The Transparent CHI Paper

Cheat Sheet

What is Transparency

Having one's actions open and accessible for external evaluation. Transparency pertains to researchers being honest about theoretical, methodological, and analytical decisions made throughout the research cycle.[1]

Framework for Open and Reproducible Research Training (FORRT.org)

Why be transparent?

Transparency is not a purely selfless act as it...

...helps readers and reviewers understand and judge your work.

...helps you stay on top of your work.

...prevents mistakes.

...helps you work faster.

...creates better research.

...increases citation count and promotes reuse

Being transparent benefits you as much as others [2].

What should I make transparent?

Treat transparency as the default, i.e., everything you produce during the project. However:

Your participants safety and rights come first!

Some data cannot be shared safely. Use data availability statement to report what can and can't be shared. Even if some things must be kept private, share what materials you can (interview questions, analysis code, or other materials) with whom you can (reviewers, qualified experts, etc.).

Isn't being transparent more work?

Yes. Especially if you have to make a lot of things transparent at once on short notice (for example from reviewers) and suddenly have to deal with missing participant consent, DRM issues, or missing items.

However: If you are transparent from the beginning, the additional work per step is minimal, and – as outlined above – the effort can actually safe you significant time and heartache down the line when having to make sense of/wanting to reuse older materials.

[1] Parsons, S., Azevedo, F., Elsherif, M. M., Guay, S., Shahim, O. N., Govaart, G. H., ... & Aczel, B. (2022). A Community-Sourced Glossary of Open Scholarship Terms. Nature human behaviour, 6(3), 312-318. https://doi.org/10.1038/s41562-021-01269-4

[2] Markowetz, F. (2015). Five selfish reasons to work reproducibly. Genome biology, 16(1), 1-4.

Common Tools and Learning Resources

Citation Management

Zotero (Zotero.org)

Data and File Organization

Research Data Alliance rd-alliance.org/

Project TIER projecttier.org/

Data Repositories

Open Science Framework (OSF.io)

Zenodo (zenodo.org)

Harvard Dataverse (dataverse.harvard.edu)

Preprint Servers

Open Science Framework (OSF.io)

arXiv (arxiv.org)

Licenses

CC-BY creativecommons.org

MIT mit-license.org

Analysis tools

Open source software is more transparent

R r-project.org

Python python.org

JASP jasp-stats.org

...but, you can be transparent with closed-source software, too, e.g. by sharing your SPSS syntax

Code Repositories

GitHub (github.com)

Zenodo (zenodo.org)

GitLab (gitlab.com)

Bitbucket (bitbucket.org)

Literate programming

Mixing text and code helps document your work

Quarto quarto.org

RMarkdown rmarkdown.rstudio.com

Jupyter Notebooks jupyter.org

Learning Resources

Great papers and write ups:

Broman, Wu (2018). Data organization in spreadsheets. peerj.com/preprints/3183

Wickham (2014). Tidy Data. jstatsoft.org/v59/i10

Wilson, G. et al (2017). Good enough practices in scientific computing. doi.org/10.1371/journal.pcbi.1005510

Resources and Collections:

Framework for Open and Reproducible Research Training FORRT.org

The Alliance for Open Scholarship all4os.org

FOSTER Open Science fosteropenscience.eu

The ecosystem of technologies for social science research

...there are many more resources in all these categories!
Pull requests welcome at github.com/jvornhagen/ACheatSheetForTheTransparentCHIPaper.

Timeline

Fill in the blanks with your target deadlines. If a particular step does not apply to your work, feel free to cross it out.

TIMELINE		YOUR ACTION ITEMS	RESOURCES
While Designing your Study:			
	Ethics approval	· Have an ethics committee approve what you can share and how you can share it	[Check your universities guidelines]
	Choose an appropriate writing tool	· Consider your and your collaborators needs · Overleaf is great for working together, but hard to pick up · RMD/Quarto incorporate data analysis but lack live co-editing	ACM Template: Quarto https://github.com/quarto-journals/acm ACM Template: RMd https://github.com/ulyngs/chi-2019-proc-rmd-template ACM Template: Overleaf https://www.overleaf.com/latex/templates/tagged/acm
	Write out/preregister your study design	· Decide on your design, tools and analyses · Preregistration templates can guide you through this even if you don't need to preregister this specific study	help.osf.io/article/345-create-registrations
Before you Begin Data Collection:			
	Set up data collection	· Prepare your data folder structure · Prepare a data dictionary · Make sure to choose a FAIR repository · Keep the repository private · Choose a non-proprietary file format (e.g., csv)	projecttier.org/tier-protocol/protocol-4-0/ help.osf.io/article/217-how-to-make-a-data-dictionary fairsfair.eu/news/fair-data-repositories-key-features-defined forrt.org/curated_resources/using-osf-to-share-data-a-step-by-step-g/
	Get informed consent for data sharing	· In your informed consent statement, make sure to get your participant's consent to share their de-identified data	uu.nl/en/research/research-data-management/guides/informed-consent-for-data-sharing *Note the Sources and Further Reading for more country specific infos
After Data Collection:			
	Prepare data	· deidentify/anonymize data, · Safe raw, deidentified data to your private repository	edps.europa.eu/system/files/2021-04/21-04-27_aepd-edps_anonymisation_en_5.pdf
	Data analysis	· write clean, executable, and commented code/script	Writing Clean Code: oreilly.com/library/view/clean-code-a/9780136083238/
	Write up your paper	· Report your study in a transparent way · Keep the repository private, use anonymized links in your paper	Checklist for the Transparent CHI (PLAY) Paper: doi.org/10.1145/3410404.3414229 help.osf.io/article/201-create-a-view-only-link-for-a-project
	Acknowledge all contributions	· Properly acknowledge everyone, who contributed to your paper	CRediT.niso.org/
Finishing Up:			
	Supplementary material	Make sure your repository is complete and up to date, e.g: · data and analysis scripts · study protocols · any other relevant materials · licence	https://help.figshare.com/article/what-is-the-most-appropriate-licence-for-my-data
	YOU DID IT!	Submit Take a break	