

Research Data: From Funders' Expectations to the Open Science Framework

Amie Longthorne

2025

Why Data Management Is Important



Meeting UKRI and Other Funder Requirements

To meet UKRI and other funder requirements for data management, researchers need to create a data management plan (DMP) at the funding application stage, make research data as open as possible, and ensure proper documentation and metadata for discoverability and reuse. Data should be preserved for a specified period, often 10 years, and deposited in a suitable repository



UKRI's Common Principles on Research Data



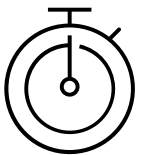
1. Public Good: Research data should be openly available with minimal restrictions.



2. Best Practice Alignment: Data management policies should align with wider standards.



4. Compliance: Follow legal, ethical, and commercial requirements for data release.



5. Privileged Use: You may have limited time to use your data exclusively before sharing.



6. Acknowledgment: Recognise contributions of researchers who generate and share data.

7. Funding Support: Costs for managing and sharing data are supported under UKRI funding.

Writing Data Management Plans



What UKRI Expects in a DMP

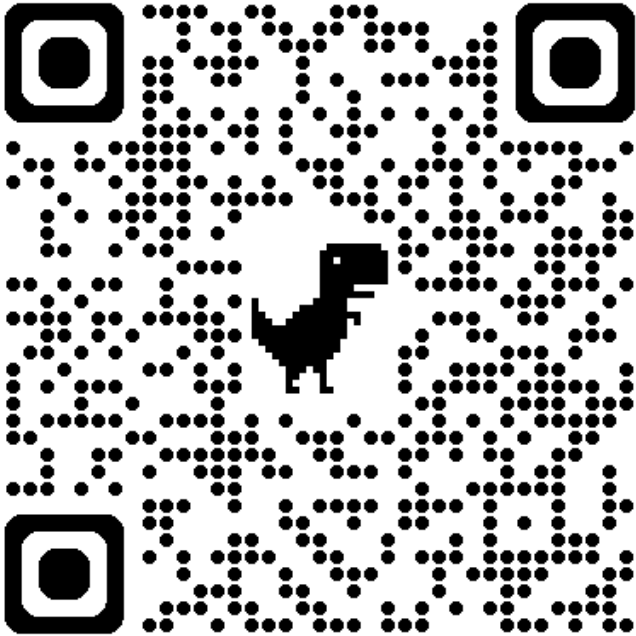
Required at application or post-award (varies by council)

- Must cover:
 - **Data types** and volumes
 - **Standards and metadata**
 - **Storage and backup**
 - **Ethics and legal compliance**
 - **Sharing, reuse, and preservation**
 - **Responsibilities and resources**

Tip: Use DMPonline or UKRI council templates

DMP Online

<https://dmponline.dcc.ac.uk/>



g the research?

Comments & Guidance

Guidance

Comments

DCC

UCD

UCL

Questions to consider:

- Do you have sufficient storage or will you need to include charges for additional services?
- How will the data be backed up?
- Who will be responsible for backup and recovery?
- How will the data be recovered in the event of an incident?

Guidance:

State how often the data will be backed up and to which locations. How many copies are being made? Storing data on laptops, computer hard drives or external storage devices alone is very risky. The use of robust, managed storage provided by university IT teams is preferable. Similarly, it is normally better to use automatic backup services provided by IT Services than rely on manual processes. If you choose to use a third-party service, you should ensure that this does not conflict with any funder, institutional, departmental or group policies, for example in terms of the legal jurisdiction in which data are held or the protection of sensitive data.

Storage & security

+

s

Plan overview

Write Plan

Research outputs

Share

Download

1/1

/ 1)

/ 2)

