How can journal data sharing policies be more prevalent and effective?

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Publishers/Journals and data sharing

- An increasing number of publishers and journals are introducing data sharing policies e.g. PLOS, Nature, Elsevier, Wiley
- Publishers and journals are at forefront of data sharing policy initiatives e.g. COPDESS, TOP Guidelines, JDAP

**Data Availability**

The following policy applies to all PLOS journals, unless otherwise noted.

PLOS journals require authors to make all data underlying the findings described in their manuscript fully available without restriction, with rare exception.

When submitting a manuscript online, authors must provide a Data Availability Statement describing compliance with PLOS's policy. If the article is accepted for publication, the data availability statement will be published as part of the final article.

Refusal to share data and related metadata and methods in accordance with this policy will be grounds for rejection. PLOS journal
Common approaches

Data availability statements provide a statement about where data supporting the results reported in a published article can be found. Required by many journals/publishers (PLOS, BMJ, Nature, BMC, new ICMJE policy) and some funding agencies (e.g. EPSRC in the UK). Common forms:

- The datasets generated during and/or analysed during the current study are available in the [NAME] repository, [PERSISTENT WEB LINK TO DATASETS].
- The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.
- All data generated or analysed during this study are included in this published article (and its supplementary information files).

Source: http://www.springernature.com/gp/group/data-policy/data-availability-statements
Data on (reasonable) request – issues

• Data availability declines over time

• The most effective journal data polices mandate data sharing in a repository and a data availability statement with a link to the data

• Data availability from authors on request has been found wanting in several studies/case studies

• Sharing of clinical research data usually happens between individuals and research groups (non-publicly)

1. Vines et al. (2013) Current Biology. DOI: http://dx.doi.org/10.1016/j.cub.2013.11.014

Slide credit: Iain Hynaszkiewicz, Springer Nature
Policy challenges

Wide variance between journals on:

• Existence of data policy: the higher the Impact Factor of the journal the more likely they are to have a data availability policy and to enforce it (1)
• Data policy aspects: content, discoverability, ease of interpretation, infrastructure providers, support for compliance (2)
• Most data sharing policies do not provide specific guidance on the practices that ensure data is maximally available and reusable (3)

(3) Vasilevsy NA, Minnier J, Haendel MA, Champieux RE. (2017) Reproducible and reusable research: are journal data sharing policies meeting the mark? PeerJ 5:e3208 https://doi.org/10.7717/peerj.3208
Effects

• Can be difficult for journal editors to develop and support a data policy
• Difficult for researchers in understanding and complying with data policies
• Challenges for infrastructure providers and research support staff to assist data policy compliance
• Lack of clarity on who is responsible for various aspects of data management
• Lack of clarity (consensus) on what constitutes best practice
Policy standardisation

- There is clear benefit in a more standardised approach (1).
- Greater standardisation could also facilitate the construction of a register of data policies, similar to the SHERPA registers for funder and publisher policies on open access (1).
- Springer Nature research data policy types as standardisation example: more than 1,000 (~45%) Springer Nature journals have adopted a standard policy (2).

(2) Springer Nature Research Data Policy Types
https://www.springernature.com/de/authors/research-data-policy/data-policy-types/12327096
Community & stakeholder engagement via RDA

- **RDA Data Policy Standardisation and Implementation Interest Group**
- **Co-chairs:** Iain Hrynaszkiewicz (Springer Nature), Natasha Simons (ANDS), Simon Goudie (Wiley), Azhar Hussain (Jisc)
- **Group activities:** are building on and are informed by research carried out by Jisc, ongoing activities of ANDS and work of Springer Nature and Wiley on data policy
- **Activities:** RDA plenary discussions, community calls to identify policy components etc. More to come!

Roundtables: domain focused

- Publishers
- Editors
- Data facility providers
- Domain experts
- Academy representatives
- Researchers

Social sciences

ICPSR

Health and medical

ANDS

AMWA

(ATHMEN)
Roundtables

Read the ANDS Guide
Research data for journal editors

• ANDS website
  • Social science data and journals
  • Health and medical data hub
• Work individually with Editors to develop/enhance data policies
Institutional Engagement

• Become a recommended location for data
• Links between data and journal articles (Scholix initiative)
• RDA Group on Data Policy Standardisation and Implementation
• Future events
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