

CESSDA Work Plan 2020

WPT: Widening Activities and Journals Outreach 2020

Assessment of Journal Requirements and Needs Deliverable 1: Report

Document info

Dissemination Level	PU
Due Date of Deliverable	31/06/20
Actual Submission Date	07/07/20
Туре	Report
Approval Status	Approved by CESSDA Training Working Group Leader Irena Vipavc Brvar
Version	v3.0
Number of Pages	p.1 – p.23
DOI	10.5281/zenodo.5554436

The information in this document reflects only the author's views and CESSDA ERIC is not liable for any use that may be made of the information contained therein. The information in this document is provided "as is" without guarantee or warranty of any kind, express or implied, including but not limited to the fitness of the information for a particular purpose. The user thereof uses the information at his/ her sole risk and liability. This deliverable is licensed under a Creative Commons Attribution 4.0 International License.





Version history

Version	Date	Comment	Revised by
0.0	Jan-June 2020	Co-edited electronic document	All authors in list below
0.1	05.07.2020	Draft in template to all co-authors Serafeim Alvanides	
0.1.1	06.07.2020	Edits and comments to v0.1 ADP team	
0.1.2	06.07.2020	Edits and comments to v0.1	FORS team
0.1.3	06.07.2020	Edits and comments to v0.1	TARKI team
0.1.4	06.07.2020	Edits and comments to v0.1	CROSSDA team
1.0	07.07.2020	Submission to CESSDA	Serafeim Alvanides
1.0.1	1.0.1 08.07.2020 Feedback from CESSDA Martina Drascic		Martina Drascic
1.1	1.1 10.07.2020 Submission to CESSDA Serafeim Alvanides		Serafeim Alvanides
1.1.1	1.1.1 02.09.2020 Feedback from CESSDA Irena Vipavc Brvar		Irena Vipavc Brvar
1.1.2	07.09.2020	Comments to v1.1.1	All authors in list below
2.0	09.09.2020	Submission to CESSDA	Serafeim Alvanides
3.0	22.09.2022	Minor edits to wording	Serafeim Alvanides

Author List

Organisation	Name	Contact information
GESIS, Germany	Serafeim Alvanides	Serafeim.Alvanides@gesis.org
ADP, Slovenia	Janez Štebe	janez.stebe@fdv.uni-lj.si
FORS, Switzerland	Emilie Morgan De Paula	emilie.morgandepaula@unil.ch
FORS, Switzerland	Brian Kleiner	brian.kleiner@fors.unil.ch
TARKI, Hungary	Peter Hegedus	peter.hegedus@tarki.hu
CROSSDA (FFZG), Croatia	Marijana Glavica	mglavica@ffzg.hr
CROSSDA (FFZG), Croatia	Irena Kranjec	ikranjec@ffzg.hr

Peer-review

Organisation	Name	Contact information
CSDA, Czech Republic	Jindřich Krejčí	jindrich.krejci@soc.cas.cz





Contents

Executive Summary	4
Abbreviations and Acronyms	5
1. Background	6
2. Methodology	6
3. Secondary analysis: journal websites	7
3.1 Publisher policies	7
3.2 Principles and criteria	9
4. Primary analysis: interviews with editors	11
4.1 Current journal policy on data sharing/depositing/archiving	11
4.2 Perceptions on data sharing and archiving	12
4.3 Supporting the journals/editors in future policies	13
5. Conclusions and recommendations	14
Bibliography	15
Appendix A: model letter to editors	17
Appendix B: instrument for interviews	18
Appendix C: background information of participating journals	19
GESIS: IJSRM	19
GESIS: Politische Vierteljahresschrift	19
ADP: Socialno delo Journal	20
FORS: Revue suisse de science politique	20
CROSSDA: Društvena istraživanja	21
CROSSDA: Ljetopis socijalnog rada	22
CROSSDA: Revija za socijalnu politiku	22



Executive Summary

An increasing number of academic journals are requiring the deposit of the data used in publications, but many are not equipped for handling these or lack the resources for long-term preservation of data and documentation. *Journals Outreach* is a sub-task of the CESSDA Work Plan 2020 Task *Widening Activities and Journals Outreach*. The overall goal of *Journals Outreach* is to define and promote a formal collective position statement of CESSDA regarding archival services to journals. The specific objective of this deliverable is to provide a better understanding of journal practices, requirements, and needs regarding the accessibility of data used in scientific publications. To this effect, a combination of secondary analysis from the policies of 3 global publishing companies and primary data analysis from 7 interviews with journal editors was conducted and is presented here.

The major finding from the global publishers is that they already have in place policies in response to pressures for data openness and research replicability. The publishers' policies are in a continuous state of change, as they see this trend as a means of expanding their services by developing open data platforms and introducing niche journals that focus on specific aspects of the research cycle (e.g. research protocols, software sharing, data replicators etc.). In general, the global publishers are applying blanket policies from physical sciences to social sciences, without explicit consideration for the sensitivity of social science data (e.g. qualitative data, importance of metadata, contextual information on the studies). In addition, national and supranational policies on data protection, storage and sharing, such as the General Data Protection Regulation 2016/679 (GDPR) do not feature explicitly in their websites.

The majority of the editors interviewed are positively predisposed towards data sharing and replication and have already implemented or are in the process of revising/implementing policies in this direction. Although some of the journals are associated with larger publishers, most are published independently and as a result implement changes at a slower pace compared to the global publishers. However, the editors fully appreciate the complexities associated with the diversity of social science data and the additional demands such data impose on sharing and replicability. In addition, despite their willingness to develop policies, they lack the financial and technical resources to implement them at the journal/publisher level. The solution they see is implementing data sharing policies in collaboration with the national data service providers (DSPs) of CESSDA and most of them have already made significant steps towards this direction. In addition to the infrastructure, technical support and research data management (RDM) training, other advantages of national DSPs are highlighted: development of metadata specific to social science data and the understanding of concerns and regulations on data protection, storage and sharing at the national and European levels.

