

SFB 1280 Research Data Management Policy

Adopted policy, Cologne, CRC general assembly, 2022-09-28

Preamble

The SFB 1280 "Extinction Learning" produces unique research data at the intersections between neuroscience, biology, medicine, psychology, and computer science. All those working on an SFB 1280 project (in the following referred to as "researchers") recognize the central importance of research data and their comprehensible documentation for the expansion of the scientific knowledge base and as a basis for future research projects.

Therefore, the SFB is committed to developing sustainable strategies for quality assurance of data and their archiving in accordance with the Guidelines for Safeguarding Good Research Practice of the German Research Foundation (DFG) and the Checklist for the appropriate handling of research data in connection with DFG projects.

Ethical and legal constraints, data protection

The SFB's researchers are bound by the ethical and legal framework of their research. They responsibly take into account rights and obligations arising in particular from legal requirements (such as the General Data Protection Regulation, GDPR), feedback from ethics committees on their research projects, and requirements for animal experiments for their research data.

The institutions involved in SFB 1280 - the Ruhr-Universität Bochum, the University of Duisburg-Essen, the Leibniz Research Centre for Working Environment and Human Factors at TU Dortmund University, and the Philipps-Universität Marburg - provide contacts for data protection issues (data protection officers). Moreover, the SFB provides a platform for the central exchange of knowledge on data protection, best practices for pseudonymization and anonymization, consent forms and ethical boundary conditions for SFB researchers.

[>>Link to the SFB knowledge base with relevant information<<](#)

Open Science

Open Science in the SFB needs to be understood in terms of the requirements regarding data protection, ethical and legal constraints and the high value of the data produced. The SFB is committed to Open Science: New research projects are strongly encouraged to be pre-registered on recognized platforms (e.g., OSF) and the collected or generated research data and materials shall be made publicly available on recognized repositories using appropriate licenses (e.g. CC licenses) and taking into account the access categories as suggested by the German Psychological Society (DGPs, see Gollwitzer, M., Abele-Brehm, A., Fiebach, C., Ramthun, R., Scheel, A. M., Schönbrodt, F. D., & Steinberg, U. (2020). Data Management and Data Sharing in Psychological Science: Revision of the DGPs Recommendations. <https://doi.org/10.31234/osf.io/24ncs>).

The SFB's Open Science working group establishes standards for Open Science best practices in the SFB together with the SFB's Central Research Data Management project (INF). INF advises SFB researchers on Open Science standards established by the community (e.g., National Research Data Infrastructure, NFDI) and develops technical workflows for easy and sustainable publication of research data.

SFB 1280 Research Data Management Policy

Data documentation and organization

In accordance with the Guidelines for Safeguarding Good Research Practice of the DFG, the documentation of research data in the SFB should follow discipline-specific standards and recommendations. Therefore, SFB researchers store their data in a documented form using metadata. This is done in accordance with the FAIR principles ("Findable, Accessible, Interoperable, Re-Usable") and by taking into account standards on metadata, data organization and data types agreed upon by the SFB. The SFB maintains a platform where information on these relevant standards (e.g., the SFB metadata scheme, the Brain Imaging Data Structure) can be accessed by all SFB members, and provides tools (e.g., an app to store SFB metadata in local files) to facilitate the standards-compliant storage of data and metadata.

[>>Link to the SFB knowledge base with relevant information<<](#)

The focus groups in the SFB specify goals for the subsequent re-use of data within the SFB and thus define boundary conditions for the further development of standards for data documentation and data organization in the SFB. All subprojects, INF and the focus groups collaborate on the further development of these standards.

INF supports the data management of the researchers by collecting and harmonizing requirements, advising on technical and content aspects, disseminating information from the central infrastructure, and communicating requirements from the SFB to the central infrastructure. In addition, INF does trendscouting on tools and methods for sustainable data documentation in regional and national networks, such as the state initiative research data management in North Rhine-Westphalia (fdm.nrw), the German Initiative for Networked Information (DINI), the Committee on Data for Science and Technology (CODATA).

Quality assurance

In accordance with the Guidelines for Safeguarding Good Research Practice of the DFG, the researchers of the SFB commit themselves to assure the quality of their data. The PhD students and postdocs check the collected data for completeness and correctness promptly after data collection. The PIs commit to review the data collected or generated in the subproject for completeness and consistency after completion of a study or before publication of respective study results. Moreover, they have missing information added, if possible, or documented according to discipline-specific standards and recommendations.

[>>Link to the SFB knowledge base with relevant information<<](#)

INF develops workflows for the review of research data in the SFB, as well as for the storage and archiving of research data in the central infrastructure. The SFB is committed to relay developed processes for the quality assurance of research data (e.g., review processes) to the NFDI.

SFB 1280 Research Data Management Policy

Collaboration and Data Sharing

The members of the SFB commit themselves to share research data within the SFB as early as possible. Standards for data documentation and data organization are followed so that these data can be re-used by the focus groups and other subprojects within the SFB. The SFB maintains a platform where information on these relevant standards can be accessed by all SFB members. In addition, INF provides a technical infrastructure for data sharing and collaborates with the central service units of the RUB to ensure the integration into the central RUB infrastructure. Furthermore, INF advises and supports the subprojects in developing efficient workflows for saving data and metadata.

[>>Link to the SFB knowledge base with relevant information<<](#)

The focus groups reuse the centrally collected and shared SFB data and develop methods to innovatively analyze the data. In doing so, the focus groups work transparently and respectfully with the subprojects: This includes continuous information and communication with the data-generating SFB subprojects regarding the focus groups' analyses and methods and, according to the Guidelines for Safeguarding Good Research Practice, co-authorship in case of a resulting publication. The focus groups publish the developed methods including comprehensible documentation promptly within the SFB and ensure that the culture of sharing is maintained and promoted.

The subprojects test the innovative analysis methods of the focus groups and provide feedback on the applicability of the methods in different contexts. INF supports the focus groups by disseminating information on innovative analysis methods in the subprojects and collecting feedback on them.

Archiving

The researchers of the SFB commit themselves to store research data for at least 10 years beyond the end of the project in accordance with the Guidelines for Safeguarding Good Research Practice of the DFG and the respective guidelines for research data management of the Ruhr-Universität Bochum, the University Duisburg-Essen, the Leibniz Research Centre for Working Environment and Human Factors at TU Dortmund University, and the Philipps-Universität Marburg. For this purpose, the SFB develops processes to archive documented research data sustainably in the local infrastructure of the RUB. INF works closely with the central service facilities of the RUB to ensure the connectivity of the SFB's archiving workflows to the central infrastructure.

[>>Link to the SFB knowledge base with relevant information<<](#)

The SFB researchers commit themselves to archive research data, which are necessary for the reproducibility of the scientific process, in the central infrastructure. Developed recommendations for archiving of research data will be made available on the SFB's central knowledge platform.