## Questionnaire A Survey on Data Citation and Reuse Practices April, 2022

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## Introduction

This study investigates how researchers reuse and cite data in their work. Data reuse refers to using data (for any purpose) which others have created.

We are interested in hearing from researchers from a diversity of communities who reuse and cite data, as well as from those who do not.

The survey consists of three main sections.

- Part 1: Reusing & citing data
- Part 2: Rewarding data management
- Part 3: Demographics

This study is funded by the Alfred P. Sloan Foundation and is conducted by researchers at the Scholarly Communications Lab at the University of Ottawa, Canada as part of the Meaningful Data Counts project, a collaboration involving the nonprofit organization DataCite.

By clicking on the "Next" button below to start the survey, you indicate your consent to participate in this research. You can read more about the survey and what will be done with the data on the <u>informed consent form</u> (this will launch a new window). We have received ethical approval for the study from the University of Ottawa Research Ethics Board.

If you need to return to a previous page as you complete the survey, please use the "Previous" button, rather than the back button in your browser.

Thank you for your participation.

## **Definitions**

The below terms are used throughout the survey. A link to these definitions is included at the top of every page of the survey for your reference.

Data: In this survey, data are defined as entities used as evidence of phenomena for the purposes of research or scholarship [1]. Different communities define data in different ways; what serves as data for one person may not be data for another. Examples of data range from observations in spreadsheets to literature corpora to physical samples.

Secondary data: Data which others have created

Data reuse: Using data which others have created, for any purpose

Data sharing: Making your data available to others, e.g. in a data repository

*Citation*: Reference (to data) that is included in reference lists. Reference lists may be in formal publications (e.g. journal articles, conference proceedings, book chapters) or in other entities (e.g. blog posts, teaching syllabi, etc.).

Data management: The work involved in organizing, documenting, storing, preserving and/or sharing/publishing data in research. This work takes many forms, involving initial planning, day-to-day processes, and making data usable and available for the future.

[1] Borgman, C. L. (2015). Big data, little data, no data: Scholarship in the networked world. MIT press.

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Part 1: Reusing & Citing Data
* 1. Have you ever reused data which other people have created, for any purpose?  Please select one answer. <u>Definitions</u> of survey terms
Yes
○ No

Please describe the type of secondary data that you reuse (optional).  ease write your answer in the box below.					
<u>efinitions</u> of survey	/ terms				

	Reusing & Citing Data
	How would you classify the type of data that you reuse? se select all that apply.
	nitions of survey terms
$\bigcirc$	Quantitative data
$\bigcirc$	Qualitative data
$\bigcirc$	Both
	Other (please specify in box below)

Part 1:	Reusing	ጼ	Citing	Data
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\* 4. How frequently do you reuse secondary data for the following purposes? Please select one option for each row. <u>Definitions</u> of survey terms.

	Never	Rarely	Sometimes	Often	Always
Purposes As the basis for a study		0		$\bigcirc$	0
To prepare for a new project/proposal or to generate new ideas		$\bigcirc$	$\bigcirc$		
To integrate with other data (e.g. to create a new dataset)		0		$\bigcirc$	0
As model, algorithm or system inputs					
To calibrate instruments or models					
To verify my own data					
To identify trends, to make comparisons or to make predictions	$\bigcirc$	$\circ$		$\bigcirc$	$\bigcirc$
To create visualizations or summaries					
For teaching/ training					
Other (please specify in box below)					

Part 1:	Reusing	18	Citing	Data
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\* 5. When you reuse data, what do you usually cite or reference?

If you do not cite or reference data, please select never for each row.

Please select one answer for each row.

<u>Definitions</u> of survey terms

	Never	Rarely	Sometimes	Often	Always	N/A
The data themselves (e.g. a particular dataset or record)	$\bigcirc$				0	
The source of the data (e.g. a data repository or database)	$\bigcirc$		$\bigcirc$	$\bigcirc$		
A collection of related data (e.g. a series of datasets)	$\bigcirc$		$\bigcirc$	$\circ$		
An article or publication analyzing the data	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$		
A data paper (A data paper is a short article with in-depth descriptions about the data but no further analysis).	0	0	0	0	0	0

