



UISYS

Social and Health Information and
Research Unit

VNIVERSITAT
DE VALÈNCIA



CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

Researching on data

Models to publish, consume and measure the
reuse of research data: across institutional and
geographical boundaries

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www.datasea.es / www.uisys.es

ingenio
CSIC-UPV
Instituto de gestión de la innovación
y del conocimiento



www.uisys.es/



HOME RESEARCH TRAINING AND TEACHING CONTACT



The UISYS group is made up of multidisciplinary researchers from the Information sciences, Social and Health sciences and develops projects in the area of bibliometrics, information systems evaluation and open science, in collaboration with several domestic and foreign institutions.

UISYS Research lines

- Bibliometrics and **indicators of scientific activity**.
- Design, development and **evaluation of scientific information systems**, such as databases, interoperable digital libraries and websites.
- **Social and Health studies and indicators**, with the aim of contributing to the body of knowledge about human behavior and social interaction.



OPEN SCIENCE – RESEARCH DATA SHARING

UISYS Research lines – DATA SHARING

- Two approaches:

1. Opinion and habits of Spanish researchers about research data sharing.

2. Editorial policies on data sharing.

Approach 1: Opinion and habits of Spanish researchers about research data sharing



Survey 1. 2013 Health datasea:

<http://www.healthdatasea.es/>



Survey 2. 2016-18 DATASEA:

<http://www.datasea.es/es/>



Approach 1: Opinion and habits of Spanish researchers about research data sharing

➔ **1. Health datasea:** <http://www.healthdatasea.es/>

Survey: What do Spanish researchers in health sciences think about open research data?

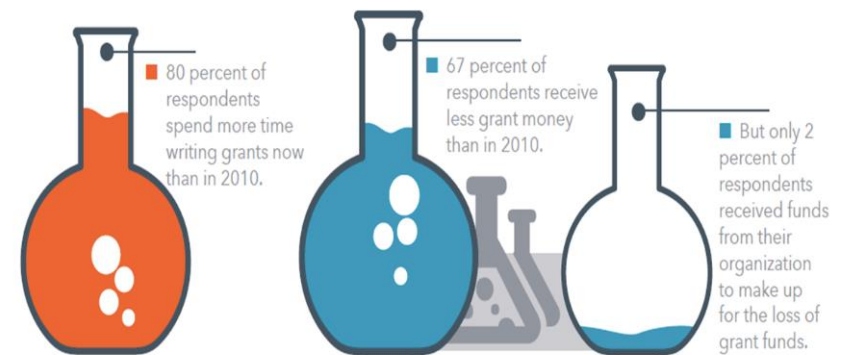


Approach 1: Opinion and habits of Spanish researchers about research data sharing

Method

An electronic survey was developed, consisting of 40 questions distributed in three blocks:

- A) Personal data.
- B) Creation and reuse of data.
- C) Data preservation.



Approach 1: Opinion and habits of Spanish researchers about research data sharing

Method

The questionnaire was based on others already validated and adapted:

- PARSE insight.
- University of Southampton Questionnaire.
- Imperial College of London DAF Survey Questionnaire.
- Edinburgh Data Audit Implementation Online Questionnaire.
- Data Asset Framework.
- ANU Data Management Manual.
- Spanish National Research Council-CSIC.

Approach 1: Opinion and habits of Spanish researchers about research data sharing

Method

The questionnaire was sent by e-mail to researchers from several Spanish institutions



UNIVERSITAT POLITÈCNICA DE VALÈNCIA



Approach 1: Opinion and habits of Spanish researchers about research data sharing

Method

Variables from section A:

- Age
- Sex
- Affiliation
- Area
- Position
- Research experience

Approach 1: Opinion and habits of Spanish researchers about research data sharing

Method

Variables from section B:

- Existence of data management plans in the work center.
- Reasons why it was developed / Why it does not exist.
- Storage and backup device.
- The will to use other researchers' data.
- What external data they use
- Have they ever been asked for data by other researchers?
- Problems or biases to share.

Approach 1: Opinion and habits of Spanish researchers about research data sharing

Method

B. Creación y reutilización de los datos

9. En los proyectos de investigación en los que ha participado ¿existe alguna política o plan de gestión de los datos (implícita o por escrito) que incluya alguno de estos ítem?

- No tenemos
- Normalización de los nombres de los archivos o de la estructura de los directorios
- Normas de anonimización y confidencialidad
- Cómo extraer los ficheros de los instrumentos de medición
- Unidades donde se almacenan para uso del grupo de investigación
- Niveles de autorización para acceder y modificar datos
- Registro de accesos
- Servicios externos donde depositarlos obligatoriamente, como repositorios, bancos de datos y plataformas generales (Google drive / Dropbox) o especializadas (Figshare / Dryad)
- Normas para protección de los derechos de propiedad intelectual
- Condiciones de utilización por personas ajenas al grupo
- Otro:

10. En caso de tenerla, ¿cuál fue el motivo principal para desarrollar esta política?

- Requisito del ente financiador del proyecto

Approach 1: Opinion and habits of Spanish researchers about research data sharing

Method

Variables from section C:

- Data preservation practices.
- Threats from data sharing.
- Data storage system.
- Devices used for its preservation.
- Plans for storage and preservation.
- Aids in carrying out data management.

Approach 1: Opinion and habits of Spanish researchers about research data sharing

