

RESEARCH MADE SIMPLE

A Practical Guidebook for
BS, MS, PhD, and Journal
Article Writing

EXPLORE
INVESTIGATE
ANALYZE
INTERPRET
SOLVE
CONTRIBUTE

TURN
IDEAS
INTO
IMPACT

RESEARCH QUESTION → LITERATURE REVIEW → METHODOLOGY → ANALYSIS → WRITING → PUBLICATION

Problem
↓
Literature Review
↓
Methodology
↓
Results
↓
Conclusion

Variable	N	Mean	SD	p
Group A	50	3.26	0.82	<.001
Group B	50	2.14	0.76	

DISCOVER
LEARN
RESEARCH
WRITE
PUBLISH
MAKE A
DIFFERENCE

Plan
Collect Data
Analyze
Write
Revise
Submit
Achieve

By Dr. Shazia Shahzadi, Ph.D

Psychologist | Speech Pathologist | Researcher | Author | Trainer

Research

A Practical Guidebook

From a Research Idea to a Clear Journal Article

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First Edition

Simple English • Practical examples • Checklists • Tables • Figures • Writing exercises

RESEARCH: A PRACTICAL GUIDEBOOK

Copyright and Use

A practical learning book

This guide explains research writing in plain English. It does not replace a university handbook, ethics policy, statistical consultation, or a journal's Instructions for Authors.

Examples in the book are fictional and are used only for teaching.

Practical note: Use the current reporting guideline that matches your study design, and always check the target journal before submission.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the connection between this decision and the next stage of the study and keep the research story coherent. Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the connection. Keep the reasoning clear and consistent.

RESEARCH: A PRACTICAL GUIDEBOOK

Preface

Research becomes easier when we stop treating it as one giant task.

Most people do not struggle because they are unable to research. They struggle because too many decisions arrive at the same time: topic, sample, tools, statistics, writing and publication.

This book separates those decisions. Each page answers one practical question and leads to the next.

Practical note: The aim is clarity, not complicated language.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the connection between this decision and the next stage of the study and makes the work easier to defend during supervision, peer review, or a viva. Practical reflection: keep the connection between this decision and the next stage of the study visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why. Keep the reasoning clear and consistent.

RESEARCH: A PRACTICAL GUIDEBOOK

How to Use This Book?

Read it in order once; then return to the section you need.

If you are starting a study, begin with Chapters 1–5. If your data are already collected, go to Chapters 6–8. Use Chapter 9 for tables, figures, references and reporting standards. Chapter 10 explains how BS, MS/MPhil and PhD research differ. Chapter 11 then takes the work from draft to journal submission.

Practical note: Keep a research notebook beside you. Complete the short exercises instead of only reading them.

Practical reflection: Keep the link between each research decision and the next stage of the study clear. State the decision in plain language first, adding technical detail only when it improves accuracy. A reader should be able to understand what was decided, why the decision is appropriate, what evidence supports it, and how it influences the next step. If any of these points are unclear, revise the section before moving forward.

Use consistent terminology for populations, variables, outcomes, and time points throughout the proposal, thesis, or article. Avoid vague or overly impressive wording, separate observation from interpretation, and include detail only when it adds meaning. Where decisions depend on university, ethics, or journal requirements, follow the most current official guidance.

Mini practice: Apply this approach to one real or imaginary study. Write the decision in two or three sentences, compare it with the research question and methodology, and revise it for clarity and precision.

Quality check: Imagine another researcher can read only this page. They should still be able to understand the decision made, the reasoning behind it, and what should happen next.

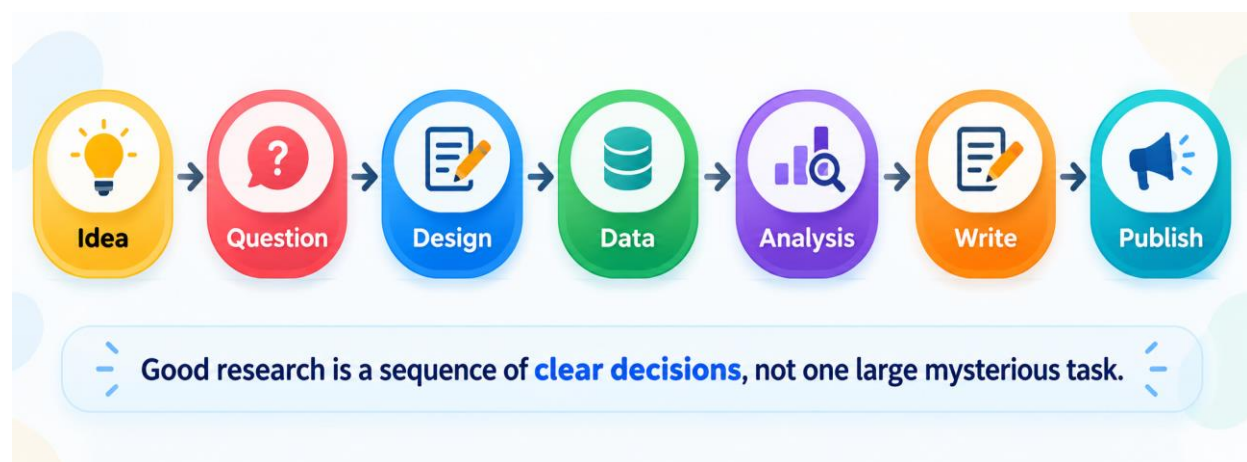
RESEARCH: A PRACTICAL GUIDEBOOK

The Research Journey

A paper is the final record of a chain of decisions.

A strong manuscript is easier to write when the question, design, measures and analysis already fit together.

Weak alignment early in the project cannot be repaired by sophisticated words at the end.



Practical note At every stage ask: Does this decision still answer my research question?

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the connection between this decision and the next stage of the study easier for supervisors, examiners, readers, and journal reviewers to follow. Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, Keep the reasoning clear and consistent.

RESEARCH: A PRACTICAL GUIDEBOOK

Research in One Sentence

Research is a careful way of answering a focused question with evidence.

Good research is systematic: you decide what you want to know, choose a suitable method, collect information consistently, analyse it appropriately, and explain what the evidence does and does not support.

Practical note: The word 'careful' matters. Research is not simply collecting many facts.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the connection between this decision and the next stage of the study and keep the research story coherent. Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach Keep the reasoning clear and consistent.

RESEARCH: A PRACTICAL GUIDEBOOK

Main Types of Research

Different questions need different designs.

Quantitative studies work mainly with numerical data. Qualitative studies explore experiences, meanings and processes. Mixed-methods studies intentionally integrate both. Evidence syntheses use existing studies rather than collecting new participant data.

Practical note: Do not choose a design because it sounds advanced. Choose it because it matches the question.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the connection between this decision and the next stage of the study and makes the work easier to defend during supervision, peer review, or a viva. Practical reflection: keep the connection between this decision and the next stage of the study visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise. Keep the reasoning clear and consistent.

RESEARCH: A PRACTICAL GUIDEBOOK

Ethics Comes Before Data

Ethics is part of the research design, not a form completed at the end.

Think about consent, privacy, possible harm, fair recruitment, data security, conflicts of interest and approval requirements before data collection starts.

Clinical trials and some other studies may also require prospective registration.

Practical note: When in doubt, ask the responsible ethics body before recruitment.

Practical reflection: keep ethical, transparent, and responsible research practice visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later in the proposal, thesis, or article. Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document.

RESEARCH: A PRACTICAL GUIDEBOOK

Reporting Guidelines Are Writing Maps

Use the guideline that fits your design.

EQUATOR indexes major reporting guidelines. Examples include CONSORT for randomized trials, STROBE for observational studies, PRISMA for systematic reviews, SRQR or COREQ for qualitative research, and TIDieR for describing interventions.

Practical note: A reporting checklist helps you report a study completely; it is not a substitute for good study design.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the accuracy of references and completeness of reporting easier for supervisors, examiners, readers, and journal reviewers to follow.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen Keep the reasoning clear and consistent.

RESEARCH: A PRACTICAL GUIDEBOOK

Learning Route

Eleven chapters take you from idea to degree-level research and then to journal submission.

Most chapters have ten short lessons. You will repeatedly return to one principle: alignment. The title, objectives, methods, results and discussion should all describe the same study. The exact thesis format and degree requirements must always be checked against your own university handbook.

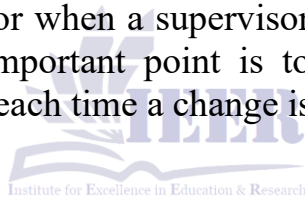
Practical note: The last three pages give a concentrated Q1-journal writing guide.

Chapter	Main focus	Pages
1	Choosing a Research Topic and Title	11–20
2	Literature Review, Research Gap and Introduction	21–30
3	Research Questions, Objectives, Hypotheses and Frameworks	31–40
4	Methodology: Design, Setting, Participants and Sampling	41–50
5	Measures, Data Collection, Ethics and Analysis Planning	51–60
6	Writing the Results	61–70
7	Writing the Discussion	71–80
8	Writing the Title, Abstract, Keywords and Conclusion	81–90
9	Tables, Figures, References and Reporting Standards	91–102
10	BS, MS, Ph.D. Research	103–112
11	From Draft to	113–125

	Submission: Peer Review and Q1 Writing	
12	Appendices	126-132

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the connection between this decision and the next stage of the study and keep the research story coherent. Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several Keep the reasoning, clear and consistent.

Use the contents as a working map rather than as a rule that every project must follow in exactly the same order. Researchers often return to earlier decisions when new evidence appears or when a supervisor, ethics committee, or journal requests clarification. The important point is to keep the question, method, analysis, and writing aligned each time a change is made.



CHAPTER 1 CHOOSING A RESEARCH TOPIC AND TITLE

Start with a real problem

Extra practice: describe the problem in one sentence without naming a method. If the sentence already contains the answer you hope to prove, rewrite it more neutrally.

A useful topic begins with a problem that matters to a defined group, setting or field.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Write the broad concern in one sentence.
- Name who is affected.
- State why the problem deserves study now.

Example: Ayesha notices that many university students report poor sleep during examination periods. 'Student stress' is broad; 'sleep quality during examinations' is closer to a researchable problem.

Try it Write one problem you see in your workplace, clinic, classroom or community.

Key idea: Write the broad concern in one sentence. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this Keep the explanation clear and consistent.

CHAPTER 1 CHOOSING A RESEARCH TOPIC AND TITLE

Move from broad to focused

A topic becomes manageable when you narrow population, concept, setting and time.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Broad: mental health.
- Narrower: stress among nurses.
- Researchable: association between rotating night shifts and perceived stress among nurses in tertiary hospitals.

Example Ayesha uses a funnel: students → undergraduate students → examination period → sleep quality and perceived stress.

Try it Reduce your topic until a reader can imagine who, what and where.

Key idea: Broad: mental health. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the connection between this decision and the next stage of the study visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later. Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to. Keep the explanation clear and consistent.

CHAPTER 1 CHOOSING A RESEARCH TOPIC AND TITLE

Check whether the topic is researchable

A researchable topic can be investigated with available people, data, time, skills and ethical access.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- Can you reach the population?
- Can the main variables or experiences be measured or explored?
- Can the project be completed within your resources?

Example: A national study may sound impressive, but Ayesha has access to only two universities. She chooses a realistic setting and states it honestly.

Try it List one practical barrier and one way to reduce it.

Key idea: Can you reach the population? Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the movement from a broad interest to a focused and feasible research problem easier for supervisors, examiners, readers, and journal reviewers to Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 1 CHOOSING A RESEARCH TOPIC AND TITLE

Find the value without exaggeration

Importance should be explained with evidence, not with dramatic wording.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- Show the size or seriousness of the problem when reliable data exist.
- Explain what remains uncertain.
- State who may use the findings.

Example: Instead of writing 'stress is a devastating global epidemic', Ayesha writes that stress and sleep problems are common concerns in student populations and that local evidence during examination periods is limited.

Try it Replace one exaggerated sentence in your notes with a specific, supportable sentence.

Key idea: Show the size or seriousness of the problem when reliable data exist. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the reasoning. Keep the reasoning clear and consistent.

Practical note: keep the connection between this step and the complete research story visible while Keep the explanation clear and consistent.

CHAPTER 1 CHOOSING A RESEARCH TOPIC AND TITLE

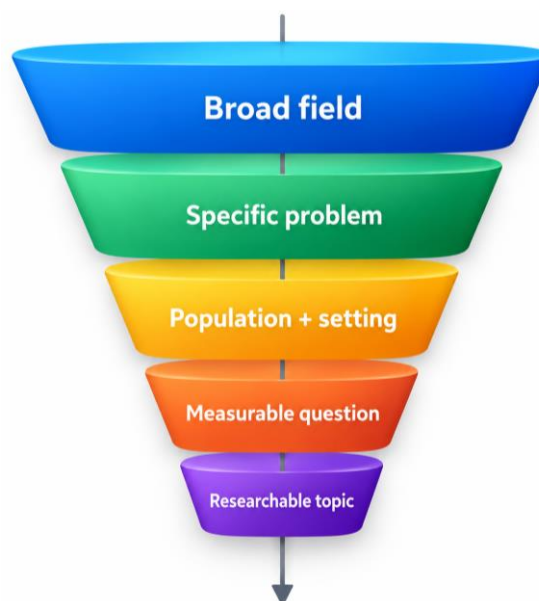
Use a topic funnel

A simple funnel prevents a project from growing in every direction.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Field → problem → population → key variables or phenomenon → setting → design.
- Stop adding variables unless each one has a clear role.
- A smaller coherent study is usually better than a crowded study.



