



# University of Pretoria: RESEARCH DATA MANAGEMENT PLAN

## RESEARCHER

### Are you using or generating research data in your research?

- Yes
- No

*Example Answer:*

Define it: What is research data? Research data is 'is any information that has been collected, observed, generated or created to validate original research findings'. Research data can include survey/questionnaire data, consent forms, videos of artistic performances, audio records of interviews and their transcripts, physical samples (including biological samples of animal or human origin, plant specimens, organisms, molecules, chemicals etc.), photographic images, environmental or habitat data, observational data (of humans, organisations, animals, chemical reactions etc.).

Research data can be in any form, for example, electronic or hard copy, video, audio, artefacts, and machine readouts.

*Guidance:*

Important! Are you sure that you are not collecting research data? Only desktop research does not require a research data management plan. Desktop research is research that is based on published material or documents. It is sometimes called documentary research.

If you are using research data in your research study, you must submit a Research Data Management Plan as part of your research proposal. You must also upload your research data (or a link to your research data) to the University's institutional Research Data Management System.

Find out more: To read about Research Data Management Plans and how to upload your research data to the University, the University's institutional Research Data Management System. visit the [Research Data Management Guide](#).

### Select the source of your research data

*Guidance:*

You are collecting or sampling the research data from a primary source (i.e., in the field).

For example: You are collecting or sampling the research data directly from a human participant, animal subject, organism or live environment.

You are reusing existing data that was initially collected or generated for a different purpose.

For example: You are using data from a public record administrated by the Government, the UP research data repository (or another research data repository), medical or agricultural records, a human participant's social media account, the internet or from previous research project.

### Select which methods you will use to collect or generate your research data

- Interviews
- Focus groups
- Surveys
- Questionnaires
- Record/document/statistical analysis
- Computer/instrument generated
- Physical measurements
- Collecting samples
- Clinical trials
- Filming
- Experiments
- Intervention/therapy
- Tracking
- Observation

### Describe how much data you expect to collect or sample.

*Example Answer:*

For example: What sample size are you planning to collect and over what period of time.

### Describe the previous research project or activity

*Example Answer:*

For example: If you are re-using existing research data from a previous research project, describe the previous research project's aims and research methodology used.

For example: If you are re-using existing data from a government database, medical records or agricultural records, describe what purpose the data was originally collected for. If you collected data from social media accounts, describe what the original purpose for that data originally being shared on the social media platform.

### Have you obtained permission from the curator of the existing data to re-use the existing data in your research?

- Yes

- No
- I don't need permission (e.g., it is a public record)

*Example Answer:*

If you are reusing existing research data you may need permission from the curator. Here are some examples:

- if the research data is in a research data repository you may need to apply for permission to reuse the data from a data access committee,
- if the research data is stored on a website or social media platform, the terms of that website may stipulate who owns the data and what the data can and can't be collected and used for.

It is your responsibility to ensure that you have the right to reuse the data in your research.

*Guidance:*

What to do next: If you answered 'Yes', you must keep a record of this permission (you may be asked for it). If you answered 'No', you must obtain permission from the relevant curator(s) before you can re-use the existing data.

## STORAGE AND PRESERVATION

**Select how you will store your research data when you are collecting or sampling it (e.g., in the field).**

- My research does not involve collecting or sampling research data.
- In hardcopy format (on paper)
- On a phone
- On a tablet
- On a laptop or computer
- On a laptop or computer
- Other (Please specify)

**Select how you will store your research data once you have finished collecting or generating it (i.e., once you have transferred your research data to University systems or storage facilities).**

- Other (Please specify)
- On a laptop or computer
- On a USB or removable hard drive
- Your University GoogleDrive or OneDrive account
- RedCap database
- Another cloud services provider (e.g., Dropbox, Amazon Web Services)
- In a filing cabinet or drawer
- In a storeroom
- In a laboratory

*Guidance:*

**Important:** If you are storing your research data with a third party (e.g., a cloud service provider), the University must have a contract with that third party. You should never use a personal account with these service providers, but only University sanctioned service providers. This means that the University must have an agreement in place with that cloud storage provider and the Unit for Academic IT must have conducted a security risk assessment. Contact the Unit for Academic IT for assistance.

**Describe how you plan to organise or categorise your research data during your research**

*Example Answer:*

Describe what electronic, physical file storage or sampling classification system you plan to use to store your research data. Describe how you plan to organise your folders, subfolders and files containing your research data. Describe what naming convention you will use for your files.