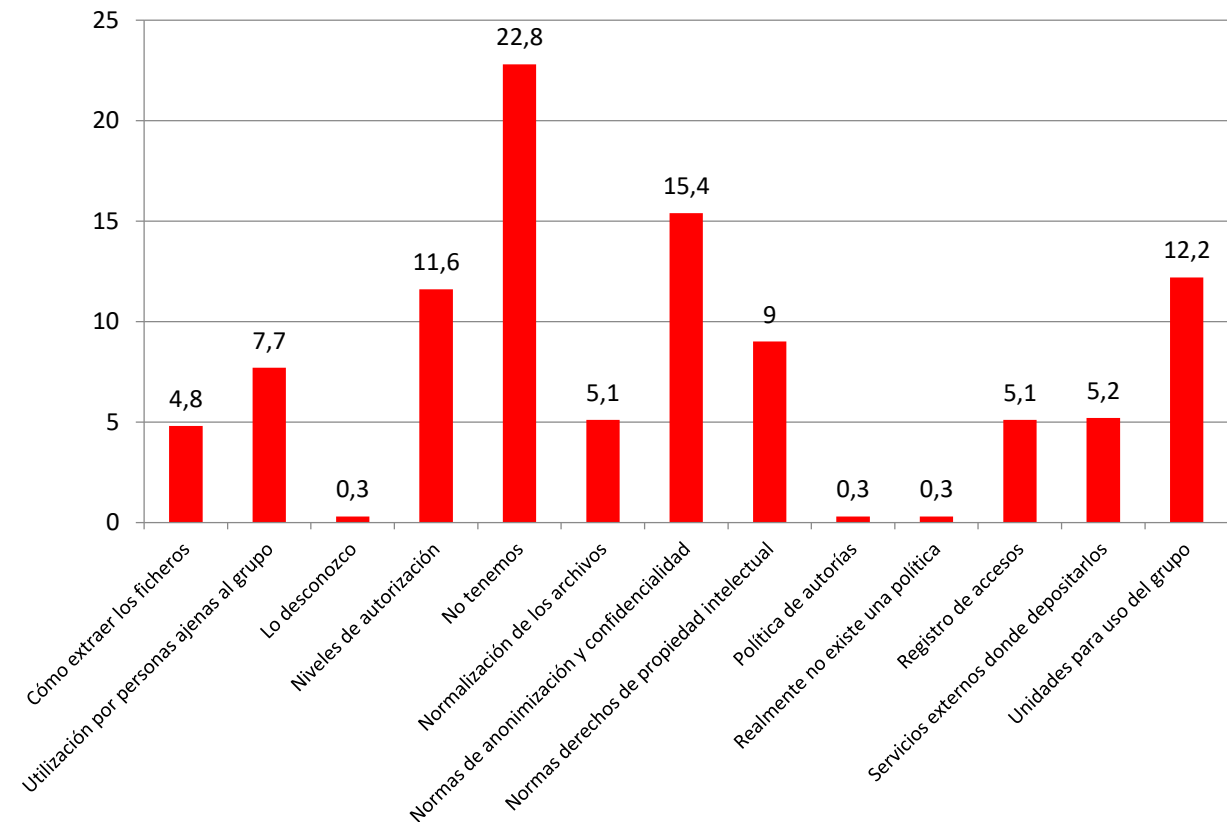
Results

155 respondents

- 97 men (62.6%)
- 58 women (37.4%)

Data management policy or plan

En los proyectos de investigación en los que ha participado ¿existe alguna política o plan de gestión de los datos (implícita o por escrito) que incluya alguno de estos ítem?

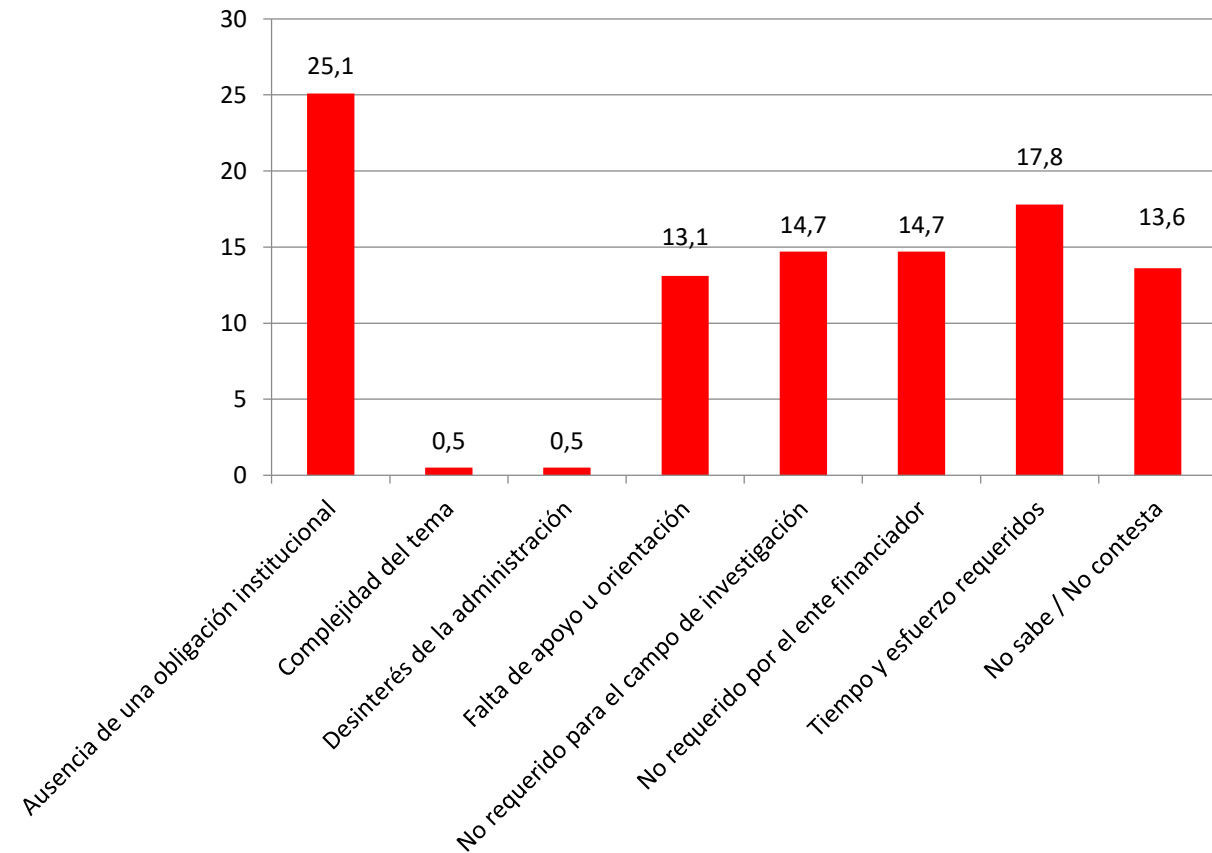


Approach 1: Opinion and habits of Spanish researchers about research data sharing

Main reason for the lack of a data management policy

Results

¿Cuál cree que es el motivo principal por el que no existe ninguna política?

