Oxford Research Practice Survey 2024

Research Practice Team
Research Strategy and Policy Unit
University of Oxford

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Executive Summary

The Research Practice Team distributed a survey targeting staff and students involved in research at the University of Oxford between February-April 2024, receiving 422 full responses distributed across careers stages and divisions.

The survey aimed to assess and improve awareness and use of various research practices and resources available in the University.

Specific research practices included:

- Persistent identifiers (ORCiD)
- Narrative CVs
- Open Access publishing
- Preprints
- Openly sharing research materials and/or data
- Data management practices/resources
- FAIR principles for data stewardship
- Preregistration and Registered Reports
- Trusted research (e.g., security related issues in international research collaboration)

The survey also asked about broader categories of good research practice (those covered by the e-learning modules being developed by the Research Practice Team), including:

- Research integrity
- Open research practices
- Good research design
- Collaboration and good research leadership
- Good practice regarding research data management
- Good practice regarding authorship, publication and peer review
- Research impact and public engagement

The **main themes** emerging from the survey findings were:

- There are significant gaps in awareness and use, especially around certain research practices (e.g., FAIR, Trusted research)
- However, some practices are fairly well known and used (e.g., Open access, ORCiD)
- Dissemination of University resources (guidance, training) to researchers can and should be improved

An **overview of the survey findings** is summarised below:

- Majority of respondents are unaware of the Research Practice Programme
- Majority of respondents have and use ORCiD
- Practice & awareness of queried research practices is middling:
  - Highest practice (50-60%) was of Open access, Data management, and Sharing materials
  - Lowest awareness (23-27%) and practice (16-19%) was of FAIR principles, Preregistration, and Trusted Research
  - Practice is highest in academics/research staff (compared to support staff, technicians or postgraduate students)
- Barriers to research practices varied:
  - Most popular answers were 'no barriers' (27-30%: Open access, Preprints, Sharing materials/data, Data management) or 'lack of training' (22-29%: Data management, FAIR, Preregistration, Trusted research)
  - Lack of funding for Open access was a resounding theme of write-in responses (over 10% of total sample), especially in Humanities
- Most respondents agreed that their department values the practices we asked about:
  - Highest agreement was for Research integrity (88%)
  - Lowest agreement was for Open research and Data management (62-63%)
- Awareness of University resources for various practices was relatively low, ranging from 17% (FAIR) to 59% (ethical conduct)
- Most write-in suggestions for improving research practice centred around providing more resources (support staff, funding, job security, improving workloads) or improving training (offering more, disseminating more effectively).

We **recommend** the following actions should be taken in light of the survey findings:

- Investigate ways to improve *dissemination/awareness* of (existing) guidance, resources, and training to researchers
    - Improve the timing of signposting to guidance and training offerings – e.g., at start of contracts, start of grants, and investigate when other opportune times are
        - E.g., embed key components relevant to particular disciplines on **DPhil** training (as a requirement for transfer/confirmation) - it may then diffuse upwards to supervisors and research staff
        - E.g., address good research practice for **research staff** at induction and professional development reviews
        - E.g., find timepoints to reach long-time **PIs**, as they have a great deal of influence on their groups
    - Optimise communication channels for reaching researchers—e.g., directly through departments, perhaps by training staff in those departments
- Improve guidance and training *offerings*
    - Identify areas where new training should be developed (or existing training improved)
    - Respondents expressed a need for training in FAIR/Data management, Trusted research, and preregistration
    - Identify ways training can be more tailored by division/department
- Investigate ways to offer more support to researchers (respondents strongly indicated need for more support and reduction of administrative burden/workload)
    - Identify where to target or add staff support
    - Identify practices that can be dropped, automated, or lowered in priority
    - Identify where infrastructure can be improved
    - Address (perceived) lack of funding for Open access, especially in humanities

Appendix: Full survey questions

The below content was presented to respondents on the Jisc Online Surveys platform

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Page 1: Welcome to the survey

Background information and consent:

Promoting good research practice is one of the key pillars of University of Oxford's research culture strategy.