This report highlights an opportunity for national DSPs and CESSDA as a whole to learn from some of the policies implemented by the global publishing companies (innovation, simplicity



and clarity), with a focus on supporting the independent journals and national publishers to develop policies appropriate for the needs of social science research towards data sharing.

Abbreviations and Acronyms

СС	Creative Commons licenses
CC-0	Creative Commons - No rights reserved
СС-ВҮ	Creative Commons - Attribution alone
CESSDA	Consortium of European Social Science Data Archives
CESSDA DS	Data service of the Consortium of European Social Science Data Archives
DSPs	Data service providers
FAIR	Findability, Accessibility, Interoperability and Reusability
GDPR	General Data Protection Regulation
IJSRM	International Journal of Social Research Methodology
Journals Outreach	Sub-task of the Work Plan Task <i>CESSDA Widening Activities and Journals Outreach 2020</i>
openICPSR	Self-publishing repository of the Inter-university Consortium for Political and Social Research
OSF	Open Science Framework
PVS	Politische Vierteljahresschrift
QDR	Qualitative Data Repository
RDA	Research Data Alliance
RDM	Research Data Management
SP, SPs	Service Provider, Service Providers



1. Background

For greater transparency and replication of findings, an increasing number of academic journals are requiring the deposit of the data used in publications. However, many are not equipped for handling these requirements and do not have the proper skills for long-term preservation of data and documentation (Vasilevsky et al. 2017). The overall goal of *Journals Outreach* is to define and promote a formal collective position statement of CESSDA regarding archival services to journals. By way of this statement, *Journals Outreach* aims to inform and demonstrate to journals that they can, in addition to already recommended data services, rely on CESSDA service providers for the deposit and sharing of data and replication files used in publications, rather than try to establish repositories themselves.

The collective position statement will take into consideration the specific needs and requirements of journals in relation to the capacities and policies of CESSDA service providers. *Journals Outreach* focuses on European journals with an international appeal in social science disciplines and has the following objectives:

- Gain a better understanding of journal practices, requirements, and needs regarding timely and reader-friendly accessibility of data used in scientific publications.
- Assess CESSDA service provider capacities, policies, and services for responding to the needs of journals regarding medium/long term preservation of data and replication material.
- Study of policy and legal issues: explore models for how CESSDA could coordinate to offer services to journals.
- Craft and promote a CESSDA position statement that takes these into account, in order to offer relevant archival services to European journals.

The first objective of *Journals Outreach* has been achieved through an assessment of journals and publishers, consisting of secondary analysis from information publicly available on journal/publisher websites and primary analysis of interviews with editors from journals representing a range of social sciences. This document reports on the methodology used for the secondary and primary data collection, the major findings from these analyses and the steps forward in relation to the remaining three objectives and deliverables of *Journals Outreach*.

2. Methodology

Two methods were employed for achieving the objective of the first deliverable. First, an analysis of publicly available policies and current practices of publishers in relation to data related to journal article publications. The relevant websites of three global publishers (Elsevier, SAGE, Springer) were identified and critically analysed, in order to obtain an overall



picture of current policies and practices and, in some cases, future directions, of publishers and their journals. The material related to publishers and journals is discussed in Section 3.

Secondly, a selective number of journals from a range of social science disciplines were identified and their editors contacted and interviewed, using a predefined instrument for semi-structured interviews. The instrument was designed by the *Journals Outreach* team, consisted of a number of open-ended questions and piloted with colleagues at GESIS for consistency. Prior to the interview, an invitation letter (Appendix A) was emailed to the editors with information about *Journals Outreach*, consent for recording the interview and an indicative list of interview questions around three major aspects:

- 1. Current journal policy on data sharing/depositing/archiving
- 2. Perceptions on data sharing/depositing/archiving
- 3. Supporting the journals/editors in future policies

Following acceptance of the invitation, a calendar invite was emailed with the exact details (date, time, media) of the telephone or teleconference interview. Each interview lasted between 45 and 60 minutes and the complete interview instrument is presented in Appendix B. Upon completion of each interview, a summary was compiled in English, approved by the interviewee if necessary, before being shared for further analysis with the authors of this report. The participating journals with background information on journal aims/focus and interview details are listed in Appendix C. Originally, six journals were proposed for interviews, but following the interview of one of the Editors for the *International Journal of Social Research Methodology (IJSRM)*, it was decided that seven interviews should be conducted in total. The interviews were conducted in late May to early June 2020, with the exception of IJSRM conducted in mid-May 2020 and also served as a way for piloting the instrument externally.

3. Secondary analysis: journal websites

In order to meet the first objective of *Journals Outreach*, the secondary analysis consisted of synthesising available information from the websites of three global publishers: Elsevier¹, SAGE², SpringerNature³.

3.1 Publisher policies

The global publishing companies list their own policies and advice for authors that deviate from the general framework developed recently (Hrynaszkiewicz et al. 2020), which is expected to influence further alignment of publisher policies globally. For example, Elsevier's guidance for authors claims that the "raw data can still be published in a repository of your

³ SpringerNature webpage: <u>https://www.springernature.com/gp/authors/research-data-policy</u> [7 September 2020]

¹ Elsevier webpage: <u>https://www.elsevier.com/authors/author-resources/research-data</u> [7 September 2020]

² SAGE webpage: <u>https://us.sagepub.com/en-us/nam/research-data-sharing-policies</u> [7 September 2020]



choice", but when describing the process in detail, they explicitly make reference to the Mendeley Data as an example of the repository authors may choose. Journal instructions for authors occasionally offer lists of discipline-specific repositories, but social sciences are generally omitted and even among interdisciplinary repositories there is no mention of national social science data services. Such omissions are an opportunity for *Journals Outreach* to develop specific wording offering information about CESSDA services and national data providers.