Try it Draw your own six-step funnel.

Key idea: Field → problem → population → key variables or phenomenon → setting → design. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the movement from a broad Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this
Keep the explanation clear and consistent.



CHAPTER 1 CHOOSING A RESEARCH TOPIC AND TITLE

Turn the topic into a working title

A working title is a planning tool. It can change as the study becomes clearer.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Name the central variables or phenomenon.
- Include the population or setting when helpful.
- Include the study design when the reporting guideline or journal expects it.

Example: Working title: 'Perceived Stress and Sleep Quality During Examination Periods Among Undergraduate Students: A Cross-Sectional Study.'

Try it Write a 12–18 word working title.

Key idea: Name the central variables or phenomenon. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the study title and the terms readers will use to find it visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 1 CHOOSING A RESEARCH TOPIC AND TITLE

What a strong title does

A strong title is accurate, searchable and specific.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Use familiar scientific terms.
- Avoid claims not tested by the study.
- Avoid filler such as 'A study of' when it adds no information.

Example: If Ayesha's study is cross-sectional, she avoids 'effects of stress on sleep' because the design does not establish an effect.

Try it: Underline every word in your title that carries useful information. Remove the rest.

Key idea: Use familiar scientific terms. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the study title and the terms readers will use to find it easier for supervisors, examiners, readers, and journal reviewers to follow.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the design cannot support them. Define unfamiliar terms, keep sentences reasonably. Keep the explanation clear and consistent.

CHAPTER 1 CHOOSING A RESEARCH TOPIC AND TITLE

Title mistakes that weaken a paper

Titles can mislead even when the data are sound.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- Do not imply causation from an observational design.
- Do not call a pilot study definitive.
- Do not hide the study design if it materially helps interpretation.

Example: 'Stress causes poor sleep in students' would overstate Ayesha's design. 'Association between perceived stress and sleep quality...' is more accurate.

Try it Check your title for causal verbs: cause, effect, leads to, improves, prevents.

Key idea: Do not imply causation from an observational design. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the study title and the terms readers will use to Keep the reasoning clear and consistent.

Practical note: keep the title and the language readers will use to find the study Keep the explanation clear and consistent.

CHAPTER 1 CHOOSING A RESEARCH TOPIC AND TITLE

Build searchable keywords into the title

Readers and databases find papers through recognizable terms.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- Use the accepted name of the condition, population or method.
- Prefer precise terms over creative phrases.
- Keep uncommon abbreviations out of the title unless universally recognized.

Example: Ayesha keeps 'perceived stress', 'sleep quality', 'undergraduate students' and 'cross-sectional' because these are likely search terms.

Try it List five terms a researcher would type to find your study.

Key idea: Use the accepted name of the condition, population or method. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the study title and the terms readers will use to find it and makes the work Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this Keep the explanation clear and consistent.

CHAPTER 1 CHOOSING A RESEARCH TOPIC AND TITLE

Chapter 1 practice page

By now you should have a focused topic and a defensible working title.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Problem: one sentence.
- Population and setting: one sentence.
- Main variable(s) or phenomenon: one line.
- Design: one line.
- Working title: one line.

Example: Ayesha's study is now small enough to conduct and clear enough to search in the literature.

Try it Complete all five lines before moving to Chapter 2.

Key idea: Problem: one sentence. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the connection between this decision and the next stage of the study visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 2 LITERATURE REVIEW, RESEARCH GAP AND INTRODUCTION

Why we review literature

A useful review is selective, not merely long. Give most space to evidence that directly changes how the reader understands your question, design or gap.

A literature review tells you what is already known, how it was studied and what remains uncertain.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- It prevents unnecessary duplication.
- It helps you choose measures and methods.
- It gives the rationale for your research question.

Example Ayesha begins by asking what is known about examination stress and sleep, not by collecting random articles about student mental health.

Try it Write the three concepts your search must cover.

Key idea: It prevents unnecessary duplication. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes how Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 2 LITERATURE REVIEW, RESEARCH GAP AND INTRODUCTION

Turn the topic into search concepts

Search in concept groups rather than one long sentence.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Population terms.
- Exposure, intervention or main concept terms.
- Outcome or phenomenon terms.
- Design terms only when needed.

Example : Ayesha searches combinations of student*, examination, stress, perceived stress, sleep quality and insomnia.

Try it Create one synonym list for each concept in your question.

Key idea: Population terms. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the movement from a broad interest to a focused and feasible research problem and keep the research story coherent.

Practical note: keep the connection between this step and the complete research story visible while working on this section. Write the main Keep the explanation clear and consistent.

CHAPTER 2 LITERATURE REVIEW, RESEARCH GAP AND INTRODUCTION

Search more than one useful source

No single database contains everything.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- Choose databases relevant to your field.
- Record the exact search date and strategy when reproducibility matters.
- Use reference lists and citation tracking carefully.

Example Ayesha searches psychology and health databases rather than relying only on a general web search.

Try it Make a search log with database, date, search terms and number of records.

Key idea: Choose databases relevant to your field. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the connection between this decision and the next stage of the study and makes the work easier to defend during supervision, peer review, or a viva. Practical reflection: keep the connection between this decision and Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this Keep the explanation clear and consistent.

CHAPTER 2 LITERATURE REVIEW, RESEARCH GAP AND INTRODUCTION

Read papers with a purpose

Do not read every paper from beginning to end on the first pass.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- First check title and abstract.
- Then inspect methods and results for relevance.
- Finally read the discussion critically.

Example: Ayesha makes a one-page evidence table instead of highlighting entire PDFs.

Try it For your next five papers, record design, sample, measures, main finding and limitation.

Key idea: First check title and abstract. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the connection between this decision and the next stage of the study visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 2 LITERATURE REVIEW, RESEARCH GAP AND INTRODUCTION

Build an evidence table

An evidence table turns a pile of articles into usable knowledge.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Author/year and country.
- Design and sample.
- Measures or data source.
- Key result.
- Limitations and relevance to your study.

Example Patterns become visible: many studies are outside Ayesha's setting, several use small convenience samples, and few focus specifically on examination periods.

Try it Create a five-column evidence table.

Key idea: Author/year and country. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes how previous evidence is located, compared, and used to justify the study easier for supervisors, examiners, readers, Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 2 LITERATURE REVIEW, RESEARCH GAP AND INTRODUCTION

Find a genuine research gap

A gap is not simply 'no study has been done'. It is a specific uncertainty that follows from the evidence.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Population gap.
- Context or setting gap.
- Methodological gap.
- Inconsistent findings.
- Unanswered mechanism or experience.

Example: Ayesha identifies a context gap: limited local evidence using validated measures during an examination period.

Try it Write your gap in one sentence without the phrase 'there is no research'.

Key idea: Population gap. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen how previous evidence is located, compared, and used to justify the study and keep the research story. Keep the reasoning clear and consistent.

Practical note: keep the use of previous evidence to establish the need for the study. Keep the explanation clear and consistent.

CHAPTER 2 LITERATURE REVIEW, RESEARCH GAP AND INTRODUCTION

Plan the Introduction as a funnel

A clear Introduction moves from context to specific question.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Paragraph 1: problem and significance.
- Paragraph 2: what is known.
- Paragraph 3: what is not known or is inconsistent.
- Final paragraph: aim, objectives and hypothesis if applicable.

Example: Ayesha keeps detailed methods out of her Introduction; the reader only needs enough background to understand why the study was needed.

Try it Draft four one-sentence paragraph purposes.

Key idea: Paragraph 1: problem and significance. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves how the introduction moves from the wider problem to the precise research gap and makes the work easier to defend during supervision, peer Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this Keep the explanation clear and consistent.

CHAPTER 2 LITERATURE REVIEW, RESEARCH GAP AND INTRODUCTION

Write the opening paragraph

Start with the scientific problem, not a dictionary definition.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- Use recent, directly relevant evidence.
- Avoid universal statements such as 'since the beginning of time'.
- Move quickly to the population and issue you are studying.

Example: Ayesha opens with the relationship between academic stress and sleep in university students, then narrows to examination periods.

Try it Delete any opening sentence that could fit almost any research paper.

Key idea: Use recent, directly relevant evidence. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep how the introduction moves from the wider problem to the precise research gap visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later in the Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 2 LITERATURE REVIEW, RESEARCH GAP AND INTRODUCTION

Write the gap and rationale

The strongest rationale connects prior evidence directly to your question.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- Summarize the pattern, not every paper.
- Explain the remaining uncertainty.
- Show why your study design can address part of that uncertainty.

Example: Ayesha does not promise to solve student well-being. She explains that local, time-specific evidence may help characterize the problem and guide later research.

Try it Write one paragraph using: known → uncertain → therefore this study.

Key idea: Summarize the pattern, not every paper. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes how the introduction moves from the wider problem to the precise research gap easier for supervisors, examiners, readers, and journal Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 2 LITERATURE REVIEW, RESEARCH GAP AND INTRODUCTION

Introduction quality check

A good Introduction ends exactly where the Methods should begin.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Is the problem clear?
- Are citations directly relevant?
- Is the gap specific?
- Is the aim explicit?
- Are claims proportional to the cited evidence?

Example: When Ayesha reads only the Introduction, she can predict the study question without seeing the title.

Try it Ask a colleague to state your research question after reading only your Introduction.

Key idea: Is the problem clear? Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen how the introduction Keep the reasoning clear and consistent.

Practical note: keep the movement from background to research gap and purpose visible while working Keep the explanation clear and consistent.

CHAPTER 3 RESEARCH QUESTIONS, OBJECTIVES, HYPOTHESES AND FRAMEWORKS

Write the research question first

Before finalizing the question, ask whether a reader could identify the population, main concept or variables, and type of answer you are seeking.

A clear question is the anchor of the whole project.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Name the population.
- Name the main variables, intervention or phenomenon.
- State the relationship, comparison or experience you want to examine.

Example Ayesha asks: 'Among undergraduate students during examinations, what is the association between perceived stress and sleep quality?'

Try it Write your question in one sentence.

Key idea: Name the population. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the alignment of the question, aim, objectives, and expected relationships and makes the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this. Keep the explanation clear and consistent.

CHAPTER 3 RESEARCH QUESTIONS, OBJECTIVES, HYPOTHESES AND FRAMEWORKS

Use question frameworks when helpful

Frameworks can organize thinking, but they should not force every study into the same shape.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- PICO can help intervention questions.
- PEO can help some exposure questions.
- SPIDER can help some qualitative searches.
- Other disciplines use different frameworks.

Example Ayesha uses population–exposure–outcome because she is not testing an intervention.

Try it Choose a framework only if it clarifies your question.



Key idea: PICO can help intervention questions. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the alignment of the question, aim, objectives, and expected relationships visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 3 RESEARCH QUESTIONS, OBJECTIVES, HYPOTHESES AND FRAMEWORKS

Write the aim

The aim states the overall purpose in one broad sentence.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- Use one main action verb.
- Keep it aligned with the design.
- Do not include results you hope to obtain.

Example Aim: 'To examine the association between perceived stress and sleep quality among undergraduate students during an examination period.'

Try it Write your aim using 'to + verb'.

Key idea: Use one main action verb. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the alignment of the question, aim, objectives, and expected relationships easier for supervisors, examiners, readers, and journal reviewers to follow. Quality check: imagine that another researcher can read only this page. That person should Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 3 RESEARCH QUESTIONS, OBJECTIVES, HYPOTHESES AND FRAMEWORKS

Write specific objectives

Objectives break the aim into measurable tasks.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- Describe key characteristics if needed.
- Estimate or compare outcomes.
- Examine associations or test pre-specified relationships.
- Avoid objectives that your data cannot answer.

Example Ayesha has three objectives: describe stress, describe sleep quality, and examine their association.

Try it Limit your list to the objectives needed to answer the main question.

Key idea: Describe key characteristics if needed. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the alignment of the question, aim, objectives, and expected relationships and keep the reasoning clear and consistent.

Practical note: keep the alignment of the question, objectives, and planned analysis visible while working. Keep the explanation clear and consistent.

CHAPTER 3 RESEARCH QUESTIONS, OBJECTIVES, HYPOTHESES AND FRAMEWORKS

Hypotheses: when to use them

A hypothesis is a pre-specified, testable expectation. Not every study needs one.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Use hypotheses when theory and prior evidence support directional or non-directional predictions.
- Qualitative studies usually use research questions rather than statistical hypotheses.
- Exploratory analyses should not be rewritten later as if they were pre-specified.

Example Ayesha specifies a hypothesis only for the stress–sleep association; she labels additional analyses exploratory.

Try it Mark each planned analysis: primary, secondary or exploratory.

Key idea: Use hypotheses when theory and prior evidence support directional or non-directional predictions. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study.

Apply it: take one real or imaginary study and write a short example for this step. Compare it with the research. Keep the explanation clear and consistent.

CHAPTER 3 RESEARCH QUESTIONS, OBJECTIVES, HYPOTHESES AND FRAMEWORKS

Variables and operational definitions

A concept becomes analyzable only when you define how it is measured.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Outcome variable.
- Exposure or predictor.
- Potential confounders.
- Moderators or mediators when justified.
- Measurement scale and scoring.

Example 'Stress' becomes 'total score on a validated perceived stress scale', measured according to the instrument's scoring rules.

Try it Write an operational definition for each main variable.