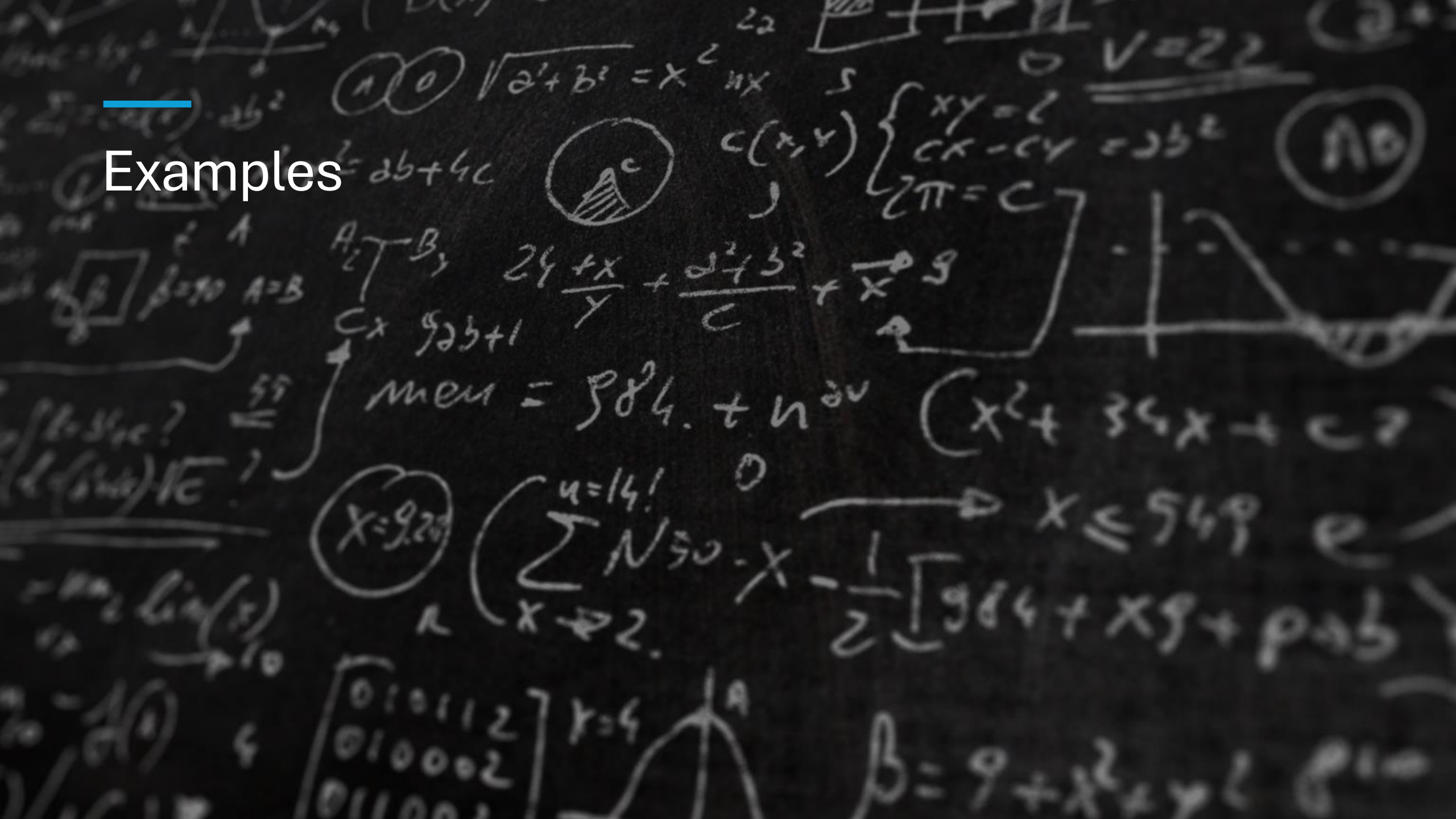
)

/ 2)

Making Your Research Data Open

- UKRI expects research data arising from its funding to be made as open as possible and as restricted as necessary, following good research data management practices
- UKRI award holders must follow data sharing policies and provide a Data Management Plan when applying for funding. - Follow the specific data sharing policies of your funding research council.
- Include a Data Management Plan and associated costs in your application.
- Researchers own the data generated and should manage copyright and IP to keep data as open as possible.

Examples





BBSRC (Biotechnology and Biological Sciences Research Council)

<https://www.ukri.org/wp-content/uploads/2021/07/data-sharing-policy-v1.22.pdf>

- What to keep? Data arising from high volume experimentation; low throughput data arising from long time series or cumulative approaches; models generated using systems approaches.
- When to archive and/or share? Generally, no later than publication of the main findings and within 3 years of generation of the dataset.
- Where to archive? In an existing repository or other community resource where possible.
- How long for? 10 yrs +
- Data management plan: Yes



NERC (Natural Environment Research Council)

What to keep? All data of long term value.