An interesting feature by Elsevier is that they invite authors to link data to the published article via the dedicated ScienceDirect service in addition to the data citation, and encourage submitting a brief data article to the Journal Data in Brief⁴. This is one of the journals in the relatively recent "suite" Research Elements⁵ consisting of four more journals: MethodsX HardwareX, SoftwareX, Software Impacts. As the overall suite and each of the journal titles suggests, the (brief) articles published here "complement full research papers and describe output that has come about as a result of following the research cycle – this includes things like data, methods and protocols, software, code, hardware and more". In effect, Elsevier through an appealing and accessible design of the relevant websites and author support tools, has created a situation where the authors are guided (although not obliged directly) to use the company's own suit of tools and services for depositing data, associated software and even research protocols and impacts from "software that has been used to address a research challenge." Admittedly, most of the Research Elements journals are more relevant to the physical sciences, but Elsevier is quite discipline agnostic, stating explicitly that the journals are "multidisciplinary [sic] and accept articles from any subject area". More specifically, the Data in Brief Journal "welcomes submissions that describe data from all research areas", as long as they constitute "a set of information that are acquired/collected with a scientific method and have value to the research community".

The SAGE publisher policy is aligned with the general framework mentioned, stating explicitly that preferably data "should be submitted to discipline-specific, community-recognised repositories where possible". FAIRsharing is referred to as a registry where to search, along with the Registry of Research Data Repositories⁶. As a general repository, the Figshare partnership is described in detail. CC-BY and CC-0 or equivalent licences are recommended, and authors own the responsibility to clear the copyright permissions. Under the heading of Additional Data Sharing Principles, the Open Science Framework (OSF) Open Research Badges can be "added to articles to indicate to readers if the paper has (1) open data (2) open materials and (3) if the study was pre registered." The badges are awarded to articles meeting the OSF criteria and are visible on the article and table of contents, while being used by some SAGE journals to demonstrate compliance with Open Data policies. In addition to the badges, individual SAGE journals also endorse some

⁴ Data in Brief webpage: <u>https://support.dataverse.harvard.edu</u> [7 September 2020]

⁵ Research Elements webpage: <u>https://www.elsevier.com/authors/author-resources/research-elements-journals</u> [7 September 2020]

⁶ Registry of Data Repositories webpage: <u>https://www.re3data.org</u> [7 September 2020]



or all of the following policies in their Submission Guidelines: Data replication, PreRegistration and enrolling to a trial with Code Ocean (cloud-based computational reproducibility platform for storing data and code). Finally, the general guidelines also describe the multitier approach, with some journals supporting and encouraging data sharing, others expecting data sharing and requiring as a minimum the data availability statement, with data sharing exceptions allowed for ethical or legal reasons.

SpringerNature adds the fourth level ("Policy Type 4"), where peer review of data is also required for some of their journals. They enlist the social science category of data repository, where openICPSR, QDR and UK Data Service are mentioned among others. They offer an option for suggesting additional repositories, compatible with their "data deposition policies" by completing a repository questionnaire with 31 Questions⁷. The questionnaire concerns the profile and criteria of the Scientific Data journal fulfilment, and at the end requires the DataCite landing page to be enabled. Elaborate description of each policy level is provided, and FAQs, together with information on the support team and helpdesk is available. SpringerNature, while still aligned with the common journals policy framework, is also the most elaborated and detailed. It could be considered as an example of good practice for other publishers and journals. It could also serve as a test for the CESSDA DS regarding fulfilment of criteria and demands, as it could be expected that if a repository passes the SpringerNature policy requirement, it would suit most others that are aligned with the general policy framework. In short, the criteria listed trusted data repositories towards a repository recommendation at SpringerNature are:

- Be broadly supported and recognized within their scientific community
- Ensure long-term persistence and preservation of datasets in their published form
- Provide expert curation
- Implement relevant, community-endorsed reporting requirements
- Allow anonymous referees to access data before public release
- Provide stable identifiers for submitted datasets
- Allow public access to data without unnecessary restrictions

These are general criteria and not absolute standards: recommended repositories need not meet every criterion. In fact, SpringerNature "encourage authors to review and follow appropriate reporting standards for their field or data-type"⁸.

3.2 Principles and criteria

For the secondary analysis of these websites, principles from McQuilton et al. (2020) on the identification and selection of data repositories recommended to researchers when they are preparing to publish the data underlying their findings were applied. Some of the *Journals*

⁷ *Scientific Data* and SpringerNature questionnaire for inclusion of repository to trusted repositories webpage: <u>https://www.nature.com/documents/scidata-repository-questionnaire.docx</u> [7 September 2020]

⁸ *Scientific Data* and SpringerNature criteria for inclusion of repository to trusted repositories webpage: <u>https://www.nature.com/sdata/policies/data-policies#repo-criteria</u> [7 September 2020]



Outreach objectives closely relate with the discussed criteria for Data Repository selection. This is the work that includes contribution of some past and present projects and working groups, where many of the major global publishers collaborate. So, it can be considered as the state-of-the-art position for that particular group, for the purposes of this mapping exercise. Among the objectives that correspond directly, is the aim to "inform data repository developers and managers of the features believed to be important by journals and publishers". It can be further expected that the agreed criteria will, as explicitly stated among the goals, influence the guidance for authors in the journals' instructions, which are the main stakeholders (scientific community, professional societies) besides journals' representatives aims to fulfil their needs. In addition, our criteria closely correspond to Hrynaszkiewicz et al. (2020), who have proposed a number of policy types that can be adopted by publishers/journals to promote data sharing in a way that encourages good practice, while meeting the perceived needs of authors/researchers. They also provided implementation guidelines for standard research data policies for publishers/journals together with policy texts to be implemented by journals in their Information for Authors. Amongst their proposed journal policies is the recommendation to make explicit reference to specific (recommended, trusted or supported) repositories. Following up this recommendation, it is important to establish minimum criteria that CESSDA Data Services should fulfil in order to be listed in similar lists for individual journals or major publishers.

