

Data behind the academic publication

Purpose: Guidance on data management for data supporting an academic paper

Audience: UKERC researchers who publish in academic journals

Summary

This guidance addresses data that supports a specific publication rather than the general topic of depositing a research data set.

Most publishers support the principle of enabling data used in a publication to be shared. All publications should have a **data availability** or **data access** statement outlining where this data can be found, or why it is not publically available. Most publishers recommend the use of a public established **data repository** for data which can be shared. The major domain data repositories for UKERC researchers are the EDC or the ESRC funded UK Data Archive. Your University will also have a data repository and there may be institutional expectations you need to comply with.

For some data, publishing it in a **data journal** which enables the data to be described and discoverable may be an additional mechanism for credit.

Introduction

To support research integrity and Open Research sharing more of the data underpinning journal articles is important. Practices vary over disciplines due to different subject expectations, but the general direction of movement is towards greater open sharing of data. This guidance brings together information on the expectations of journal publishers and the UKRI as a funding body.

Increased visibility of the data can bring benefits to the author as studies have indicated that articles linking to data are cited more.

Journal publisher expectations for research articles

The requirements and policies of journals published in by UKERC researchers have been analysed and this section summarises the high level policy expectations of those publishers. For details please refer to information for each journal.

Policy requirements

- **Encourage or mandate sharing data supporting the publication:** Elsevier, Frontiers, IET, IOP, MDPI, Nature, Springer, Taylor & Francis and Wiley
- **Data availability or Data Access statement in the article:** Elsevier, Frontiers, IET, IOP MDPI, Nature (implicit), Springer, Taylor & Francis, and Wiley,
- **Encourage or mandate depositing data in a repository** Elsevier, IET, MDPI, Nature (large data), Springer, Taylor & Francis and Wiley.
- **Recommend citing data in the article** Elsevier, Taylor & Francis, Wiley, IEEE

Funder expectations for research articles

UKRI requires in-scope research articles to include a Data Access Statement, even where there are no data associated with the article or the data are inaccessible. The statement can include links to the dataset, where applicable and appropriate.



Types of data availability statements

There are many types of data availability statements and each publisher will give specific guidance but in general they fall into the following categories. The project's data management plan is likely to have identified the appropriate data availability in advance of the article being written.

Data openly available

Statement defines where the data can be located. The EDC and the UK Data archive are public repositories.

- Data is openly available from a public repository
- Data has been derived from public domain resources.
- Data is available within the article or supplementary data

Data available with restrictions

- Data is embargoed due to commercial restrictions.
- Data available on request due to privacy/ethical restrictions.
- Data subject to third party restrictions.

Data not available

- Data not available due to ethical/commercial/legal restrictions.

No new data generated

- Data sharing not applicable

Data Journals

Data journals focus on the dataset, its collection and methods of analysis rather than the outcomes of the analysis which would be the focus of a research article. It allows for the description of the dataset to be recorded and then cited to provide acknowledgement and credit to the data creators/collectors.

Most of the data journals expect the data being described to be deposited in a public repository.

Further Reading

- More EDC advice from our service website [About Data Management pages](#)
- JISC advice on [linking data to publications](#)
- Colavizza G, Hrynaszkiewicz I, Staden I, Whitaker K, McGillivray B (2020) **The citation advantage of linking publications to research data**. PLoS ONE 15(4): e0230416. <https://doi.org/10.1371/journal.pone.0230416>
- UKRI Open Access Policy (2021) [UKRI-180821-UKRIOpenAccessPolicy-2.pdf](#)
- Concordat on Open Research Data (2016) [UKRI-020920-ConcordatonOpenResearchData.pdf](#)
- Hrynaszkiewicz, I., Simons, N., Hussain, A., Grant, R. and Goudie, S., 2020. **Developing a Research Data Policy Framework for All Journals and Publishers**. *Data Science Journal*, 19(1), p.5. DOI: <http://doi.org/10.5334/dsj-2020-005>
- Results of an open research survey from PLOS [How can publishers better meet the open research needs of funders and institutions? - The Official PLOS Blog](#)