Key idea: Outcome variable. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the logical connection between concepts, variables, methods, and analysis visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later in the proposal, thesis, or article. Mini practice: apply this idea to one real Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 3 RESEARCH QUESTIONS, OBJECTIVES, HYPOTHESES AND FRAMEWORKS

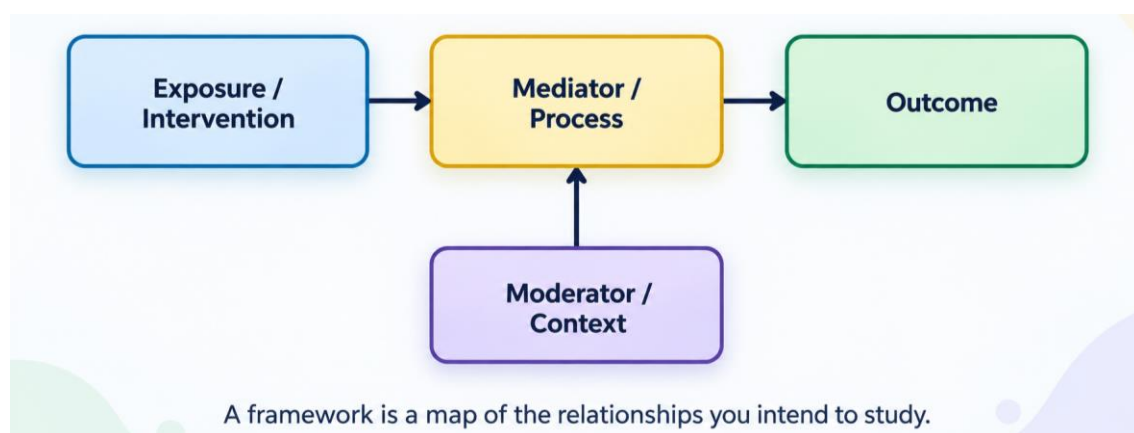
Conceptual and theoretical frameworks

A framework shows why variables or ideas belong together.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Theoretical frameworks draw on established theory.
- Conceptual frameworks may combine evidence and logic for a specific study.
- Every arrow should represent a relationship you can explain.



Try it Draw your framework before you draw a polished figure.

Key idea: Theoretical frameworks draw on established theory. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the logical connection between concepts, variables, methods, and analysis easier for supervisors, examiners, readers, and journal reviewers to follow.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the design cannot support them. Define unfamiliar terms, keep the explanation clear and consistent.



CHAPTER 3 RESEARCH QUESTIONS, OBJECTIVES, HYPOTHESES AND FRAMEWORKS

Keep the framework testable

A beautiful diagram is not useful if it contains relationships the study cannot examine.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- Remove unsupported arrows.
- Separate measured variables from background concepts.
- Do not label a mediator unless the design and analysis can test mediation appropriately.

Example Ayesha removes 'academic performance' because she is not collecting reliable performance data in this project.

Try it Circle every framework element that appears in your Methods.

Key idea: Remove unsupported arrows. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the logical connection between concepts, variables, methods, and analysis and keep the research story coherent.

Practical note: keep the clear presentation of findings without interpretation visible while working on this section. Write the main decision in Keep the explanation clear and consistent.

CHAPTER 3 RESEARCH QUESTIONS, OBJECTIVES, HYPOTHESES AND FRAMEWORKS

Alignment test

Question, aim, objectives, variables and analysis should tell one story.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- Question asks.
- Objectives divide the task.
- Methods collect the needed evidence.
- Analysis answers the objectives.
- Results report those answers.

Example If an objective has no corresponding analysis, Ayesha either adds a justified analysis or removes the objective.

Try it Make a five-column alignment table.

Key idea: Question asks. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the logical connection between concepts, variables, methods, and analysis and makes the work easier to defend during supervision, peer review, or a viva. Practical reflection: keep the logical connection between concepts, variables, methods, Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this. Keep the explanation clear and consistent.

CHAPTER 3 RESEARCH QUESTIONS, OBJECTIVES, HYPOTHESES AND FRAMEWORKS

Chapter 3 practice page

Create the blueprint you will use for the rest of the study.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Research question.
- Overall aim.
- Two to four specific objectives.
- Hypothesis if appropriate.
- Variables/phenomenon and operational definitions.
- Simple framework.

Example A strong blueprint reduces rewriting later because every section has a clear purpose.

Try it Do not proceed until each objective can be answered by your planned data.

Key idea: Research question. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the connection between this decision and the next stage of the study visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 4 METHODOLOGY: DESIGN, SETTING, PARTICIPANTS AND SAMPLING

Methodology answers 'How?'

Think of the Methods as an audit trail. Another competent researcher should understand what you did, when you did it, to whom, with which tools and how the data were analyzed.

The Methods section should let a knowledgeable reader understand exactly how the study was carried out.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Design.
- Setting and dates.
- Participants and eligibility.
- Sampling and study size.
- Measures, procedure, ethics and analysis.

Example Ayesha writes her Methods from the research plan, not from memory after analysis.

Try it Create Methods subheadings before writing paragraphs.

Key idea: Design. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the clarity and Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 4 METHODOLOGY: DESIGN, SETTING, PARTICIPANTS AND SAMPLING

Choose the study design

The design must match the question and the kind of inference you want to make.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Cross-sectional: one-time or short-window assessment.
- Cohort: follow participants over time.
- Case-control: compare prior exposures between cases and controls.
- Randomized trial: allocate interventions randomly.
- Qualitative: explore experiences or meanings.

Example Ayesha chooses cross-sectional because she wants a snapshot of stress and sleep during examinations, not an intervention effect.

Try it Write one sentence explaining why your design fits your question.

Key idea: Cross-sectional: one-time or short-window assessment. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the clarity. Keep the reasoning clear and consistent.

Practical note: keep the transparency and reproducibility of the study method visible while working on. Keep the explanation clear and consistent.

CHAPTER 4 METHODOLOGY: DESIGN, SETTING, PARTICIPANTS AND SAMPLING

Describe the setting and dates

Readers need context to judge transferability and timing.

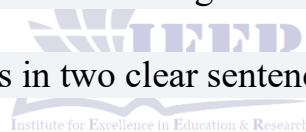
This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- Institution or community type.
- Geographic setting when relevant.
- Recruitment period.
- Data-collection period.
- Important contextual conditions.

Example Ayesha reports that data were collected at two universities during scheduled end-semester examinations and gives the months and year.

Try it Write setting and dates in two clear sentences.



Key idea: Institution or community type. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the clarity and reproducibility of the research method and makes the work easier to defend during supervision, peer review, or a viva. Practical reflection: keep the clarity and reproducibility of the research method visible while you work. Write the decision in plain language. Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this. Keep the explanation clear and consistent.

CHAPTER 4 METHODOLOGY: DESIGN, SETTING, PARTICIPANTS AND SAMPLING

Define the population

Be precise about who the study is about and who could enter it.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- Target population.
- Accessible population.
- Eligibility criteria.
- Exclusion criteria only when justified.

Example Ayesha defines undergraduate students enrolled during the examination period, then states age and enrollment requirements.

Try it Ask whether each criterion is scientifically or ethically necessary.

Key idea: Target population. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the clarity and reproducibility of the research method visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later in the proposal, thesis, or article.

Quality check: another researcher should be able to understand this section without asking you to explain it verbally. Include specific information when it affects interpretation, but remove Keep the explanation clear and consistent.

CHAPTER 4 METHODOLOGY: DESIGN, SETTING, PARTICIPANTS AND SAMPLING

Sampling methods

Sampling affects who enters the study and how confidently results can be generalized.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Probability sampling uses a known selection mechanism.
- Convenience sampling uses accessible participants.
- Purposive sampling selects information-rich cases for qualitative work.
- Report what you actually did, not what you intended but did not achieve.

Example If Ayesha uses convenience recruitment, she names it plainly and later discusses its limitation.

Try it Write the exact recruitment route from invitation to inclusion.

Key idea: Probability sampling uses a known selection mechanism. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 4 METHODOLOGY: DESIGN, SETTING, PARTICIPANTS AND SAMPLING

Study size and power

Study size should be justified, not chosen only because a round number looks acceptable.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- For hypothesis tests, use an appropriate power or precision approach.
- For descriptive work, precision may be central.
- Qualitative sample planning follows different logics and should be justified in that tradition.

Example Ayesha records the assumptions used in her sample-size calculation before collecting data.

Try it List effect/precision assumption, alpha, power and expected attrition when applicable.

Key idea: For hypothesis tests, use an appropriate power or precision approach. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen Keep the reasoning clear and consistent.

Practical note: keep the connection between this step and the complete research story visible while Keep the explanation clear and consistent.

CHAPTER 4 METHODOLOGY: DESIGN, SETTING, PARTICIPANTS AND SAMPLING

Randomization and allocation

In randomized trials, explain sequence generation, allocation concealment and implementation separately.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Who generated the sequence?
- How was assignment concealed until enrolment?
- Who enrolled participants?
- Who assigned interventions?

Example A trial cannot be called randomized only because participants were put into two groups.

Try it If you run a trial, map each allocation step before recruitment.

Key idea: Who generated the sequence? Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the clarity and reproducibility of the research method and makes the work easier to defend during supervision, peer review, or a viva. Practical reflection: keep the clarity and reproducibility of the research method visible while you Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this Keep the explanation clear and consistent.

CHAPTER 4 METHODOLOGY: DESIGN, SETTING, PARTICIPANTS AND SAMPLING

Blinding and masking

Blinding reduces some forms of bias but is not always possible.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- State who was blinded: participants, providers, outcome assessors, analysts.
- Explain how blinding was maintained.
- Do not write 'double blind' without specifying the blinded groups.

Example A behavioral trial may not blind participants, but outcome assessment or analysis might still be blinded.

Try it Write one precise blinding sentence for your study.

Key idea: State who was blinded: participants, providers, outcome assessors, analysts. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the clarity and reproducibility of the research method visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later in the proposal, Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 4 METHODOLOGY: DESIGN, SETTING, PARTICIPANTS AND SAMPLING

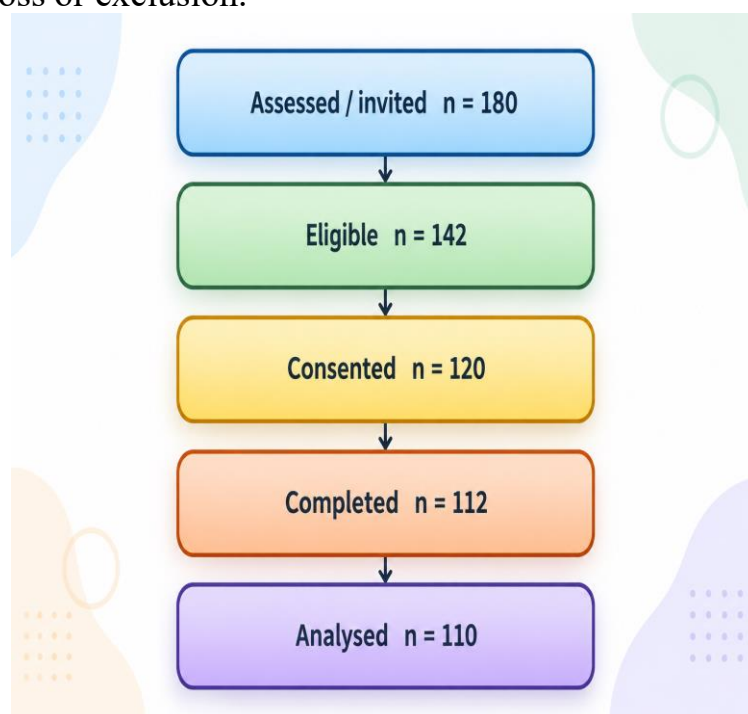
Participant flow

Track the numbers at each stage.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- Invited or assessed.
- Eligible.
- Enrolled or randomized.
- Completed follow-up.
- Included in analysis.
- Reasons for loss or exclusion.



Try it Create a participant-flow log while collecting data, not at manuscript writing time.

Key idea: Invited or assessed. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the clarity and reproducibility of the research method easier for supervisors, examiners, readers, and journal reviewers to follow. Quality check: imagine that another researcher can read only this page. That person should understand what Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.



CHAPTER 4 METHODOLOGY: DESIGN, SETTING, PARTICIPANTS AND SAMPLING

Methods quality check

A reader should not have to guess how the sample was formed.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Can another researcher identify the same population?
- Are eligibility and recruitment clear?
- Is the sample-size rationale transparent?
- Does the design name match what was done?

Example Ayesha removes vague phrases such as 'participants were randomly selected' because she used open volunteer recruitment.

Try it Audit every method word that has a technical meaning: random, blinded, prospective, controlled.

Key idea: Can another researcher identify the same population? Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official Keep the reasoning clear and consistent.

Practical note: keep the connection between this step and the complete research story visible while Keep the explanation clear and consistent.

CHAPTER 5 MEASURES, DATA COLLECTION, ETHICS AND ANALYSIS PLANNING

Choose measures that fit the construct

Do not choose an instrument only because it is popular. Check what it measures, scoring, validity evidence, language, permissions and whether it is suitable for your population.

A famous instrument is not automatically the right instrument.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Measure the construct named in the objective.
- Check validity and reliability evidence relevant to your population and language.
- Know scoring, permissions and interpretation limits.

Example Ayesha chooses validated stress and sleep measures rather than creating new questions without a reason.

Try it For each tool, write what it measures and why it fits.

