



University of
**Southern
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Frequently Asked Questions: AI and Human Research Ethics

The use of Artificial Intelligence (AI) presents interesting ethical challenges in terms of research integrity and data privacy. AI is used here to encompass a broad range of tools, including Large Language Models, generative AI, and interpretive AI. Here are some frequently asked questions associated with the use of AI in human research:

1. When is AI used in research?

It is possible to use AI tools at various points in the research process, from idea generation to data analysis and writing. Other uses include transcription and data visualisation. Some projects may also use synthetic AI data, which are artificially generated data that mimic real-world data. For more information about use of AI in research, refer to the [NHMRC Guide for assessing research involving AI](#).

2. Do I need to declare use of AI in my ethics application?

Yes. If you intend to use AI tools at any stage of the research process involving contact with humans or use of their data, this should be declared in your ethics application. This includes disclosing use of AI tools for transcribing interviews, analysis of data, and use of synthetic datasets. You are encouraged to reflect carefully on any risks that might arise from AI use and consider appropriate mitigation strategies.

3. Can I use AI to assist in writing my ethics application?

Yes. However, any AI tools used for your research, including research administration such as completing ethics applications, must comply with UniSQ ITDS policies regarding the use of AI. Researchers must ensure that any tools used meet a standard for data privacy and retention. You should also consider other guidelines for use of AI in research administration, such as the Australian Research Council's recent Policy on [Use of Generative AI in the ARC's grants programs](#). Importantly, you are considered to be the author of your ethics application and are responsible for the information it contains.

4. What are the ethical considerations and risks involved in using AI tools in my research?

Ethical considerations and risks may include:

- **Privacy** – Many AI tools retain the data that is uploaded into them by users as this is an important part of how these tools are trained and refined. This has implications for human research data that is uploaded into these systems as this may provide third parties with access to the data. Even if deidentified, this may be in breach of the terms of consent agreed to by your participants. This can:
 - Violate others' privacy
 - Cause reputational harm
 - Breach reasonable expectation of privacy
 - Breach the terms of informed consent
- **Intellectual property** – The retention of data also has implications for intellectual property that should be considered by all researchers.
- There are also concerns about the **reliability of data/analysis** and, importantly, **bias and representativeness**. These can impact your findings and, in turn, impact the communities being researched.

5. How can I ensure that my use of AI in research is ethical?

Reflect carefully on how you intend to use AI in your research, considering the various risks and mitigation strategies.

- **Choose your tools carefully**
 - Either use tools already [approved by UniSQ ITDS](#) or submit a [ITDS Technology Solutions Advice Hub form](#) requesting that a new tool is reviewed to check its compliance with policy.
 - Additional resources include:
 - [Using Generative AI in Research at UniSQ](#)
 - [Copilot - UniSQ's secure AI solution \(Knowledge article\)](#)
 - [ITDS Security Blocked Applications \(Knowledge article\)](#)
 - [Meeting Transcriptions - Approved options at UniSQ \(Knowledge article\)](#)
- **Include consideration of AI in your risk assessment**
 - Consider whether the use of the AI tool may introduce any potential risks or harms to participants, researchers, communities, data, or the research outcomes.
 - Where risks are identified, explain within the ethics application how they will be mitigated, monitored, and managed throughout the project.
 - You may find it useful to use the [NHMRC's Questionnaire: Guide for assessing research involving artificial intelligence, machine learning, large language model technology \("AI"\)](#).
- **Disclose how you are using AI to your participants**
 - If you are using AI tools in any stage of the research that will involve contact with participants' data, such as transcribing interviews or performing analysis, make sure you disclose this to your participants in the Participant Information Sheet. Include any information that may impact their data privacy and confidentiality.
 - If you are going to use their data to create a synthetic dataset, include this in the terms of consent.

6. When and why should I disclose the use of synthetic datasets?

Synthetic data are artificially generated data that mimic real-world data. Synthetic data can be useful for augmenting or balancing datasets for characteristics that are difficult to obtain or training diagnostic algorithms. When using synthetic data, it is important to know how this data has been generated as this may determine whether you need to submit your use of this data for ethical review. Importantly, data generated from human data sets should only include data from people who have consented to their data being used for AI purposes. Accordingly, if you are planning to collect data for the purpose of later generating synthetic data, this should be included as a clear term of consent. If using synthetic data, this would be considered an "existing data set" in the ethics application. You should disclose use of synthetic data when:

- The synthetic dataset has been generated from human data. Please ensure that express permission was obtained by the dataset generator from the original participants for their data to be used in this manner.
- You are going to generate a synthetic dataset from data you have collected from humans. Please ensure you obtain express consent from your participants to use their data to create synthetic data.
- Also consider the policies regarding ethical review for any publications in which you plan to disseminate your research.

7. What are the risks of using synthetic data?

Ethical considerations and risks may include:

- **Accuracy, reliability, and trust** – Unreliable data will impact the reliability of your results.
- **Privacy and security** – Reidentification of participants from synthetic data is difficult but not impossible.
- **Group harms** – Consider whether the data and your analysis render social groups vulnerable in the context of your research and findings. Relate this back to those questions of accuracy and reliability.
- **Bias** – AI tools have been shown to replicate existing social biases – this is also possible in synthetic data.

8. Where can I get help with my ethics application?

You can contact the [UniSQ Ethics Office](#) directly or drop into one of our weekly [HRE drop-in sessions](#). Additional resources and templates are available on the [Human Research Ethics webpage](#).