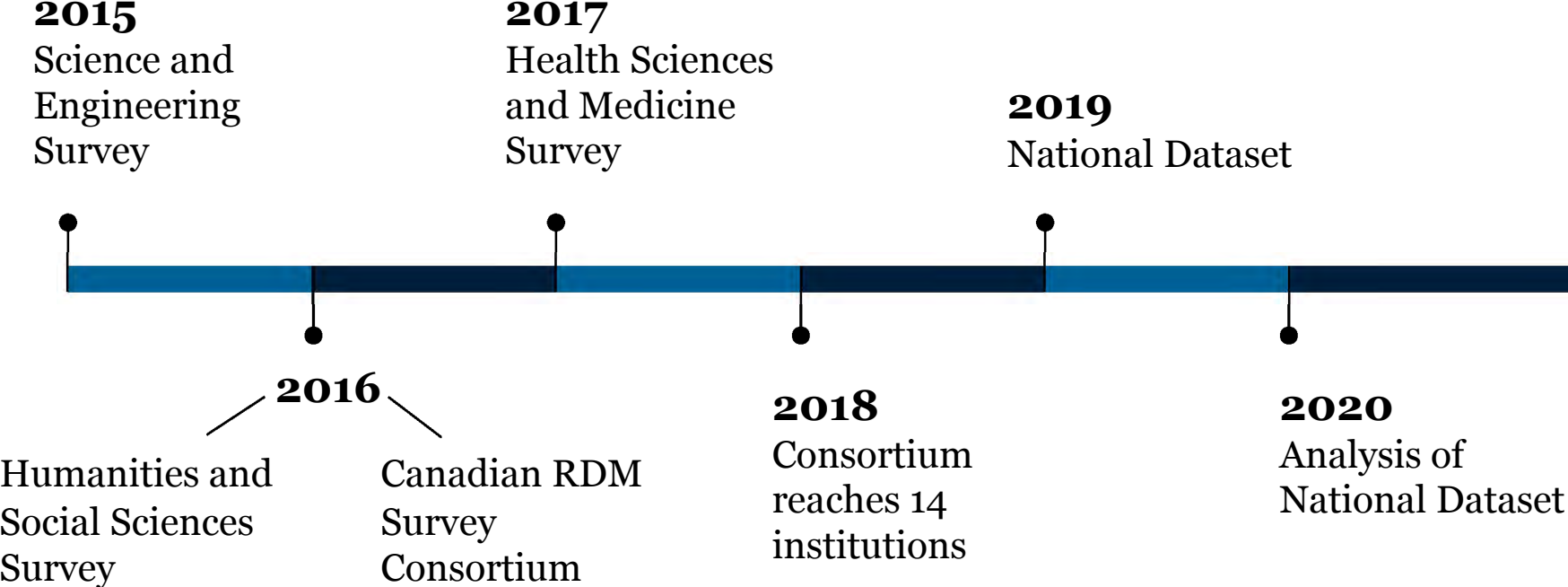


Research Data Management in Canada

Perceptions and Practices Across the Disciplines

Presented by Melissa Cheung, University of Ottawa and Alexandra Cooper, Queen's University
21 July 2020

Background: The Survey Project



The Survey

- Common survey instrument consisted of 4 sections with questions that reflect the data lifecycle
- Each institution ran surveys individually using their own survey software
 - Customized the survey based on institutional characteristics and interest
 - Obtained ethics approval from their own research ethics board

Merging datasets

- Recode institutional datasets to match standard codebook
 - Regroup rank, funding variables
 - Regroup faculty/department into generic list of “field of study”
 - Remove text responses from analysis