Good research practice means ensuring the integrity of research, and that research excellence is underpinned by the principles of honesty, rigour, impartiality, collegiality, trust, transparency, and accountability.

To that end, we're running this survey to:

- Understand researchers' views and awareness of different research practices,
- Improve awareness of support, guidance and training offered by the University,
- Consider what further measures or initiatives would be appropriate for us to undertake

We are interested in views from **all** those involved in research, including **postgraduate research students, postdocs and research fellows, research technicians and support staff,** and academic staff, based in all Divisions of the University and/or in the Colleges. As part of the University's Research Practice programme, we intend to run this survey annually in order to be able to measure progress made in these areas as a result of improved support and training, or to identify where there is still work to be done.

This survey contains 10 questions and should take around 5-10 minutes to complete. Responses will be anonymous and voluntary, but highly encouraged. The data from your responses will be used by Research Practice Group at the University of Oxford to assess and improve the training and resources provided on research practice; therefore it is a key opportunity for you to shape what support is provided.

This survey was modelled partly after a previous survey, distributed at Oxford in 2021 and 2022 by Reproducible Research Oxford. It uses some text and questions from that survey. (Citation: Malika Ihle, Dorothy Bishop, & Laura Fortunato. (2022). Open research at Oxford survey. Zenodo. https://zenodo.org/doi/10.5281/zenodo.4433688). We adapted additional questions from a survey of research culture at University of

Glasgow in 2019:
https://www.gla.ac.uk/myglasgow/ris/researchculture/researchculturesurvey/.

If you have any questions about the survey, or any accessibility issues, please contact
jackie.thompson@bodleian.ox.ac.uk.

1. Please confirm below that you understand how your data will be used, and that you consent to it being used in that way. If you do not consent, then please close this browser window to exit the survey. *Required*

I understand how my data will be used, and consent to it being used that way

Page 2: About you

2. Which of these categories most closely fits your role? (Note, this survey is not intended for undergraduate or taught masters students)

Postgraduate Research Student (e.g., DPhil, MPhil, MSc by Research)

Research Support Staff (e.g. project managers, research software engineers, clinical research coordinators)

Research Technician (a role bringing specialty technical expertise, e.g., laboratory technician, statistician, etc.)

Research Staff (e.g., postdoctoral researcher, research fellow)

Academic (e.g., lecturer, professor)

3. How long have you been at the University of Oxford in your current (or a similar) role?

0-2 years

2-5 years

5-10 years

10 years or more

*4.*Which Division of the University is your department in? (If you are not sure, please consult the list here: https://www.ox.ac.uk/about/divisions-and-departments)

Humanities Division
Social Sciences Division
Medical Sciences Division (MSD)
Mathematical, Physical and Life Sciences Division (MPLS)
Gardens, Libraries and Museums (GLAM)
University Administration and Services
No division - college affiliation only
Continuing Education

If you are in the **Humanities or Arts**, please note:

When questions in this survey refer to '**data**,' we mean this to include **any information generated or used** during a research project. This includes sources, archives, (digital) representations of art or artefacts, recordings, transcripts, etc.

Page 3: Research practice questions

*5.*Before taking this survey, were you aware that the University has a Research Practice Programme to support researchers in all disciplines? This programme has been created as a partnership between academic staff and professional services staff.

Yes

No

Not sure

*6.*Do you have an ORCiD identifier? This is a 16-digit ID number that distinguishes you from every other researcher. You can connect your iD with your professional information

— affiliations, grants, publications, peer review, and more, to identify you across platforms. (Get one [here](#).)