Key idea: Measure the construct named in the objective. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves. Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this. Keep the explanation clear and consistent.

CHAPTER 5 MEASURES, DATA COLLECTION, ETHICS AND ANALYSIS PLANNING

Report instruments clearly

Readers need enough information to understand how scores were produced.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Instrument name and version.
- Number of items and response format.
- Scoring direction and range when useful.
- Reliability/validity evidence.
- Translation or adaptation process if relevant.

Example Ayesha reports the version actually administered and avoids copying a full instrument into the article unless licensing permits it.

Try it Create a one-paragraph instrument summary.

Key idea: Instrument name and version. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the consistency and quality of measurement and data collection visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later in Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 5 MEASURES, DATA COLLECTION, ETHICS AND ANALYSIS PLANNING

Pilot testing

A pilot can test feasibility, wording, timing and procedures.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- State the purpose of the pilot.
- Describe who participated.
- Explain changes made afterward.
- Do not present a tiny pilot as proof that the final intervention works.

Example Ayesha pilots the survey process to estimate completion time and identify unclear instructions.

Try it Write two questions your pilot should answer.

Key idea: State the purpose of the pilot. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the consistency and quality of measurement and data collection easier for supervisors, examiners, readers, and journal reviewers to follow. Quality check: imagine that another researcher can read Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 5 MEASURES, DATA COLLECTION, ETHICS AND ANALYSIS PLANNING

Standardize data collection

Consistency reduces avoidable measurement error.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- Use the same instructions.
- Train data collectors.
- Record deviations.
- Control version changes in forms or software.

Example Ayesha prepares a short data-collection manual so both university sites use the same procedure.

Try it Write a five-step procedure another team member could follow.

Key idea: Use the same instructions. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the consistency and quality of measurement and data collection and keep the research story coherent.

Practical note: keep the quality and consistency of measurement and data collection visible while working on this section. Write the main decision in plain language before adding Keep the explanation clear and consistent.

CHAPTER 5 MEASURES, DATA COLLECTION, ETHICS AND ANALYSIS PLANNING

Plan data management before analysis

A clean dataset begins with clear rules.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Unique participant IDs.
- Variable names and coding.
- Missing-value codes.
- Range and logic checks.
- Secure storage and access control.

Example Ayesha creates a data dictionary before entering the first response.

Try it Make a data dictionary with variable, label, type, allowed values and missing code.

Key idea: Unique participant IDs. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the consistency and quality of measurement and data collection and makes the work easier to defend during supervision, peer review, or a viva.

Apply it: take one real or imaginary study and write a short example for this step. Compare it with the research question, design, Keep the explanation clear and consistent.

CHAPTER 5 MEASURES, DATA COLLECTION, ETHICS AND ANALYSIS PLANNING

Ethics approval and consent

Report who approved the study and how consent was obtained.

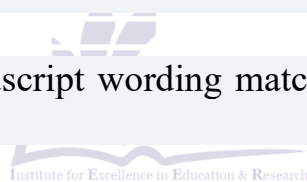
Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Name the ethics body.
- Give protocol/reference number when available.
- State consent procedure.
- Explain special protections for vulnerable groups if relevant.

Example Ayesha keeps ethics documents, approved forms and amendments in one project folder.

Try it Check that the manuscript wording matches the approval you actually received.

Institute for Excellence in Education & Research

Key idea: Name the ethics body. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep ethical, transparent, and responsible research practice visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later in the proposal, thesis, or article.

Quality check: another researcher should be able to understand this section without asking you to explain it verbally. Include specific information when it affects interpretation, but Keep the explanation clear and consistent.

CHAPTER 5 MEASURES, DATA COLLECTION, ETHICS AND ANALYSIS PLANNING

Privacy and confidentiality

Collect only the identifiers you need and protect them.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Separate identifiers from analysis data when possible.
- Limit access.
- Use secure storage.
- Explain data retention and sharing rules.

Example Ayesha removes names from the analysis file and uses study IDs.

Try it Ask: could this variable identify someone when combined with other variables?

Key idea: Separate identifiers from analysis data when possible. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes ethical, transparent, and responsible research practice easier for supervisors, examiners, readers, and journal reviewers to follow. Quality check: imagine that another researcher can read only this page. That Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 5 MEASURES, DATA COLLECTION, ETHICS AND ANALYSIS PLANNING

Write the statistical analysis plan

Decide the main analyses before looking for interesting patterns.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- Primary outcome/analysis.
- Descriptive statistics.
- Model choice and assumptions.
- Handling of missing data.
- Subgroup or sensitivity analyses.
- Software and version.

Example Ayesha predefines the stress–sleep association as primary and labels other correlations exploratory.

Try it Write your analysis plan beside each objective.

Key idea: Primary outcome/analysis. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the match between the analysis and the research objectives and keep the research story coherent.

Practical note: keep the connection between this step and the complete research story visible while working on this section. Write the main decision in plain language before Keep the explanation clear and consistent.

CHAPTER 5 MEASURES, DATA COLLECTION, ETHICS AND ANALYSIS PLANNING

Report effect size and uncertainty

***p* value alone does not describe the size or precision of a finding.**

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- Report estimates.
- Use confidence intervals when appropriate.
- Include effect sizes that fit the analysis.
- Interpret practical or clinical meaning separately from statistical significance.

Example Ayesha reports the correlation estimate and confidence interval rather than writing only ' $p < .05$ '.

Try it For every primary result, ask: what is the estimate and how precise is it?

Key idea: Report estimates. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the match between the analysis and the research objectives and makes the work easier to defend during supervision, peer review, or Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this Keep the explanation clear and consistent.

CHAPTER 5 MEASURES, DATA COLLECTION, ETHICS AND ANALYSIS PLANNING

Chapter 5 practice page

Freeze the operational plan before you collect or analyses more data.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Measures table.
- Data-collection procedure.
- Ethics and consent statement.
- Data-management plan.
- Objective-to-analysis table.

Example This page becomes Ayesha's working checklist during data collection.

Try it Date and version your plan so later changes are transparent.

Key idea: Measures table. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the connection between this decision and the next stage of the study visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 6 WRITING THE RESULTS

Results answer the objectives

A simple discipline helps: make a list of objectives and place the corresponding result beside each one. Any major result with no objective needs a clear reason for being reported.

The Results section reports what the data show, without turning into a second Discussion.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Follow the order of objectives or pre-specified outcomes.
- Start with participant flow and descriptive information.
- Then present primary results, followed by secondary and exploratory results.

Example Ayesha uses the same sequence she established in her objectives and analysis plan.

Try it Write your Results subheadings before inserting numbers.

Key idea: Follow the order of objectives or pre-specified outcomes. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 6 WRITING THE RESULTS

Start with participant flow

Tell readers how many participants reached each stage and how many were analyzed.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Include exclusions and reasons.
- Report missing data where relevant.
- Use a flow diagram when it improves clarity.

Example Ayesha reports invitations, completed surveys, excluded incomplete records and the final analytic sample.

Try it Reconcile every number; totals should add up.

Key idea: Include exclusions and reasons. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the clarity and reproducibility of the research method and keep the research story coherent.

Practical note: keep the connection between this step and the complete research story visible while working on this section. Write the main decision in plain language before Keep the explanation clear and consistent.

CHAPTER 6 WRITING THE RESULTS

Describe the sample

A descriptive table helps the reader understand who was studied.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- Age and other relevant demographics.
- Clinical or contextual characteristics.
- Key baseline measures.
- Missing data counts where useful.

Example Ayesha does not overload Table 1 with variables that never appear elsewhere in the paper.

Try it Keep descriptive variables relevant to interpretation.

Key idea: Age and other relevant demographics. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the accurate and economical presentation of findings and makes the work easier to defend during supervision, peer review, or a viva. Practical reflection: keep the accurate and economical presentation of findings visible while you work. Write the decision in plain language first, and Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this. Keep the explanation clear and consistent.

CHAPTER 6 WRITING THE RESULTS

Report the primary outcome first

The most important result should not be hidden after many exploratory analyses.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- State the estimate.
- Give uncertainty such as a 95% confidence interval when appropriate.
- Give exact p values unless journal conventions differ.
- Name the model or comparison clearly.

Example Ayesha reports the stress–sleep association before subgroup correlations.

Try it Write your primary finding in one sentence without interpretation.

Key idea: State the estimate. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the connection between this decision and the next stage of the study visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 6 WRITING THE RESULTS

Tables: show detail efficiently

Tables are useful when readers need exact values or several related comparisons.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Give each table a clear title.
- Use informative row and column labels.
- Define abbreviations and statistical symbols in notes.
- Do not repeat the entire table in prose.

Example Ayesha's text highlights the main pattern; the table carries the detailed values.

Try it For each table ask: what question does this table answer?

Key idea: Give each table a clear title. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the accurate and economical presentation of findings easier for Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 6 WRITING THE RESULTS

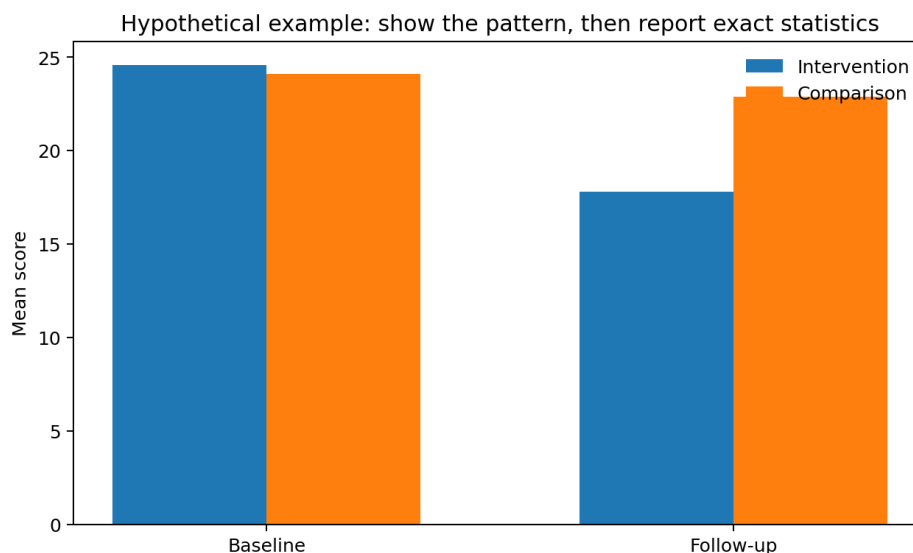
Figures: show patterns

A figure should reveal a pattern faster than prose or a dense table.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Choose the graph type for the data.
- Label axes and units.
- Show uncertainty where appropriate.
- Avoid decorative 3-D effects that distort perception.



Try it Remove any figure that does not add information.

Key idea: Choose the graph type for the data. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the accurate and economical presentation of findings and keep the research story coherent.

Practical note: keep the clear presentation of findings without interpretation visible while working on this section. Write the main decision in plain language before Keep the explanation clear and consistent.



CHAPTER 6 WRITING THE RESULTS

Do not duplicate

The same complete dataset should not appear in text, table and figure.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Text: message.
- Table: precise values.
- Figure: visual pattern.
- Supplement: extra detail.

Example Ayesha refers readers to Table 2 and states only the main estimate in the paragraph.

Try it Highlight repeated numbers in your draft and decide the best home for each.

Key idea: Text: message. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the accurate and economical presentation of findings and makes the work easier to defend during supervision, peer review, or a viva. Practical reflection: keep the accurate and economical presentation of findings visible while you work. Write the decision in plain language first, and add technical. Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this. Keep the explanation clear and consistent.

CHAPTER 6 WRITING THE RESULTS

Use statistical language carefully

Technical words should mean what statistics says they mean.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- Statistically significant does not mean important.
- Correlation does not prove causation.
- A no significant result is not automatically proof of no effect.
- Exploratory results should be labeled.

Example Ayesha writes 'was associated with' rather than 'caused'.

Try it Replace causal verbs unless your design and analysis justify them.

Key idea: Statistically significant does not mean important. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the match between the analysis and the research objectives visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later in the proposal, thesis, or article.

Quality check: another researcher should be able to understand this section without asking you to explain it verbally. Include specific information when Keep the explanation clear and consistent.

CHAPTER 6 WRITING THE RESULTS

Results paragraph pattern

A readable Results paragraph often follows: question → estimate → uncertainty → table/figure reference.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- Start with the comparison or association.
- Give the main numeric result.
- Add confidence interval/effect size as appropriate.
- Point to the supporting table or figure.

Example: 'Higher perceived stress was associated with poorer sleep quality (estimate..., 95% CI...). Full model results are shown in Table 2.'

Try it Write one primary-results paragraph using this pattern.

Key idea: Start with the comparison or association. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the accurate and economical presentation of findings easier for supervisors, examiners, readers, and journal reviewers to follow.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the design cannot support them. Define unfamiliar terms, keep the explanation clear and consistent.

CHAPTER 6 WRITING THE RESULTS

Results quality check

Before writing the Discussion, verify the numbers.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Tables match text.
- Denominators are clear.
- Units are consistent.
- Rounding is consistent.
- Confidence intervals, test statistics and p values agree.
- All planned outcomes are reported.

Example Ayesha checks the manuscript against the final analysis output, not an older draft.

Try it Perform a number-by-number audit with a second person if possible.

Key idea: Tables match text. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the accurate and economical presentation of findings and Keep the reasoning clear and consistent.

Practical note: keep the clear presentation of findings without interpretation visible while working on this Keep the explanation clear and consistent.