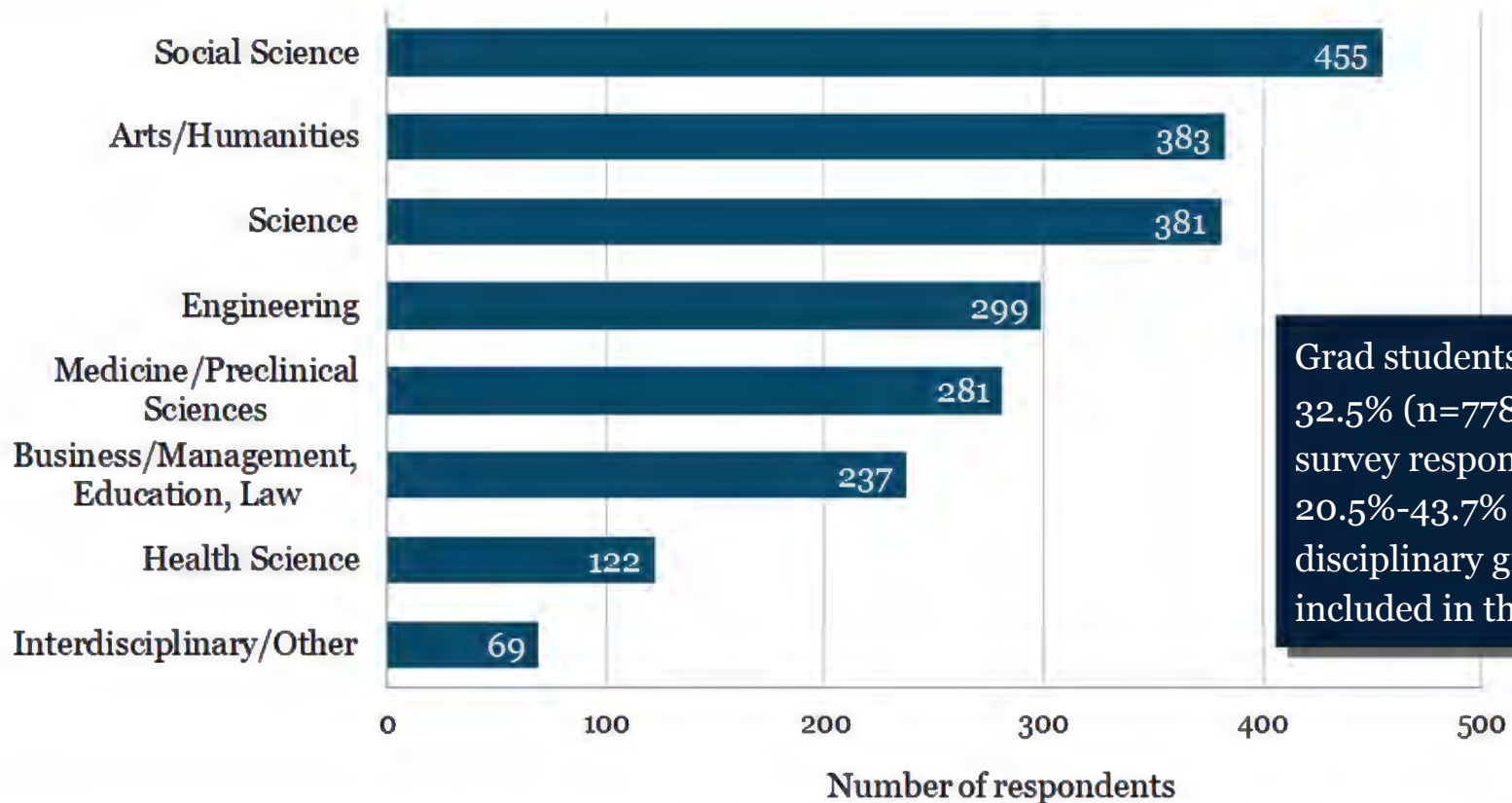
Funding			
Variable name	FUNCIHR		
Variable label	Funding source: CIHR		
Variable description	Funding source respondent has used in last 5 years or intends to use in next 5 years: CIHR		
Survey question	Which funding sources have you used within the past 5 years, or are planning to apply for in the next 5 years? Please exclude funding earmarked exclusively for operations and infrastructure. Select all that apply:		
Value label	Value description	Count	Percent
0	Not Chosen	2164	81.4%
1	Chosen	455	17.1%
99	Not Declared	13	0.5%
999	Not asked by administering institution	26	1.0%
Funding			
Variable name	FUNSSHRC		
Variable label	Funding source: SSHRC		
Variable description	Funding source respondent has used in last 5 years or intends to use in next 5 years: SSHRC		
Survey question	Which funding sources have you used within the past 5 years, or are planning to apply for in the next 5 years? Please exclude funding earmarked exclusively for operations and infrastructure. Select all that apply:		
Value label	Value description	Count	Percent
0	Not Chosen	1936	72.8%
1	Chosen	683	25.7%
99	Not Declared	13	0.5%
999	Not asked by administering institution	26	1.0%
Funding			
Variable name	FUNCFI		
Variable label	Funding source: CFI		
Variable description	Funding source respondent has used in last 5 years or intends to use in next 5 years: CFI		
Survey question	Which funding sources have you used within the past 5 years, or are planning to apply for in the next 5 years? Please exclude funding earmarked exclusively for operations and infrastructure. Select all that apply:		
Value label	Value description	Count	Percent
0	Not Chosen	2211	83.2%
1	Chosen	227	8.5%
99	Not Declared	1	0.0%
999	Not asked by administering institution	219	8.2%
Funding			
Variable name	FUNNSERC		
Variable label	Funding source: NSERC		
Variable description	Funding source respondent has used in last 5 years or intends to use in next 5 years: NSERC		
Survey question	Which funding sources have you used within the past 5 years, or are planning to apply for in the next 5 years? Please exclude funding earmarked exclusively for operations and infrastructure. Select all that apply:		
Value label	Value description	Count	Percent
0	Not Chosen	1987	74.8%
1	Chosen	632	23.8%
99	Not Declared	13	0.5%
999	Not asked by administering institution	26	1.0%



Who participated?