The criteria implemented here are split into *Essential* and *Desirable*. Among the essential criteria are:

- Repository Status: ready
- Data Access Conditions: clear
- Licence: clear
- Data Deposition Conditions: clear

In assessing a CESSDA SP's fulfilment of those conditions further clarification may be needed. Some problematic points related to further alignment of repository services and specific expectations from publishers need to be considered. For example, Data Deposition Conditions may specify geographic boundaries, funder, type of organisations and similar, which can limit the variety of data origin when related to publication in specific journals. In addition, journal articles tend to be written by authors from different countries, where both the geographic boundaries of data and contributors can be different from the national service provider. This possible limitation can be explored further regarding current CESSDA SPs collection policy conditions. Related to this is a question of varied data formats and disciplinary background, which are also typically defined in the collection policy of CESSDA SPs. Similar discussions can be raised regarding licence alignments, where Creative Commons (CC) licences are not used in the majority of SPs, nor are the existing licences mapped to any other standard vocabulary, which would be a desirable property of a repository from the publisher's standpoint.





Most if not all of other *Essential* and *Desirable* characteristics are currently fulfilled by CESSDA SPs. In particular, the *Essential* criteria: Clear Data Reuse and Access Conditions, Existing Support, and the *Desirable* criteria Community Standards Data and Metadata formats, Data Citation, Curation, Versioning, Sustainability, Funding, Certification, Data contact information. One element that needs further elaboration is the Data Access Pre-Publication Review service, as some journals require access to confidential data for peer review and increasingly for double blind peer review. Data Usage information service perhaps also needs to be improved among some CESSDA SPs. Therefore, further information would need to be obtained about the variety of types of data that particular journals expect among the contributions. One final recommendation is to get the repository listed and information maintained in the FAIRsharing⁹ registry (McQuilton et al., 2020). This approach is gaining popularity among journals, enabling matching with the repositories that fit the requirements. As a result, *Journals Outreach* will provide advice on a strategy about how CESSDA SPs can get listed in FAIRsharing as well as in other popular repository catalogues (e.g. those related to data citation tracking).

4. Primary analysis: interviews with editors

The second layer of evidence for meeting the first objective of *Journals Outreach* consisted of 7 semi-structured interviews of editors for the following journals, publishing within different contexts:

- International Journal of Social Research Methodology (IJSRM)
- Politische Vierteljahresschrift (PVS) German Political Science Quarterly
- Socialno delo Journal Journal of Social Work
- Revue suisse de science politique Swiss Political Science Review
- Društvena istraživanja Journal for General Social Issues
- Ljetopis socijalnog rada Annual of Social Work
- Revija za socijalnu politiku Sociological review

Background information for these journals and links to their websites is provided in Appendix C. Here, we focus on synthesising the evidence and editors' responses in relation to the three dimensions concerned with the first objective of *Journals Outreach*.

4.1 Current journal policy on data sharing/depositing/archiving

With the exception of IJSRM, journals encourage data sharing and archiving of research data to various degrees. IJSRM is a special case here, because the Editors have expressed their views in public on why data sharing is not relevant to a journal focusing on methodology (Castellani & Edwards 2019). The other six journals recommend and encourage to various degrees, but do not enforce or oblige authors to make available the data used in their

⁹ FAIRsharing policies: A catalogue of data preservation, management and sharing policies from international funding agencies, regulators and journals webpage: <u>https://fairsharing.org/policies</u> [7 September 2020]



articles. Three of the journals are published by global publishing companies and operate to a certain extent within the policies of their publishers Springer, Wiley (via *Open Research Badges*, as discussed above) and Taylor & Francis (in the case of IJSRM), although they pointed out that these tend to be generic, rather than specific to social science data. The remaining journals direct authors to 'trusted disciplinary repositories' that allow for the full range of controlled and secure access options, in compliance with legislation and ethical standards. The 4 non-global publisher journals have consulted extensively with the national DSPs or the national RDA nodes, when implementing or revising data sharing policies, as well as providing guidance in citing the data properly.

In general, there is a strong view amongst the editors interviewed that designing and implementing a coherent data sharing policy is inevitable and welcome with respect to replicability in the social sciences. Most of the journals included in the study are embracing this process by designing or revising their current data policies, in general with input from the national DSPs. However, there seem to be conflicting views amongst the editors on qualitative data due to the additional challenges they pose in relation to the confidentiality of participants and replicability of qualitative research.

4.2 Perceptions on data sharing and archiving

Throughout the IJSRM interview it became clear that the "negative" position stated by the editors is not because they are against data sharing and archiving in principle -- in fact they have deposited data from their own studies with the UK Data Service. The editors' concerns are that detailed contextual information (beyond the standard metadata) is a real challenge for certain types of social science data (e.g. qualitative data) and that publication of methodological articles (the focus of IJSRM) is not enhanced in any way by depositing data. Similar concerns were voiced by the editors of the other journals, in relation to the special nature of qualitative data and the additional challenges they pose for anonymising, archiving and reusing. This perception is sometimes supported by the view that replicability of social science research requires much more than bundles of data and metadata; for example, additional detailed information of the geographical, social, economic and cultural context in which the data were collected and analysed.

