

Researchers say: show me the citations... and I'll show you the data

STM Research Data workshop

Grace Baynes, Springer Nature

2 December 2019

ADVANCING
DISCOVERY

Why data matters and what publishers can do to support

>50%

Researchers cannot reproduce their own work

Up to 50%

Citation AND productivity advantage associated with making data open

€10 billion a year

Estimated cost to the EU of not making data FAIR

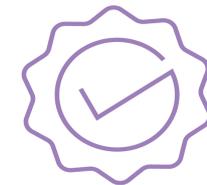


€30 billion 50,000 jobs

Potential impacts by 2030 of the European Open Science Cloud, including the Copernicus earth observation data

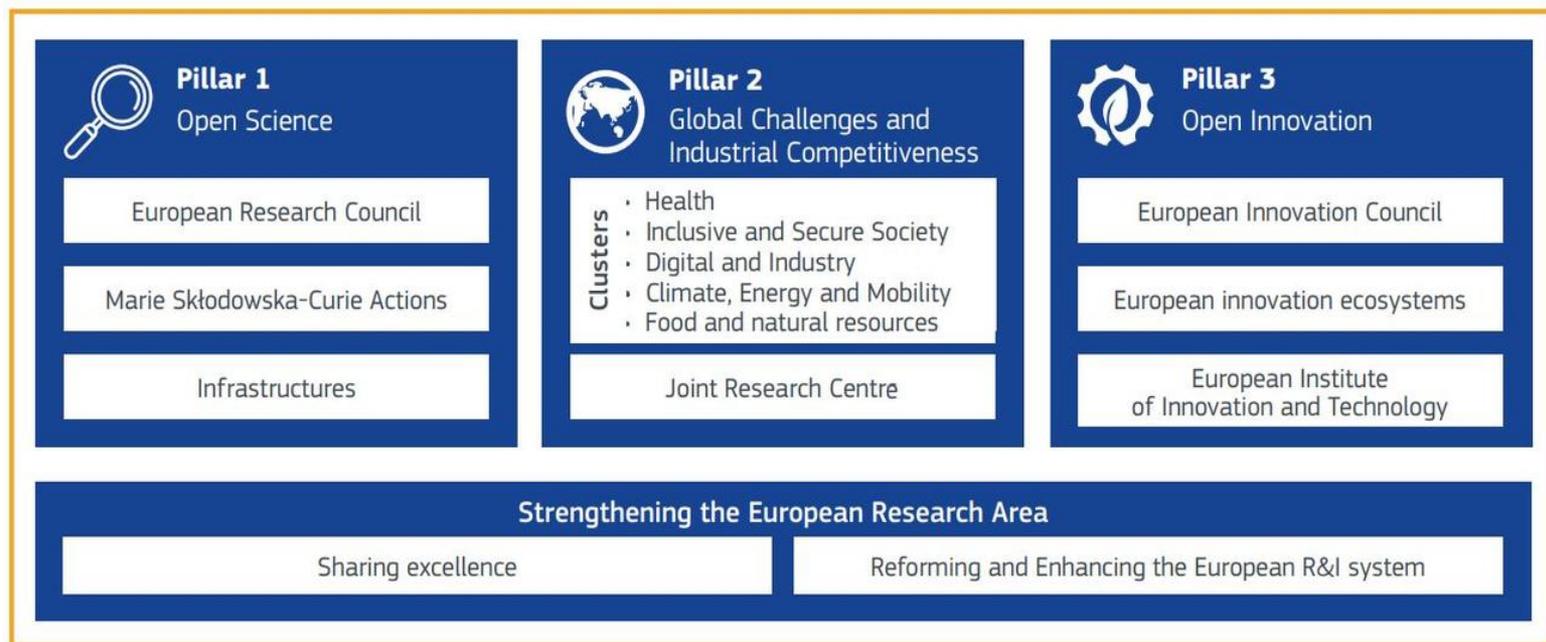


1.
Clear
policy



2.
Better
credit

*“Open Science will become the modus operandi of Horizon Europe. It will go beyond the open access policy of Horizon 2020 and require open access to publications, **data**, and to **research data management plans**.”*



Examples: Funders who require data sharing



European Commission

Cancer Research UK

European Research Council

Children's Investment Fund Foundation (UK)
Department for International Development (UK)

Austrian Science Fund

Academy of Finland

Marie Curie Cancer Care (UK)

Business Finland

Nuffield Foundation (UK)

German Research Foundation

National Institutes of Health (NIH)

Higher Education Authority Ireland

National Science Foundation (NSF)

Science Foundation Ireland

UKRI/Research Councils UK

Cariplo Foundation (Italy)

Royal Society

Wellcome

Luxembourg National Research Fund

British Heart Foundation

Netherlands Organization for Scientific Research

Swedish Research Council

CGIAR

Swiss National Science Foundation

World Bank

Arcadia Fund (UK)

Source: Springer Nature analysis 2018; n = 393

Are mandates a motivator for sharing data?



