**Open & Reproducible Research: Resources for Mental Health researchers and Network funded projects**

This document is a work in progress, we will update it as new resources are created and following the “Open Science and Reproducible Research for Mental Health Networks plus-fund projects” event in December. Please contact sam.parsons@psy.ox.ac.uk if you are interested in contributing to this document, or suggesting resources that are missing.

This document was developed tailored to the (potential) needs of the Mental Health Network plus-fund projects. Most of these projects centre on; developing guidelines, running focus groups, developing resources, and pilot studies. Many open and reproducible research practices (e.g. preregistration) were developed with empirical studies and/or experimental work in mind. However, there are lessons to be learned and practices that can be ported to these “non-standard” projects. We focus on these in this document and the workshop in december.

This document is split into two sections:

1. [Resources for non-standard projects](#_sqc8jqjfrlt) (most relevant to specific needs of projects)
2. [General introductory resources](#_pods1i1l5yn0) for open & reproducible research

**Acknowledgements:**

I reached out to the open research community, who recommended many of these resources and deserve thanks.

I am also indebted to Emily Farran who was kind enough to share a working draft of their document “Open Research: Examples of good practice, and resources across disciplines”. This will become a valuable resource when released - I believe to be hosted on the UK Reproducibility Network website - as it covers a wide range of subject areas and research methods.

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## Resources for non-standard projects

(for each resource, have a link, and maybe a quote or something like that too. At the very least have a description)

### Courses

**Managing Qualitative Social Science Data: An interactive online course**

* <https://managing-qualitative-data.org/>
* 4 modules including exercises:
	+ Planning the Management of Qualitative Data
	+ Managing Qualitative Data
	+ Sharing Qualitative Data
	+ Writing with Qualitative Data
* *Summary: Research data management is caring for, facilitating access to, preserving and adding value to research data throughout its lifecycle. Data are valuable, and form the basis for your empirical claims. Better data management means better research, can help you address concerns about your data that reviewers of your research might raise, and makes your data more easily shareable.*

### Repositories

**The Qualitative Data Repository**

* <http://qdr.syr.edu/>
* *Brief summary from website: The Qualitative Data Repository (QDR) is a dedicated archive for storing and sharing digital data (and accompanying documentation) generated or collected through qualitative and multi-method research in the social sciences. QDR provides search tools to facilitate the discovery of data, and also serves as a portal to material beyond its own holdings, with links to U.S. and international archives. The repository’s initial emphasis is on political science.*

**UK dataservice list of qualitative and mixed methods data.**

* <https://www.ukdataservice.ac.uk/get-data/key-data/qualitative-and-mixed-methods-data.aspx>

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### Practices

**Non-Interventional, Reproducible, and Open (NIRO) Systematic Reviews** (Pickering, J. S., Topor, M., Barbosa Mendes, A., Bishop, D. V. M., Büttner, F. C.,Henderson, E. L., ... Kothe, E. J. (2020).

* <https://niro-sr.netlify.app/>
* <http://doi.org/10.17605/OSF.IO/F3BRW>
* *Systematic reviews are complicated. Ensuring that they are reproducible and open is even more complex, and it's easy to overlook things or to adopt a workflow which makes reproducibility and transparency difficult to achieve. Whilst there are many (brilliant!) existing guidelines for conducting systematic reviews, many of these focus on a particular type of research centred around interventions. The NIRO Systematic Review checklist aims to provide a comprehensive set of guidelines for non-interventional research to help bring the gold-standard of evidence synthesis to other areas of research.*

**Preregistering qualitative research** (Haven & Van Grootel, 2019)

* <https://www.tandfonline.com/doi/full/10.1080/08989621.2019.1580147>
* *Abstract: The threat to reproducibility and awareness of current rates of research misbehavior sparked initiatives to better academic science. One initiative is preregistration of quantitative research. We investigate whether the preregistration format could also be used to boost the credibility of qualitative research. A crucial distinction underlying preregistration is that between prediction and postdiction. In qualitative research, data are used to decide which way interpretation should move forward, using data to generate hypotheses and new research questions. Qualitative research is thus a real-life example of postdiction research. Some may object to the idea of preregistering qualitative studies because qualitative research generally does not test hypotheses, and because qualitative research design is typically flexible and subjective. We rebut these objections, arguing that making hypotheses explicit is just one feature of preregistration, that flexibility can be tracked using preregistration, and that preregistration would provide a check on subjectivity. We then contextualize preregistrations alongside another initiative to enhance credibility in qualitative research: the confirmability audit. Besides, preregistering qualitative studies is practically useful to combating dissemination bias and could incentivize qualitative researchers to report constantly on their study's development. We conclude with suggested modifications to the Open Science Framework preregistration form to tailor it for qualitative studies.*
* Qualitative research preregistration template: <https://docs.google.com/document/d/1fYQgzQsqlokFecOthoH8zFTnbKjuOJWgvmERquZUDsE/edit>

### Examples of practices

**How to FAIR:** many examples of making different kinds of data FAIR (findability, accessibility, interoperability, and reusability), including various kinds of qualitative studies.