When to archive and/or share? Submission of data as soon as finalised version is ready. Maximum embargo period is 2 years

Where to archive? NERC Data Centres

How long for? 10 yrs +

Data management plan: Yes. An outline plan to accompany the funding application and a full DMP within the first 3-6 months of the project.

British Academy

What to keep?

All research data that supports findings and has long-term value, particularly data essential for validation and reuse.

When to archive and/or share?

Data should be shared at the earliest opportunity, ideally upon publication of results. Embargoes should be minimal and well-justified.

Where to archive?

A suitable, trusted digital repository – institutional, subject-specific, or generalist – that ensures open access and long-term preservation.

How long for?

At least 10 years, or longer if required by institutional or disciplinary standards.

Data management plan:

Yes. A data management plan (DMP) is required at the application stage, outlining data collection, storage, sharing, and preservation strategies.

Royal Society

What to keep?

All research data underpinning publications and of long-term value, including raw, processed, and analysed data.

When to archive and/or share?

At the point of publication or as soon as the final dataset is ready. Any embargo period should be kept to a minimum and justified.

Where to archive?

A recognised, trusted, and accessible repository appropriate for the data type (e.g. institutional repository, subject-specific repository, or generalist repository like Zenodo, Dryad, or Figshare).

How long for?

Minimum of 10 years after project completion or longer if required by discipline norms or repository policies.

Data management plan:

Yes. A data management and sharing plan is required as part of the grant application, outlining how data will be managed, shared, and preserved.

Selecting appropriate repositories

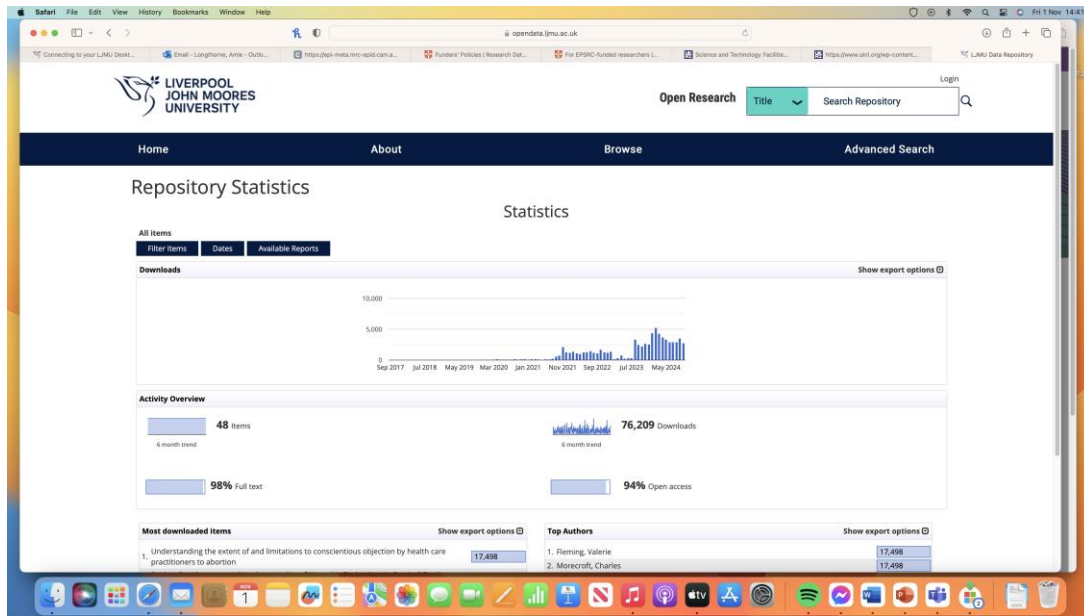


Examples:

- **General:** Zenodo, Figshare, OSF
- **Disciplinary:** arXiv (physics), GenBank (genomics), UK Data Service
- **Institutional:** LJMU's data repository (all research areas)

Use tools like re3data.org to explore and compare repositories.

Did you know we have our own LJMU data repository?



The [LJMU Research Data Repository](#) is the University's data repository, offering researchers the ability to store and make their research open access.

Data stored in the [LJMU Research Data Repository](#) can be freely accessed online by anyone and easily discovered through web search engines.

In cases where certain data is not suitable for immediate sharing due to commercial or copyright reasons, it can be securely stored in the repository until an appropriate time when it can be made public.