*Guidance:*

Find out more: You can read more about naming conventions for electronic records and files for your research data on the [University's Library Webpage](#).

**Describe any tools or software to you will use to process your research data**

*Guidance:*

Find out more: You can read about different research data analysis tools and software on the [University's Library Webpage](#).

**Describe how you will back up your research data**

*Guidance:*

Describe what method you will use to back up your research data, who will be responsible for backing it up and how often your research data will be backed up.

**Select how you will control the quality of your research data**

- I am reusing someone else's research data
- Calibration
- Repeated measurements
- Standardised data capture

- Data entry validation
- Peer review of data
- Using controlled vocabularies
- Other (Please provide specific details)

### **Describe how you will maintain and update your research data**

*Example Answer:*

For example, depending on the types of files you are working with, you can use a system that keeps track of versions of individual files like SharePoint. You can also manage version control by incorporating version numbers (such as V01, V02 etc.) into your file names.

### **What metadata standards will you use?**

*Guidance:*

Define it: What is 'metadata'? Metadata is structured information about the attributes of a dataset that enables the data to be identified, retrieved and managed over time. Find out more: You can learn about which metadata standards to adopt on the [University's Library Webpage](#).

### **Describe the types of metadata and documentation that will accompany your research data to help secondary users to understand and reuse it**

*Guidance:*

This should include basic details that will help people find the research data, including who created or contributed to the research data, its title, date of creation and under what conditions it can be accessed and used.

### **What security safeguards do you intend to use to keep your research data secure?**

- I will restrict access to the research data to individuals who need access to fulfil their role.
- I will keep a record of who has accessed the research data.
- I will not share the research data with anyone before verifying their identity (e.g., using passwords or other authentication methods)
- I will not share research data with any service providers (e.g., cloud storage service providers) or software without making sure that the University has an agreement in place with them.
- I will use secure methods of transferring research data (e.g., password protected files, encrypted communication or secure file transfer protocols)
- I will make sure that any computers, mobile devices and removable media used to process the research data is secure (e.g., ensure that all software is up to date, that access to the device is restricted, that they can be wiped remotely or that they are encrypted)
- I will secure physical areas where research data is stored through appropriate entry controls and sign-in procedures.

*Guidance:*

**Important:** Having appropriate security safeguards in place to protect your research data is very important. When your research data includes personal information, it is legally required! It is also often a requirement in funding agreements. If your research data includes identifiable personal information implementing these safeguards is strongly recommended and in other instances, they are a guideline. If you cannot implement any of these safeguards you should document why. For further information on securing research data, see the Research@UP Manual.

### **List where the research data will be preserved after your research is complete**

*Guidance:*

Research data should be preserved in the University's institutional Research Data Management System or a storage repository within the academic department where you conducted your research.

### **List the time periods for which your research data must be preserved once your research is complete.**

*Guidance:*

For example, the ASSAf POPIA Code of Conduct requires that all research administration data must be kept for a minimum period of ten (10) years after the completion of the original research project.

### **Will your research data be published and made available for reuse?**

- All research data collected and generated during your research will be published and made available for reuse
- Only the metadata will be published and made available for reuse
- None of my research data will be published or made available for reuse
- Other – please specify

*Guidance:*

**Important:** If your research data contains identifiable personal information, human biological materials or animal samples you will also need to conclude a data sharing agreement or a material transfer agreement before the research data is shared. Contact the Contracts & Innovation Office for assistance. You also have to complete the POPIA self-assessment which includes a section on the reuse of identifiable personal information.

### **Select where you will publish your research data and make it available for reuse**

- The University's institutional Research Data Management System
- Another data repository (please specify which one)

*Guidance:*

Important: If your research data contains identifiable personal information, human biological materials or animal samples you will also need to conclude a data sharing agreement or a material transfer agreement before the research data is shared. Contact the Contracts & Innovation Office for assistance at [insert email address].

**Select when your research data will be published and made available for reuse**

- Research data will be available as soon as my findings are published
- Research data available upon completion of your research
- Research data available upon completion of your research (with embargo)

**RESPONSIBILITIES**

**Who will be responsible for implementing this research data management plan and monitoring that it is followed?**

- Principal Investigator
- Database administrator
- Project Manager
- Other (please specify who)