Data Management Plans for projects at PSI, UiO

Everyone who works with research data at UiO must have a data management plan (DMP). This is in line with the UiO's Research Data Management policy and guidelines. A DMP is a document that describes how research data should be managed throughout the research project as well as after the project is complete. In other words, the DMP should contain details about what kind of data will be collected, how it will be collected, what it will be used for in the project, and a description of how the data will be managed throughout the life of the project. The following questions will guide you through the entire lifecycle of research data in a typical research project.

Red text for guidance for qualitative projects is added. Remove red text when filled in.

General Information

Project title:
Part of a larger research project? Main Project Title and Project Number: Fill in here if your project is part of a larger research project.
Data Management Plan Owner (responsible) (name): The student is responsible for the data management plan unless it is part of a larger project where there is already a DMP.
Project Leader and Participants: The supervisor is the project leader, and the student is the participant. Write the name(s) of supervisors, students, and other people involved (if relevant).
Affiliated Faculty and Institute: The Faculty of Social Science, Department of Psychology.
Collaborating Institutions: Name of collaborating institutions if there are (ask your supervisor).
Project Description (brief): The abstract/ summary of the project description (short!).
Project Period: If the data is only used in your part of the project, the period should run until the end of the semester you submit + 3-4 months. If the data will be used further by you, your supervisor or other researchers in the team, extend the the period accordingly.
Source of Financing: If your project is part of a larger research project, you should name the source of Financing (ask your supervisor). If your project is not linked to any financed project, you can state: Not Applicable (NA). (If your project receives a grant, you are not supposed to state the grants as financing.)
Data Management Plan Version and Date: Version 1, today's date. If you change the handling of data, you make a new version.

Description and Collection of Research Data

What kind of data will be collected or generated? (Link to the new definition) Qualitative data are non-numerical data, typically interview data, voice/ document/text data, or data from observation. Qualitative data most often contain data about identifiable, living people, including special categories of personal data and therefore are usually classified as red or black data in UiO's data classification system. Your supervisor will let you know if your data can be later classified into yellow or other levels of safety.

How will the data be collected? For each dataset, provide a description of how they are going to be acquired. For example: The raw audio data will be collected through recordings of individual- or group interviews, using Nettskjema and the UiOs Dictaphone app.

Storage

UiO has developed a guide for storing data that applies to everything from open to restricted data and provides information about how it can best be stored during a research project. The guide can be found here. You can also find a list of recommended storage solutions for each type of data here. For projects that require collaboration with other institutions, you should decide if all of the data needs to be stored in the same place and if so, determine which solution provides an adequate level of security and access for all participants.

Where will the data be stored? Because qualitative data in psychology and health-related research fall most often under a sensitive data category and are classified as minimum "red" at the moment of data collection, our policy at PSI is to store them in TSD (Services for sensitive data), unless data are classified otherwise (for example,   public open documents). The data will be transcribed automatically or manually in TSD, and kept there as long as it contains personal information. Accordingly, the data will be analyzed manually/through NVivo/(or similar software) on the TSD platform, or platforms for red data. Direct personal information will be removed during transcription. If your supervisor or the research group of your supervisor evaluates the risk of recognizing informants as low, the pseudonymized transcripts will be exported to UiO's storage for Restricted data (yellow data), and can then be analyzed outside of TSD.

Access

It is important to think about how you can safely share data with other participants during the project regardless of their affiliation.

Who will need access to the data during the research project? Most often, the a master- or PhD-student and the supervisor are the only one who need to handle personal data. If the data will be used further, the supervisor or their research group will need access, however, only to anonymized or pseudonymized data.

How will access to the data be controlled? Describe the people who have access to the project's TSD folder and have access to the data through logging in.

Who is responsible for controlling access? Make an agreement with your supervisor if it is you or the supervisor who runs the project in TSD. If the data collection is only for the master thesis, it is often practical that the student runs the TSD folder and controls access. If relevant, this access can later be granted to the supervisor.

Organization and Metadata – Documentation of Data and Data Quality

Regardless of whether or not you will share your data in the future, it is important that your data is well organized, well documented, and have registered metadata. Some research fields have well-established metadata standards, and some do not have any standards at all. You can read more about metadata standards here.