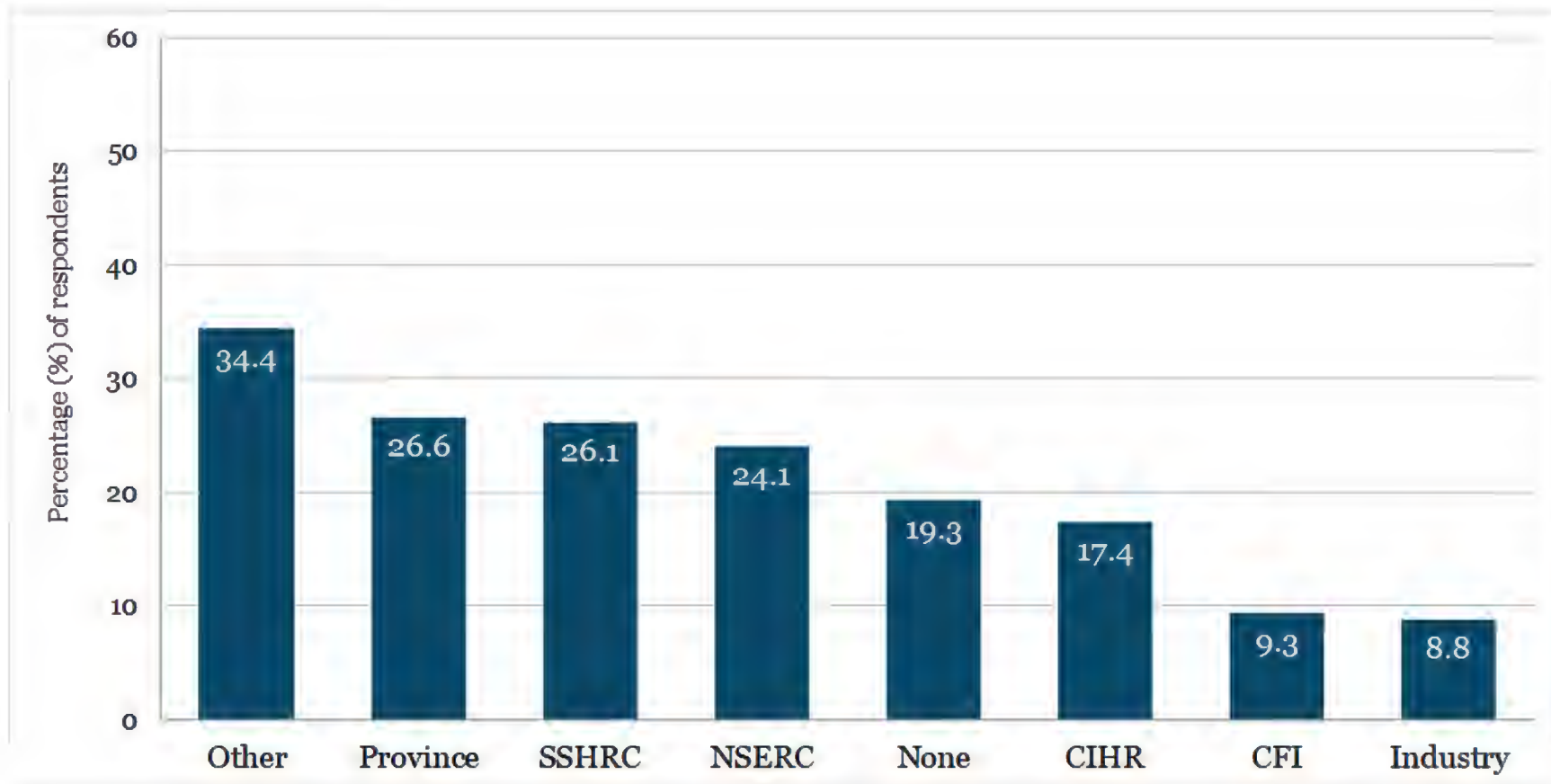
Survey Results

Respondent Field of Study



Grad students made up 32.5% (n=778) of the total survey respondents and 20.5%-43.7% in each disciplinary group included in the survey.