All the editors interviewed stressed the different requirements for quantitative and qualitative data, when it comes to archiving. Although not necessarily opposing the archiving and sharing of qualitative data, they recognise the additional demands in terms of ethics and confidentiality, generation of complex metadata, physical demands of archiving (i.e. storage space), alongside perceptions amongst researchers on sharing different types of data. Interviewees made explicit reference to the non-sharing reasoning of researchers related to the nature of qualitative data (too personal and sensitive) and current practices of storing the data in private environments (e.g. at their offices), while acknowledging this is not perfect due to the high risks involved. In addition, the concept of research replicability is more complex with qualitative data and not as "straightforward" as having access to the data, metadata and the replication files/code. This means that an ethos of data sharing as



research practice has not been established yet across the various social science disciplines. This in turn presents a challenge (but also an opportunity) for educating researchers on how to formulate informed consent in order to enable data sharing with other researchers.

One unusual practice some editors mentioned is asking the authors to provide data in response to ad-hoc requests by reviewers and readers. This practice resolves to a certain extent the issue of controlling who has access to data and securing embargo periods. However, it raises additional concerns not only in terms of ethical and legal treatment of research data, but also regarding the intellectual property, proper acknowledgement/citation of the data being used, and additional requirements on the limited resources of the journals.

All the editors interviewed had shared their data in the past or had used themselves archived data, and they were positively predisposed towards developing and promoting thorough data sharing policies for the journals they are involved in (excluding IJSRM). Some acknowledged explicitly the need to generate high quality, testable and replicable social science research that can stand the scrutiny of the scientific community. However, the editors also stressed the importance of developing workable solutions that do not put unnecessary strain on the authors sharing the data, the limited journal resources (from reviewers to editors and administrators), and the researchers using the archived data. They also agreed that the national DSPs can play a significant role in guiding and supporting this process, given their thorough understanding of diverse data types, knowledge of metadata and comprehensive understanding of data protection legislation, both national and European.

4.3 Supporting the journals/editors in future policies

Overall, the editors expressed confidence in the national DSPs for supporting them to develop data sharing policies and potentially becoming the dedicated repositories safeguarding not only the quality of the data, but also controlling access to the data. However, this positive attitude also came with different levels of commitment and associated requests from the journal editors. For example, *Politische Vierteljahresschrift (PVS)* with a strong ethos towards reproducibility is considering making obligatory the submission of research data and replication files at the same time as the article submission, with one of the reviewers focusing on the data and replication of the study. In addition, *Socialno delo Journal* state their commitment by considering and directing them to the national DSP, if necessary. However, the majority of non-global publisher journals are "staffed" by a limited number of volunteering editors, boards and reviewers, already overwhelmed by the increase in article submissions and research output that needs to be processed (Vasilevsky et al. 2017). Therefore, the editors agreed that more realistic options should be considered.

Amongst the realistic demands from the editors, three were voiced repeatedly by all.

First, there was the need for support with designing comprehensive, thorough and clear data sharing policies, suitable for the social sciences. The data policies developed by global



publishing companies and discussed earlier were mentioned as good examples, but the editors raised concerns about the applicability of such generic policies to national and European contexts. In addition, such generic data policies do not recognise the complexity and special nature of social science data and qualitative data in particular. All the editors highlighted the special nature and range of social science data and the lack of appropriate data sharing policies.

Secondly, there is the need for support offered to authors for handling the data archiving process. In addition to data cleaning and selection of appropriate formats for long term preservation and accessibility of diverse datasets, this involves the creation of well-organised and thorough metadata, contextual information, and replication files for the replicability of research and the potential of national/international comparisons (Assante 2016). One aspect without clear agreement amongst the editors is the desirable level of complexity associated with depositing and accessing the data for further research and replication. Some editors praised the simplicity of platforms such as Harvard Dataverse¹⁰ for depositing and downloading data seamlessly, while others expressed concerns about exactly the same platform and the ease of access that may contravene national and European regulations about storage and access of social science data.

Thirdly, there is a need for Research Data Management (RDM) training for authors and researchers in all aspects of data collection that is suitable for archiving and sharing. This includes designing appropriate informed consent forms that allow the longer term storage and eventual sharing of data, methods for anonymization quantitative and qualitative data, understanding the important role of metadata (Habermann 2020), obtaining DOIs for data, rights on controlling the distribution, use of secure data centres for sensitive data, as well as the appropriate acknowledgement and citation of data.

Finally, all the editors were well aware of their national DSPs and had already communicated with them to various degrees in order to resolve queries about data sharing, implement data policies for the journals or revise their policies with the view of recommending the national DSPs as data archive services for their journals. On the other hand, they were less aware of CESSDA, although most of them agreed that coordination of data sharing practices at the European level could potentially resolve a number of issues raised throughout the interviews. One editor went as far as suggesting a pan-European data archive, "a Harvard Dataverse for Europe", that could be promoted by all European journals and editors.

5. Conclusions and recommendations

The objective of this report was to provide a better understanding of journal practices, requirements, and needs regarding the accessibility of data used in scientific publications.

The major finding from the global publishers is that they already have in place policies in response to pressures for data openness and research replicability. The publishers' policies

¹⁰ Harvard Dataverse webpage: <u>https://support.dataverse.harvard.edu</u> [7 September 2020]



are in a continuous state of innovation, as they see this trend as a means of expanding their services by developing open data platforms and introducing niche journals that focus on specific aspects of the research cycle (e.g. research protocols, software sharing, data replicators etc.). In general, the global publishers are applying blanket policies from physical sciences to social sciences, without explicit consideration for the sensitivity of social science data (e.g. qualitative data, importance of metadata, contextual information on the studies). In addition, national and supranational policies on data protection, storage and sharing, such as the General Data Protection Regulation 2016/679 (GDPR) do not feature explicitly on their websites.

