later questions and data collection as the researcher develops an explanation or theory.
Ethnography	Sustained observation; participation where	Field-note template; observation guide; interview guide	How engagement in the setting will help the researcher understand practices and meanings in context.

Research Design	Suitable Methods	Possible Instruments	What students should explain
	appropriate; informal or formal interviews; artefact analysis		
Autoethnography	Reflexive writing; recollection of significant events; examination of personal records and artefacts; observation or conversations where relevant	Reflexive journal; field notes; timelines; photographs; correspondence; institutional documents	How the researcher will document personal experience systematically and connect it to the wider social or cultural context. Autoethnographic writing can itself be part of generating and analysing data.
Narrative inquiry	Narrative interviews; life-history accounts; diaries; personal documents	Narrative interview prompts; timeline activity; document review guide	How the methods will allow participants to tell and contextualise their stories.
Qualitative descriptive study	Semi-structured interviews; focus groups; observations; documents	Interview or focus group guide; observation schedule; document review guide	How the methods will produce a clear account of participants' views, practices, or circumstances.
Quantitative			
Descriptive survey	Questionnaire administration; structured review of existing records	Structured questionnaire; data extraction form	How each variable will be measured, how questions or response options were developed, and how the questionnaire will be administered.
Correlational study	Questionnaires; standardised measures; extraction of	Validated scales; structured questionnaire; data extraction form	How each variable will be measured and whether the instruments are appropriate for the study population.

Research Design	Suitable Methods	Possible Instruments	What students should explain
	existing numerical data		
Comparative study	Common measures administered to two or more groups; existing records	Questionnaire; assessment; validated scale; data extraction form	How the same outcomes will be measured consistently across groups.
Experimental and quasi-experimental study	Pre- and post-intervention measurements; observations using standard criteria; relevant records	Tests; rating scales; observation checklist; intervention record	How outcomes will be measured, when measurements will occur, and how implementation of the intervention will be documented.
Longitudinal study	Repeated questionnaires, tests, or record extraction over time	Repeated-measure questionnaire; test; data extraction form	When measurements will take place and how the same participants or units will be tracked over time.
Mixed Methods			
Convergent design	Qualitative and quantitative methods conducted during the same broad phase	For example, interview guide and questionnaire	How both datasets address the research questions and how their findings will be compared or brought together.
Explanatory sequential design	Quantitative collection followed by qualitative follow-up	For example, questionnaire followed by an interview guide informed by survey results	How the first-phase results will determine what the second phase investigates and whom it includes.
Exploratory sequential design	Qualitative collection followed by quantitative collection	For example, interview guide followed by a questionnaire developed from the qualitative findings	How the first-phase findings will inform the development of the quantitative instrument or measures.
Embedded design	A primary qualitative or	For example, the achievement test	What role the supporting dataset plays and when it will be

Research Design	Suitable Methods	Possible Instruments	What students should explain
	quantitative method with a supporting dataset collected within the study	and observation guide	collected in relation to the primary dataset.

The methods in Table 5 are options, not required combinations. Choose those that fit the questions, design, participants, setting, and evidence needed. If you use several qualitative sources, explain how you will compare them. In mixed methods, specify when and how the qualitative and quantitative strands will be integrated.

A useful check before finalising this section is to ask: “*Can I trace every research question to a data source, a method, an instrument, and a planned analysis?*” If any link is missing, the data collection plan needs further development.

Use a separate subsection for each method you actually plan to use (for example, interviews, observations, or document analysis). For each one, state what data you will collect, from whom or what source, how the instrument will be used, and why the method fits the design. Number only the subsections included in your own study. Conclude with the sentence that links this data collection method with the data analysis and interpretation.

1.9.9 Data analysis and interpretation

Identify an analysis strategy that fits the research questions, design, and data. Naming thematic analysis or descriptive statistics is only a starting point: explain the steps you will follow and how they will produce findings that answer the questions.

Describe how you will prepare the data, including transcription, translation, de-identification, document organisation, variable coding, or treatment of missing responses where relevant. Then explain the analysis steps in order, using recent methodological sources to justify your procedure.

Table 6: Data Analysis Strategies Aligned with Specific Research Designs

Research design	Suitable analysis strategies	What students should explain
Qualitative		
Descriptive phenomenology	Descriptive phenomenological analysis, using a clearly identified procedure	How they will examine accounts of lived experience and develop a description of its essential features.