Funding sources

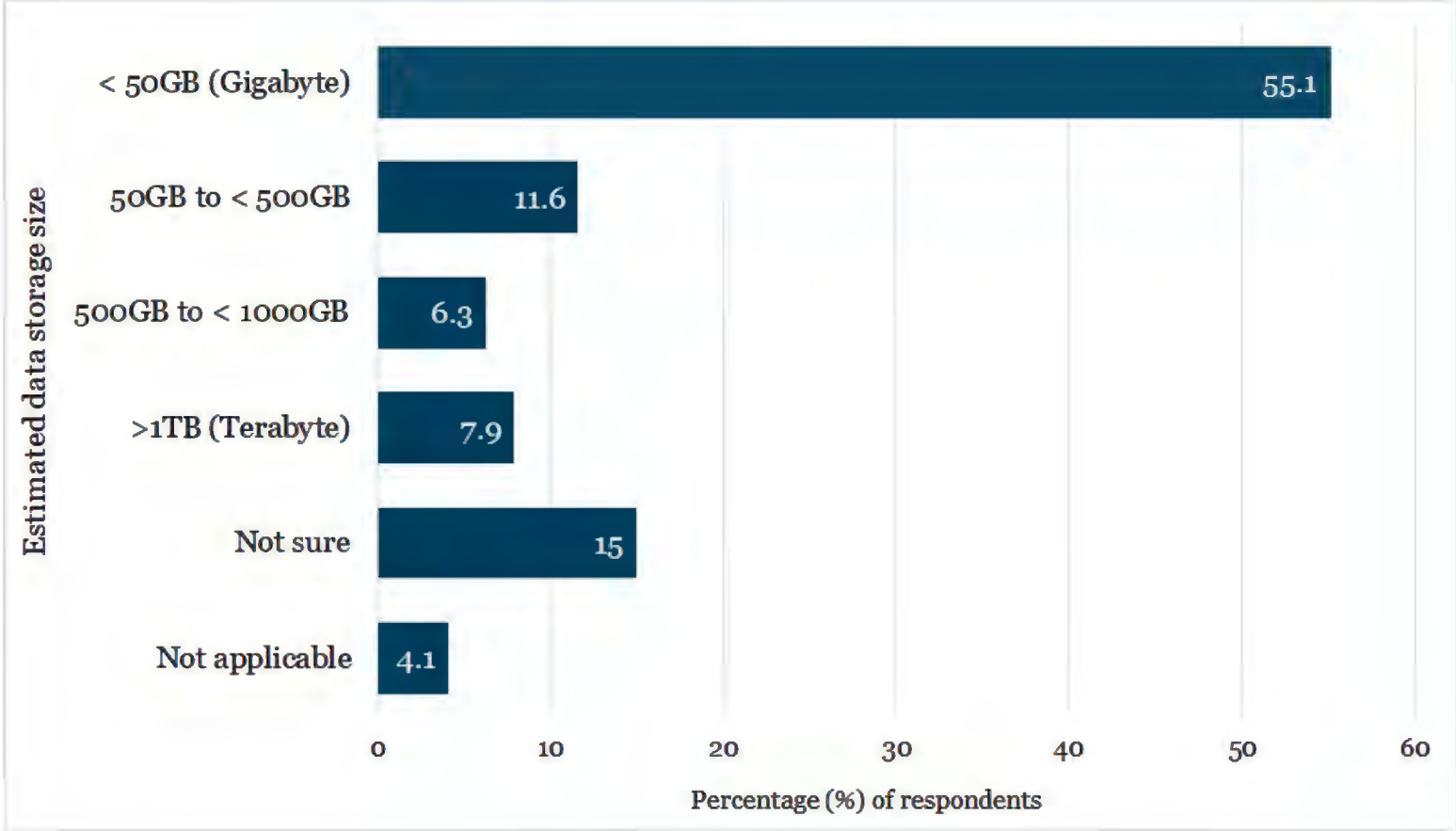


Current RDM Practices

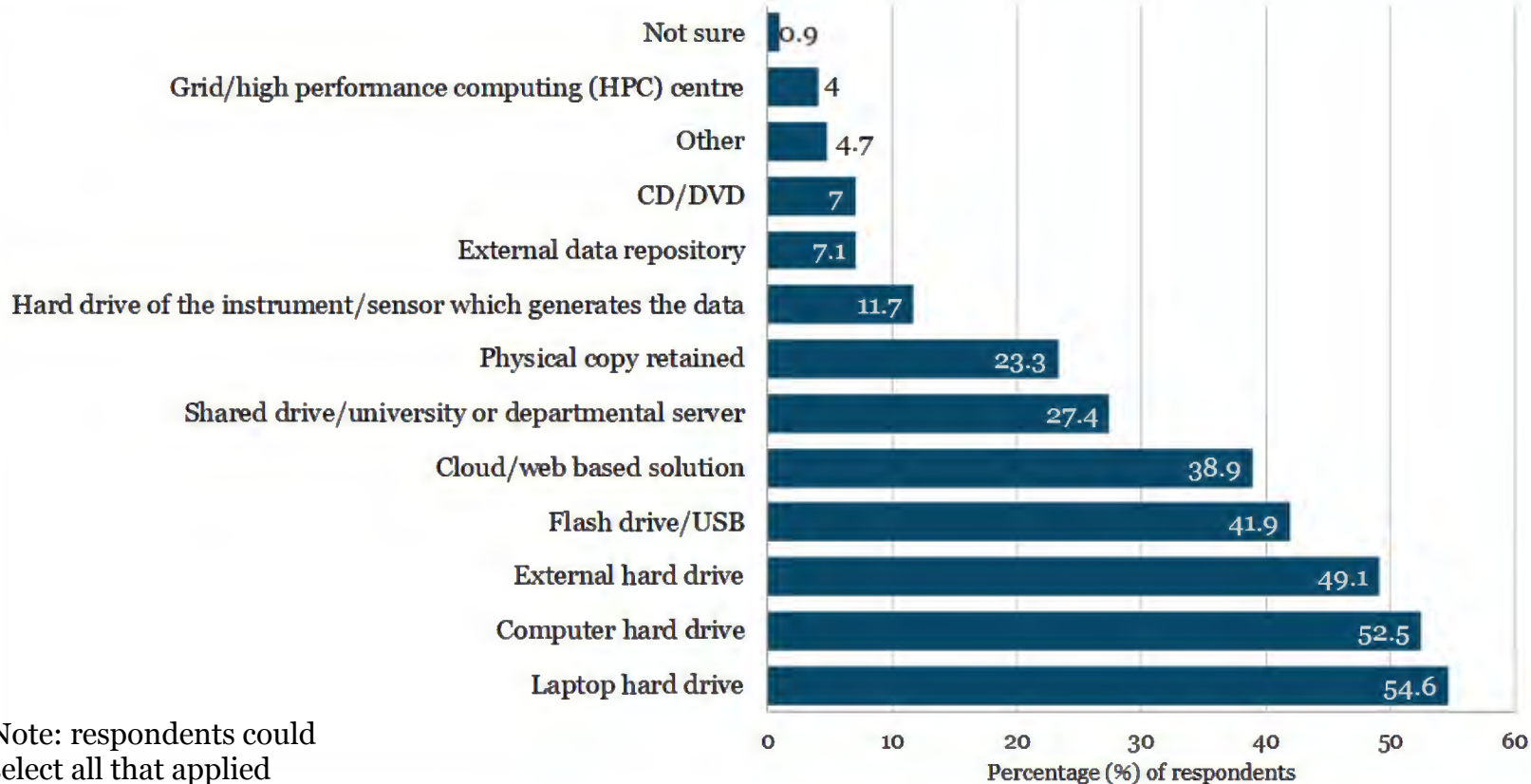
(reported at the time of the survey)

How are researchers
working with and
managing their data?

