State of Open Data

Report posted on 2023-11-14, 12:04 authored by Digital Science, Mark Hahnel, Graham Smith, henning schoenenberger, Niki Scaplehorn, Laura Day. Digital Science, Figshare and Springer Nature share The State of Open Data 2023.

Link:

https://digitalscience.figshare.com/articles/report/The_State_of_Open_Data_2023/24428194https://digitalscience.figshare.com/articles/report/The_State_of_Open_Data_2023/24428194

View Points:

- The report displays **surveys** that incorporate actual data about several factors, such as language, profession, geography, and institution details. According to the publication, **75% of researchers report not having received help in sharing their data**. This indicates that there is a need for broader support in organizing and sharing research data, with a number of possible channels for doing so.

- It's **surprising that open data awareness is unaffected by professional stage**. The results imply that people with **different career lengths have comparable difficulties and have similar reasons for sharing data**. Diverse viewpoints are indicated by the variation in replies from various fields and geographical areas.

- Researchers have been concerned about their **lack of recognition for sharing data**. Scholars in all but mathematics believe they are underappreciated for sharing their data.

- The report also addresses the **quality of publicly available datasets, stressing the significance of FAIR** (findability, accessibility, interoperability, and reusability). Scholars like that their data is accessible to the public through open repositories, but they are concerned about other people reinterpreting their work.

- Publishers like **Springer Nature** try to help by enforcing Data Availability Statements, integrating rules, and increasing the accessibility of open science across disciplines. The goal is to **enable authors to share their data easily.**

- Data sharing issues that are most frequently brought up involve worries regarding private information or research participant rights; a key concern was that, it varies depending on the region and research subject, is **data misuse**. There is also **uncertainty about copyright and data licensing**.

- Respondents from **Germany and India exhibit greater levels of support**, while those from China and Japan exhibit greater neutrality. Ethiopia is the country with the highest percentage of respondents who support open data, followed by Germany, the United Kingdom, India, and Ethiopia. With the **lowest percentage of strong support is Japan**.

- The report also highlights differences in the level of awareness about data management plans, with **Ethiopia demonstrating the highest level of awareness** and **Japan with the lowest awareness**. The **fact that not all nations are aware of data management plans could be a source of bias for this research, since those that are vote in favour of them while the others do not.**

- It's **interesting to note that although researchers are aware of AI, they don't often use it for data-related tasks**, such as using ChatGPT or similar applications. According to the study, the most typical response to that query was, **"I know about these tools, but I haven't given them much thought."**

- The article emphasises that AI-driven solutions can help with the drafting of metadata, while human supervision is still essential, AI provides writers and journals with useful assistance that raises the standard for data exchange.

- The article highlights the necessity of **AI having a beneficial effect on open science** and tells the **importance of honesty, openness, and cooperation in scientific pursuits**.

- **Overall, the paper underlines the difficulties and developments in data management strategies, signifies the knowledge gap, and stresses the need to standardize the process of exchanging data.**

PASSPORT FOR OPEN SCIENCE

Report *September 2022*: Passport for Open Science – A Practical Guide for PhD Students

Link:

https://www.ouvrirlascience.fr/passport-for-open-science-a-practical-guide-for-phd-students/

View Points:

- The article indicates the **advantages of open science**, how widely it is **accepted and supported globally**, and illustrates the part that **researchers—including doctorate candidates—play in pushing this movement**.
- It suggests that the concept of open science indicate the **freedom of researchers to obtain scientific materials, including papers and publications, without any financial barriers** or payment requirements.
- The document provides **instructions on how to manage data** while following to ethical guidelines and funding agency criteria. **Awareness of tools such as DMP OPIDoR,** shows that they aid in the development of efficient plans that specify the procedures for gathering, storing, and exchanging data during a research project.
- It reveals that **precise technique and thorough documentation are necessary for repeatable research** in order to **guarantee traceability and openness** all the way through the scientific process.
- It was **surprising to realize that Publishers who guarantee speedy publication but compromise on quality should be avoided**. Predatory publishers could demand money and damage reputation in the scientific community. The article provided information on how to evaluate a journal before submitting, using techniques in websites like **"Think. Check. Submit."**
- A fact that it is **the authors' rights to retain their work** until they sign a publishing contract and the **French government's support of open access to publicly financed research** with short embargo periods were highlighted in the context of **intellectual property rights**.
- A **notable example is the work of Ségolène V**., a young doctorate in archaeology whose research used **soot from limestone concretions to examine human habitation in caves**. He invented fuliginochronology—a technique that creates accurate, yearly-resolution records of cave occupation—during his thesis research. **His thesis's open access publication made previously unpublished material accessible and raised awareness of his methodology.** By permanently archiving his work, he can show how influential his efforts were before.
- The effective data management was also emphasized in this article, telling the **importance of FAIR principles**, as covered in the first article on the state of open data.
- The article discusses **peer review**, which, despite its difficulties, guarantees publishing trustworthiness. Within some fields, pre-registration is a way to reduce publication bias and **highlight the importance of the two-stage peer review process in the research process.**
- **I realized from reading the article that we could freely share our thesis work by submitting it to peer-reviewed online journals, publishing it in easily accessible publications, taking part in online forums, and sharing our data and code. Adopt best practices, make use of trustworthy formats, keep up with developments in open research, and ask for help when needed.**