State of Open Data Report: What circumstances would motivate you to share your data? (n=1,359) (multiple select)		
Answer	%	Count
Increased impact and visibility of my research	62%	841
Public benefit	59%	802
Transparency and re-use	48%	652
Getting proper credit for sharing data	46%	621
Journal/publisher requirement	44%	599
Trust the person requesting my data	41%	561
Institution/organisation requirement	38%	522
It was made easy and simple to do so	36%	485
Funder requirement	33%	453
Freedom of information request	26%	352
Other (please specify)	5%	63
I would never share my data	1%	17
Total	100%	1,359

Publisher policies

Impact of journal policies on data sharing is higher than both funder and institutional requirements



Policy Types

Type 1

Data sharing and data citation is encouraged but not required

Type 2

Data sharing and evidence of data sharing encouraged

Type 3

Data sharing encouraged and statements of data availability required

Type 4

Data sharing, evidence of data sharing and peer review of data required

- Springer Nature launched a data policy standardisation initiative in 2016¹
- More than 1,500 (~65%) Springer Nature journals have adopted a standard research data policy
- Approach is practical and pragmatic, enabling all journals to adopt a policy even if they are new to data sharing
- All policies support community specific policies, mandates and repositories
- All policies and journals promote data citation in Information for authors
- Similar initiatives since introduced at Elsevier², Wiley³, Taylor & Francis⁴
- Cochairing a data policy standardisation working group of the Research Data Alliance⁵

1. *Standardising and harmonising research data policy in scholarly publishing*

Iain Hrynaszkiewicz, Aliaksandr Birukou, Mathias Astell, Sowmya Swaminathan, Amye Kenall, Varsha Khodiyar
International Journal of Digital Curation; doi: <https://doi.org/10.2218/ijdc.v12i1.531>

2. <https://www.elsevier.com/authors/author-services/research-data/data-guidelines>

3. <https://authorservices.wiley.com/author-resources/Journal-Authors/licensing-open-access/open-access/data-sharing.html>

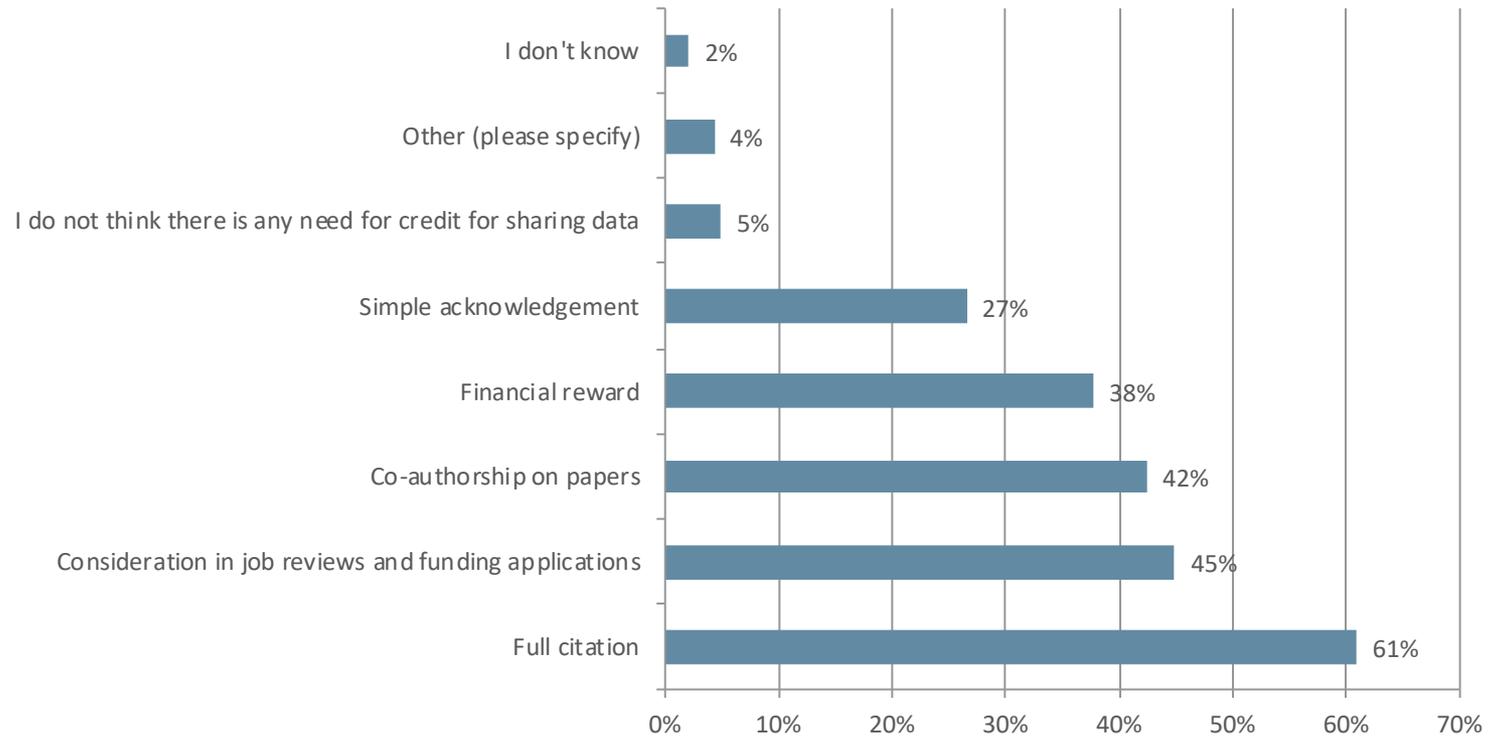
4. <https://authorservices.taylorandfrancis.com/understanding-our-data-sharing-policies/>