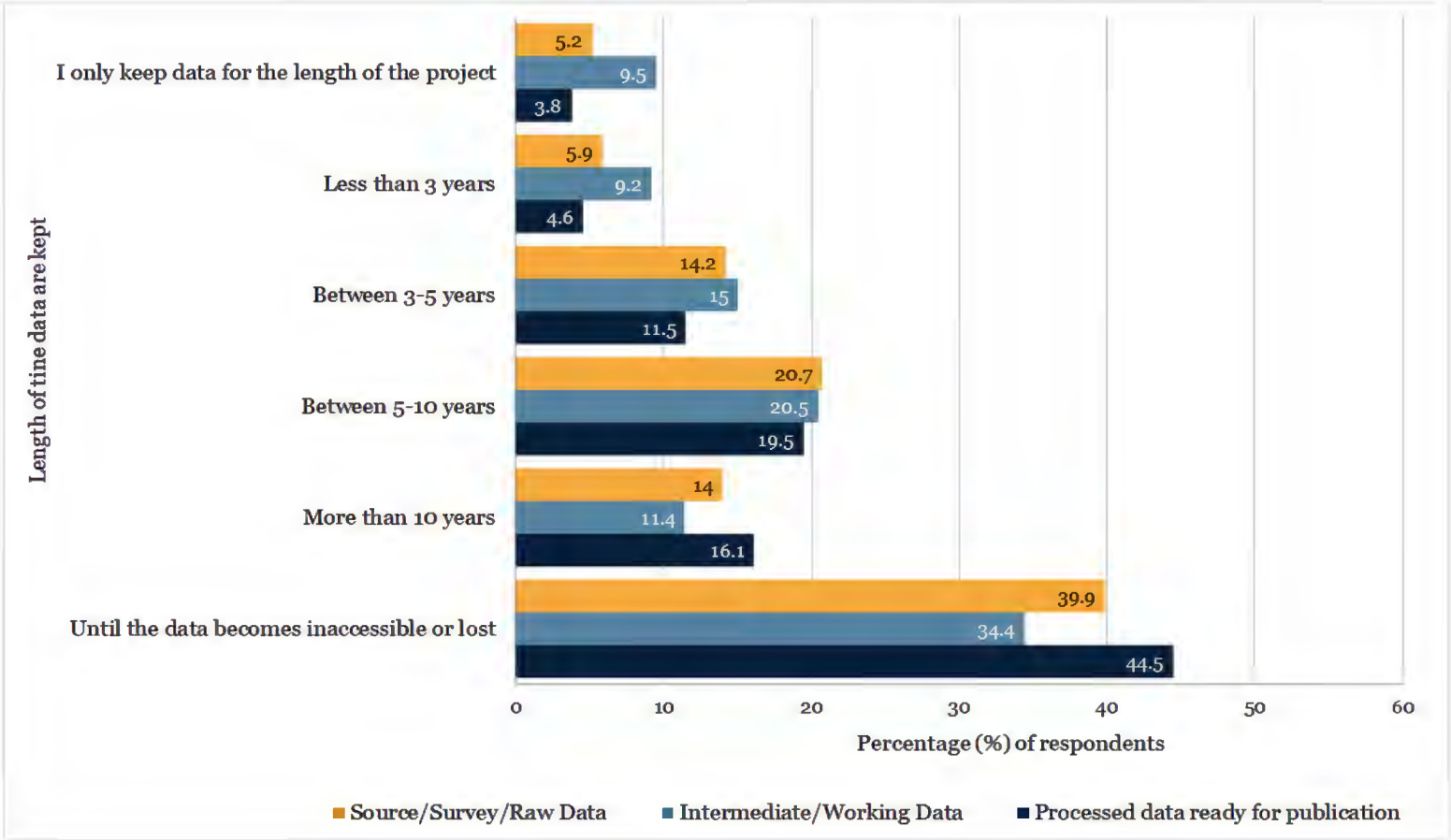
Estimated data storage size for a typical project



Where are researchers storing their data?



Data kept after project



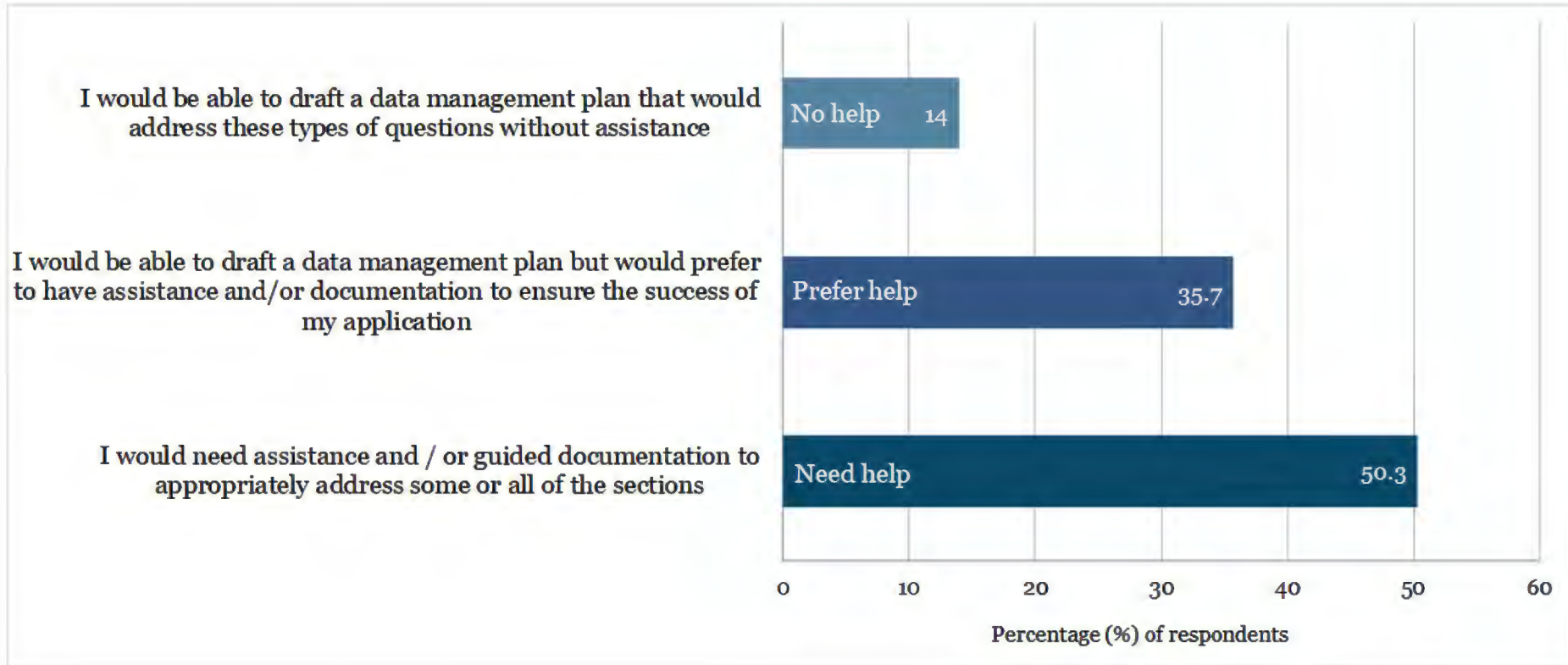
Researcher Readiness for Tri-Agency RDM Policy

Would researchers be able to meet Tri-Agency RDM policy requirements for data management plans (DMPs) and to deposit data in digital repositories?