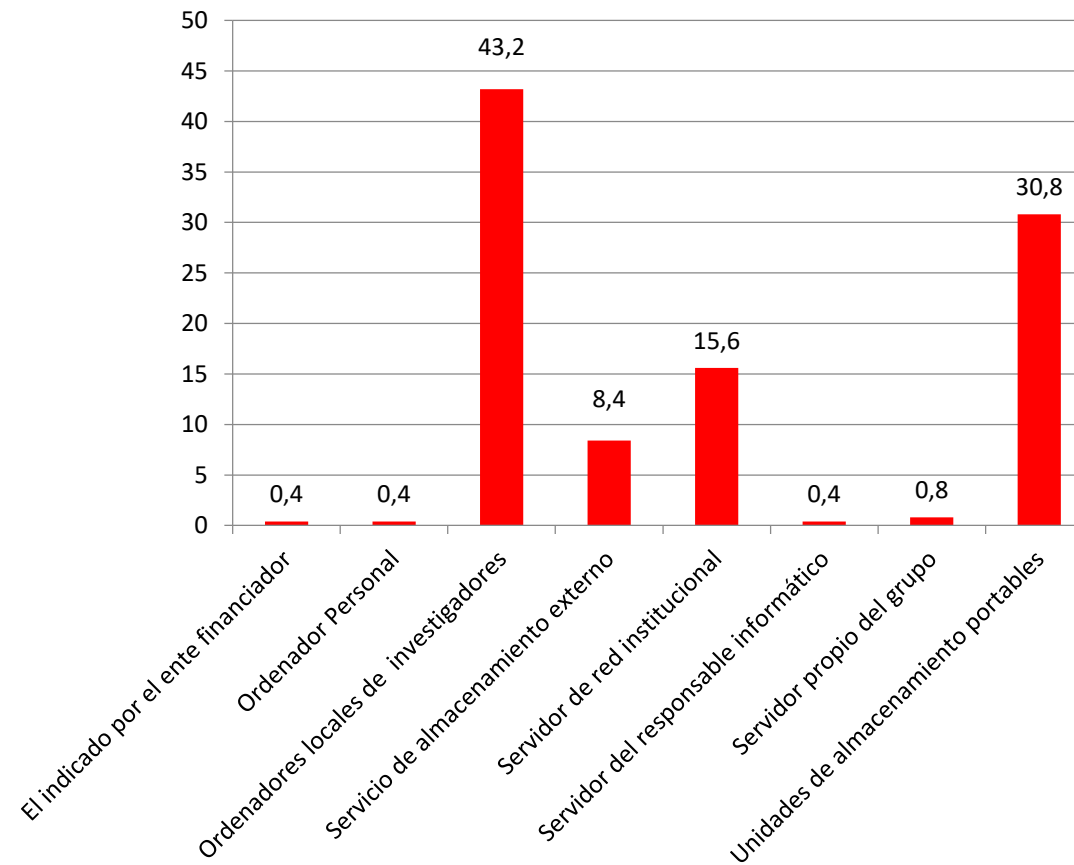


Approach 1: Opinion and habits of Spanish researchers about research data sharing

Results

Research data storage device

¿Dónde suele almacenar sus datos de investigación? Porcentaje

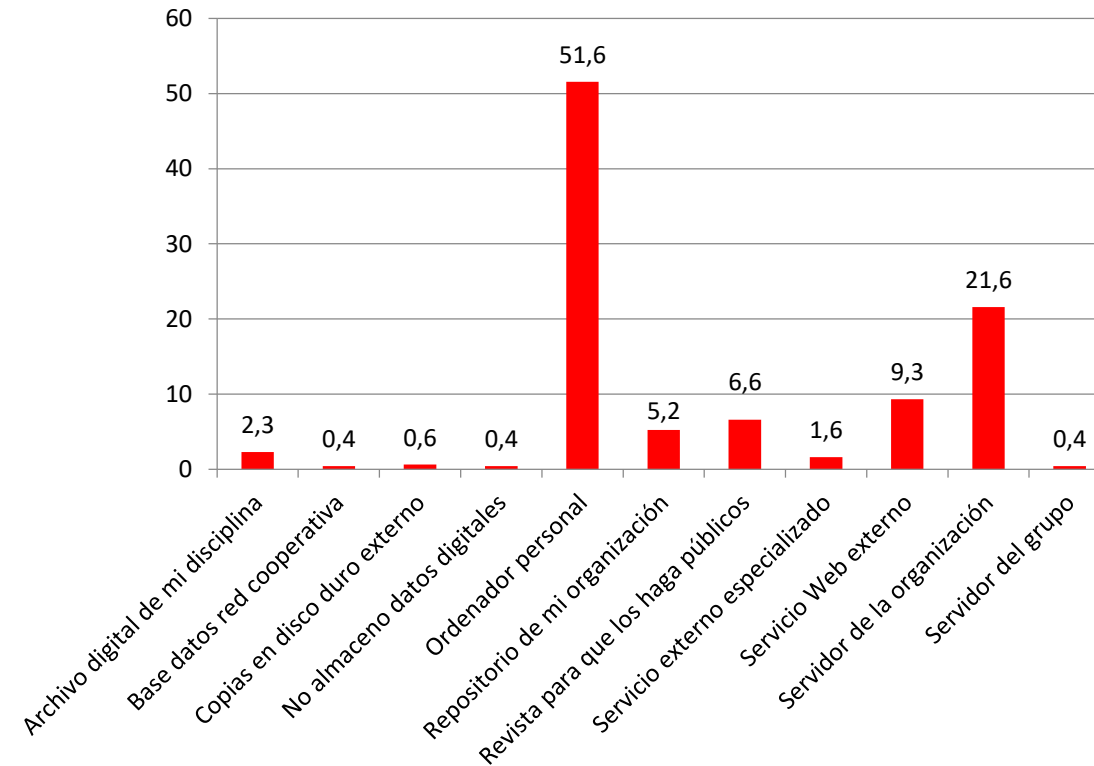


Approach 1: Opinion and habits of Spanish researchers about research data sharing

Results

Storage of research data

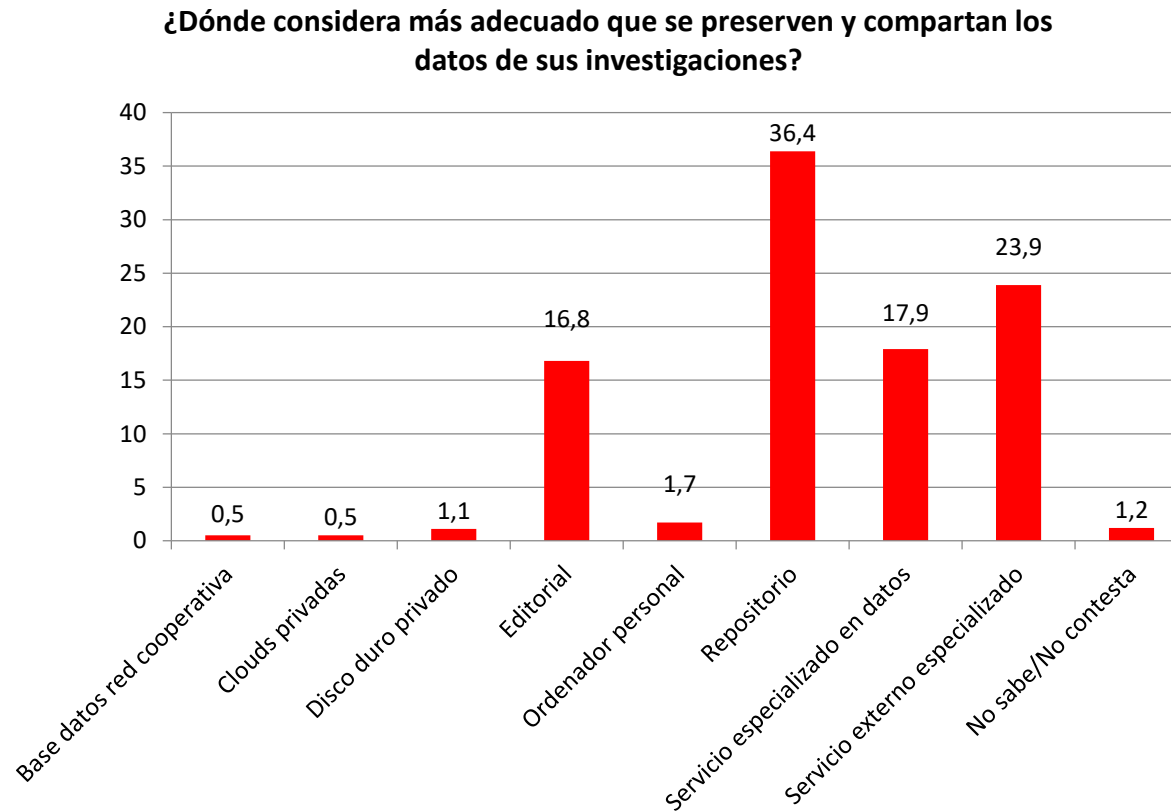
¿Cómo almacena los datos de investigación para preservar su acceso y utilización futura?