* <https://howtofair.dk/>
* *This website will take you on a deep dive into the subject matter of FAIR research data. Over the course of about two hours, it will show you that FAIR is not a time-consuming administrative mantra, but a set of principles that makes your research efficient, transparent and sustainable. Working in line with the FAIR principles to make your data more FAIR will improve your research data management and safeguard your research data for the future.*
* This page has a collection of videos: <https://howtofair.dk/how-to-fair/#case-introductions>

**Examples of methodological appendices:** each of these papers detail some form of coding appendix showing how they arrived at their coding schema, resolved coder disagreements, and refined the schema.

* Fuji Johnson, Genevieve. 2017. “Data for: A Question of Respect: A Qualitative Text Analysis of Canadian Parliamentary Committee Hearings on PCEPA.” Qualitative Data Repository. doi:10.5064/f6z31wj1.
* Jaramillo, M.C., R.C.M. Maia, S. Mameli, and J. Steiner. 2017. “For More Transparency in Deliberative Research. Implications for Deliberative Praxis.” Journal of Public Deliberation 13 (2).
* Deterding, Nicole M., and Mary C. Waters. 2018. “Flexible Coding of In-Depth Interviews: A Twenty-First-Century Approach.” doi:10.1177/0049124118799377.

**Factsheet on balancing Open Data with data protection of personal data.**

* <https://www.openaire.eu/factsheet-personal-data/view-document?Itemid=>

**Case studies: working with transcript data; working with sensitive survey data.**

* <https://howtofair.dk/how-to-fair/#humanities>

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### Papers

**Transparency in Practice in Qualitative Research** (Kapisewski & Karcher, 2019)

* <https://preprints.apsanet.org/engage/apsa/article-details/5d94c7762f41c7001256af6d>
* **Important concepts:**
	+ Preregistration
	+ Methodological Appendices
	+ Annotation
* *The discipline of political science has been engaged in discussion about when, why, and how to make scholarship more transparent for at least three decades. This piece argues that qualitative researchers can achieve transparency in diverse ways, using techniques and strategies that allow them to balance and optimize among competing considerations that affect the pursuit of transparency.. We begin by considering the “state of the debate,” briefly outlining the contours of the scholarship on transparency in political and other social sciences, which so far has focussed mostly on questions of “whether” and “what” to share. We investigate competing considerations that researchers have to consider when working towards transparent research. The heart of the piece considers various strategies, illustrated by exemplary applications, for making qualitative research more transparent.*

**Promises and pitfalls of data sharing in qualitative research** (Tsai, Kohrt, Matthews, Betancourt, Lee, Papachristos, Weiser, & Dworkin)

* [https://dx.doi.org/10.1016%2Fj.socscimed.2016.08.004](https://dx.doi.org/10.1016/j.socscimed.2016.08.004)
* *The movement for research transparency has gained irresistible momentum over the past decade. Although qualitative research is rarely published in the high-impact journals that have adopted, or are most likely to adopt, data sharing policies, qualitative researchers who publish work in these and similar venues will likely encounter questions about data sharing within the next few years. The fundamental ways in which qualitative and quantitative data differ should be considered when assessing the extent to which qualitative and mixed methods researchers should be expected to adhere to data sharing policies developed with quantitative studies in mind. We outline several of the most critical concerns below, while also suggesting possible modifications that may help to reduce the probability of unintended adverse consequences and to ensure that the sharing of qualitative data is consistent with ethical standards in research.*

**Research Participant Views regarding Qualitative Data Sharing** (Mozersky, Parsons, Walsh, Baldwin, McIntos, & DuBois, 2020)

* <https://doi.org/10.1002/eahr.500044>
* *Abstract: We found no studies in the United States that explored research participants' perspectives about sharing their qualitative data. We present findings from interviews with 30 individuals who participated in sensitive qualitative studies to explore their understanding and concerns regarding qualitative data sharing. The vast majority supported sharing qualitative data so long as their data were deidentified and shared only among researchers. However, they raised concerns about confidentiality if the data were not adequately deidentified and about misuse by secondary users if data were shared beyond the research community. These concerns, though, did not deter them from participating in research. Notably, participants hoped their data would be shared and may have expected or assumed this was already happening. While many could not recollect details about data-sharing plans for studies in which they participated, they trusted researchers and institutions to appropriately handle data sharing. If individuals view data sharing as an extension or integral part of their participation in qualitative research, then researchers may have a stronger obligation to share qualitative data than previously thought. Guidelines and tools to assist researchers and institutional review board members in ethical and responsible qualitative data sharing are urgently needed.*

**Qualitative data sharing: Data repositories and academic libraries as key partners in addressing challenges** (Mannheimer, Pienta, Kirilova, Elman, & Wutich, 2019).