The majority of the editors interviewed incline towards data sharing and replication and have already implemented or are in the process of revising/implementing policies towards this direction. Although some of the journals are associated with larger publishers, most are published independently and as a result innovate at a slower pace compared to the global publishers. However, the editors fully appreciate the complexities associated with the diversity of social science data and the additional demands such data impose on sharing and replicability. In addition, despite their willingness to develop policies, they lack the financial and technical resources to implement them at the journal/publisher level. The solution they see is implementing data sharing policies in collaboration with the national DSPs and most of them have already made significant steps in this direction. In addition to the infrastructure, technical support, and research data management (RDM) training, other advantages of national DSPs highlighted here are: development of metadata specific to social science data and the understanding of policies on data protection, storage and sharing at the national and European levels.

This report has highlighted an opportunity for national DSPs and CESSDA as a whole to learn from some of the policies implemented by the global publishing companies (such as innovation, simplicity and clarity), with a focus on supporting the independent journals and national publishers to develop policies appropriate for the needs of social science research towards a healthy culture of data sharing and replicability in Europe. The next step of *Journals Outreach* is to assess the CESSDA related national DSP's capacities, policies, and services for responding to the needs of journals regarding preservation of data and replication material.

Bibliography

- Assante, M., Candela, L., Castelli, D., & Tani, A. (2016). Are Scientific Data Repositories Coping with Research Data Publishing? *Data Science Journal, 15.* <u>http://doi.org/10.5334/dsj-2016-006</u>
- Castellani, B., & Edwards, R. (2019). Basic Data Sharing and Our Journal: A dialogue between our Editors. *International Journal of Social Research Methodology.*



https://ijsrm.org/2019/03/17/basic-data-sharing-and-our-journal-a-dialogue-between-our-editors-brian-castellani-and-ros-edwards

- Habermann, T. (2020). Metadata and Reuse: Antidotes to Information Entropy. *Patterns, 1*. https://doi.org/10.1016/j.patter.2020.100004
- Hrynaszkiewicz, I., Simons, N., Hussain, A., Grant, R., & Goudie, S. (2020). Developing a research data policy framework for all journals and publishers. *Data Science Journal*, *19*(1), <u>http://doi.org/10.5334/dsj-2020-005</u>
- McQuilton, P., Sansone, S.-A., Cousijn, H., Cannon, M., Chan, W. M., Carnevale, I., ... Threlfall, J. (2020, March 5). FAIRsharing Collaboration with DataCite and Publishers: Data Repository Selection, Criteria That Matter. <u>https://doi.org/10.17605/OSF.IO/N9QJ7</u>
- Vasilevsky, N.A., Minnier, J., Haendel, M.A., & Champieux R.E. (2017). Reproducible and reusable research: are journal data sharing policies meeting the mark? *PeerJ* 5:e3208. https://doi.org/10.7717/peerj.3208



Appendix A: model letter to editors

CESSDA Widening Activities and Journal Outreach 2020

Subject: Journal Outreach

Dear Professor ...

[DATE]

Thank you for agreeing to be interviewed for the CESSDA* project on Journal outreach, lead by the GESIS Data Archive in Germany. The goal of the activity is to define and promote a formal position statement on behalf of CESSDA regarding archival services to journals.

The Journals Outreach activity has the following objectives:

- 1. Gain a better understanding of journal practices, requirements, and needs regarding the availability of data used in scientific publications.
- 2. Assess CESSDA service provider capacities, policies, and services for responding to the needs of journals regarding preservation of data and replication material.
- 3. Study of policy and legal issues: explore models for how CESSDA could coordinate to offer services to journals.
- 4. Craft and promote a CESSDA position statement that takes these into account, in order to offer relevant archival services to European journals.

This interview will provide evidence towards the **first objective**; the deliverable is a short report from the findings of interviews with journal editors. Although the interviews can remain anonymous, we may have to mention journals by name in our report (unless you object to this).

At the start of the interview, we will ask for your permission to record it. Should you agree, you will receive a recording of the interview and you can request to remove any sections. I attach a list of indicative questions for the interview, but please note that we may deviate.

Thank you for your support with this project

Serafeim Alvanides Senior Researcher, GESIS Data Archive https://www.gesis.org/en/institute/staff/person/S.Alvanides

*CESSDA - Consortium of European Social Science Data Archives <u>https://www.cessda.eu/About/Projects/Work-Plans</u>





Appendix B: instrument for interviews

Indicative questions for interview with Journal Editors

1. Current journal policy on data sharing/depositing/archiving

- What is the formal position of the journal in relation to data sharing or archiving?
- How is this communicated to potential authors and to accepted submissions?
- Are all the editors / members of the editorial board aware and in agreement of the position?
- To what extent does the journal position agree or deviate from the publisher's?
- If you <u>do not</u> require data to be shared/deposited/archived, are/do the authors:
 - required to provide the data upon request (from reviewers or readers)?
 - follow-up such requests?
 - encourage replication of research (e.g. in methodology)
- Have you experienced pressure from the publisher/funders/authors to review journal position?

2. Perceptions on data sharing/depositing/archiving

- What constitutes "data" for the research disciplines your journal is targeting?
- What is your personal view on research transparency and replicability?
- Have you used data repository services as a researcher?
 - If yes, please name the data repositories you used and specify:
 - Self-archiving with minimal legal and ethical checks?
 - Assessment of quality and reuse values of data, FAIR, CTS or similar criteria?
 - Long-term preservation?
 - Links to external services: datacite link, orcid, re3data, FAIRsharing?
- What do you believe is the main purpose of data access?
 - Replication, reproduction, funder and ethical requirements?