Approach 1: Opinion and habits of Spanish researchers about research data sharing

Results

Appropriate location for preservation of research data

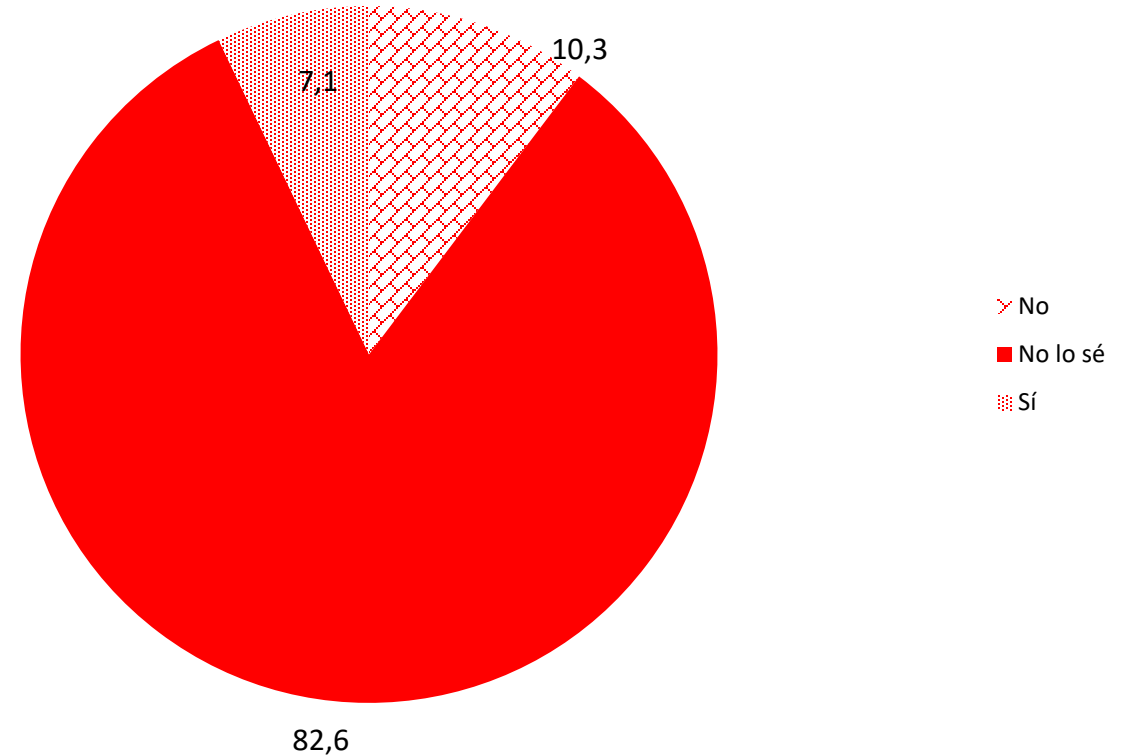


Approach 1: Opinion and habits of Spanish researchers about research data sharing

Results

Existence of preservation facilities

¿Existe en su disciplina alguna instalación para la preservación de datos digitales que pueda utilizar?



Approach 1: Opinion and habits of Spanish researchers about research data sharing

2. DATASEA: <http://www.datasea.es/es/>



CSO2015-65594-C2-1R and 2R (MINECO/FEDER, UE)
01/01/2016-31/12/2018

Ministerio de Economía y Competitividad. Gobierno de España y FEDER, UE. Programa Estatal de I+D+i Orientada a los Retos de la Sociedad



Approach 1: Opinion and habits of Spanish researchers about research data sharing

DATASEA: <http://www.datasea.es/es/>



Models to publish, consume and measure the reuse of research data: across institutional and geographical boundaries



Approach 1: Opinion and habits of Spanish researchers about research data sharing

Goal

To describe the data publication and consume models, and to explore appropriate methods to measure the use of research data.

DATASEA: <http://www.datasea.es/es/>

Approach 1: Opinion and habits of Spanish researchers about research data sharing

Work plan

O1: PORTAL DEVELOPMENT

- 1.1. Identify the needs of national users
- 1.2. Develop a journals platform
- 1.3. Register data sources and public services for research

O2: STUDIES AND METHODOLOGICAL RECOMMENDATIONS

- 2.1. Share national and international knowledge about the behavior of Spanish researchers regarding their data
- 2.2. Study metrics to analyze the production and reuse of data
- 2.3. Data literacy campaigns and datasharing promotion

Approach 1: Opinion and habits of Spanish researchers about research data sharing

Specific objectives

- ***O1. Portal development***

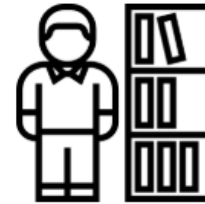
Develop a web portal focused on stakeholders (scientists and research managers).

Approach 1: Opinion and habits of Spanish researchers about research data sharing

- **O1. Portal development**



Are you a librarian?



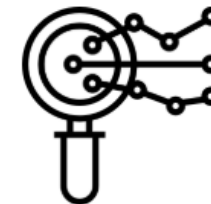
Are you a journal editor?



Are you an academic authority?