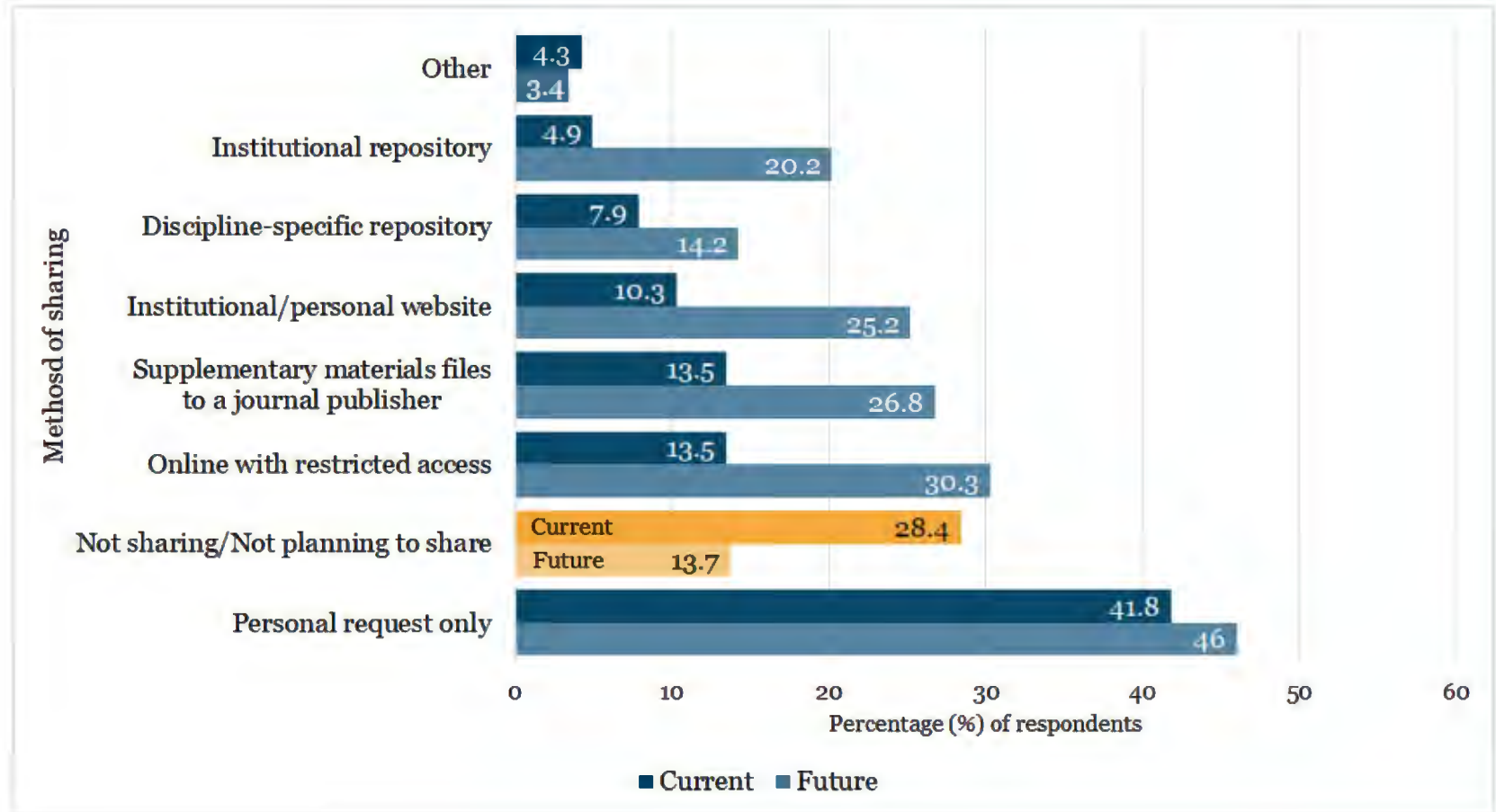
Audience poll: We asked researchers if they would be able to draft a DMP as part of a grant application. Guess which of the following statements most researchers said best describes their situation.

- A) They do not need help drafting a DMP.
- B) They prefer having help and/or guided documentation.
- C) They need help and/or guided documentation to draft a DMP.