	Never	Rarely	Sometimes	Often	Always
ncluding a citation to data in reference ists	$\bigcirc$	0		$\bigcirc$	
ncluding a citation to a related paper n reference lists	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	0
Mentioning data in a footnote					
Mentioning data in body of text					0
Mentioning data in .cknowledgements, appendix, etc.	$\bigcirc$	$\circ$			
Mentioning data in captions, figures or ables		0	0	0	0
ner (please specify in box below)					

	person were to reuse data which you have created, would you want them to cite/refer	end
your data?	no answer	
Please select o  Yes	ie answer.	
○ No		
) NO		

art 1: I	
	ge contains two related questions about your preferences regarding how other people cite or se your data.
* 8. W	hat would you prefer that other people cite/reference when they use your data?
	e select all that apply.
<u>Detini</u>	<u>itions</u> of survey terms
	The data themselves (e.g. a particular dataset or record)
	The source of the data (e.g. a data repository or database)
	A collection of related data (e.g. a series of datasets)
	An article or publication analyzing the data
	A data paper (A data paper is a short article with in-depth descriptions about the particular data).
	Other (please specify in box below)
* 9. H	low would you prefer other people to cite/reference <b>your</b> data? se select all that apply.
* 9. H	low would you prefer other people to cite/reference <b>your</b> data?
* 9. H	low would you prefer other people to cite/reference <b>your</b> data? se select all that apply.
* 9. H	low would you prefer other people to cite/reference <b>your</b> data? The select all that apply.  Including a citation to data in reference lists
* 9. H Pleas	low would you prefer other people to cite/reference <b>your</b> data?  The select all that apply.  Including a citation to data in reference lists  Including a citation to a related paper in reference lists
* 9. H Pleas	low would you prefer other people to cite/reference your data?  The select all that apply.  Including a citation to data in reference lists  Including a citation to a related paper in reference lists  Mentioning data in a footnote
* 9. H Pleas	low would you prefer other people to cite/reference your data?  The select all that apply.  Including a citation to data in reference lists  Including a citation to a related paper in reference lists  Mentioning data in a footnote  Mentioning data in body of text
* 9. H Pleas	low would you prefer other people to cite/reference your data?  The select all that apply.  Including a citation to data in reference lists  Including a citation to a related paper in reference lists  Mentioning data in a footnote  Mentioning data in body of text  Mentioning data in acknowledgements, appendix, etc.

Part 1: Reusing & Citing Data
This section asks further questions about your motivations for citing (or not citing) data. Citations are references to data, in reference lists.
* 10. Do you cite secondary data (by including a data citation in a reference list) in any way for any purpose? Please select one answer. <u>Definitions</u> of survey terms
Yes
Sometimes
○ No
If you selected "No," please explain why you do <b>not</b> cite data.

Part 1:	Reusing & Citing Data	
Pleas	Why do you cite secondary data? se select all that apply. itions of survey terms	
	As a way of showing intellectual debt to the data creator/data provider  As a way of supporting the validity of your claims  As a way of helping others to locate and access the data you used  Other (please specify in box below)	As a way of rewarding the data creators/data providers  As a way of indicating that you have used the data in some way  Because you were advised to cite data (e.g. by a journal editor)

Part 1: Reusing & Citing Data	
* 12. Do you ever cite data for the following reasons?  Please select all that apply. <u>Definitions</u> of survey terms	
To correct your own data (you cite your own data)  To build on or use data you have created (you cite your own data)  To criticize or correct the data of others	To bring recognition to your own data (you cite your own data)  None of the above

* 13. Plea	Reusing & Citing Data  What are your reasons for not reusing data create se select all that apply.  Initions of survey terms  Reusing data is not relevant to your research methods  Reusing data is not normal in your research community  There are no available relevant data for your research topic  You get more credit for your work if you create your own data	You do not trust data that others create You cannot find the data you need You do not know how to give credit for data created by other people You did not know that you could reuse data created by other people
	Other (please specify in the box below)	

14. Please describe the lease write your answer	ı use in your work		
ease write your answer efinitions of survey term			
•			

* 15 If another	person were to reuse data which you created, would you want them to cite/reference
data?	person were to reuse data which you created, would you want them to cite/reference
Please select o	ne answer.
Yes	
No	

art 1: Reusing & Citing Data
his page contains two related questions about your preferences regarding how other eople cite/reference your data.
* 16. What would you prefer that other people cite/reference when they use your data?  Please select all that apply. <u>Definitions</u> of survey terms
The data themselves (e.g. a particular dataset or record)  The source of the data (e.g. a data repository or database)  A collection of related data (e.g. a series of datasets)  An article or publication analyzing the data  A data paper (A data paper is a short article with in-depth descriptions about the particular data).
Other (please specify in box below)
* 17. How would you prefer other people to cite/reference <b>your</b> data?  Please select all that apply.
Including a citation to data in reference lists
Including a citation to a related paper in reference lists
Mentioning data in a footnote
Mentioning data in body of text
Mentioning data in acknowledgements, appendix, etc.
Mentioning data in captions, figures or tables
Other (please specify in box below)