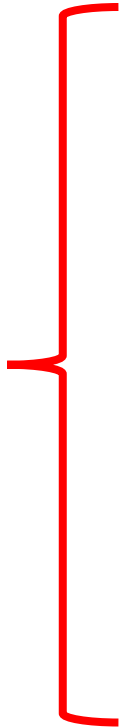
Are you interested in Research Data in deep?



Approach 1: Opinion and habits of Spanish researchers about research data sharing

- **O1. Portal development**

Are you a researcher?



Looking for data or journal



SEARCH

Managing/storing my data



Preparing a Data Management Plan (DMP)



Releasing my data



Approach 1: Opinion and habits of Spanish researchers about research data sharing

- ***O1. Portal development***

Are you a researcher?



LOOKING FOR DATA OR JOURNAL

You are here: [Home](#) / [Research Data](#) / [Researcher](#) / Looking for data or journal

Maybe are you planning your Data Management Plan or maybe are you designing an experiment. As a researcher you would need to know the previous existing data.

It is possible to access existing data when they have been uploaded in data banks or added to scientific papers as supplementary material:

- re3data.org compiles the repositories <http://re3data.org>
- ODISEA records the scientific journals that support supplementary material <http://odisea.ciepi.org>

Approach 1: Opinion and habits of Spanish researchers about research data sharing

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Approach 1: Opinion and habits of Spanish researchers about research data sharing

- ***O1. Portal development***

Are you a researcher?



PREPARING A DATA MANAGEMENT PLAN

You are here: [Home](#) / [Research Data](#) / [Researcher](#) / Preparing a data management plan

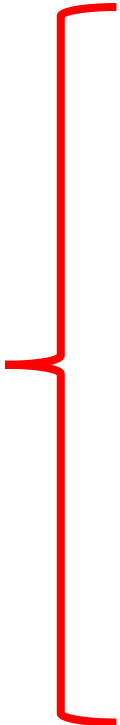
A Data Management Plan (DMP) is a brief document about how are you going to manage the data in your research project. Whether we are a PhD student or a Senior the search for funding, we want to think about the management of the data we are going to generate. The DMP depends on the final purpose of our research:

- As a student, there are several instructions, perhaps for your own institution. A good example can be found at University of Bath (2013). *Data Management Pla*. Research 360. <http://www.bath.ac.uk/research/data/planning/tools.html>
- As a researcher, computerized tools are available as: DMPTool <https://dmptool.org/>, for USA funders, with some examples published; DMP <http://dmponline.d> European level; and BAGODA for H2020 in Spanish <http://www.consejoriadragon.es/bagoda/index.php>

Approach 1: Opinion and habits of Spanish researchers about research data sharing

- **O1. Portal development**

Are you a researcher?



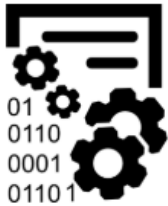
Looking for data or journal



Managing/storing my data



Preparing a Data Management Plan (DMP)



Releasing my data



Approach 1: Opinion and habits of Spanish researchers about research data sharing

- ***O1. Portal development***

Are you a researcher?



MANAGING/STORING MY DATA

You are here: [Home](#) / [Research Data](#) / [Researcher](#) / Managing/Storing my data

Whether we were preparing the Data Management Plan (MPD) or researching, we have to be clear about how to manage and store the data. There is no single pathway. Each team should design their own recommendations.

- Managing data includes issues as: documenting the tools or the methods used in the research; assigning metadata; establishing the responsibilities for the data management and the policies for naming the files and their versions; how to anonymize data; designing the workflow of data...
- Data storing means: choosing reliable tools that warrant the integrity of data; the broad access to data for everyone in the team; and automatic backups of data.

It can be used:

- Cloud data storage as Dropbox
- Specific science facilities as Dataverse <https://dataverse.org/> or Figshare <https://figshare.com/>
- Institutional services as Bristol University Research Data Storage Facility <https://www.acrc.bris.ac.uk/storage.htm>
- Comprehensive systems: are usually aimed at a subject area: BlueBridge <http://www.bluebridge-vres.eu/> for fisheries and oceans or Elixir <https://www.elixir-europe.org/> for life sciences.

Approach 1: Opinion and habits of Spanish researchers about research data sharing

- **O1. Portal development**

Are you a researcher?



Looking for data or journal



Preparing a Data Management Plan (DMP)



Managing/storing my data



Releasing my data



Approach 1: Opinion and habits of Spanish researchers about research data sharing

- ***O1. Portal development***

Are you a researcher?



RELEASING MY DATA

You are here: [Home](#) / [Research Data](#) / [Researcher](#) / Releasing my data

When the research has been concluded, some data could be required to be opened by the funders or the scientific journal. These would be the essential tasks to do:

- Appraising and choosing the files to release
- Converting them into an open format
- Compiling their documentation and metadata
- Choosing the appropriate license from Creative Commons or from Open Data Commons <https://opendatacommons.org/licenses/>
 - ODC-BY OpenDataCommons Attribution License
 - PDDL Public Domain Dedication and License
 - ODbL Open Database License

Technically, it can be uploaded data into a repository or they can be added to scientific papers as supplementary material. For each way, the instructions of each service must be followed. If you have not chosen any specialized repository yet, we recommend trying one or some of these: Dataverse <https://dataverse.org/>, Zenodo <https://zenodo.org/> or Figshare <https://figshare.com/>

Approach 1: Opinion and habits of Spanish researchers about research data sharing

- ***O1. Portal development***



Are you a researcher?



Are you a librarian?



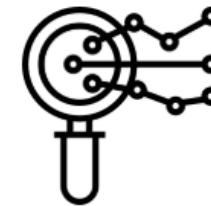
Are you a journal editor?



Are you an academic authority?



Are you interested in Research Data in deep?



Approach 1: Opinion and habits of Spanish researchers about research data sharing

- **O1. Portal development**

Are you a librarian?



How to build a research data management service



Most frequent services



Infrastructures needs assessment



Assessing about licenses



Approach 1: Opinion and habits of Spanish researchers about research data sharing

- ***O1. Portal development***

Are you a librarian?



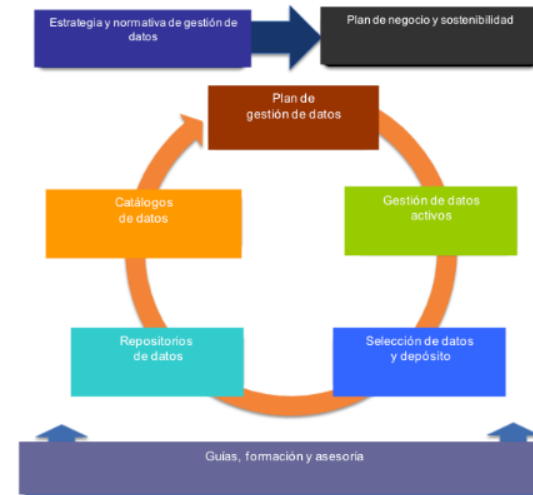
HOW TO BUILD A RESEARCH DATA MANAGEMENT SERVICE

You are here: [Home](#) / [Research Data](#) / [Librarian](#) / How to build a research data management service

A research data management (RDM) service could be provided by the library or by the Vice-chancellor with Research competencies. Academic libraries have a large experience supporting research in their institutions, but this kind of services needs the collaboration of other university departments.