CHAPTER 7 WRITING THE DISCUSSION

Begin with the main finding

A strong Discussion starts with meaning, not a second Results section. State the main finding in plain language, then connect it to previous evidence and plausible explanations.

The first paragraph should answer the research question in plain scientific language.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- State the main finding.
- Do not repeat every number.
- Keep the claim proportional to the design.

Example Ayesha begins by stating that higher perceived stress was associated with poorer sleep quality during the examination period.

Try it Write your opening in two sentences.

Key idea: State the main finding. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the connection between this decision and the next stage of the study and Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this. Keep the explanation clear and consistent.

CHAPTER 7 WRITING THE DISCUSSION

Compare with previous research

The Discussion is a conversation with the literature, not a list of citations.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Identify agreement or disagreement.
- Discuss meaningful differences in population, setting or methods.
- Avoid saying a study 'supports' yours only because both p values are significant.

Example Ayesha compares direction and magnitude where possible, then considers why settings may differ.

Try it Choose three studies that genuinely help interpret your main result.

Key idea: Identify agreement or disagreement. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the careful interpretation of findings without overstatement visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later in the proposal, Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 7 WRITING THE DISCUSSION

Explain possible mechanisms carefully

Mechanisms should be plausible and referenced, but not presented as proven unless directly tested.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- Use language such as 'may', 'could' or 'is consistent with'.
- Separate measured mechanisms from proposed explanations.
- Avoid biological stories that your data cannot verify.

Example Ayesha notes possible stress-related sleep disruption as an interpretation, not as a measured causal pathway.

Try it Mark every mechanism in your Discussion as tested or proposed.

Key idea: Use language such as 'may', 'could' or 'is consistent with'. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the careful interpretation of findings without overstatement easier for supervisors, examiners, readers, and journal reviewers to follow.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the design cannot support them. Define unfamiliar terms, keep sentences reasonably short, Keep the explanation clear and consistent.

CHAPTER 7 WRITING THE DISCUSSION

Discuss unexpected findings

Unexpected results are useful when treated thoughtfully.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- Check data and analysis first.
- Consider measurement, sample and context.
- Compare with prior evidence.
- Do not invent a convenient explanation.

Example: One subgroup pattern surprises Ayesha. She reports it cautiously and treats it as exploratory.

Try it Write two plausible explanations and one reason each may be wrong.

Key idea: Check data and analysis first. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the careful interpretation of findings without overstatement and keep the research story coherent.

Practical note: keep the connection between this step and the complete research story visible while working on this section. Write the main decision in plain language. Keep the explanation clear and consistent.

CHAPTER 7 WRITING THE DISCUSSION

Write limitations honestly

Limitations improve credibility when they are specific and linked to possible consequences.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Selection bias.
- Measurement limitations.
- Confounding.
- Missing data.
- Temporal or causal limits.
- Generalizability/transferability.

Example Ayesha explains that cross-sectional timing prevents establishing direction and convenience recruitment limits generalization.

Try it For each limitation write: limitation → likely consequence → any mitigation.

Key idea: Selection bias. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the careful interpretation of findings without overstatement and makes the work easier to defend during supervision, peer review, or a viva. Practical reflection: keep the careful interpretation of findings without overstatement visible Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this Keep the explanation clear and consistent.

CHAPTER 7 WRITING THE DISCUSSION

Write strengths without selling the study

Strengths should be factual.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Validated measures.
- Clear protocol.
- Adequate sample for pre-specified analysis.
- Transparent reporting.
- Relevant setting.

Example: Ayesha avoids 'the first groundbreaking study'. She states the concrete features that improve interpretability.

Try it Replace praise words with observable design features.

Key idea: Validated measures. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the careful interpretation of findings without overstatement visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later in the proposal, thesis, or article. Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 7 WRITING THE DISCUSSION

Implications for research

Future-research recommendations should come from the findings and limitations.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Replicate in other settings.
- Use longitudinal or experimental designs when causality matters.
- Improve measurement.
- Test mechanisms directly.
- Include underrepresented groups.

Example Ayesha recommends longitudinal work because her cross-sectional design cannot establish temporal direction.

Try it Write two specific next studies rather than 'more research is needed'.

Key idea: Replicate in other settings. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the careful interpretation of findings without overstatement easier for supervisors, examiners, readers, and journal reviewers to follow. Quality check: imagine that another researcher can read only this page. That person should understand what Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 7 WRITING THE DISCUSSION

Implications for practice or policy

Do not jump from one study to a large policy claim.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- Consider study design and evidence strength.
- Separate possible relevance from proven benefit.
- Avoid recommending an intervention you did not test.

Example Ayesha suggests that universities may consider monitoring student sleep and stress, but she does not claim her study proves a specific program will work.

Try it Underline every recommendation and ask what evidence supports it.

Key idea: Consider study design and evidence strength. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the careful interpretation of findings without overstatement and keep the research story coherent. Writing note: strong academic writing is usually Keep the reasoning clear and consistent.

Practical note: keep the careful interpretation of findings in relation to evidence and limitations visible Keep the explanation clear and consistent.

CHAPTER 7 WRITING THE DISCUSSION

End with a measured conclusion

The final paragraph should return to the objective and main finding.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- One short summary.
- One sentence on meaning.
- One sentence on what remains uncertain or what should happen next.

Example Ayesha's conclusion mirrors her design language: association, not effect.

Try it: Read only your objective and conclusion. Do they match?

Key idea: One short summary. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the consistency and quality of measurement and data collection and makes the work easier to defend during supervision, peer review, or a viva. Practical reflection: keep the consistency and quality of measurement. Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this. Keep the explanation clear and consistent.

CHAPTER 7 WRITING THE DISCUSSION

Discussion quality check

A good Discussion interprets; it does not inflate.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- No new results.
- No unsupported causal claims.
- Balanced comparison with literature.
- Specific limitations.
- Reasonable implications.
- Conclusion aligned with the data.

Example Ayesha deletes sentences that sound impressive but cannot be traced to evidence.

Try it Do a 'claim audit': highlight each claim and identify its evidence source.

Key idea: No new results. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the careful interpretation of findings without overstatement visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later in the proposal, thesis, Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 8 WRITING THE TITLE, ABSTRACT, KEYWORDS AND CONCLUSION

Return to the title after writing

The final title and abstract should be written after the main manuscript is stable. This reduces the risk of promising an outcome or emphasis that the paper does not actually deliver.

The final title should describe the finished study, not the study you first imagined.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Check population.
- Check variables or phenomenon.
- Check design wording.
- Remove conclusions that are not supported.

Example Ayesha revises her working title after analysis but keeps the same core question.

Try it Compare the title with the final Methods and Results.

Key idea: Check population. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the explanation clear and consistent.

CHAPTER 8 WRITING THE TITLE, ABSTRACT, KEYWORDS AND CONCLUSION

What a strong abstract does

The abstract is a miniature version of the paper.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Why the study was needed.
- What was done.
- What was found, with key numbers.
- What the findings mean, without over-claiming.

Example Ayesha writes the abstract last so that every number comes from the final manuscript.

Try it Do not draft the abstract from memory.

Key idea: Why the study was needed. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the accurate summary of the complete study in limited space and keep the research. Keep the reasoning clear and consistent.

Practical note: keep the accurate summary of the complete study in limited space visible while Keep the explanation clear and consistent.

CHAPTER 8 WRITING THE TITLE, ABSTRACT, KEYWORDS AND CONCLUSION

Background and objective in the abstract

Usually one or two sentences are enough.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- State the specific problem.
- Identify the gap briefly.
- End with the study objective.

Example Ayesha avoids a long global introduction and moves quickly to her question.

Try it Try to reach the objective by the second or third sentence.

Key idea: State the specific problem. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the alignment of the question, aim, objectives, and expected relationships and makes the work easier to defend during supervision, peer review, or a viva. Practical reflection: keep the alignment of the question, aim, objectives, and expected relationships visible while you work. Write the decision. Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this. Keep the explanation clear and consistent.

CHAPTER 8 WRITING THE TITLE, ABSTRACT, KEYWORDS AND CONCLUSION

Methods in the abstract

Readers need the design essentials, not every procedural detail.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- Design.
- Setting/population.
- Sample size.
- Main measure/intervention.
- Main analysis when important.

Example Ayesha names the cross-sectional design, two-university setting, sample and validated measures.

Try it Remove methods detail that does not affect interpretation.

Key idea: Design. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the accurate summary of the complete study in limited space visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later in the proposal, thesis, or article.

Quality check: another researcher should be able to understand this section without asking you to explain it verbally. Include specific information when it affects interpretation, but remove Keep the explanation clear and consistent.

CHAPTER 8 WRITING THE TITLE, ABSTRACT, KEYWORDS AND CONCLUSION

Results in the abstract

This is where many abstracts become too vague.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Give the analyzed sample.
- Report the main estimate and uncertainty.
- Include the primary comparison or effect size.
- Avoid 'significant improvement' without numbers.

Example Ayesha gives the key association estimate and confidence interval rather than writing 'stress significantly affected sleep'.

Try it Include at least one meaningful numeric result for the primary question.

Key idea: Give the analyzed sample. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the accurate and economical presentation of findings easier for supervisors, examiners, readers, and journal reviewers to Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 8 WRITING THE TITLE, ABSTRACT, KEYWORDS AND CONCLUSION

Conclusion in the abstract

The abstract conclusion should be slightly more cautious than the Discussion, not more dramatic.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Answer the objective.
- Use design-consistent language.
- Avoid recommendations the study did not test.

Example Ayesha writes that stress and poorer sleep were associated, and that longitudinal research is needed to clarify direction.

Try it Delete words such as proves, confirms and demonstrates unless truly justified.

Key idea: Answer the objective. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the careful interpretation of findings without overstatement and keep the research story coherent. Writing note: strong academic writing is usually calm, direct, and Keep the reasoning clear and consistent.

Practical note: keep the careful interpretation of findings in relation to evidence and limitations visible Keep the explanation clear and consistent.

CHAPTER 8 WRITING THE TITLE, ABSTRACT, KEYWORDS AND CONCLUSION

Structured versus unstructured abstracts

Follow the target journal.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Structured abstracts use headings such as Background, Methods, Results and Conclusions.
- Unstructured abstracts still need the same logical sequence.
- Check word limit before final editing.

Example Ayesha prepares a 250-word structured version, then adapts it if her journal requires another format.

Try it Save a master abstract and a journal-specific version.

Key idea: Structured abstracts use headings such as Background, Methods, Results and Conclusions. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the accurate summary of the complete study in limited space and makes the work easier to defend during supervision, peer review, or a viva.

Apply it: take one real or imaginary study and write a short example for this step. Compare it with the research question, Keep the explanation clear and consistent.

CHAPTER 8 WRITING THE TITLE, ABSTRACT, KEYWORDS AND CONCLUSION

Choose keywords strategically

Keywords help indexing and discovery.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- Use standard field terminology.
- Do not simply repeat every title word if useful related indexing terms exist.
- Use controlled vocabulary such as MeSH when the journal asks for it.

Example Ayesha selects terms that describe stress, sleep, students and study context.

Try it Search how recent papers in your target journal label similar topics.

Key idea: Use standard field terminology. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the study title and the terms readers will use to find it visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later in the proposal, thesis, Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 8 WRITING THE TITLE, ABSTRACT, KEYWORDS AND CONCLUSION

Write the manuscript conclusion

A full-paper conclusion is usually brief.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- Restate the answer, not the entire Discussion.
- Keep causal language appropriate.
- Avoid introducing new citations or results unless journal style expects otherwise.

Example Ayesha's conclusion takes one short paragraph because the Discussion has already done the interpretation.

Try it Aim for clarity rather than ceremonial phrases.

Key idea: Restate the answer, not the entire Discussion. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the careful interpretation of findings without overstatement easier for supervisors, examiners, readers, and journal reviewers to follow.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the design cannot support them. Define unfamiliar terms, keep sentences reasonably short, Keep the explanation clear and consistent.

CHAPTER 8 WRITING THE TITLE, ABSTRACT, KEYWORDS AND CONCLUSION

Q1-style abstract checklist

High-level journals differ, but strong abstracts share discipline and information density.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Specific objective.
- Correct design name.
- Sample and setting.
- Primary estimate plus precision.
- No unexplained abbreviations.
- No result that is absent from the paper.
- Conclusion matched to design and evidence.

Example Ayesha reads the abstract as an editor would: Can I understand the scientific question and main answer in one minute?

Try it: Do a word-by-word audit. Every abstract sentence should earn its place.

Key idea: Specific objective. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance.

Practical note: keep the accurate summary of the complete study in limited space visible while working on this section. Write the Keep the explanation clear and consistent.

CHAPTER 9 TABLES, FIGURES, REFERENCES AND REPORTING STANDARDS

Use tables to reduce cognitive load

Every table and figure should earn its place. If the same information is clearer in one sentence, use the sentence; if readers need exact values or patterns, a table or figure may be better.

A table should make complex information easier to compare.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- One clear purpose per table.
- Self-explanatory title.
- Consistent decimal places.
- Notes for abbreviations and tests.
- No vertical clutter unless journal style requires it.

Example Ayesha separates participant characteristics from model results rather than combining everything into one crowded table.

Try it Ask a reader to interpret a table without reading the Results text.

Key idea: One clear purpose per table. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this Keep the explanation clear and consistent.

