Assessing data-related practices in the field of psychology: Survey design and preliminary results

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Background

Though the field of psychology has begun to embrace open science practices, information about how researchers are currently managing and sharing their data remains largely anecdotal. The objective of this study is to survey the practices and perceptions of active psychology researchers in order to inform the development of data-related standards and best practices.

This is an adaptation of a survey we did in 2017-18 to assess data-related practices in the field of human neuroimaging (Borghi & Van Gulick, 2018, PLOS ONE https://doi.org/10.1371/journal.pone.0200562).

Research Questions

- How are researchers in different scientific disciplines actually managing and sharing their research data?
- What are the current levels of adoption for emerging open science practices including publishing preprints, sharing research materials, and publishing in open access journals?
- How do we, at libraries and universities, best engage with researchers on issues related to data management and open science?

Surveying Psychology Researchers

Online survey instrument

- 64 multiple choice questions tailored to psychology research methods.
- Explores data-related practices throughout the course of a research project.
- Topics include: the type of data collected, the software tools used, how data is managed, factors that limit and motivate current practices, as well as perceived need for additional training or education and perceptions of emerging practices.
- Demographics collected include: # of years in research, current position, country, type of research institute, lab size, number of collaborators, funding sources, and sub-discipline of psychology (cognitive, social, developmental, clinical, etc.)

Distributed via social media and disciplinary listservs as well as via emails sent to corresponding authors of papers published in 2017 and 2018 in 40 psychology journals.

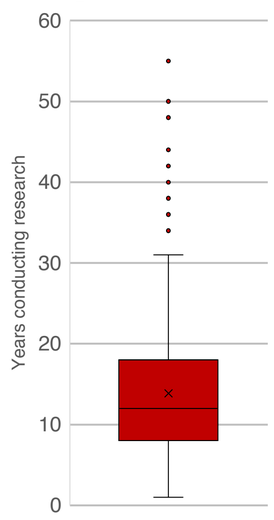
Preliminary data reported for 274 participants who report working in 31 different countries (55.9% USA, 10.7% UK, 6.3% Canada, 5.5% Germany, 4.4% Australia).

⚠ Preliminary Data ⚠

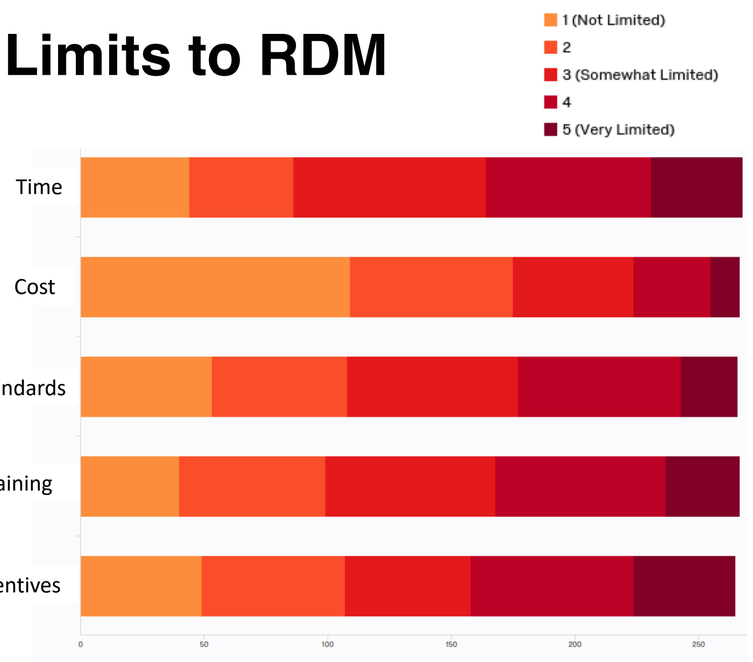
Psychology sub-discipline

	Number	Percentage
Social and Personality Psychology	60	22.556391
Cognitive Psychology	50	18.796992
Developmental Psychology	43	16.165414
Cognitive Neuroscience	32	12.030075
Clinical Psychology	28	10.526316
Other (Please describe)	23	8.646617
Industrial/Organizational Psychology	17	6.390977
Biopsychology or Behavioral Neuroscience	11	4.135338
Quantitative Psychology	2	0.751880

Experience



Limits to RDM



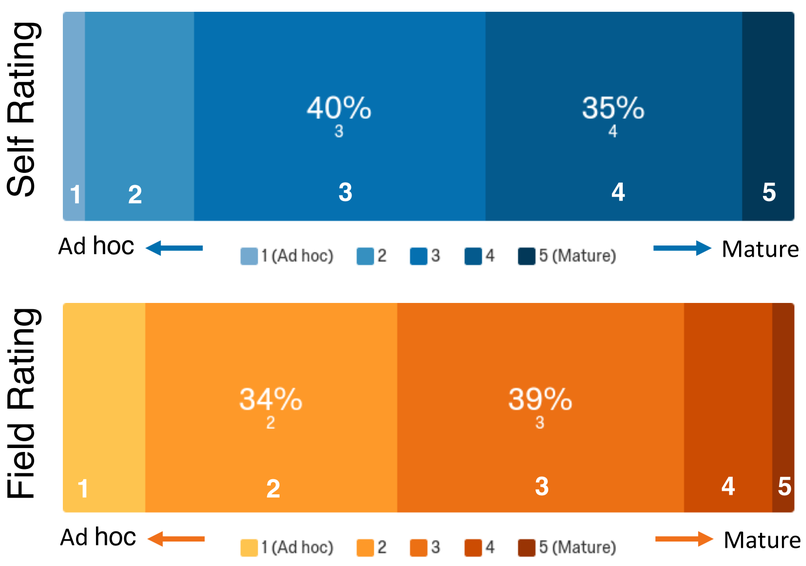
Next Steps

Preprint, survey, & open data coming later this year!

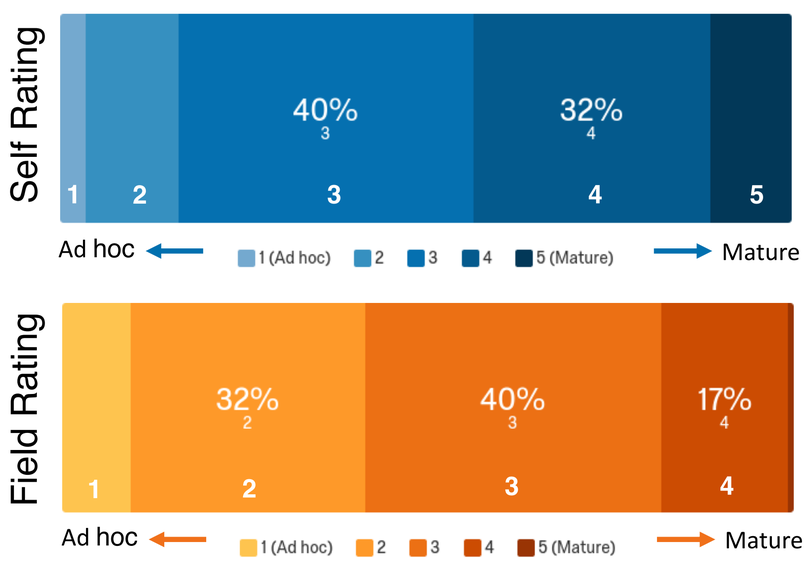
We hope to increase our engagement with the neuroscience and psychology communities and develop follow-up studies and researcher-focused educational materials related to data management and open science. We're also exploring how to investigate data-related practices in other disciplines.

Data Management Maturity Ratings

Collection Phase



Analysis Phase



Sharing Phase