Τ

	I am aware of and <b>use</b> this recommendation.	I am aware of and <b>do not use</b> this recommendation	I am unaware of this recommendation.
DataCite	$\circ$	$\circ$	$\circ$
Data repositories	$\bigcirc$		$\bigcirc$
Scientific societies (e.g. the American Geophysical Union)	0	0	$\circ$
Journals or publishers	$\bigcirc$	$\bigcirc$	$\bigcirc$
Citation style guides (e.g. APA, MLA, etc.)	0	0	$\circ$

ata reuse.  19. How important are the following lease select one option for each a selicitions of survey terms					
	Extremely unimportant	Unimportant	Neither important nor unimportant	Important	Extremely important
Having data be recognized as a standalone research output, separate from publications	$\bigcirc$			$\circ$	
Having the creation of good data documentation and workflows be rewarded					

Part 2: Rewarding Data Management
This page contains two questions which are related to each other.
* 20. Have you ever shared your own research data?
Please select one answer.
<u>Definitions</u> of survey terms
○ No
* 21. Have you ever used <b>your own</b> data multiple times (e.g. for new studies, or to produce multiple
publications?)  Please select one answer.
<u>Definitions</u> of survey terms
Yes
○ No

Part 2:	Rewarding	Data	Management

\* 22. How important is it to you to do the following?

Please select one option for each statement.

<u>Definitions</u> of survey terms

	Extremely unimportant	Unimportant	Neither important or unimportant	Important	Extremely important	N/A
Assess the reach and influence of your <i>own data</i>	$\circ$	$\circ$	$\circ$	0	$\circ$	$\circ$
Get credit specifically for sharing your own data	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Assess the reach and influence of other people's data which you reuse				$\circ$	$\circ$	$\circ$
Get credit for <i>reusing</i> other people's data	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

Extremely important
0
0
0
$\bigcirc$

* 24. How important would it be for you to know the following information about <b>your</b> data?  Please select one option for each row. <u>Definitions</u> of survey terms							
		Extremely unimportant	Unimportant	Neither important or unimportant	Important	Extremely important	
	The number of citations your data have received		$\circ$		$\circ$		
	The number of times your data have been downloaded	$\bigcirc$	$\bigcirc$		$\bigcirc$		
	The number of times your data have been viewed	0			$\circ$		
	Information about where your data were used (e.g., in which country, at which institution)		$\bigcirc$	$\circ$	$\bigcirc$	$\bigcirc$	
	Descriptions or a narrative providing details about how your data were used	0	$\bigcirc$		$\circ$		
	Information about who has used your data		$\bigcirc$		$\bigcirc$		
	If your data have received recognition outside the scholarly system, e.g. in newspapers		$\circ$	0	0	0	

e nearly at the end of the surve	. Below are some ques	tions to help us context	ıalize your
rs.			
. How many years of professional	experience do you have	in your field?	
se select one answer.			
0-5			
6-15			
16-30			
31+			

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* 26. With	which disciplina	ary domain do	you most id	entify ?		
	ect one disciplii					
If desired also	ease add keywords	to further describ	ne vour discipli	nany evportice h	elow	
ii desired, pie	ease aud keywords	to further describ	Je your discipili	nary expertise b	eiow.	

. What type of organization do you w	ork for?	
se select one answer.	OIK IOI :	
University or college	Government agency	
Research institution	Corporate	
Other (please specify in box below)		

rt 3: Demographics			
* 29. In what country do you	currently work?		

* 30. How d	o you identify y	our gender:			
	ct one answer.				
Woman	1				
Man					
Non-bir	nary				
Prefer r	not to say				
Option	not listed				

this section vou ca	n add final comments	s and indicate if v	ou would like to be co	ntacted in the
ure.				
Final comments: Do	you have anything els	se that vou would li	ike to share with us?	
	ments in the box below.			

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Yes No  I would like to be informed about the results of this survey.  I would be willing to participate in	Part 4: Conclusion		
I would like to be informed about the results of this survey.  I would be willing to participate in	2. May we contact you in the futur Please select one answer per row.	e?	
results of this survey.  I would be willing to participate in		Yes	No
I would be willing to participate in future research in this area.	I would like to be informed about the results of this survey.	0	0
	I would be willing to participate in future research in this area.		

nail addresses will on be stored in a location		eu purposes. You	ır emaii address

You have reached the end of the survey.

Thank you very much for your time and input.

Please click "Done" to complete the survey.

The Meaningful Data Counts Team

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