CHAPTER 9 TABLES, FIGURES, REFERENCES AND REPORTING STANDARDS

Design figures for information

A figure is not decoration.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Choose the correct plot.
- Keep labels readable.
- Show units.
- Use uncertainty intervals where useful.
- Do not manipulate axes to exaggerate differences.

Example Ayesha uses a scatterplot for an association and avoids a pie chart that would hide the relationship.

Try it Explain your figure's single message in one sentence.



Key idea: Choose the correct plot. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the clarity and reproducibility of the research method visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later in the proposal, thesis, or article.

Quality check: another researcher should be able to understand this section without asking you to explain it verbally. Include specific information when it affects interpretation, but Keep the explanation clear and consistent.

CHAPTER 9 TABLES, FIGURES, REFERENCES AND REPORTING STANDARDS

Write table and figure captions

Captions should help the item stand on its own.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- State what is shown.
- Define groups and time points.
- Explain symbols and abbreviations.
- Include essential statistical notes.

Example Ayesha checks that every table and figure is cited in the text in numerical order.

Try it Search your manuscript for 'Table' and 'Figure' and verify every citation.

Key idea: State what is shown. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the accurate and economical presentation of findings easier for supervisors, examiners, readers, and journal reviewers to follow. Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 9 TABLES, FIGURES, REFERENCES AND REPORTING STANDARDS

Choose a reference style

Reference style is a journal requirement, not a personal preference.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- APA is common in psychology and social sciences.
- Vancouver/NLM styles are common in biomedical journals.
- Other journals use Harvard, Chicago or custom styles.

Example Ayesha keeps her reference manager library complete, then applies the journal style at submission.

Try it Do not manually retype dozens of references if a reference manager can format them safely.

Key idea: APA is common in psychology and social sciences. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the accuracy of references. Keep the reasoning clear and consistent.

Practical note: keep the accuracy of references and completeness of reporting visible while working on. Keep the explanation clear and consistent.

CHAPTER 9 TABLES, FIGURES, REFERENCES AND REPORTING STANDARDS

Verify every reference

Citation errors damage trust and can misrepresent evidence.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Open the original source.
- Check authors, year, title, journal, volume, pages/article number and DOI.
- Confirm that the source actually supports the sentence.
- Check retraction status when relevant.

Example Ayesha verifies key references in PubMed, Cross-ref or the publisher record.



Try it Randomly audit ten references now; if errors are common, audit all of them.

Key idea: Open the original source. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the accuracy of references and completeness of reporting and makes the work easier to defend during Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this Keep the explanation clear and consistent.

CHAPTER 9 TABLES, FIGURES, REFERENCES AND REPORTING STANDARDS

Use DOI correctly

A DOI is a persistent identifier when one has been assigned.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Copy it from a reliable source.
- Do not invent a DOI.
- Do not add one when the source has none.
- Use the journal's required DOI presentation style.

Example Ayesha corrects several DOIs by checking the publisher page instead of trusting an old citation export.

Try it Test that each DOI resolves to the intended article.

Key idea: Copy it from a reliable source. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the accuracy of references and completeness of reporting visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise it before moving forward. This habit prevents small inconsistencies from becoming larger problems later in the Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 9 TABLES, FIGURES, REFERENCES AND REPORTING STANDARDS

Match the reporting guideline

Reporting guidance depends on study design.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Randomized trial: CONSORT 2025.
- Observational study: STROBE.
- Systematic review: PRISMA 2020.
- Qualitative study: SRQR or COREQ as appropriate.
- Intervention description: TIDieR can supplement design-specific guidance.

Example Ayesha uses STROBE for her cross-sectional study and does not paste checklist wording into the manuscript.

Try it Identify your primary guideline before final drafting.

Key idea: Randomized trial: CONSORT 2025. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the accuracy of references and completeness of reporting easier for supervisors, examiners, readers, and journal reviewers to follow. Quality check: imagine that another researcher can read only Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 9 TABLES, FIGURES, REFERENCES AND REPORTING STANDARDS

Use checklists as an audit

A reporting checklist is most useful when completed against page numbers in the final manuscript.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- Read each item.
- Locate where it is reported.
- Add missing information when applicable.
- Mark not applicable only with a defensible reason.

Example Ayesha catches an omitted description of missing-data handling during this audit.

Try it Complete the checklist before submission, not after reviewers ask.

Key idea: Read each item. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the accuracy of references and completeness of reporting and keep the research story coherent.

Practical note: keep the accuracy of references and completeness of reporting visible while working on this section. Write the main decision in Keep the explanation clear and consistent.

CHAPTER 9 TABLES, FIGURES, REFERENCES AND REPORTING STANDARDS

Research integrity and authorship

Publication quality includes ethical authorship and transparent disclosure.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- List as authors only those meeting the journal's authorship criteria.
- Disclose conflicts and funding.
- Do not fabricate, falsify or selectively hide results.
- Avoid plagiarism and inappropriate text recycling.
- Report any use of AI tools according to current journal policy.

Example Ayesha records contributions during the project so authorship discussions are based on actual work.

Try it Create a contribution table before submission.

Key idea: List as authors only those meeting the journal's authorship criteria. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves ethical, transparent, and responsible research. Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this. Keep the explanation clear and consistent.

CHAPTER 9 TABLES, FIGURES, REFERENCES AND REPORTING STANDARDS

Selected standards and final reference audit

Use current primary guidance rather than relying on copied checklists or secondary summaries.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- ICMJE Recommendations (updated): manuscript preparation, ethics, authorship and publication practice.
- EQUATOR Network: reporting-guideline library, including CONSORT, STROBE, PRISMA 2020, SRQR/COREQ and TIDieR.
- APA Journal Article Reporting Standards (JARS): quantitative, qualitative and mixed-methods reporting.
- COPE: publication-ethics guidance.
- NLM Citing Medicine and Sample References: biomedical reference formatting and verification.

Example: Ayesha keeps a short standards file with the exact guideline version used for her study. She also checks the target journal because journal-specific instructions can differ from general guidance.

Try it Final audit: all tables/figures cited; numbers agree; references verified; DOI/retraction status checked when relevant; reporting checklist complete; ethics, funding, conflicts and data statements present as required.

Key idea: ICMJE Recommendations (updated): manuscript preparation, ethics, authorship and publication practice. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the accuracy of references and completeness of reporting visible while you work. Write the decision in plain language first, and add technical detail only when it Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 10 BS, MS/MPHIL AND PHD RESEARCH: FROM PROPOSAL TO THESIS

Understand what changes from BS to PhD

A degree does not become advanced simply because the document becomes longer. The real difference is the depth of the question, the independence of the researcher, the strength of the method, and the contribution expected from the work.

A BS project usually teaches the student how to complete the research cycle correctly. An MS or MPhil study normally expects stronger critical reading, clearer methodological justification and a more independent analysis. A PhD must make an original and defensible contribution to knowledge.

Practical guide

- **BS:** show that you can ask a focused question, use a suitable method, analyses data correctly and write a coherent report.
- **MS/MPhil:** demonstrate deeper critical thinking, stronger methodological decisions and a meaningful contribution within a defined area.
- **PhD:** identify an important gap and produce an original contribution that can withstand expert examination.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the design cannot support them. Define unfamiliar terms, keep sentences reasonably short, and explain why an important methodological choice fits the present question. This style strengthens the level of scope, independence, and originality expected for the Keep the explanation clear and consistent.

CHAPTER 10 BS, MS/MPHIL AND PHD RESEARCH: FROM PROPOSAL TO THESIS

Start with the degree requirement, not with the topic

Before choosing a topic, read the university regulations, departmental handbook and supervisor instructions. Word limits, proposal formats, ethics procedures, publication requirements and thesis structures differ across institutions.

Then choose a topic that is important enough for the degree but still possible within your time, access, budget and skills. A good topic is not the broadest topic. It is the one you can investigate well.

Practical guide

- Write the degree requirements on one page.
- List the time, participants, data sources, tools and expertise you can realistically access.
- Reject topics that require resources you do not have.
- Discuss feasibility with the supervisor before investing months in the literature review.

Practical note: keep the connection between this step and the complete research story visible while working on this section. Write the main decision in plain language before adding technical detail. Then ask whether a reader can see what was decided, why it was reasonable, and how it connects with the next stage. If the logic is not clear, revise it before adding more information. Clear reasoning is more valuable than complicated wording.

CHAPTER 10 BS, MS/MPHIL AND PHD RESEARCH: FROM PROPOSAL TO THESIS

Write a proposal that shows a logical study

A research proposal is a plan for the study. Its job is to show why the question matters, what is already known, what remains uncertain, and exactly how you will answer the question.

Most proposals contain a title, background, problem statement, literature review, research gap, aim, objectives or questions, methodology, ethics, analysis plan, timeline and references. Some universities require additional sections.

Practical guide

- Make every objective measurable or answerable.
- Make sure the proposed design can answer the objectives.
- Name the population, setting, sampling method, measures and planned analysis.
- Do not promise conclusions before data have been collected.

Apply it: take one real or imaginary study and write a short example for this step. Compare it with the research question, design, population, and planned analysis. Use the same names for variables, groups, outcomes, and time points throughout the document. Small wording changes can create large inconsistencies, so a final alignment check is useful before the proposal, thesis, or article is submitted. Quality check: another researcher should be able to understand this section without asking you to explain it verbally. Include specific information when it affects interpretation, Keep the explanation clear and consistent.

CHAPTER 10 BS, MS/MPHIL AND PHD RESEARCH: FROM PROPOSAL TO THESIS

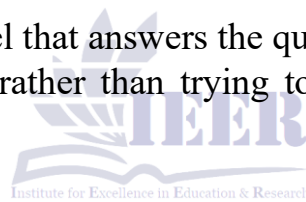
BS research: keep the project focused and teachable

At BS level, a modest, well-executed study is usually stronger than an ambitious study that cannot be completed properly. The student should learn the full process: ethical conduct, data collection, analysis, interpretation and academic writing.

A BS thesis can still be valuable. Its contribution may be local evidence, replication in a new setting, a descriptive profile, an association between variables, or a small qualitative exploration. The claims should match the design.

Practical guide

- Prefer one clear primary question over many weak questions.
- Use validated tools where appropriate and explain why they fit the population.
- Keep the analysis at a level that answers the question correctly.
- Show limitations openly rather than trying to make a small project sound larger than it is.



Practice: write three sentences describing what makes your own project appropriate for this degree level.

Quality check: another researcher should be able to understand this section without asking you to explain it verbally. Include specific information when it affects interpretation, but remove repeated sentences that add no new meaning. Separate what the data show from what you think the findings may mean. Where institutional Keep the explanation clear and consistent.

CHAPTER 10 BS, MS/MPHIL AND PHD RESEARCH: FROM PROPOSAL TO THESIS

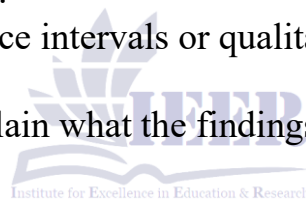
MS/MPhil research: add depth, justification and independence

At MS or MPhil level, the examiner normally expects more than correct procedure. The researcher should compare evidence critically, justify methodological choices, understand alternative explanations and show greater independence in analysis and discussion.

The study may test a clearer theoretical relationship, adapt or validate a measure, compare groups, evaluate an intervention, use a stronger qualitative design, or integrate methods. Complexity should serve the question; it should not be added only to look advanced.

Practical guide

- Explain why this design is more suitable than reasonable alternatives.
- Link the conceptual or theoretical framework to variables, interview questions or interpretation.
- Plan effect sizes, confidence intervals or qualitative rigor procedures as appropriate.
- Use the Discussion to explain what the findings add, not simply to repeat results.



Practice: write three sentences describing what makes your own project appropriate for this degree level.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the design cannot support them. Define unfamiliar terms, keep sentences reasonably short, and explain why an important methodological choice fits the present question. This style strengthens the level of scope, independence, and originality expected. Keep the explanation clear and consistent.

CHAPTER 10 BS, MS/MPHIL AND PHD RESEARCH: FROM PROPOSAL TO THESIS

PhD research: define and defend an original contribution

A PhD is judged by the contribution it makes and by the researcher's ability to defend that contribution. Originality does not always mean discovering something that has never been imagined. It can come from a new theory, method, population, dataset, intervention, synthesis, explanation or combination of evidence that materially advances understanding.

The doctoral researcher should be able to explain the gap in a few sentences, show why it matters, justify every major methodological decision, and separate what the data demonstrate from what remains uncertain.

Practical guide

- State the proposed original contribution in one paragraph before data collection.
- Keep a decision log explaining major design and analysis choices.
- Expect examiners to ask why this question, why this method, why this sample and why this interpretation.
- Revise the claimed contribution after the results are known; do not force the findings to fit the original expectation.

Practice: write three sentences describing what makes your own project appropriate for this degree level.

Practical note: keep the level of scope, independence, and originality expected for the degree visible while working on this section. Write the main decision in plain language Keep the explanation clear and consistent.

CHAPTER 10 BS, MS/MPHIL AND PHD RESEARCH: FROM PROPOSAL TO THESIS

Build the thesis chapter by chapter

A thesis should read as one connected argument. The common structure is Introduction, Literature Review, Methodology, Results or Findings, Discussion, Conclusion and References, with front matter and appendices as required. Some universities permit article-based theses, which use a different structure.

The chapters should not feel like separate assignments. The problem introduced at the beginning should lead to the objectives; the objectives should lead to the method; the method should produce the results; and the Discussion should answer the original problem.