I am not aware of ORCiD

I have an ORCiD but I don't use it

I have an ORCiD and I use it

Not sure

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7.Which of the following research practices are you aware of, and which do you have experience with? (For **definitions** of each practice, **scroll down** below this question.)
'Aware only' indicates that the practice is applicable to your discipline, but you do not have direct experience with it. 'Practising myself' means you use the practice in your own research.

	What is your experience with these practices?			
	Aware only	Practising myself	Not aware	Not applicable
Narrative CVs				
Open Access publishing				
Preprint publishing				
Openly sharing research materials and/or data				
Data management practices and resources				
FAIR principles for data stewardship				
Preregistering a study plan and/or publishing a Registered Report*				
Trusted research (e.g., security related issues in international research collaboration)				

Definitions and links to further information:

(Scroll down to continue the survey)

Narrative CVs : Narrative CV formats, which UKRI call the Résumé for Research and Innovation (R4RI), prompt descriptions of contributions and achievements, allowing researchers to reflect a broader range of skills and experiences.

Open Access publishing: Open access refers to material (such as a book, article or other scholarly work) that is free at the point of access and licensed for reuse, so readers can use, reuse and share research easily. This includes all forms; not only 'gold' (i.e. the version processed by the publisher is released openly on the publisher's system upon publication, but also 'green' (i.e. the accepted version of the work, after peer review, is shared by the author(s) in a repository).

Preprint publishing: Depositing an article, book chapter, book, or other scholarly work in a public repository ahead of peer review. Equivalent terms used in some disciplines are 'working papers' and 'unpublished manuscripts'.

Openly sharing research materials and/or data: i.e., making openly available any element of the research process that can be coded digitally or shared physically, in any discipline. E.g., digital images of artefacts or sources; notes; samples or reagents; written protocols; videos of the research process or procedures; or other items used to collect evidence or conduct the research

Data management practices and resources: Refers to guidance, standards, tools, services, registries and all other resources that enable planning (e.g., Data Management Plans), reporting (e.g, reporting standards), storing (e.g.. repositories and databases), sharing and publishing data, software and other digital objects.

The FAIR principles: to ensure data and (digital) material is findable, accessible, interoperable and reusable by machines and humans.

Preregistering a study plan and/or publishing a Registered Report: Preregistration means registering a locked, time-stamped plan or protocol specifying the details (hypotheses, methods, analyses) of your study before you begin collecting or analysing data, usually in an online registry. Registered Reports involve submitting your protocol for peer review at a journal before you preregister, and receiving a commitment from the journal to publish the eventual study.

Trusted research/ National Security and Investment Act (i.e., security related issues in international research collaboration): The responsibility of researchers engaged in

international collaboration to consider potential security related issues and take the necessary steps to manage any potential risks.

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We will now ask you to consider different **barriers** that may impede you adopting a given research practice.

These could include **lack of:**

infrastructure, i.e. tools, resources, and/or services that enable the practice;

training, i.e the acquisition of knowledge and/or skills needed for the practice

norms, i.e. widespread attitudes and behaviours that support and/or encourage the practice (e.g., noticing that others in the field do it; interest from early-career researchers; support from mentors)

incentives, i.e. resources and/or mechanisms that reward the practice (e.g. dedicated funding, awards; institutional recognition);

policy, i.e. a requirement to implement the practice by relevant stakeholders (e.g. institutions, funders, publishers).

Note that we are not asking about **Time** as a factor, as lack of time for a particular practice usually indicates it lacks priority (incentives, norms, policy) or does not have the proper support (training, infrastructure) to decrease the time burden.

8. Do you face any barriers in adopting the following practices in your work, and if so, what are they? Tick all that apply, and/or provide a brief description in the text boxes to the right.