In order to know the components of this kind of service we can follow the DCC Jones, Pryor, and Whyte's guide (2013).

How to develop RDM services, available at <http://www.dcc.ac.uk/resources/how-guides/how-develop-rdm-services> for knowing the components of a service:



Approach 1: Opinion and habits of Spanish researchers about research data sharing

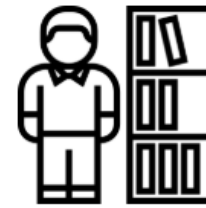
- **O1. Portal development**



Are you a researcher?



Are you a librarian?



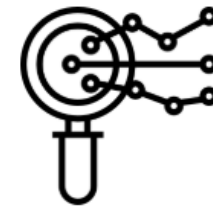
Are you a journal editor?



Are you an academic authority?



Are you interested in Research Data in deep?




Approach 1: Opinion and habits of Spanish researchers about research data sharing

- ***O1. Portal development***

Are you a journal editor?



Open Journal System +
Dataverse



Other polices



Example



Approach 1: Opinion and habits of Spanish researchers about research data sharing

- ***O1. Portal development***

Are you a journal editor?






OPEN JOURNAL SYSTEM + DATASERVE

You are here: [Home](#) / [Research Data](#) / [Journal editor](#) / Open Journal System + Dataserve

One of the most used tools for open access in scientific journals, OJS, provides modules to connect the journal with its deposit on Dataverse <https://dataverse.org/>



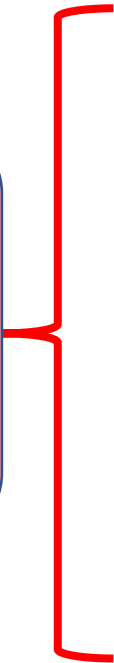
Open source research data repository software

 Researchers	Enjoy full control over your data. Receive web visibility, academic credit, and increased citation counts. A personal dataverse is easy to set up, allows you to display your data on your personal website, can be branded uniquely as your research program, makes your data more discoverable to the research community, and satisfies data management plans. Want to set up your personal dataverse?
 Journals	Seamlessly manage the submission, review, and publication of data associated with published articles. Establish an <i>unbreakable link</i> between articles in your journal and associated data. Participate in the open data movement by using Dataverse as part of your journal data policy or list of repository recommendations. Want to find out more about journal dataverses?
 Institutions	Establish a research data management solution for your community. Federate with a growing list of Dataverse repositories worldwide for increased discoverability of your community's data. Participate in the drive to set norms for sharing, preserving, citing, exploring, and analyzing research data. Want to install a Dataverse repository?

Approach 1: Opinion and habits of Spanish researchers about research data sharing

- ***O1. Portal development***

Are you a journal editor?



Open Journal System +
Dataverse



Other polices



Example

Approach 1: Opinion and habits of Spanish researchers about research data sharing

- ***O1. Portal development***

Are you a journal editor?



EXAMPLE

You are here: [Home](#) / [Research Data](#) / [Journal editor](#) / Example

Before starting with a policy's design, we must find out two things that could seem obvious but are not trivial:

- Does the journal have the capacity to meet this challenge? Technological platform and human resources needed have to be considered
- Do our authors routinely generate data and is there a practice about it?

Relevant scientific journals mention the supplementary information for papers, as Nature <http://www.nature.com/nature/authors/submissions/final/supinfo.html> or PLOS one <http://journals.plos.org/plosone/s/supporting-information>

This is an example of the interface in the Ubiquity editorial platform:



Approach 1: Opinion and habits of Spanish researchers about research data sharing

- O1. Portal development**

Research Data



Are you a researcher?



Are you a librarian?



Are you a journal editor?



Are you an academic authority?



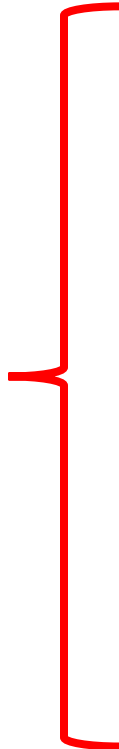
Are you interested in Research Data in deep?



Approach 1: Opinion and habits of Spanish researchers about research data sharing

- ***O1. Portal development***

Are you an academic authority?



Thinking a policy



What do researchers do with their data?



Legal requirements



Research life-cycle



Approach 1: Opinion and habits of Spanish researchers about research data sharing

- **O1. Portal development**

Research Data



Are you a researcher?



Are you a librarian?



Are you a journal editor?



Are you an academic authority?



Are you interested in Research Data in deep?



Approach 1: Opinion and habits of Spanish researchers about research data sharing

- ***O1. Portal development***

INTERESTED IN TOPIC?

You are here: [Home](#) / [Research Data](#) / Interested in topic?

Are you interested in Research Data in deep?



Datametrics



Training in Spanish



Deliverables



Approach 1: Opinion and habits of Spanish researchers about research data sharing