Practical guide

- **Introduction:** define the problem, context, gap and purpose.
- **Literature Review:** synthesize what is known and build the rationale.
- **Methodology:** make the study reproducible and justify key choices.
- **Results/Findings:** report evidence in the order of the objectives.
- **Discussion/Conclusion:** interpret the evidence, contribution, limitations and implications.

Apply it: take one real or imaginary study and write a short example for this step. Compare it with the research question, design, population, and planned analysis. Use the same names for variables, groups, outcomes, and time points throughout the document. Small wording changes can create large inconsistencies, so a final alignment check is useful before the proposal, thesis, Keep the explanation clear and consistent.

CHAPTER 10 BS, MS/MPHIL AND PHD RESEARCH: FROM PROPOSAL TO THESIS

Analyze at the level your question requires

Good analysis is not the analysis with the most complicated name. It is the analysis that matches the research question, design, variables, assumptions and data quality. Decide the main analysis before looking for interesting results.

Quantitative theses should report descriptive information and the planned inferential analysis with effect sizes and uncertainty where appropriate.

Qualitative theses should show a transparent path from data to themes or interpretations and explain procedures used to support rigor. Mixed-methods theses must show where and how the two forms of evidence are integrated.

Practical guide

- Keep a clean codebook or analytic record.
- Separate primary, secondary and exploratory analyses.
- Report missing data and important deviations from the original plan.
- Ask a statistician or qualitative-methods expert when the design requires expertise beyond your training.

Quality check: another researcher should be able to understand this section without asking you to explain it verbally. Include specific information when it affects interpretation, but remove repeated sentences that add no new meaning. Separate what the data show from what you think the findings may mean. Where institutional or journal requirements apply, use the current official guidance rather than Keep the explanation clear and consistent.

CHAPTER 10 BS, MS/MPHIL AND PHD RESEARCH: FROM PROPOSAL TO THESIS

Prepare for proposal defense and final viva

A defense is easier when you can explain the study without hiding behind slides. Examiners usually test whether the researcher understands the problem, the literature, the design, the analysis, the limitations and the contribution.

Prepare short answers first, then supporting detail. If a limitation is real, acknowledge it and explain its likely effect. Defending research does not mean claiming that every decision was perfect.

Practical guide

- Prepare a two-minute explanation of the problem, gap, method, main finding and contribution.
- Make a list of the ten hardest questions an examiner could ask.
- Know the exact sample, measures, key statistics or themes, and major limitations.
- For every major choice, be able to answer: Why did you do it this way?

Practice: answer the question “What is the single most important contribution of this study?” in no more than 50 words.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the design cannot support them. Define unfamiliar terms, keep sentences reasonably short, and explain why an important methodological choice fits the present question. This style strengthens the level of scope, independence, and originality expected. Keep the explanation clear and consistent.

CHAPTER 10 BS, MS/MPHIL AND PHD RESEARCH: FROM PROPOSAL TO THESIS

Move from thesis to journal article

A thesis and a journal article have different jobs. A thesis documents the full academic journey. An article presents one focused contribution to a specific readership. Do not simply cut pages from the thesis and call the remainder an article.

Choose one clear paper question, identify the target journal, rebuild the Introduction around that question, shorten the Methods without losing reproducibility, select only the results needed for that paper, and write a Discussion around the paper's contribution. Check authorship, permissions, ethics statements and the journal's policy on thesis-derived publications.

Practical guide

- One article should have one central message.
- Do not publish overlapping papers that repeat the same results without a legitimate reason and transparent cross-reference.
- Rewrite rather than copy large thesis passages mechanically.
- Before submission, check the reporting guideline and the journal Instructions for Authors.

Before writing the article, circle the one objective that will become the paper's main question.

Practical note: keep the level of scope, independence, and originality expected for the degree visible while working on this section. Write the main decision in plain language before adding technical detail. Then ask whether a reader can Keep the explanation clear and consistent.

CHAPTER 11 FROM DRAFT TO SUBMISSION: PEER REVIEW AND Q1 WRITING

Choose the journal before final formatting

Journal fit is more than quartile. Check scope, recent articles, study designs commonly published, readership, word limits, reporting requirements, fees and ethical policies before submission.

Journal fit affects word count, article type, audience and reporting details.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Read aims and scope.
- Read recent articles.
- Check accepted study designs.
- Review author instructions.
- Check indexing and legitimate journal information.

Example Ayesha shortlists journals that publish observational student-health research and then checks each journal directly.

Try it Write why your paper fits the journal in two sentences.

Key idea: Read aims and scope. Keep the language factual and make sure this choice matches the rest of the study.

A useful comparison is to ask what the student must contribute independently. At BS level, correct execution and clear learning are central. At MS/MPhil level, stronger justification and critical interpretation are expected. At PhD level, the researcher must also show a distinct contribution that can be defended against existing knowledge. These are broad academic expectations; the university's own regulations remain the final guide.

Before approval, make a one-page requirement sheet for your degree. Record the expected proposal sections, thesis format, ethics route, word range, timeline, and any publication requirement. Discuss this sheet with the supervisor before finalizing the topic. This prevents a common problem: designing an interesting study that later does not fit departmental rules, available time, or the evidence expected at that degree level.

A proposal should also show feasibility. State where participants or data will come from, what permissions are needed, how long recruitment may take, what resources are required, and what you will do if the first plan is not practical. A realistic plan is stronger than an ambitious plan with hidden weaknesses. Review every proposal section against the same research question before submission.

For a BS project, simplicity is a strength when it produces clean learning. Limit the number of variables, outcomes, groups, and research questions. Choose methods that the student can apply correctly and explain confidently. The final report should demonstrate understanding of the research cycle, not an attempt to imitate a doctoral thesis. Good execution, ethical conduct, and honest interpretation are the main priorities.

At MS/MPhil level, the literature review should do more than summarize papers one by one. It should compare findings, identify patterns and disagreements, and explain why the chosen method is appropriate. The discussion should show independent thinking while remaining evidence-based. A useful test is whether the student can justify major decisions with literature, methodological reasoning, and the exact needs of the research question.

For doctoral work, originality must be stated precisely rather than described with broad words such as novel or unique. Explain what is being added, to which body of knowledge, and why that addition matters. The contribution may be theoretical, methodological, empirical, contextual, or integrative. Whatever form it takes, it should be visible in the research question, methods, findings, and final discussion rather than appearing only in the conclusion.

Create a chapter map before writing the full thesis. Under each chapter, list its purpose, main questions, key tables or figures, and the message the reader should carry forward. Then check the links between chapters. Repeated background can be shortened, inconsistent terminology corrected, and missing transitions added. This planning makes a long thesis feel like one argument rather than several separate documents joined together.

Analysis should be planned with the question in front of you. For each objective, identify the exact data needed, the main analytic approach, and the form in which the result will be reported. Keep exploratory analyses clearly separate from planned primary analyses. When assumptions are important, document how they were checked. The goal is not maximum statistical complexity; it is an analysis that is defensible, transparent, and understandable.

For viva preparation, make a short defense file containing the research gap, objectives, design rationale, sampling decision, main findings, limitations, contribution, and three or four likely questions for each chapter. Practice answering first in one sentence and then in more detail. This helps you remain focused under pressure. When an examiner raises a valid limitation,

acknowledge it directly and explain what it means for interpretation or future work.

When converting a thesis into articles, decide whether one paper or several papers are genuinely justified by distinct questions. Avoid dividing one coherent study into unnecessarily small papers. For each article, rebuild the story around one main contribution and remove thesis material that is not needed for that question. Ensure that overlapping publications are transparent, authorship is agreed, and the target journal's policies are followed before submission.

A practical journal-fit check is to read several recent articles from the journal, not only its aims and scope page. Look at the populations, designs, article types, word lengths, and level of methodological detail that appear repeatedly. This does not guarantee acceptance, but it helps you judge whether your manuscript belongs in that readership. Select the journal before the final rewrite so that structure and emphasis can be adjusted appropriately.



CHAPTER 11 FROM DRAFT TO SUBMISSION: PEER REVIEW AND Q1 WRITING

Avoid predatory or unsuitable journals

Do not judge a journal only by an email invitation or claimed impact.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Check the publisher and journal website carefully.
- Verify indexing claims in the indexing service itself.
- Look for transparent editorial policies and fees.
- Be cautious with guaranteed acceptance or unrealistically fast peer review.

Example Ayesha verifies rather than trusting a marketing email.

Try it If anything important is hard to verify, pause submission.

Key idea: Check the publisher and journal website carefully. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 11 FROM DRAFT TO SUBMISSION: PEER REVIEW AND Q1 WRITING

Prepare the submission package

A clean submission reduces administrative delays.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- Manuscript file.
- Title page if separate.
- Tables/figures in required format.
- Cover letter.
- Reporting checklist.
- Ethics, registration, funding, conflicts and data statements.
- Supplementary files.

Example Ayesha uses a folder named FINAL_SUBMISSION and removes older drafts from it.

Try it Compare every file against the journal checklist.

Key idea: Manuscript file. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the preparation of a complete manuscript for an appropriate scholarly journal and makes the work easier to defend during supervision, peer review, or a viva. Practical reflection: keep the preparation of a complete manuscript for an Keep the reasoning clear and consistent.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the Keep the explanation clear and consistent.

CHAPTER 11 FROM DRAFT TO SUBMISSION: PEER REVIEW AND Q1 WRITING

Write a concise cover letter

The cover letter should help the editor understand fit, not repeat the entire abstract.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- Name the manuscript and article type.
- State the research question and main contribution briefly.
- Explain fit with the journal.
- Confirm originality and required disclosures.

Example Ayesha uses three short paragraphs and avoids adjectives such as groundbreaking or revolutionary.

Try it Keep the letter factual and specific.

Key idea: Name the manuscript and article type. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the preparation of a complete manuscript for an appropriate scholarly journal visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A reader should be able to identify what you decided, why the decision is reasonable, and how it affects the next step. If one of these points is unclear, revise. Keep the reasoning clear and consistent.

Practical note: keep the preparation of a focused manuscript for an appropriate scholarly journal visible. Keep the explanation clear and consistent.

CHAPTER 11 FROM DRAFT TO SUBMISSION: PEER REVIEW AND Q1 WRITING

Respond to peer review

A response letter should be calm, complete and easy to audit.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

- Copy each comment.
- Respond directly below it.
- State exactly what changed and where.
- If you disagree, explain the scientific reason respectfully.
- Never claim a change was made when it was not.

Example Ayesha numbers reviewer comments and uses page/line locations in the revised manuscript.

Try it Treat the response letter as a second scientific document.

Key idea: Copy each comment. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same names for populations, variables, outcomes, and time points throughout the document. Consistency makes the preparation of Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this Keep the explanation clear and consistent.

CHAPTER 11 FROM DRAFT TO SUBMISSION: PEER REVIEW AND Q1 WRITING

Handle rejection productively

A rejection is a decision about one manuscript at one journal at one time.

Think of this step as a quality-control point. The best choice is usually the one that can be explained simply, documented transparently and defended from the study design rather than from personal preference.

Practical guide

- Read the decision carefully.
- Separate fixable scientific issues from journal-fit issues.
- Revise before sending elsewhere.
- Do not immediately resubmit the unchanged paper to the next journal.

Example Ayesha creates a revision list, improves the paper, then adapts it to a better-fit journal.

Try it Turn every useful reviewer point into an action item.

Key idea: Read the decision carefully. Keep the language factual and make sure this choice matches the rest of the study.

Quality check: imagine that another researcher can read only this page. That person should understand what decision was made, what evidence supports it, and what should happen next. Be specific where detail matters, but do not add information simply to make the section longer. Separate observation from interpretation. Where a choice depends on university, ethics, or journal requirements, use the current official guidance. These checks strengthen the preparation of a complete manuscript for an Keep the reasoning clear and consistent.

Quality check: another researcher should be able to understand this section without asking you to Keep the explanation clear and consistent.

CHAPTER 11 FROM DRAFT TO SUBMISSION: PEER REVIEW AND Q1 WRITING

Final language edit

Good academic writing is precise, restrained and easy to follow.

Good research writing is not about sounding impressive. It is about reducing uncertainty for the reader. At this stage, your job is to make one decision explicit and to show how that decision serves the research objective.

Practical guide

- Prefer short direct sentences.
- Use technical terms only when needed.
- Remove repeated claims.
- Keep tense consistent.
- Replace vague words with concrete information.

Example Ayesha reads each paragraph for one main job and cuts sentences that do not help that job.

Try it Read the paper aloud; awkward sentences often become obvious.

Key idea: Prefer short direct sentences. Keep the language factual and make sure this choice matches the rest of the study.

Writing note: strong academic writing is usually calm, direct, and exact. Define unfamiliar terms, remove repeated ideas, and avoid claims that go beyond the design or data. If evidence is limited, say so. If several choices are acceptable, explain why your choice fits the present study. This measured approach improves the preparation of a complete manuscript for an appropriate scholarly journal and makes the work easier to defend during supervision, peer review, or a viva.

Writing tip: professional academic language is usually direct and measured. Avoid absolute statements when the design cannot support them. Define unfamiliar terms, keep sentences Keep the explanation clear and consistent.