* <https://doi.org/10.1177/0002764218784991>
* *Data sharing is increasingly perceived to be beneficial to knowledge production, and is therefore increasingly required by federal funding agencies, private funders, and journals. As qualitative researchers are faced with new expectations to share their data, data repositories and academic libraries are working to address the specific challenges of qualitative research data. This article describes how data repositories and academic libraries can partner with researchers to support three challenges associated with qualitative data sharing: (1) obtaining informed consent from participants for data sharing and scholarly reuse, (2) ensuring that qualitative data are legally and ethically shared, and (3) sharing data that cannot be deidentified. This article also describes three continuing challenges of qualitative data sharing that data repositories and academic libraries cannot specifically address—research using qualitative big data, copyright concerns, and risk of decontextualization. While data repositories and academic libraries cannot provide easy solutions to these three continuing challenges, they can partner with researchers and connect them with other relevant specialists to examine these challenges. Ultimately, this article suggests that data repositories and academic libraries can help researchers address some of the challenges associated with ethical and lawful qualitative data sharing.*

**Easing Into Open Science: A Guide for Graduate Students and Their Advisors.** (Kathawalla, U., Silverstein, P., & Syed, M. 2020).

* <https://doi.org/10.31234/osf.io/vzjdp>
* *This article provides a roadmap to assist graduate students and their advisors to engage in open science practices. We suggest eight open science practices that novice graduate students could begin adopting today. The topics we cover include journal clubs, project workflow, preprints, reproducible code, data sharing, transparent writing, preregistration, and registered reports.*

**Interlinking open science and community-based participatory research for socio-environmental issues**. (Kondo, Miyata, Ikeuchi et al., 2019)

* <https://doi.org/10.1016/J.COSUST.2019.07.001>
* *This paper discusses how open science can be interlinked with community-based participatory research (CBPR) to address socio-environmental issues. By reviewing three case studies in Japan, the authors developed a theoretical framework to span these inter-actor boundaries by (1) discovering and sharing goals that actors with different interests could tackle together (the transcend method); (2) considering ethical equity with special attention to empowering marginalized (or ‘small voice’) actors; (3) developing fair data visualization based on the FAIR Data Principles and (4) facilitating dialogue. A civic tech approach, in which civic engineers develop a solution to local issues by using open governmental data and information and communication technologies, is applied. This framework will reflectively be tested using case studies.*

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### Blogposts

**A Reviewer Asked You to Make Your Materials Open. Now What?**

* <https://transparenthci.medium.com/a-reviewer-asked-you-to-make-your-materials-open-now-what-f4af38e44b86>

**Data Sharing, Caring, and Access: reflections on archiving data and materials, and considerations on how to do so across different contexts**

* <https://gist.github.com/rmcelreath/557c5dcc7fb3ec6264088b8191772ed3>

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## General Open and Reproducible Research Concepts and resources

*These resources are largely intended to be introductory into some of the themes that will arise during discussions of open and reproducible research practices.*

**The Centre for Open Science** (<https://www.cos.io/>): An organisation dedicated to promoting open research practices, connecting open research initiatives, and providing tools (e.g. the OSF, below) to help researchers on their open science journeys.

**The Open Science Framework** (<https://osf.io/>): A powerful repository to store your research materials

**Society for the Improvement of Psychological Science** (SIPS; <https://improvingpsych.org/>): An organisation that “brings together scholars working to improve methods and practices in psychological science”

**UK Reproducibility Network Open Research primers** (<https://www.ukrn.org/primers/>)

* Preregistration and Registered Reports (<https://osf.io/8v2n7/>)
* Preprints (<https://osf.io/m4zyh/>)
* Open Access (<https://osf.io/94rsp/>)
* Data sharing (<https://osf.io/wp4zu/>)
* Open code & software (<https://osf.io/qw9ck/>)

**FAIR (Findable, Accessible, Interoperable, and Reusable) Principles (**[**https://www.go-fair.org/fair-principles/**](https://www.go-fair.org/fair-principles/)**):** A set of principles to make research objects useful to others.

**Many talks from experts relating to open research:** <https://www.youtube.com/c/RIOTScienceClub/videos>

**A Framework for Open and Reproducible Research Training (FORRT)** - searchable resources page linking to over 700 papers, blogposts, and resources: <https://forrt.org/resources/>

## What’s missing from this document?

Add your suggestions here :)

[www.equator-network.org/](http://www.equator-network.org/) (just in case it’s not above)