3. Supporting the journals/editors in future policies

- Should the journal decide to adopt a data sharing/depositing/archiving policy in the future:
 - Which obstacles do you foresee when enforcing the policy of "open access" to datasets?
 - Would you prefer disciplinary data repositories over general ones?
 - Would you prefer national over international data repositories?
- What could a consortium (e.g. CESSDA) or national data service providers (e.g. GESIS, UKDS) offer to support publishers/journals/editors towards a data sharing or archiving culture?





Appendix C: background information of participating journals

GESIS: IJSRM

JOURNAL: International Journal of Social Research Methodology JOURNAL'S WEBPAGE: <u>https://www.tandfonline.com/toc/tsrm20/current</u> PUBLISHER: Taylor & Francis Online PUBLISHER TYPE: Global publishing company JOURNAL TYPE: International

FOCUS & SCOPE: A key feature of the Journal is its mixed audience of researchers within academic and other research organizations as well as practitioner-researchers in the field. The Journal therefore aims to publish high quality methodological discussions which typically draw on a mix of academic and practice-based research in professional and service settings, and those considering the relationship between the two.

OPEN ACCESS POLICY:

The publisher has adopted a Basic Data Sharing Policy where they state that journals that they publish will encourage authors to share or make open the data underlying their article publication. The data set to be shared or made open by the author/s should be the data needed for independent verification of research results in the article. However, the editors have expressed their concerns in a blog published on the journal's companion website¹¹.

DATE OF INTERVIEW: 12 May 2020

PARTICIPANTS: GESIS (Serafeim Alvanides) – IJSRM (Editor Prof. Dr. Rosalind Edwards)

GESIS: Politische Vierteljahresschrift

JOURNAL: Politische Vierteljahresschrift (PVS) - German Political Science Quarterly **JOURNAL'S WEBPAGE:** <u>https://link.springer.com/journal/11615/volumes-and-issues</u>

PUBLISHER: Springer (previously NOMOS)

PUBLISHER TYPE: Global publishing company

JOURNAL TYPE: Articles mostly in German, but since late 2019 increasingly in English

FOCUS & SCOPE: Politische Vierteljahresschrift (PVS) ("German Political Science Quarterly") publishes the latest research results from all sub-disciplines of political science. It thus includes contributions from political theory and the history of ideas, from the analysis and comparison of political systems, from policy analysis, from the field of international relations and foreign policy, from empirical social research and methodology, as well as from political sociology. (Springer website)

OPEN ACCESS POLICY: Hybrid. Open Access options available

The journal encourages but does not enforce authors to make available the data used in their articles through, for example, repositories. The move from NOMOS to Springer from

¹¹ IJSRM companion webpage: https://ijsrm.org/2019/03/17/basic-data-sharing-and-our-journal-a-dialogue-between-our-editors-brian-castellaniand-ros-edwards [7 September 2020]



Volume 59 (March 2018) was partly in order to move to a publisher supporting data to be made available through permanent repositories, as opposed to making data available via zipped files etc. "Springer accepts electronic multimedia files (animations, movies, audio, etc.) and other supplementary files to be published online along with an article or a book chapter. Before submitting research datasets as electronic supplementary material, authors should read the journal's Research data policy. We encourage research data to be archived in data repositories wherever possible."

DATE OF INTERVIEW: 28 May 2020

PARTICIPANTS: GESIS (Serafeim Alvanides) – Politische Vierteljahresschrift (PVS) (Associate Editor Prof. Dr. Kai-Uwe Schnapp)

ADP: Socialno delo Journal

JOURNAL: Socialno delo Journal - Journal of Social Work JOURNAL'S WEBPAGE: <u>https://www.revija-socialnodelo.si/en/</u> PUBLISHER: University of Ljubljana, Slovenia PUBLISHER TYPE: Independent

JOURNAL TYPE: Slovenian and English

FOCUS & SCOPE: "Socialno delo is a peer-reviewed academic journal for social work with a long tradition (since 1957). Four issues are published per year. Articles in Slovenian ('socialno delo' means 'social work') or English are accepted and published."

OPEN ACCESS POLICY: Formal policy is to direct authors to 'trusted disciplinary repositories' that allow for the full range of controlled and secure access options. The policy document was prepared recently with participation in the RDA Node Slovenia project. At the journal a working group was established to implement data citation rules and instructions for authors. New policy recommends depositing research data in repositories, in compliance with legislation and ethical standards. They recommended solely Slovenian repositories. The Journal team stressed the importance of ADP support in research data management, which was agreed to be offered for the journal and for the researchers, in particular in providing the model data citation including digital object identifiers, management of sensitive research data, and pre-access regime to data for double blind peer review.

The policy strongly recommends for authors to deposit their data in a trustworthy data repository before they submit an article for consideration. ADP is explicitly mentioned as eligible, owing that it has elaborated data access regimes suited to the protection of sensitive data. General/institutional data repositories are also allowed if suitable for the data. **DATE OF INTERVIEW:** 1 June 2020

PARTICIPANTS: ADP (Sonja Bezjak, Janez Štebe, Irena Vipavc Brvar) - Socialno delo Journal (Chief editor: Vera Grebenc)

FORS: *Revue suisse de science politique*

JOURNAL: Revue suisse de science politique - Swiss Political Science Review



JOURNAL'S WEBPAGE: <u>https://onlinelibrary.wiley.com/journal/16626370</u>

PUBLISHER: Wiley

PUBLISHER TYPE: Global publishing company

JOURNAL TYPE: International (with papers in English)

FOCUS & SCOPE: "The Swiss Political Science Review (SPSR) is a generalist political science journal whose aim is to advance academic knowledge and debate in political research. The SPSR is published on behalf of the Swiss Political Science Association (SPSA). Because of its origins, the journal is particularly interested in issues such as federalism and decentralisation, direct democracy, or consociational politics, but it publishes research from any major area and subfield of political science. The SPSR encourages contributions from different theoretical and methodological approaches and especially welcomes intellectual

exchange across traditional boundaries between political science subfields and with its neighbouring disciplines (sociology, social psychology, law, anthropology, economics, and philosophy). It publishes original and innovative work that makes a theoretical, methodological and/or empirical contribution to the study of political phenomena." (Wiley website)

OPEN ACCESS POLICY: The journal asks authors to make available the data used in their articles. Authors have to include a Data Availability Statement that specifies where and how the data can be accessed by following instructions provided by Wiley. While authors may choose to share their data on request only, they are encouraged to make it available through, for example, repositories. Wiley encouraged the journal to offer "Open Science Badges" to authors, which requires data to be made available through permanent repositories.