• O1. Portal development

DELIVERABLES

You are here: [Home](#) / [About](#) / Deliverables

- **WP1.1 D1 Directorio de las estructuras de investigación existentes en las universidades seleccionadas**
 - WP1.1 D1.1. Directorio UPV [descargar pdf](#)
 - WP1.1 D1.2. Directorio UV [descargar pdf](#)
- **WP1.1 D2** Panel de expertos por áreas de conocimiento y clasificación orgánica según puesto de trabajo [descargar pdf](#)
- **WP1.1 D3 Diseño de una encuesta y resultados**
 - WP1.1 D3.1 Formulario de encuesta [Formulario](#)
 - WP1.1 D3.2 [Resumen](#) provisional de encuesta (UPV)
- **WP1.2 D1** Inventario de los centros (OPIs y universidades) más productivos en publicación científica (elaboración propia) [descargar pdf](#)
- **WP1.2 D2** Inventario de centros que exponen datos: [ODISEA](#)
- **WP1.2 D3** Publicación en la plataforma web de las URLs identificadas: [ODISEA](#)
- **WP2.1 D1** Informe de casos de repositorios. Hernández Arizo, I. (2016). Métricas basadas en datos. Antonia Ferrer, dir. pags. 59 y ss. <http://hdl.handle.net/10251/71915>
- **WP2.1 D2** Declaración de definiciones y acuñación de términos y ontologías [descargar pdf](#)
- **WP2.2 D1 Mapa de flujos de las 4 instituciones con respecto a los datos académicos y Mapa de flujos recomendable con el Informe de roles involucrados**
 - WP2.2 D1.1 2013 VALENTÍN TORRECILLA, ANDREU. *Gestión de Datos de la Investigación. Tesina de fin de Master CALSI.*
 - WP2.2 D1.2 Cuestionario para Expertos en Gestión de Datos de Investigación en España (4 marzo 2015)
 - WP2.2 D1.3 Iniciativas en Gestión de Datos de Investigación en España (2 abril 2015)
 - WP2.2 D1.4 Fernández López, Antonio Lázaro (2013). Análisis y diagnóstico de la difusión de la información y documentación estadística de las administraciones públicas en España. Diploma de estudios avanzados UPV, Fernanda Peset y Antonia Ferrer, dirs.
- **WP2.3 D1 Informe de necesidades de preservación, identificación de las posibilidades de intercambio y de las debilidades del sistema**
 - Ferrer Sapena, Antonia; Aleixandre-Benavent, Rafael (2016). Datos abiertos, el punto de vista del investigador. Semana acceso abierto 24-28 octubre
- **WP2.3 D2 Publicaciones científicas** sobre los aspectos más técnicos y procedimentales; publicaciones por disciplinas estudiadas
- **WP2.3 D3 Guía para investigadores**
 - DATASEA, Grupo *Gestiona y comparte Datos de investigación: Guía Datasea para investigadores.*

Approach 1: Opinion and habits of Spanish researchers about research data sharing

Work plan

O1: PORTAL DEVELOPMENT

- 1.1. Identify the needs of national users
- 1.2. Develop a journals platform
- 1.3. Register data sources and public services for research

O2: STUDIES AND METHODOLOGICAL RECOMMENDATIONS

- 2.1. Share national and international knowledge about the behavior of Spanish researchers regarding their data
- 2.2. Study metrics to analyze the production and reuse of data
- 2.3. Data literacy campaigns and datasharing promotion

Approach 1: Opinion and habits of Spanish researchers about research data sharing

- ***O2. Studies and methodological recommendations***

Provide reliable knowledge about the researchers' behaviour about data sharing in Spain

Approach 1: Opinion and habits of Spanish researchers about research data sharing

- ***O2. Studies and methodological recommendations***

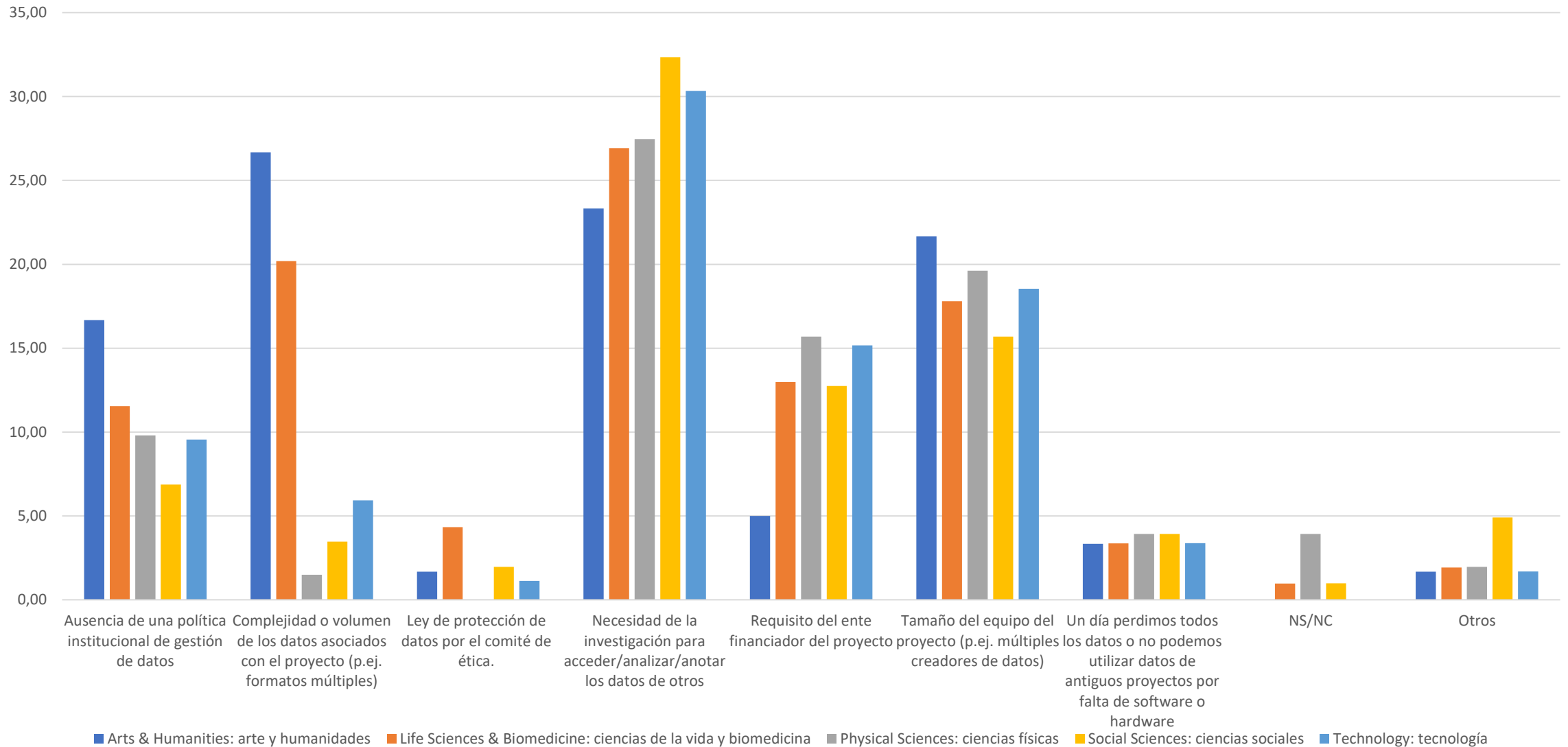
What do Spanish researchers in all areas of science think about open research data?

