FOSTER
Course for Doctoral Students

RESEARCH DATA MANAGEMENT AND OPEN DATA

23th July 2015, Social Science Data Archives, Faculty of Social Sciences, University of Ljubljana

ECPR Summer School 2015
RESEARCH DATA MANAGEMENT PLANNING

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Research Data Management Planning

1. What does Research Data Management Planning involve?
2. What’s the benefit?
3. What do funders expect?
4. What do social science disciplines/journals expect?
What does Research Data Management Planning involve?
Defining “Data”

![Bar chart showing word count for different institutions.](chart.png)

- School of Data: 11
- Edge Hill: 19
- University of Nottingham: 21
- University of the Arts: 22
- Oxford Brooks: 29
- University of Liverpool: 49
- UCL: 74
- University of Lancaster: 104
- University of Melbourne: 204
Responsibility for RDM

• Primarily with the researcher
• But within a wider network of responsibility and support
  • Project based
  • Institution
  • Funder
  • Discipline
What is a Data Management Plan?

• The basis of effective Research Data Management is planning.
Data Management Plan content: Consent

• Obtaining informed consent from research participants, and in a way that doesn’t unnecessarily prevent data re-use

“I shall assume that your silence gives consent”
Data Management Plan content: Ethics

• resolving the tension between protecting participants and being able to do research
Data Management Plan content: Anonymisation

- strategies that allow us to extract value from the data while protecting, where necessary, the identity of participants
Data Management Plan content:
Documentation/Metadata

• making data discoverable and comprehensible to others
  • and if you collected the data, your future self
Data Management Plan content: Intellectual Property

- clarifying ownership of data and conditions under which data can be used or re-used.
Data Management Plan content: Size and format
Data Management Plan content: Storage

• protecting data from accidental or malicious damage or loss
Data Management Plan content: Long-term preservation and re-use

• planning for long-term preservation.
  • where will the data go?
  • under what conditions can it be re-used.
What’s the benefit of Research Data Management Planning?
Benefits of Data Management Plans

- Route map to research
- Focus resources
- Allocate roles and responsibilities
- Clarify data sharing requirements
- Identify potential data sharing problems
What do funders expect in Research Data Management Planning?
Please indicate if any of the major SSH research funders operating in your country recommend, require, and/or enforce the following measures to promote data sharing.”

- Not applicable: 19 countries
- Recommend: 9 countries
- Require: 6 countries
- Enforce: 3 countries

IFDO survey: funder actions on Data Management Plans

Enforce
- Luxembourg, UK, USA

Require
- Finland, Germany, India, Italy, Sweden, USA

Recommend
- Australia, Canada, Finland, Germany, Italy, Namibia, Netherlands, USA, Sierra Leone.

Not applicable
- China, Czech Republic, Denmark, Estonia, Hungary, India, Japan, Latvia, New Zealand, Norway, Philippines, Romania, Russia, Slovak Republic, Slovenia, Spain, Switzerland, Taiwan, Uruguay

What do social science disciplines/journals expect in Research Data Management Planning?
Data requirements: Journals and disciplines

Recommendation 6
As a condition of publication, scientific journals should enforce a requirement that the data on which the argument of the article depends should be accessible, assessable, usable and traceable through information in the article. This should be in line with the practical limits for that field of research. The article should indicate when and under what conditions the data will be available for others to access.

Effective exchange of ideas, expertise and people between the public and private sectors is key to delivering value from research. The economic benefit and public interest in research should influence how and when data, information and knowledge from publicly or privately funded research are made widely available.

The Royal Society (2012) Science as an Open Enterprise
Disciplines: Economics

The American Economic Review: Data Availability Policy

It is the policy of the American Economic Review to publish papers only if the data used in the analysis are clearly and precisely documented and are readily available to any researcher for purposes of replication. Authors of accepted papers that contain empirical work, simulations, or experimental work must provide to the Review, prior to publication, the data, programs, and other details of the computations sufficient to permit replication. These will be posted on the AER Web site. The Editor should be notified at the time of submission if the data used in a paper are proprietary or if, for some other reason, the requirements above cannot be met.

https://www.aeaweb.org/aer/data.php
Disciplines: Psychology

Data Sharing: Principles and Considerations for Policy Development

Data Sharing Working Group*
American Psychological Association
June 2015

The American Psychological Association's Board of Scientific Affairs (BSA) convened a working group in 2014-15 to explore the ethical and practical issues involved in sharing research data. In addition to members of BSA, the working group included representatives from other APA governance bodies: the Committee on Animal Research and Ethics, the Committee on Human Research, and the Publications and Communications Board.