	Please tick all barriers that apply to you									
	Lack of infrastruc	Lack of training	Lack of norms	Lack of incentives	Lack of policy	No barriers	Not sure	Not applicable	Other	If you selected Other, please specify:

	ture									
Open Access publishing										
Preprint publishing										
Openly sharing research materials and/or data										
Data management practices and resources										
FAIR principles for data stewardship										
Preregistering a study plan and/or publishing a Registered Report*										
Trusted research (e.g., security related issues in international research collaboration)										

9.To what extent to you agree that your Department/Faculty **values** the following? (For **definitions** of each, **scroll down** below this question)

	My department values…				
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Research integrity					
Open research practices					
Good research design					
Collaboration and good research leadership					

Good practice regarding research data management					
Good practice regarding authorship, publication and peer review					
Research impact and public engagement					

Definitions and links to further information:

(Scroll down to continue the survey)

[Research integrity] is the conduct of research in ways that promote trust and confidence in all aspects of the research process. This includes upholding values of honesty, rigour, transparency, respect, and accountability (definition adapted from UK Research Integrity Office)

[Open research] **practices,** also called 'open scholarship' or, in some disciplines, 'open science'. Open research practices aim to ensure that different elements of the research process are transparent and accessible. Such practices might include: open access publishing; openly sharing materials, data or code used in your research in a public repository; posting preprints; preregistering a study; and more.

Good research design, i.e., planning how you will conduct your research so it is as sound as possible. This may include ensuring you have appropriate research questions, and methods of inquiry that can rigorously help you answer these questions. Elements may include proper grounding in theory, conceptual frameworks, data collection methods, quantitative or qualitative analysis, etc.

Collaboration and good research leadership. This includes collaboration with: other researchers within or external to the university, research participants, people who will use or benefit from your research. It also includes leadership and supervision within the sphere of research.

Good practice regarding [research data management]. Research data management is an umbrella term covering how you organise, structure, store, and care for the information generated or used during a research project. 'Data' can be qualitative (e.g. source, archive, representation of art, artefact, recording, transcript) and/or quantitative (e.g. numerical measurements, machine output, simulation results).

Good practice regarding [authorship, publication and peer review], i.e., how to credit different contributors to research, and how to plan and manage research publication to share your work with the research community

Research impact and public engagement, i.e., interacting with people and organisations outside academia. This may include not only sharing your research, but also getting input or co-creating.

Page 7: And finally...

10. I feel confident I know where in the University I can go for information and guidance/training on the following topics: (Please tick all that apply)

> Good authorship practice in my discipline
>
> Making research outputs open access
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> Research misconduct (e.g., if I have a concern about the way research is being conducted)
>
> Research data management practices and resources
>
> Making data and (digital) material FAIR
>
> Good practice in open research (e.g. sharing materials, preprint publishing, other ways of increasing transparency)
>
> Conducting research ethically
>
> Trusted research (Security related issues in international research collaboration)
>
> None of the above

11. As an institution, what is one practical thing could we do to promote good research practice? (Or anything else you'd like to tell us)

Page 8: Final page

Thank you for completing the survey! Your answers have been recorded, and they will be used to improve and tailor the training, guidance and resources the University uses to support researchers.

Every answer is valuable, and we're grateful to you for taking the time.

If you have any questions or concerns, please contact jackie.thompson@bodleian.ox.ac.uk

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NOTE: Below, we list modifications from the surveys from which we adapted questions. This content was not part of the survey instrument.

List of modifications from source survey instruments:

- Reproducible Research Oxford survey, 2021 (see citation on page 1):
    o Q4 (awareness) -- we adapted the question text and answer choices for our question 7 (however, the list of practices in the grid rows was largely different)
    o Q6 (barriers) -- we adapted the question text and answer choices almost verbatim (however, the list of practices in the grid rows was largely different)
- Glasgow research culture survey, 2019 (see information on page 1):
    o Q2 (values) -- we adapted the question text and retained the answer choices (however, the list of practices in the grid rows was largely different)
    o Q5 (resources) -- we adapted the question text and format (however, the list of practices in the grid rows was largely different)
    o Q7 (one suggestion) -- we adapted the question text and format