DATE OF INTERVIEW: 29 May 2020

PARTICIPANTS: FORS (Brian Kleiner, Emilie Morgan de Paula) – Swiss Political Science Review (SPSR), (Co-editor Dr Anke Daniela Tresch; Editorial Assistant Dr Johanna Schnabel)

CROSSDA: Društvena istraživanja

JOURNAL: Društvena istraživanja - Journal for General Social Issues **JOURNAL'S WEBPAGE:** http://drustvena-istrazivanja.pilar.hr

PUBLISHER: Institute of Social Sciences Ivo Pilar

PUBLISHER TYPE: public institute

JOURNAL TYPE: International

FOCUS & SCOPE: *Društvena istraživanja* embraces thematic and disciplinary openness and therefore publishes works from various social and humanistic disciplines: sociology, psychology, politics, history, law, economics, demography, linguistics and other disciplines. The journal publishes theoretical, empirical and review articles, and given the wide range of readers, priority is given to articles that are of wider social and international interest, in particular empirical research and international comparative research that are not locally specific and thematically narrowly specialized.

OPEN ACCESS POLICY: Fully open access



Currently, there is no formal position of the journal regarding data sharing, but the former editorial board did have some conversations about data sharing. Current editor took her position a year ago. There were no requests for data from reviewers to access the data.

DI does require authors to describe their methodology and procedures in detail as an integral part of the research paper. There was no pressure from funders/authors/reviewers to include data sharing in journal policies.

DATE OF INTERVIEW: 1 June 2020

PARTICIPANTS: CROSSDA (Marijana Glavica, Irena Kranjec) - Društvena istraživanja: Journal for General Social Issues (chief editor Dr Andreja Brajša Žganec)

CROSSDA: Ljetopis socijalnog rada

JOURNAL: Ljetopis socijalnog rada - Annual of Social Work

JOURNAL'S WEBPAGE: https://ljsr.pravo.unizg.hr/index.php/ljsr

PUBLISHER: Faculty of Law, University of Zagreb, Department of Social Work **PUBLISHER TYPE:** Public institution

FOCUS & SCOPE: The Annual of Social Work problematizes current trends in social work theory, methods and education. The journal also publishes articles from all the fields where social work is applied and from related disciplines important for a better understanding of social interventions and their more effective application. Besides original papers, the journal also publishes translations of selected texts especially important for the understanding of modern social work, notices as well as reviews of conferences, books and journals related to social work activities and other social and humanistic sciences important for social work.

OPEN ACCESS POLICY: Fully open access

The journal has no official data policy; however, the editorial board have had discussions about new journal policies and guidelines for the authors where data policy was also discussed. Members of the editorial board are familiar with TOP guidelines and new functionality in DABAR repositories. A new editorial board was established in March 2020 and their focus is primarily on establishing basic journal policies and technical instructions but including data sharing policies is also one of the goals for the future. The board is planning to implement new instructions for authors from 2021.

DATE OF INTERVIEW: 3 June 2020

PARTICIPANTS: CROSSDA (Marijana Glavica, Irena Kranjec) - Annual of Social Work (Chief editor Lucija Vejmelka)

CROSSDA: Revija za socijalnu politiku

JOURNAL: Revija za socijalnu politiku - Sociological Review JOURNAL'S WEBPAGE: <u>https://hrcak.srce.hr/ojs/index.php/rzs</u> PUBLISHER: Croatian Sociological Association PUBLISHER TYPE: Society journal JOURNAL TYPE: international



FOCUS & SCOPE: CROATIAN SOCIOLOGICAL REVIEW publishes theoretical, empirical, and methodological articles of general interest for sociology and related disciplines, with an emphasis on articles that contribute to better understanding of topics relevant for the context of Croatia, the West Balkans and, more generally, Central and Eastern Europe. The journal also welcomes propositions of thematic issues. The accepted contributions fulfil the requirements of academic relevance and scientific excellence, which are confirmed by two positive blind peer reviews. The journal also publishes book and conference reviews, as well as shorter essays / critical discussions / educational or popularization texts in the "Forum" section. Articles are published in Croatian or English. Under certain circumstances, the editors can decide to publish articles in other languages.

Scientific disciplines and subdisciplines: Social Sciences; Economics; Law; Political Science; Sociology; Psychology; Demography; Humanistic Sciences; Ethnology and Anthropology

OPEN ACCESS POLICY: Fully open access

The journal has no official data policy, but the editorial board would support requests from reviewers for data related to the article/research reviewed, with the exception of sensitive data where additional approval from the ethical board would be needed. However, such requests may not be very likely because the data are mostly qualitative, and data may be already publicly available in larger international research databases. The editorial board has internal guidelines on methodology and how data should be represented and described in the article and datasets should be cited according to the APA standard.

DATE OF INTERVIEW: 26 May 2020

PARTICIPANTS: CROSSDA (Marijana Glavica, Irena Kranjec) - Sociological review (chief editor Tanja Vučković Juroš)