- [Data repository deposit guide \(PDF, 569KB\)](#)

How to deposit?

The screenshot shows the SYMPLECTIC Elements web interface. At the top is a dark blue header with the SYMPLECTIC Elements logo and name. A vertical sidebar on the left contains icons for home, search, and other functions. The main content area is titled 'Add dataset'. Below this title is a horizontal progress bar with two steps: 'Let's get started' (active) and 'Tell us more'. A light blue information box contains an 'i' icon and the text 'Enter your dataset title', followed by a paragraph explaining that datasets may already exist and can be searched for. Below this is a form with a 'Title' label and a text input field. To the right of the input field are two buttons: 'Skip' (a blue text link) and 'Search' (a button with a dashed border). At the bottom right of the form area is a 'Cancel' link.

SYMPLECTIC
Elements

Add dataset

Let's get started Tell us more

i Enter your dataset title

Your dataset may already exist in **Symplectic Elements**, so to save time you can search for it here and claim it. Titles returned may contain **any** of your search words.

Title

[Skip](#)

[Cancel](#)

All items

Filter items

Dates

Available reports

Downloads

Show export options

Activity Overview

74 items

92,118 Downloads

99% Full text

92% Open access

Most downloaded items

Show export options

1. Understanding the extent of and limitations to conscientious objection by health care practitioners to abortion

17,825

2. Design, Development and Implementation of Wearable Technology in Football Further Education Settings in the United Kingdom. Dataset.

12,560

3. Stafford Beer: The Falcondale Collection

6,678

4. Dataset and metadata - Physical activity promoting teaching practices and children's physical activity within physical education lessons underpinned by motor learning theory (SAMPLE-PE)

6,552

5. Liverpool CCG Alcohol Data

4,491

1 2 3 4 5 all

Top Authors

Show export options

1. Fleming, Valerie

17,825

2. Maxwell, Clare

17,825

3. Morecroft, Charles

17,825

4. Tierney, Peter

12,560

5. Montgomery, Catharine

9,976

10 25 50 all

LIVERPOOL
JOHN MOORES
UNIVERSITY

Open Research

Title

Search Repository

Q

Login

LJMU Data Repository

Recent items

Support

Repository Statistics



The main data repositories are:

- [Archaeology Data Service](#) (AHRC and NERC) is the leading data repository in the UK for archaeology and historic environment data
- [Dryad](#) is an open data publishing platform and a community committed to the open availability and routine re-use of all research data.
- [UK Data Service](#) (Reshare ESRC) Trusted access and training to use the UK's largest collection of economic, population and social research data for teaching, learning and public benefit.
- [NERC data centres](#) (CEDA Archive, Environmental Information Data Centre, and others).
- [Zenodo](#) (general-purpose data sharing services available for use.
- [Figshare](#) (a general-purpose, commercial service) that offers free access to individual users. While these general-purpose services may not offer the same level of quality control as specialised repositories, they do provide a convenient, speedy, and cost-free option for sharing data.

FAIR Principles

Findable: Data should be easy to find for both humans and computers. This includes assigning a globally unique and persistent identifier to data.

Accessible: Once found, data should be easily retrievable

Interoperable: Data should be able to be integrated with other data and should interoperate with applications or workflows for analysis, storage, and processing.

Reusable: Data should be well-described so that they can be used in the future by others.



What is a ReadME file?

[LJMU template readme file \(Doc, 30KB\)](#) detailing when and how the data was created, collected, and used. Expand any abbreviations in the readme file and make column or row names in spreadsheets self-explanatory or detailed in the readme file. The readme file should be in plain text and include the following information:

- Title of the dataset
- Contact details
- File name structure
- File formats
- Column headings for tabular data
- A short description of the data
- Any licenses or restrictions

What publishers ask for?

Publishers are increasingly implementing research data policies for authors as part of their journal submissions. These policies may be mandatory or strongly encouraged and may also provide guidance on the preferred data repositories to use. Here is a list of Publishers with established research data policies, please reach out to the Research Engagement Team at lst_research_support@ljmu.ac.uk and we will gladly assist in checking for any relevant policies before you submit to your preferred journal.

