

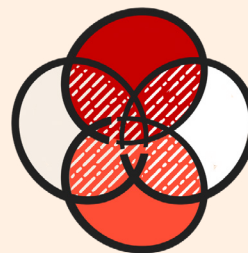
Planning and Developing Research

- Review the institutional [Open Research statement](#) to understand the University's position on open research and how it may apply to your work.
- Review the [Research Outputs Policy and rights retention](#) guidance to familiarise yourself with expectations for open dissemination of quantitative outputs. Where the research is externally funded, ensure compliance with [funder requirements relating to open research](#). Where applicable, factor open access costs into funding applications and discuss open access options with publishers early in the process. Contact [Library Research Services](#) for guidance on open access routes and funding options.
- [Link your ORCID to Symplectic](#) to support accurate attribution of outputs and reduce administrative burden later in the research process.
- Where your project involves generating or reusing quantitative data, develop a Data Management Plan that addresses data collection, documentation, storage, version control, and potential sharing arrangements in line with FAIR principles (Findable, Accessible, Interoperable, Reusable).
- Where appropriate, preregister study hypotheses, statistical analysis plans, or experimental designs (for example through recognised preregistration or registered report mechanisms) to support transparency and reduce risks of undisclosed analytical flexibility.
- If relevant to the project, plan for reproducibility at the outset, including how datasets, statistical code, and computational workflows may later be documented or shared.
- Where secondary datasets are used, clarify licensing conditions, reuse permissions, and citation expectations to ensure responsible and transparent reuse.
- Where ethical, legal, or commercial sensitivities may apply (for example in relation to personal, proprietary, or confidential data), seek Trusted Research advice during the planning stage to ensure appropriate safeguards are in place. Where the research involves human participants or sensitive personal data, follow established institutional ethics processes.
- Consider how [open research values and practices](#) may inform the development of your research proposal by identifying opportunities for transparency, collaboration, and early engagement.
- If the research may generate statistical models, algorithms, or analytical tools with potential for wider use, clarify at the outset how these may be documented and shared responsibly.
- Where intellectual property or commercialisation opportunities may arise (for example in relation to software, algorithms, or proprietary methods), consult relevant institutional teams early to align openness with protection strategies.



Conducting Research and Acquiring Data

- Where appropriate, document data collection procedures, sampling strategies, instruments, and measurement decisions in sufficient detail to support transparency and interpretability.
- Maintain clear and contemporaneous records of any deviations from preregistered plans, including adjustments to variables, thresholds, exclusion criteria, or analytical assumptions.
- Where data are generated through surveys, experiments, sensors, or automated systems, record instrument configurations, software versions, calibration details, and data-processing parameters that may influence results.
- If working collaboratively, establish shared standards for data formatting, variable naming conventions, file structures, and version control to support traceability and consistency.
- Where data are sensitive, confidential, or commercially restricted, implement agreed storage, encryption, and access-control practices in line with ethical approvals and data protection requirements.
- Where relevant, preserve raw data in addition to cleaned or transformed datasets, with appropriate documentation to clarify processing steps.
- If data are collected longitudinally or iteratively, document time points, update cycles, and any structural changes to instruments or sampling frameworks.
- Where appropriate, record decisions around missing data handling, outlier treatment, or exclusion criteria during the data acquisition phase to support later transparency.



Analysing and Sharing Data

- **Documenting analytical workflows, statistical models, assumptions, and software environments** in sufficient detail to support transparency and interpretability.
- **Where appropriate, share statistical code, scripts, or computational notebooks** (for example via version-controlled repositories or reproducible notebook formats) to enable verification and reuse.
- **If relevant to the project, prepare replication materials** that allow others to reproduce core analyses using shared data and code, or to understand clearly how results were generated.
- **Where ethical and legal considerations allow,** deposit cleaned datasets, derived variables, and associated metadata in suitable repositories in ways that align with FAIR principles (Findable, Accessible, Interoperable, Reusable). Contact [Library Research Services](#) for guidance on choosing the right institutional repository.
- **If full datasets cannot be shared openly due to legal, ethical, or commercial constraints,** ensure that a metadata record is created (ideally in Symplectic) that describes the dataset and clarifies access conditions, so that the data remains discoverable even where it is not openly accessible. Contact Library Research Services for guidance on recording and sharing metadata.
- **Where appropriate, distinguish clearly between raw, processed, and analysed data** to support interpretability and responsible reuse.
- **Document decisions relating to missing data** handling, model selection, robustness checks, and sensitivity analyses to support transparency in inferential reasoning.
- **Include a Data Access Statement in all research outputs,** in line with the Research Outputs Policy. This applies even where there are no data associated with the publication or where data are inaccessible. The statement should explain what materials are available, where they are deposited, and under what conditions. Avoid using 'data available on request' as a default; instead, specify a deposit location or provide a clear rationale for any access restrictions. Where applicable, also include a code availability statement to support transparency and reproducibility.
- **If the research includes secondary data,** consider providing clear citations and persistent identifiers for datasets used.





Disseminating and Publishing Research

- **Where appropriate, publish outputs via open access routes** in line with the Research Outputs Policy and rights retention approach.
- **Consider publishing replication materials** (such as datasets, statistical code, or analytical workflows) alongside articles to support verification and reuse.
- **If the study was preregistered or submitted as a registered report**, clearly reference this within the publication to support transparency.
- **Where appropriate, report null, negative, or non-significant findings transparently** to contribute to cumulative knowledge and reduce publication bias.
- **Consider how dissemination practices can support inclusive and responsible open research**, for example by encouraging bibliodiversity in publication formats and venues and promoting multilingual communication where appropriate.
- **Where appropriate, sharing findings through channels accessible beyond higher education**, such as blogs, data visualisations, infographics, videos, public talks, or other public-facing formats.
- **Deposit publications, datasets, scripts, and supporting materials** in suitable repositories to enhance discoverability and long-term access.
- **Where secondary datasets are used, ensure appropriate citation, licensing acknowledgement, and persistent identifiers are included.**
- **Where commercial, contractual, or confidentiality considerations apply**, coordinate dissemination decisions with relevant institutional teams to balance openness with protection.
- **For multi-authored outputs, include a CRediT author statement** clearly describing the roles of every author, in line with the Research Outputs Policy.