CHAPTER 11 FROM DRAFT TO SUBMISSION: PEER REVIEW AND Q1 WRITING

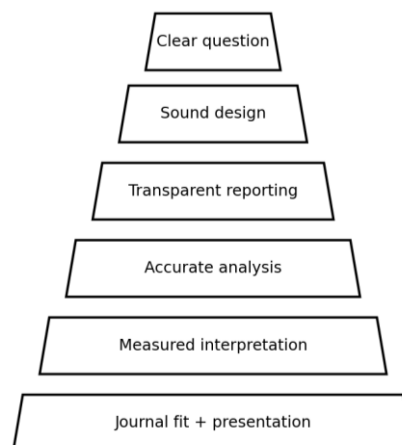
Q1 Article Guide 1: Build the paper around one clear contribution

A strong Q1-targeted article is not created by difficult vocabulary. It is built on a clear question, defensible methods, transparent reporting and a contribution that fits the journal.

This is a small part of the manuscript, but it often reveals whether the project is coherent. Work slowly here. Precise wording now prevents confusing methods, unnecessary analyses and exaggerated conclusions later.

Practical guide

- State the research problem and specific gap quickly.
- Make the objective and design unmistakable.
- Keep every major analysis tied to an objective.
- Report effect sizes/estimates and uncertainty, not p values alone.
- Use the study-design reporting guideline from the beginning.



A Q1 paper is strong because the research is clear and defensible—not because the language sounds grand.

Try it Write a three-sentence contribution statement: known → gap → what this study adds.

Key idea: State the research problem and specific gap quickly. Keep the language factual and make sure this choice matches the rest of the study.

Practical reflection: keep the preparation of a complete manuscript for an appropriate scholarly journal visible while you work. Write the decision in plain language first, and add technical detail only when it improves accuracy. A Keep the reasoning clear and consistent.

Practical note: keep the preparation of a focused manuscript for an appropriate scholarly journal visible Keep the explanation clear and consistent.

CHAPTER 11 FROM DRAFT TO SUBMISSION: PEER REVIEW AND Q1 WRITING

Q1 Article Guide 2: Write each section at publication level

A high-level manuscript feels coherent because every section performs a different job.

Many manuscripts become difficult to read because several different jobs are placed in the same paragraph. Keep the task on this page narrow. State what is needed, give enough detail for the reader, and move the rest to the correct section.

Practical guide

- **Title:** precise, searchable, design-consistent.
- **Abstract:** objective, design, sample, main numerical result, measured conclusion.
- **Introduction:** only the evidence needed to establish the gap.
- **Methods:** reproducible detail and transparent deviations.
- **Results:** objective order, exact estimates, clean tables/figures.
- **Discussion:** main finding, context, mechanisms, limitations, implications (without repeating Results).

Example: Q1 journals vary widely, so always follow the target journal. The common standard is disciplined reporting, not a special 'Q1 vocabulary'.

Try it: After drafting, write one sentence describing the job of every paragraph. Delete or move paragraphs with no clear job.

Key idea: Title: precise, searchable, design-consistent. Keep the language factual and make sure this choice matches the rest of the study.

Mini practice: apply this idea to one real or imaginary study. Write a first version in two or three sentences, compare it with the research question and method, and revise it for precision. Avoid impressive but vague wording. Use the same. Keep the reasoning clear and consistent.

Apply it: take one real or imaginary study and write a short example for this. Keep the explanation clear and consistent.

CHAPTER 11 FROM DRAFT TO SUBMISSION: PEER REVIEW AND Q1 WRITING

Q1 Article Guide 3: Final 20-point submission check

Before submission, audit the science and the presentation together.

Research becomes easier when this decision is made clearly and early. The purpose is not to make the study sound complex; it is to make the logic visible. A reader should be able to see how this step connects with the question and with the section that follows.

Practical guide

1. Clear question.
2. Genuine gap.
3. Correct design label.
4. Ethics/registration complete.
5. Sample justified.
6. Measures appropriate.
7. Analysis pre-specified where applicable.
8. Missing data addressed.
9. Estimates + uncertainty reported.
10. No causal over-claiming.
11. Tables match text.
12. Figures add value.
13. Limitations specific.
14. Conclusion matches design.
15. Abstract matches paper.
16. Reporting checklist complete.
17. References verified.
18. Journal scope fit.
19. Author instructions followed.
20. Cover letter concise.

Example: A paper that passes this check may still be rejected because editorial priorities and competition vary. The goal is to submit a manuscript that is scientifically transparent, well matched and easy to evaluate.

Try it: Do one final read as an editor: What would make me hesitate? Fix that before clicking Submit.

Key idea: 1. Clear question. 2. Genuine gap. 3. Correct design label. 4. Ethics/registration complete. 5. Sample justified. 6. Measures appropriate. 7. Analysis pre-specified where applicable. 8. Missing data addressed. 9. Estimates + uncertainty reported. 10. No causal over-claiming. 11. Tables match text. 12. Figures add value. 13. Limitations specific. 14. Conclusion matches design. 15. Abstract matches paper. 16. Reporting checklist complete. 17. References verified. 18. Journal scope fit. 19. Author instructions followed. 20. Cover letter concise. Keep the language factual and make sure this choice matches the rest of the study.

Appendix A. Organizational Structure of the Book



Appendix B: Research Topic Selection Worksheet

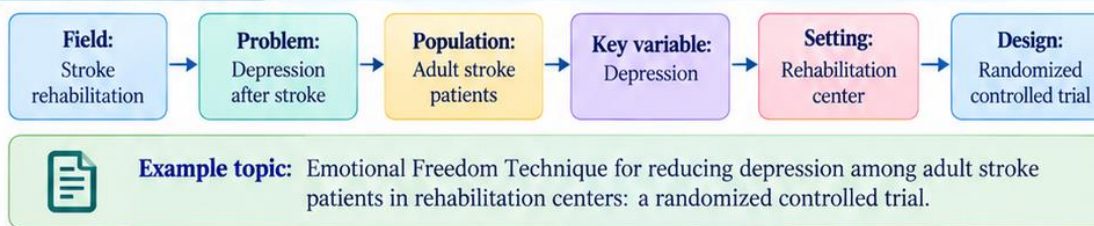


Research Topic Selection Worksheet

Use this worksheet to narrow a broad idea into a focused and researchable topic.

1	 Field	What broad area are you interested in? _____	 Quick reminders 1 Keep the topic manageable. _____ 2 Avoid adding too many variables. _____ 3 Make sure the topic matches the research question. _____ 4 Choose a design that fits the topic. _____
2	 Problem	What specific issue needs study? _____	
3	 Population	Who or what will you study? _____	
4	 Key variables or phenomenon	What main factor, experience, or outcome matters most? _____	
5	 Setting	Where will the study take place? _____	
6	 Design	What research approach will you use? _____	
 Focused research topic		Write your final research topic here. _____	

Practice example



A smaller coherent study is usually better than a crowded study.

Appendix C: Research Proposal Template

Use this template to organize the main parts of a research proposal.

- 1**  **Working title**
State the study topic clearly and specifically.
- 2**  **Background and rationale**
Explain what is known, what is missing, and why the study matters.
- 3**  **Problem statement**
Write the precise problem the study will address.
- 4**  **Objectives**
List the main aim and specific objectives.
- 5**  **Research questions or hypotheses**
State the questions or testable hypotheses.
- 6**  **Methodology**
Describe the research methods. Complete the key elements below.

Design	Population and sample	Tools or measures	Procedure	Data analysis
- 7**  **Ethical considerations**
Consent, confidentiality, and approval.
- 8**  **Timeline and resources**
Show major tasks, expected duration, and needed resources.
- 9**  **References**
List the main cited sources in the required style.

 | A good proposal shows logic: problem → objectives → methods → ethics → feasibility.

 **Proposal tips**

- 1** Keep the title focused.
- 2** Make objectives match the method.
- 3** Use clear study-design wording.
- 4** Be realistic about time and sample size.
- 5** Check the required format before submission.

Appendix D: Thesis / Dissertation Chapter Checklist

Use this checklist to review what belongs in each chapter of a thesis or dissertation.

 Chapter 1: Introduction ☐ Background ☐ Problem statement ☐ Objectives ☐ Questions or hypotheses ☐ Significance ☐ Scope	 Chapter 2: Literature Review ☐ Key theories ☐ Recent studies ☐ Research gap ☐ Critical synthesis	 Review questions 1 Does each chapter do its own job? _____ 2 Do the chapters connect logically? _____ 3 Are tables and figures cited in the text? _____ 4 Are the references complete and consistent?
 Chapter 3: Methodology ☐ Design ☐ Participants ☐ Sampling ☐ Measures ☐ Procedure ☐ Ethics ☐ Analysis plan	 Chapter 4: Results ☐ Participant details ☐ Descriptive results ☐ Main findings ☐ Tables and figures	
 Chapter 5: Discussion ☐ Interpret findings ☐ Compare with literature ☐ Explain meaning ☐ Strengths and limitations	 Chapter 6: Conclusion and Recommendations ☐ Summary ☐ Implications ☐ Recommendations ☐ Future research	 References and Appendices ☐ Consistent style ☐ Accurate citations ☐ Supporting materials



A strong thesis moves in a clear line from the research problem to the final conclusion.

Appendix E: Journal Article Writing Checklist



Use this checklist before finalizing a research article.

1  Title ☐ Clear and specific ☐ Reflects the study design when needed	2  Abstract ☐ Purpose ☐ Methods ☐ Key results ☐ Main conclusion	 Writing reminders 1 Use calm, direct language. 2 Report what the study actually shows. 3 Avoid exaggerated claims. 4 Check every table, figure, and citation. 5 Match the journal instructions.
3  Keywords ☐ Relevant ☐ Specific ☐ Search-friendly	4  Introduction ☐ Background ☐ Research gap ☐ Study aim	
5  Methods ☐ Design ☐ Participants ☐ Measures ☐ Procedure ☐ Ethics ☐ Analysis	6  Results ☐ Logical order ☐ Numerical findings ☐ Tables and figures clearly labeled	
7  Discussion ☐ Interpret findings ☐ Compare with prior studies ☐ Strengths and limitations	8  Conclusion ☐ Focused takeaway ☐ No overclaiming	
9  References ☐ Complete ☐ Correct style ☐ DOIs checked where needed	10  Declarations ☐ Funding ☐ Conflicts of interest ☐ Author contributions ☐ Data availability if required	



A strong article is clear, accurate, and easy for a reader to follow from introduction to conclusion.

Appendix F: Q1 Journal Pre-Submission Checklist

Use this checklist before submitting a manuscript to a high-quality journal.

10		Last check	
1	 Journal fit	☐ Scope matches the study.	 Last check 1 Would a reviewer understand the logic quickly? 2 Does the abstract match the full paper? 3 Do the conclusions stay within the data? 4 Have all required documents been uploaded?
2	 Author guidelines	☐ Word limit. ☐ Reference style. ☐ Section order.	
3	 Reporting guideline	☐ Relevant checklist used, such as CONSORT, STROBE, PRISMA, or SRQR.	
4	 Ethics	☐ Approval reported. ☐ Consent described when needed.	
5	 Statistics and analysis	☐ Methods are transparent. ☐ Results are internally consistent.	
6	 Tables and figures	☐ Numbered correctly. ☐ Cited in text. ☐ Legible and necessary.	
7	 Language and clarity	☐ Simple academic English. ☐ No repeated ideas. ☐ No overclaiming.	
8	 References	☐ All citations appear in the list. ☐ Formatting checked. ☐ DOIs verified where needed.	
9	 Submission files	☐ Manuscript. ☐ Cover letter. ☐ Title page. ☐ Supplementary files.	
10	 Final review	☐ Plagiarism check. ☐ Proofreading. ☐ Co-author approval.	

 | Good submission quality reduces avoidable reviewer criticism.

Appendix G: Common Research Terms and Simple Meanings

Use this glossary for quick understanding of common research language.

**Variable**

A factor that can change or be measured.

**Confounder**

A third factor that may affect the relationship between the main variables.

**Hypothesis**

A testable statement about what may happen or how variables may relate.

**Effect size**

An estimate of how large or meaningful a finding is.

**Population**

The full group the researcher wants to understand.

**Confidence interval**

A range that shows the uncertainty around an estimate.

**Sample**

The smaller group selected from the population for the study.

**p-value**

A statistic often used to judge how compatible the data are with a null hypothesis.

**Validity**

How well a tool or study measures what it is supposed to measure.

**Thematic analysis**

A qualitative method used to identify patterns or themes in data.

**Reliability**

How consistently a tool gives similar results under similar conditions.

**Triangulation**

Using more than one source, method, or perspective to strengthen understanding.

**Bias**

A systematic influence that can distort the findings.

How to use this glossary

- 1 Learn the meaning before using the term in writing.
- 2 Choose the term that matches your design and data.
- 3 When in doubt, define the term clearly in the manuscript.



Clear understanding of terms improves clear writing.

RESEARCH MADE SIMPLE

**A Practical Guidebook for
BS, MS, PhD, and Journal Article Writing**

About This Book

Research Made Simple is a practical guide designed to help students and early-career researchers move step by step from a broad idea to a clear proposal, thesis, dissertation, and journal article. Written in simple English, it explains the logic of research in a way that is easy to follow and apply.

Inside This Guide

- Choosing a focused research topic
- Writing proposals, theses, and dissertations
- Understanding methodology, tools, ethics, and analysis
- Writing results, discussion, conclusion, and references
- Preparing journal articles and Q1 submissions
- Using practical worksheets, checklists, and appendices

About the Author

Dr. Shazia Shahzadi, Ph.D is a psychologist, speech pathologist, researcher, author, and trainer. She brings academic, clinical, and teaching experience to this guide, with the aim of making research writing more clear, practical, and approachable for students and researchers.

A practical companion from topic selection to publication.

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