[American Chemical Society \(ACS\)](#)

[BMJ](#)

[Cambridge University Press](#)

[Elsevier](#)

[Emerald Group Publishing Ltd.](#)

[IOP](#)

[Microbiology Society](#)

[Oxford University Press](#)

[PLOS](#)

[Portland Press](#)

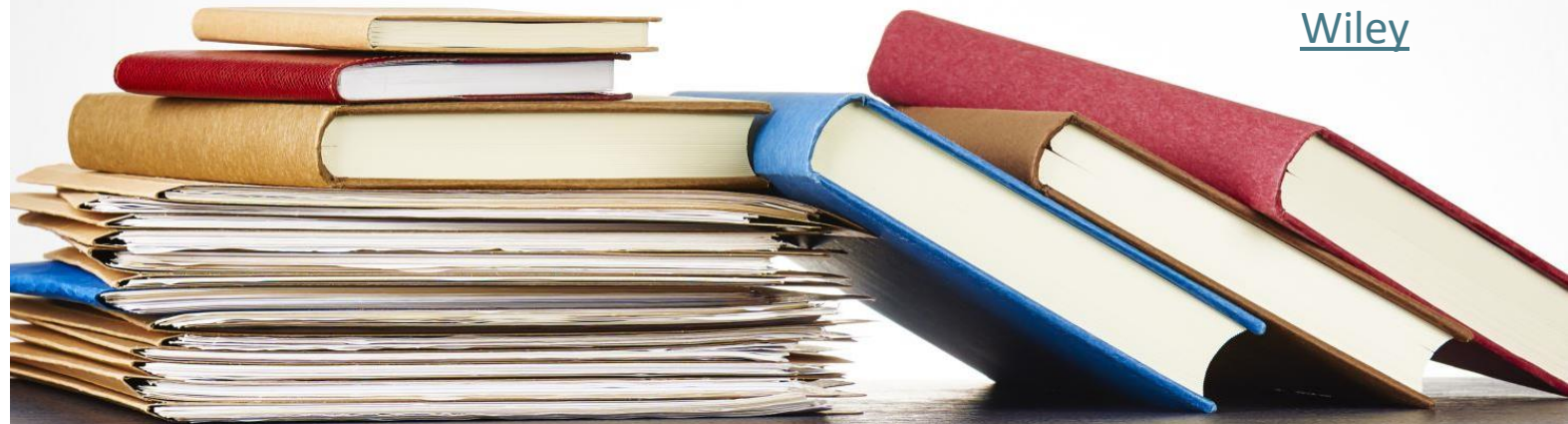
[Royal Society of Chemistry](#)

[SAGE](#)

[Springer Nature](#)

[Taylor & Francis](#)

[Wiley](#)

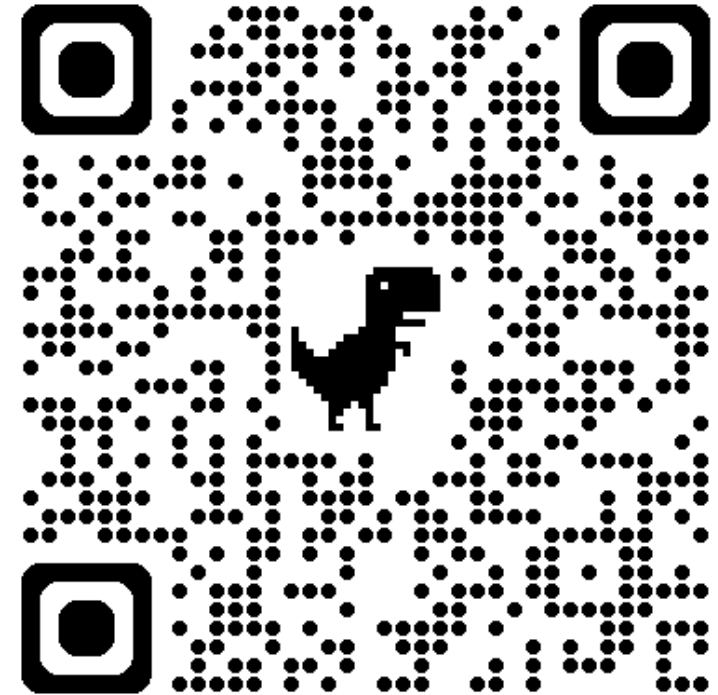



Data access statements

What should I include in a data access statement?

