

Responsible AI Use in Academic Research

A practical guide and checklist

Use AI thoughtfully, verify what it produces, protect research data, disclose relevant assistance, and retain responsibility for every research decision.

INSIDE

Decision framework / Worked examples / Source verification / Privacy / Disclosure template / Printable checklist

AI can assist. Researchers remain accountable.

Start with the standards that govern your own study.

The governing principle

AI may help organise work, suggest possibilities, improve language and support exploration. It does not replace the researcher's obligation to verify evidence, justify decisions, protect participants or acknowledge assistance.

Five commitments

Before using an AI system, apply all five safeguards:

- **Purpose**
Use AI for a defined task; do not outsource your intellectual judgment.
- **Verification**
Check every factual claim, calculation, reference and quotation against authentic sources.
- **Privacy**
Do not upload identifiable, confidential or restricted data without valid permission and safeguards.
- **Transparency**
Keep a record of material AI assistance and follow the rules for disclosure.
- **Accountability**
A human author must take responsibility for the entire research output.

IMPORTANT: University, funder, discipline and journal policies differ. The publisher or institutional rules applicable to your project take priority over this general guide.



Should I use AI for this task?

A decision framework, not a blanket permission.

1. Is AI allowed here?

Check assignment, ethics approval, supervisor, journal and funder rules.

2. Is the information safe to share?

Exclude restricted manuscripts, personal records and confidential data unless authorised.

3. Can I verify the result?

Identify original documents, calculations, scripts or sources to validate.

4. Am I preserving my own reasoning?

Interpret, select, challenge and justify the work yourself.

5. Can I disclose this accurately?

Record tool, purpose, date/version if available, review and corrections.

If any gate fails: stop, remove sensitive content, change the method, obtain authorisation, or complete the task without AI.

Lower-risk support vs higher-risk use

Use cases require context and institutional permission.

Task	More defensible approach	Risk to avoid
Brainstorming	Generate possible keywords; verify by searching databases.	Treating suggestions as verified literature.
Writing support	Improve clarity of text you drafted; inspect every change.	Submitting generated argument as your own work.
Coding/data	Request example code on synthetic data; test and document.	Uploading confidential participant records.
Literature review	Use AI to outline questions for critical comparison.	Citing invented studies or summaries.
Interpretation	Ask for alternative explanations to evaluate.	Accepting confident causal claims uncritically.

Worked example: writing assistance

A researcher drafts a methods paragraph, uses an approved tool for grammar and readability suggestions, reviews the edits against the original meaning, and records the assistance. Whether disclosure is required, and where, depends on the applicable policy.

How to check AI-assisted claims

A fluent answer is not proof.

- **References and DOI**

Search publisher, journal or trusted index; open the source; confirm title, authors, date and DOI.

- **Quotations**

Locate the quoted wording in the original work; check that context is preserved.

- **Numerical results**

Re-run calculations and inspect assumptions, units, denominators and code.

- **Summaries and synthesis**

Read the actual source; distinguish its findings from the AI's inference.

- **Images, charts and datasets**

Check provenance, permissions, data transformations and potential fabrication.

WORKED EXAMPLE / AN INVENTED CITATION

AI outputs a plausible-looking journal citation. A search by exact title and DOI yields no matching publication. Action: do not cite it; locate genuine publications and document the verification.



Protect people and research materials

A convenient tool does not override confidentiality.

Sensitive inputs need special handling

Treat interview transcripts, student records, patient records, identifiable survey responses, unpublished manuscripts under review, proprietary datasets and partner information as potentially restricted.

- **Check the legal and ethical basis**

Review consent terms, ethics approval and institutional data-handling procedures.

- **Use minimal data**

Prefer synthetic examples, aggregates or properly de-identified data when appropriate.

- **Examine tool settings**

Assess retention, model training, region, access controls and contract terms.

- **Do not assume anonymity**

Removing names alone may not prevent re-identification.

- **Use approved infrastructure**

When necessary, use institutionally authorised tools and data-processing agreements.

WORKED EXAMPLE: For a qualitative interview, use a fabricated practice excerpt to test a coding prompt. Do not paste the actual transcript into a public chatbot unless authorised under your project's protections.



Record and disclose AI assistance

Use the destination's actual reporting requirements.

What to document

Record the tool and provider; date and version where known; the specific task; whether any research content or data was submitted; how outputs were checked; and how the final work was altered.

ILLUSTRATIVE DISCLOSURE TEMPLATE

"During preparation of this [work], [tool/provider, version if known] was used for [specific purpose]. The author reviewed and verified the resulting material, made the final research decisions and takes responsibility for the content."

Example: permitted language editing

"The author used [tool] to suggest grammatical edits to author-written text. All changes were reviewed and revised by the author."

Example: research-analysis assistance

"[Tool] assisted with generating draft code for data cleaning. The researcher tested the code on the dataset, inspected outputs and documented changes in the methods and analysis records."

These examples are starting points, not universal disclosures. Some journals require a named section or details in the methods, acknowledgements or submission letter.



Three worked decisions

Reason through the issue before choosing the tool.

Scenario A / Literature search

A student requests references for a thesis topic. The AI produces ten polished citations.

RESPONSE: Do not paste them directly into the bibliography. Verify each in scholarly databases and read the relevant original papers.

Scenario B / Research interviews

A researcher wants to summarise verbatim transcripts containing sensitive participant details.

RESPONSE: Do not upload them to an unapproved service. Check ethics/consent and use authorised workflows or synthetic demonstration text.

Scenario C / Statistical code

A researcher obtains AI-suggested regression code for a study.

RESPONSE: Review the model choice, missing-data handling and assumptions; run independent checks; document the tool's contribution.



AI-use decision worksheet

Complete once for each substantial AI-assisted task.

Task and research stage

Applicable course / institutional / journal rule

Tool, provider, version and date

What data or content would be shared?

How will each output be independently verified?

What is the disclosure and record-keeping plan?

Decision: Proceed / Modify approach / Seek approval / Do not use



Responsible AI use checklist

Tick only after the checks have actually been completed.

- ☐ I confirmed applicable institutional, funder and journal policies.
- ☐ My use of AI is permitted for this particular task.
- ☐ No confidential or personal information was shared without authority.
- ☐ Any AI-assisted search terms or claims were independently checked.
- ☐ Every citation, DOI and quotation was verified from original sources.
- ☐ Code, numbers and figures were inspected and tested.
- ☐ Interpretations and conclusions remain my own justified judgments.
- ☐ I checked outputs for bias, omissions and potentially misleading claims.
- ☐ I recorded material AI assistance and relevant tool information.
- ☐ I prepared any disclosure required by the destination.
- ☐ I can defend every part of the research output without relying on AI authority.

FINAL RULE: If you cannot verify, explain, justify and take responsibility for a result, it is not ready to become part of your research.



Guidance to consult

Check current rules before relying on this guide.

ICMJE - Use of AI by Authors

<https://www.icmje.org/recommendations/browse/artificial-intelligence/ai-use-by-authors.html>

ICMJE - Artificial Intelligence in Publishing

<https://www.icmje.org/recommendations/browse/artificial-intelligence/>

COPE - Authorship and AI Tools

<https://doi.org/10.24318/cCVRZBms>

UNESCO - Guidance for Generative AI in Education and Research

<https://www.unesco.org/en/articles/guidance-generative-ai-education-and-research>

Scope and limitations

This SRS guide is educational material, not a substitute for your institution's policy, research ethics approval, legal advice, disciplinary guidance or the target journal's latest author instructions.

Further reflection

Ask: What did AI materially contribute? What could go wrong? How would I independently prove that the result is trustworthy?