5. <https://www.rd-alliance.org/groups/data-policy-standardisation-and-implementation>

What would motivate researchers to share?



2. Better credit



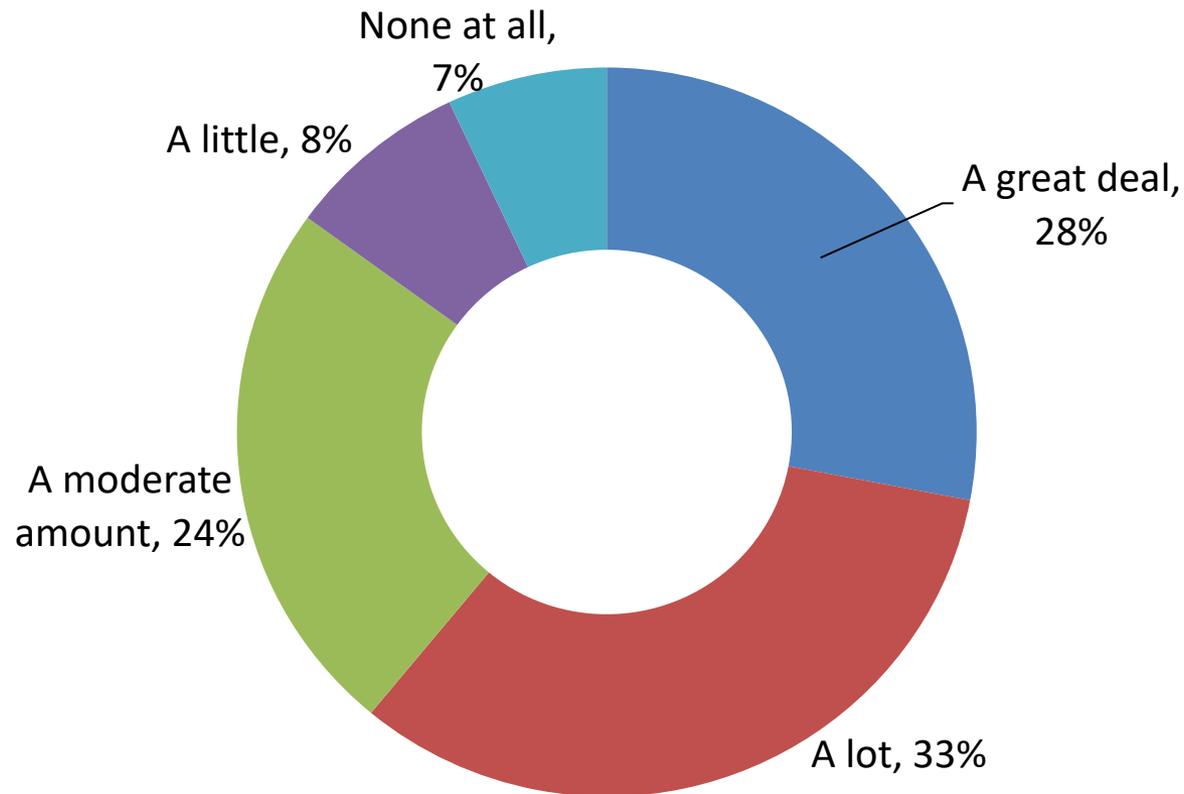
Q2.5 - What credit mechanisms do you think would encourage more researchers to share data?

Total respondents: 7929

From the State of Open Data 2019. <https://doi.org/10.6084/m9.figshare.9980783>

Citations are a motivator

Q2.6 - How much would getting data citations motivate you to make your data openly available to others?