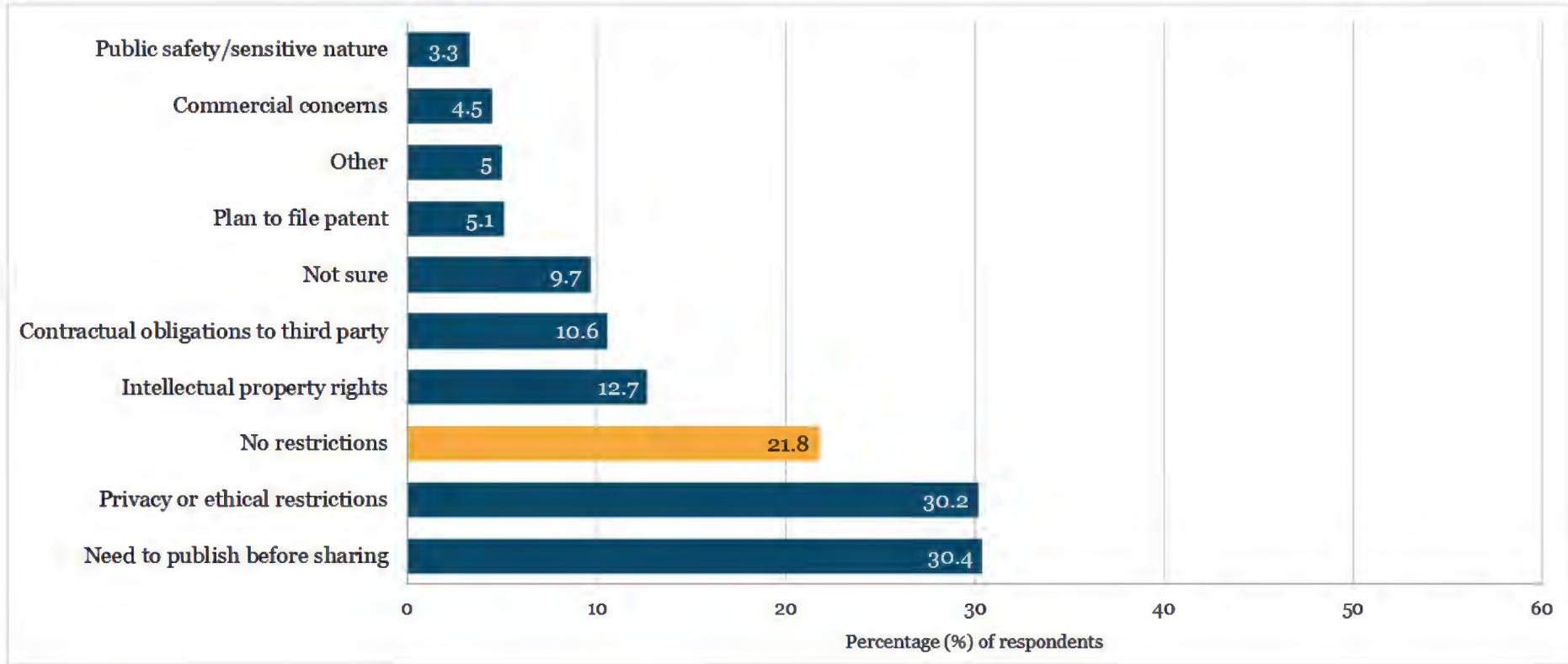
What if researchers were asked to draft a Data Management Plan (DMP)?



Data Sharing



Restrictions or embargoes on data sharing



Restrictions or embargoes on data sharing

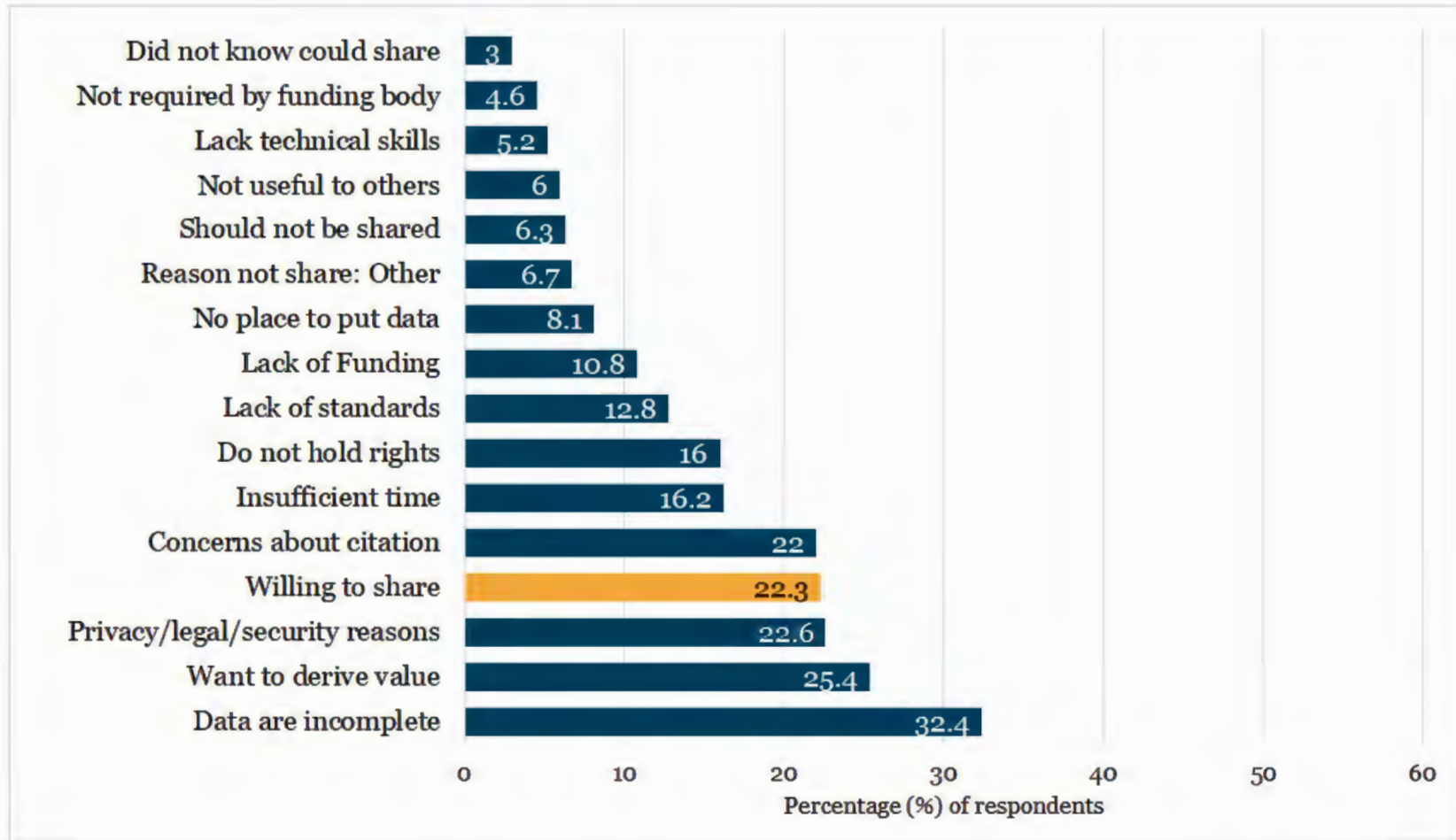
- Arts/Humanities and Science more likely to report no restrictions on data sharing
- Engineering and Science most likely to report need to publish first
- All other disciplines cited privacy, confidentiality, or ethics restrictions
- Arts/Humanities divided between need to publish first and privacy, confidentiality, or ethics restrictions



Audience poll: What do you think is the most common reason why researchers would not be willing to share their data?