Research design	Suitable analysis strategies	What students should explain
Interpretative (hermeneutic) phenomenology	Hermeneutic interpretation of participants' accounts	How they will interpret meanings in context and reflect on their own role in that interpretation.
Interpretative phenomenological analysis (IPA)	Detailed analysis of each account, followed by examination of patterns across accounts	How they will preserve the detail of individual experiences while developing shared patterns.
Exploratory case study	Within-case analysis; thematic analysis; examination of patterns across evidence sources	How they will identify important issues and processes within the bounded case.
Descriptive case study	Within-case analysis organised around the case, its context, and relevant events or activities	How they will combine evidence sources to produce a detailed account of the case.
Explanatory case study	Pattern matching; explanation building; consideration of rival explanations	How they will use evidence to assess possible explanations for how or why an outcome occurred.
Classical grounded theory	Constant comparison, concept development, memo writing, and refinement of emerging categories	How analysis and further data collection will work together to develop a theory.
Straussian grounded theory	Iterative coding, including examination of relationships among categories	How they will develop and connect categories to produce an explanatory account.
Constructivist grounded theory	Initial and focused coding, constant comparison, and memo writing	How they will develop an interpretation of the process and account for their role in constructing it.
Traditional ethnography	Contextual analysis of field notes, interviews, interactions, and artefacts	How they will identify and interpret a group's shared practices and meanings.
Focused ethnography	Focused thematic or contextual analysis of a defined practice or issue	How they will interpret the selected practice within its setting.
Critical ethnography	Contextual and critical analysis of practices, accounts, and relevant structures	How they will examine power, inequality, or exclusion alongside participants' experiences.
Evocative autoethnography	Reflexive narrative analysis and writing that links significant personal experiences to their social or cultural meanings	How events were selected, revisited, and interpreted; how the final narrative helps answer the research question.
Analytic autoethnography	Reflexive analysis of personal accounts and records in	How the researcher will move from personal experience to a

Research design	Suitable analysis strategies	What students should explain
	dialogue with relevant concepts and other evidence	supported interpretation of the wider practice or social process.
Life-history narrative inquiry	Narrative analysis of sequence, turning points, context, and meaning	How they will retain the shape and context of each person's life story.
Oral history	Contextual interpretation of accounts of past events, considered alongside available historical sources	How they will address memory, perspective, and historical context.
Practical action research	Analysis within and across cycles of planning, action, observation, and reflection	How evidence from one cycle will inform the next action or improvement.
Participatory action research	Collaborative interpretation of evidence within and across action cycles	How participants will contribute to interpreting findings and deciding on subsequent action.
Quantitative		
Descriptive survey	Frequencies, percentages, measures of central tendency and variation; confidence intervals where appropriate	Which statistics will describe each variable, and how will you present the results for the study population or sample?
Correlational study	Correlation and, where justified, regression analysis	Which relationships you will test, how variables will be measured, and how you will check assumptions. Explain that an association alone does not establish causation.
Comparative study	Tests suited to comparing the specified groups, such as a t-test, ANOVA, or an appropriate non-parametric alternative	Which groups and outcomes you will compare, why the selected test fits the data, and how you will interpret the size and uncertainty of any difference.
Experimental and quasi-experimental study	Analysis of pre- and post-intervention outcomes and differences between conditions; models that account for relevant baseline differences where appropriate	How the analysis will assess change or intervention effects in line with the design. Explain any limits on causal claims, especially where participants were not randomly assigned.
Longitudinal study	Analysis of change across time points using methods suitable for repeated measurements	How you will account for repeated observations from the same participants or units, and how you will handle participants lost to follow-up.
Mixed Methods		

Research design	Suitable analysis strategies	What students should explain
Convergent design	Separate qualitative and quantitative analyses, followed by comparison or integration	How you will bring the two sets of findings together, examine where they agree or differ, and develop an integrated interpretation.
Explanatory sequential design	Quantitative analysis followed by qualitative analysis of selected results	How the qualitative findings will help explain particular quantitative results and how you will draw the final conclusions across both phases.
Exploratory sequential design	Qualitative analysis followed by quantitative analysis of what was developed or identified	How qualitative findings will inform the next phase and how you will interpret the results of both phases together.
Embedded design	Analysis of a primary dataset and a supporting dataset, followed by interpretation of their relationship	How the supporting analysis will add to the primary findings and where the two will be connected.

The design guides analysis but does not prescribe one automatic procedure. Explain what you will analyse and how the chosen strategy serves the design. SPSS and ATLAS.ti are software tools, not analysis strategies; name the analytical procedure before identifying software that may support it.

To finish the section, explain how you will interpret the findings in relation to the research questions, research framework, and existing scholarship. If you collect several types of data, state when and how you will compare or integrate them. Avoid promising that the findings will confirm the framework or hypothesis; the analysis must also allow unexpected or contradictory findings to be reported.

1.10. RELIABILITY AND VALIDITY/CREDIBILITY AND TRUSTWORTHINESS

Identify the criteria for research quality that suit your approach and design. Explain how you will assess them and what specific steps you will take to strengthen the study. Support these choices with relevant recent methodological sources.

1.11. RESEARCH ETHICS

Explain how you will obtain ethics approval and relevant gatekeeper permission before recruitment or data generation. Address informed consent, voluntary participation, possible risks, privacy, secure data handling, and any design-specific ethical issues.

1.12. CONCLUSION

Summarise the proposal's central problem, purpose, framework, and methodological choices. Show how these elements fit together without introducing new information.

1.13 LIST OF REFERENCES

List every source cited in the proposal and check that every reference is cited in the text. Apply the required referencing style consistently.