Describe routines for how data will be documented during the project. Multiple versions (dated and timed) of the date storage, updates, and management files will be kept in a sequential format. Routines for how data will be documented are especially important if the data will be stored for use for several years and several researchers in a group. We then recommend README files, notes, logs of data collection, and versioning of the files, to have a good overview of the data. What is important to keep track of for qualitative data is, for example, the date of the interviews, characteristics of the participants, context information that might be important for analysis etc.

Will you use an existing metadata standard? If yes, which standard?
If the student has her/his/ their own project, they will create their own metadata standard (i.e., ReadMe file, NoteToSelf fil. Otherwise, they can use their supervisor's metadata standard.

Legal and Ethical Considerations

How will you ensure that data management is conducted in accordance with legal requirements regarding privacy, confidentiality, and intellectual property rights? Read more here.
The project will follow UiO's guidelines for data collection and handling of personal data. The legal basis for the handling of personal data is consent or public interest (see Sikt's web pages on how to choose between consent and public interest as legal basis). The participants will be informed through an information letter and can withdraw from the project at any time. The project also follows UiO's guidelines for the storage of sensitive data on TSD.

It is always important to think about ethics in relation to both the collection and sharing of data. How will you ensure that data management is conducted ethically? Read more about research ethics here.
The project is following ethical guidelines from NESH. For health-related research, projects should apply to REK:

Have you considered licensing your data for reuse? If yes, what license will you use? Read more about licenses here.
If data will be made available for other researchers in any way (e.g. under restricted access), a license should be chosen in agreement with the supervisor.(A license specifies in what way any

> material (data, presentations, analyses, interview-guides, surveys) can be reused, e.g. if the authors should be credited, if new versions of material can be created, if commercial use is allowed etc,)

Archiving and Sharing

UiOs policy follows the "open as standard" principle when it comes to research data. If your research data has archival value, then you should decide early in the project where you will archive your data to make it available to other researchers. If you cannot openly share your data (e.g. for legal or ethical reasons), then you should find an archive that can provide restricted access to the data or permits sharing the dataset's metadata and documentation to enable discovery of the dataset. Read more about archiving data here.

> Which archive are you planning to use to archive your research data?
> Qualitative interview data are difficult to make anonymous, and the interpretation of them is context-dependent.. In addressing the archiving of qualitative interview data for their research, we adopt a cautious and ethically responsible approach, given the challenge of fully anonymizing such rich, context-dependent data without compromising its integrity. Acknowledging the complexities of preserving confidentiality and the nuanced interpretation required, we usually decide against making the data publicly available. Instead, we propose discussing with your supervisor the creation of a secure, internal archive accessible only to authorized team members, ensuring data can be reused or reanalyzed under strict ethical guidelines and privacy safeguards. This balanced strategy emphasizes ethical considerations in qualitative research, aiming to protect participant identities while retaining the scientific value of the data for potential future research within the project group, in alignment with ethical standards and research objectives.
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> NB: Ask your supervisor if they want to personally archive your interview data for reuse within the research/project group.

> Can your data be shared openly or should access be restricted? To what degree can you share your data?
> Raw qualitative data, such as recordings of the interviews or other data with personal and sensitive personal information, is most often categorized as red and so should be stored in appropriate storage space such as TSD and not shared with anybody outside of the project. After transcription, some of the data can be made available for internal re-use.

Responsibility and Resources

At the beginning of the project, it is important that you identify everyone's role in the project, their responsibilities, and how many resources you require to avoid any data loss or expensive surprises during the project.

> Who has ultimate responsibility for managing research data during the project period? This is the student's responsibility, unless the project is part of a larger research project. It is the student who is managing data and updating data management plan, tidying data files, and making sure that data are well documented, however, under supervision by the supervisor.

Who has responsibility for managing and archiving the data after the project ends? If the data is archived after the end of the student project, or if the project is part of a larger research project, managing this is the supervisor's responsibility.

Which resources (costs, FTEs, or others) are required for data management in your project? This can include data storage, backups, access to and services related to long-term storage or archiving, and more. The master- og PhD-student apply for a folder in TSD, and the Department of Psychology pays for this service. The folder will be closed down if/when the personal data are anonymized/pseudonymized good enough for exporting, or when the project is finished.

What resource are needed while the project is active?
Technical assistance in TSD, nettskjema and Dictaphone app. Specify any technical resources you need, e.g. if you need specific types of software for analysis, etc.