- A) Researchers believe their data should not be shared
- B) The data are incomplete or not finished
- C) Researchers still wish to derive value from the data
- D) Funding body does not require sharing

Reasons for not sharing research data and associated methods/tools



Back to our research question

Would researchers be able to meet
Tri-Agency RDM policy
requirements for data management
plans (DMPs) and to deposit data in
digital repositories?

Answer: NOPE

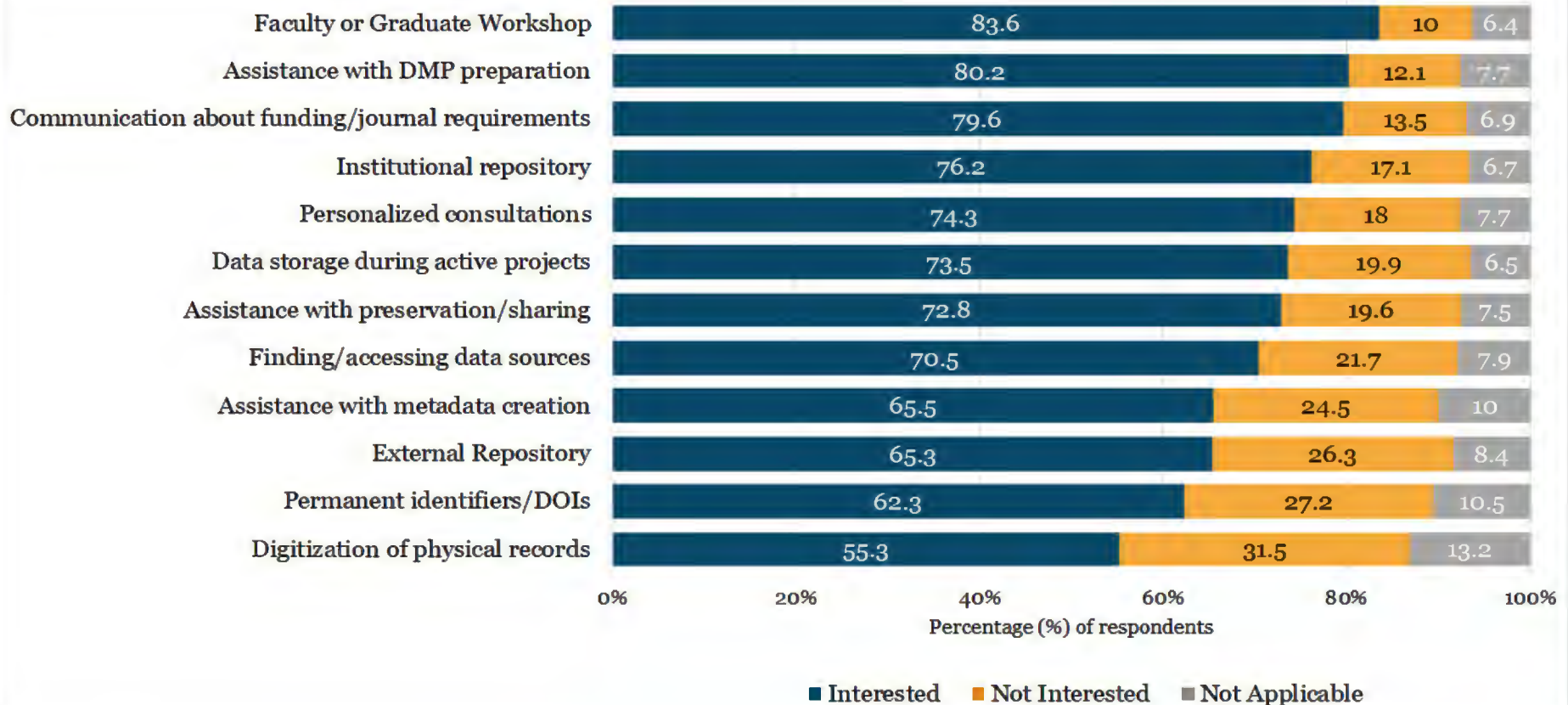
(Not based on their RDM practices
as reported, anyway)

RDM Services

What supports do researchers want or need to create DMPs for grant applications?

What supports do researchers want or need to deposit their data?

Interest in RDM services



Interest in services: differences by discipline

Field of study	Most popular RDM services	Interested
Engineering	Assistance with DMP preparation	82.52%
Arts/Humanities	Assistance with DMP preparation	79.88%
Business/Management, Education, Law	Assistance with DMP preparation	84.38%
Social Sciences	Assistance with DMP preparation	80.83%
Medicine/Preclinical Sciences	Communication/info about funding/journal requirements	80.18%
Health Science	Communication/info about funding/journal requirements	91.51%
Science	Institutional repository	77.36%
Interdisciplinary/Other	Institutional repository	84.38%

Some Implications

How can the survey results help us with developing RDM services?

Gaps between practices and policy requirements

- Clarification on policies related to data sharing and deposit in digital repositories
 - Privacy, confidentiality and ethics
 - Funding and journal policies
 - Which data should be retained and/or shared
- High demand for assistance with DMPs and institutional repositories for data preservation

But wait, there's more!

- Plans to publish our findings
- National Dataset will be made publicly available
- Learn more about the project on the [Canadian RDM Survey Consortium's page](#) of Portage's website



Thank you!
Questions?