2.
Better
credit



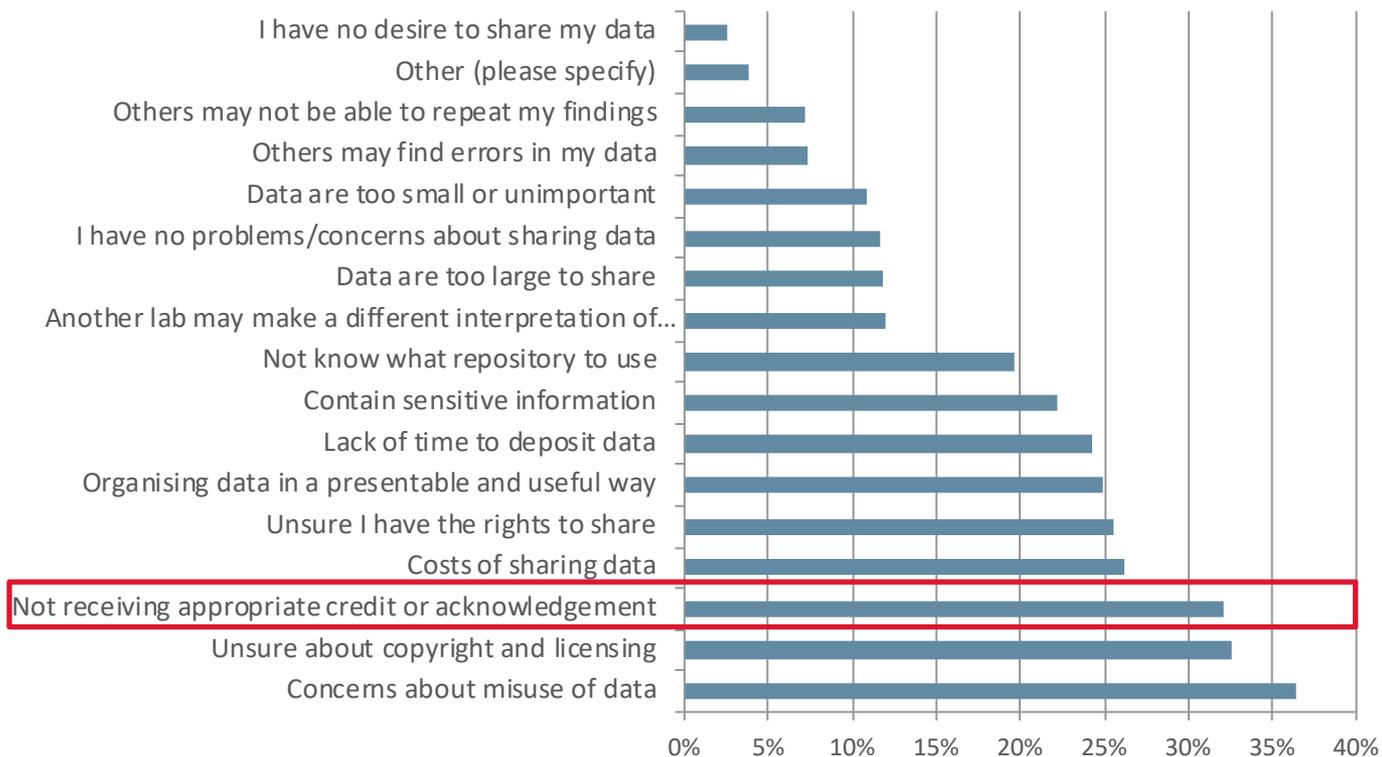
Total respondents: 7876

From the State of Open Data 2019. <https://doi.org/10.6084/m9.figshare.9980783>

What's worrying researchers about sharing?



2. Better credit



Q. What problems/concerns do you have with sharing datasets? Total respondents: 5809

From the State of Open Data 2019. <https://doi.org/10.6084/m9.figshare.9980783>



Collaborations and initiatives to promote credit and recognition for data sharing

1. Data citation

1. Journal policies promote citation of datasets in reference lists and publishers are collaborating to implement better ways to measure and track reuse of data through citations

2. More recognition of data sharing in funding and promotion decisions

1. Datasets and software as well as articles are recognised by, for example, US National Science Foundation

3. Data publishing options in peer-reviewed journals

1. Data journals, such as *Scientific Data*, provide a means to gain publication credit specifically for publishing datasets

SCIENTIFIC DATA 

Researchers need support: *Looking to publishers to help*



5.
Training &
education

Who is best placed
to support data
management?



57%

peers



52%

publishers



42%

libraries

Copyright
and
licensing
of data?

Which
repository
to use?

65%

of researchers feel
there is not sufficient
training, support and
advice in regard to
data management

How to
prepare
a DMP?

How to
share
sensitive
data?

How to
comply
with journal
and funder
policies?

How to
guard
against
misuse
of data?