6. It is the responsibility of the principal investigator to ensure that data are prepared in a form that is usable and interpretable by others (including provision of sufficient background information and annotations) and to deposit the data and accompanying material in a repository in accord with applicable data sharing policies. The secondary data user is responsible for protecting the identities and confidentiality of participants, conducting analyses consistent with best methodological practices, making informed and responsible interpretations of the data, and consulting with the principal investigator or original research team as needed to ensure that the user has proper understanding of the data.

Disciplines: Sociology

American Sociological Association Code of Ethics

13.05 Data Sharing

(a) Sociologists share data and pertinent documentation as a regular practice. Sociologists make their data available after completion of the project or its major publications, except where proprietary agreements with employers, contractors, or clients preclude such accessibility or when it is impossible to share data and protect the confidentiality of the data or the anonymity of research participants (e.g., raw field notes or detailed information from ethnographic interviews).

(b) Sociologists anticipate data sharing as an integral part of a research plan whenever data sharing is feasible.

(c) Sociologists share data in a form that is consonant with research participants’ interests and protect the confidentiality of the information they have been given. They maintain the confidentiality of data, whether legally required or not; remove personal identifiers before data are shared; and, if necessary, use other disclosure avoidance techniques.

(d) Sociologists who do not otherwise place data in public archives keep data available and retain documentation relating to the research for a reasonable period of time after publication or dissemination of results.

(e) Sociologists may ask persons who request their data for further analysis to bear the associated incremental costs, if necessary.

(f) Sociologists who use data from others for further analyses explicitly acknowledge the contribution of the initial researchers.

Disciplines: Political Science

Data Access and Research Transparency (DA-RT): A Joint Statement by Political Science Journal Editors

From the “Workshop on Data Access and Research Transparency (DA-RT) in Political Science.” Convened by the American Political Science Association (APSA) and hosted by the Inter-university Consortium for Political and Social Research (ICPSR), with support from Syracuse University’s Center for Qualitative and Multi-Method Inquiry (CQMI), and the University of Michigan’s Center for Political Studies (CPS).

September 18-19, 2014, Ann Arbor, MI

October 6, 2014

In this joint statement, journal editors commit their respective journals to the principles of data access and research transparency, and to implementing policies requiring authors to make as accessible as possible the empirical foundation and logic of inquiry of evidence-based research.

Data Access and Research Transparency (DA-RT) signatories (Oct 2014 - )

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<th>American Political Science Review</th>
<th>Journal of Peace Research</th>
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<td>American Journal of Political Science</td>
<td>European Union Politics</td>
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<td>Journal of Conflict Resolution</td>
<td>International Interactions</td>
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<td>Comparative Political Studies</td>
<td>British Journal of Political Science</td>
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<td>Political Analysis</td>
<td>Security Studies</td>
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<td>Research and Politics</td>
<td>Journal of Politics</td>
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<td>State Politics and Policy Quarterly</td>
<td>European Political Science</td>
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<td>Political Science Research and Methods</td>
<td>Party Politics</td>
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<tr>
<td>Quarterly Journal of Political Science</td>
<td>Conflict Management and Peace Science</td>
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<td>Political Behavior</td>
<td>Cooperation and Conflict</td>
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<td>International Security</td>
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<td>Journal of European Public Policy</td>
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<td>Italian Political Science Review</td>
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http://www.dartstatement.org/
Data Access and Research Transparency in the Quantitative Tradition

Arthur Lupia, *University of Michigan*
George Alter, *University of Michigan*

Planning and good data management practices can reduce burdens often associated with data sharing.

Many universities employ “data librarians” who offer assistance with data management planning.

Data archives, including the six partners in the Data Preservation Alliance for the Social Sciences (http://www.data-pass.org/), are also available to offer advice and assistance to a wide range of scholars.

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http://dx.doi.org/10.1017/S1049096513001728
Research Data Management Planning: Conclusions

• Data Management Plans map a way through research
• Funders are moving towards Data Management Plans as part of funding applications
• Journals require data sharing as a condition of publication.
• It is always better to seek permission rather than forgiveness

A Data Management Plan can help
Images

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Images


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