Examples of data access statements are provided below, but your statement should typically include:

- where the data can be accessed (preferably a data repository)
- a persistent identifier, such as a Digital Object Identifier (DOI)
- details of any restrictions on accessing the data and a justifiable explanation (e.g. for ethical, legal or commercial reasons)





LIVERPOOL
JOHN MOORES
UNIVERSITY

Find a course
Staff
Students

Study
Discover
Research
International
Business
About us

/ About us / Staff profiles / Faculty of Health / School of Psychology / Cathy Montgomery







Prof Cathy Montgomery

School of Psychology
Faculty of Health

Email: C.A.Montgomery@ljmu.ac.uk
Telephone: [0151 904 6295](tel:0151-904-6295)

See My Tutor

Biography
Publications
Professional

Highlighted publications

Sumnall H, Hamilton I, Atkinson AM, Montgomery C, Gage S. 2020. Representation of adverse childhood experiences is associated with lower public stigma towards people who use drugs: an exploratory experimental study *Drugs: Education, Prevention, and Policy*, 28 DOI [Author Url](#) [Public Url](#)

Dataset

Slade K, Richter M. 2020. **Material of Slade and Richter (2020) – "Effortful Listening and Autonomic Nervous System Activity: Myocardial Sympathetic Activity Varies as a Function of Listening Demand but Parasympathetic Activity Does not"** DOI [Public Url](#)

Richter M. 2010. **Manipulation checks moderate the impact of task difficulty and reward value on effort mobilization** DOI [Publisher Url](#)

Silvia PJ, Gendolla GHE, McCord D, Drath W, Richter M. 2006. **Self-Focused Attention and Effort During Self-Regulation: A Psychophysiological Analysis** DOI [Publisher Url](#)

Silvia PJ, Gendolla GHE, Richter M. 2005. **Self-awareness and effort during self-regulation: Insights from Brehm's theory of motivational intensity** DOI [Publisher Url](#)

Update your staff profile

Montgomery C. 2024. [Public Url](#)

Dataset

Montgomery C, Powell A. 2024. Alcohol Processing Speed Data DOI [Public Url](#)

Montgomery C, Jones A. 2024. Retrospective Outcomes Evaluation of XR-BUP DOI [Public Url](#)

Montgomery C, Saini P, McCarthy M, Hanlon C, Schoetensack C. 2023. Barriers and facilitators to access for alcohol treatment in Liverpool. DOI [Publisher Url](#) [Public Url](#)

Montgomery C. 2023. Project Images - Little evidence for the role of disgust sensitivity in implicit disgust to images of White people engaged in Injecting Drug Use (IDU) DOI [Public Url](#)

Montgomery C, Jones A. 2023. Liverpool CCG Alcohol Data DOI [Public Url](#)

Montgomery C. 2023. Opioid Prescribing data for CNCP in LCCG 2016-2018 DOI [Public Url](#)

Talamonti D, Clark D, Montgomery C, Bruno D. 2020. Age-related prefrontal cortex activation in associative memory: an fNIRS pilot study DOI [Public Url](#)

Internet publication

Ogden R, Montgomery C. 2023. How drugs can warp your sense of time [Publisher Url](#)

Andreas Richter

School of Psychology
Faculty of Health

Email: M.Richter@ljmu.ac.uk
Telephone: [0151 231 2220](tel:0151-231-2220)

See My Tutor

id

Biography
Publications
Professional

Highlighted publications

Cath Dishman



Amie Longthorne



Katherine Stephan



- **Open Access and Digital Scholarship Librarian**

- **Research Data Management Specialist**

- **Research Engagement Librarian**

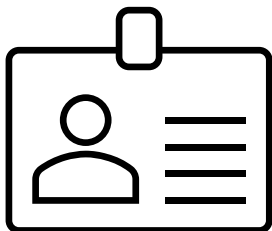
lst_research_support@ljmu.ac.uk

Twitter/X: LJMUResearch

LinkedIn: LJMU Library Researcher Engagement Team

BlueSky: @ljmuresearch.bsky.social

Calendar of events: <https://unical.ljmu.ac.uk/?team=re>



The background is a solid medium purple color. It is decorated with several abstract elements: white dots of varying sizes forming irregular, cloud-like patterns in the top-left, top-center, and bottom-left areas; and solid, darker purple organic shapes in the top-right and bottom-left corners.

THANK YOU