Survey 2

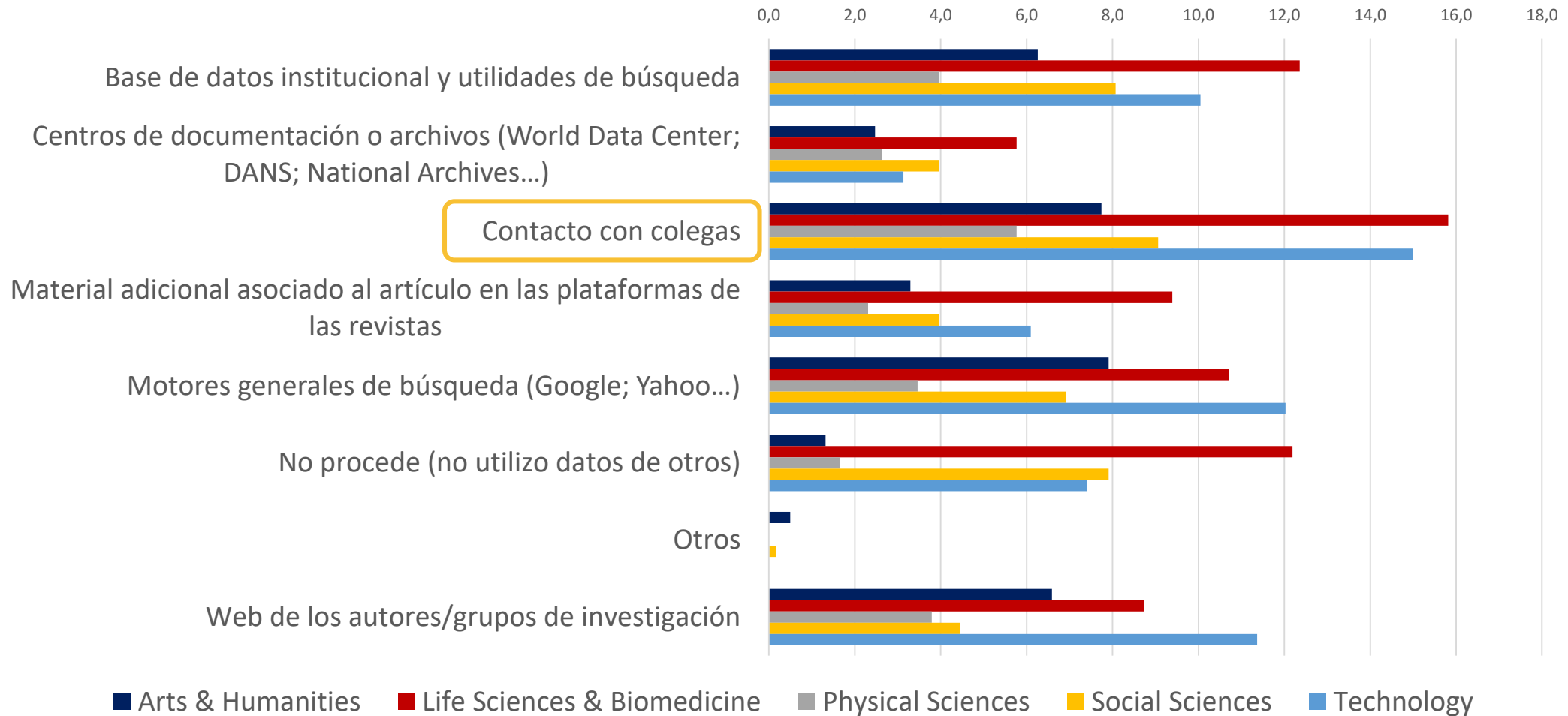
1,063 researchers

- 663 men (62.4%)
- 400 women (37.6%).

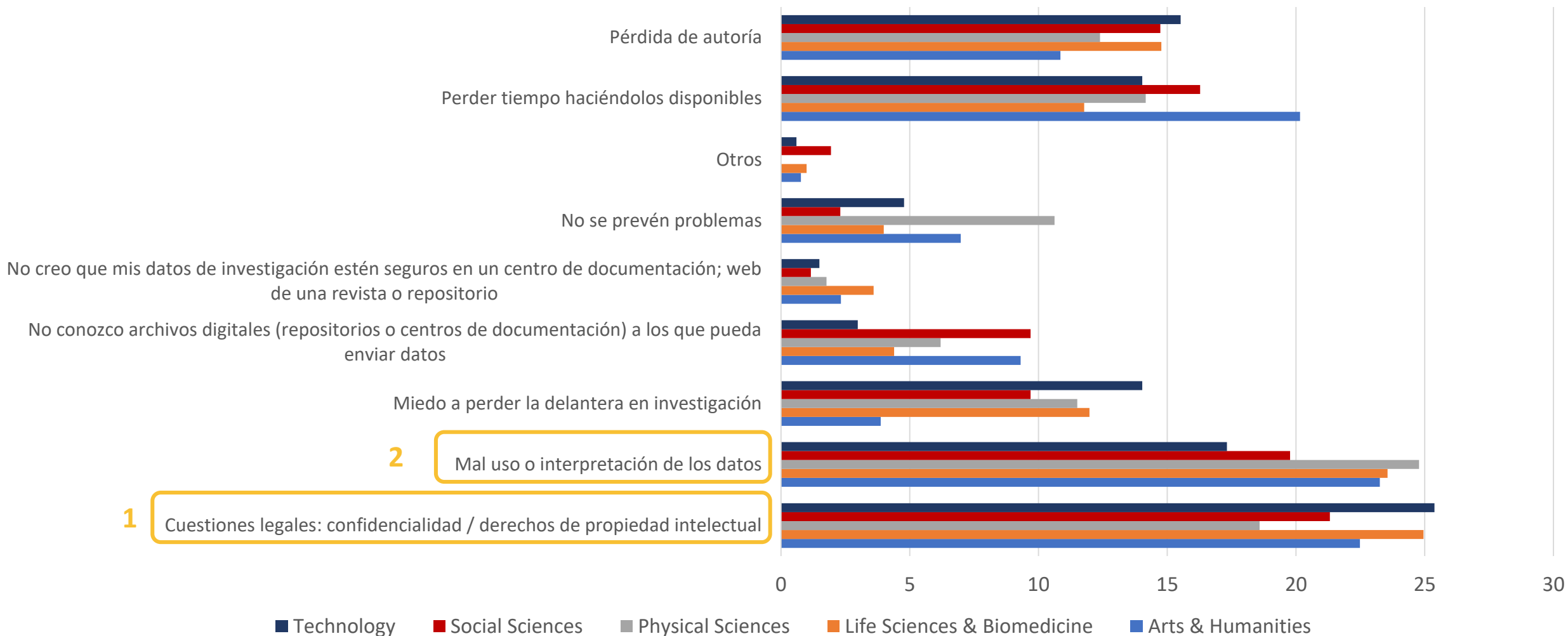
Results: What was the main reason for developing the data policy?



Means to locate and access other researchers' data



Concerns about sharing data in an external service



Approach 1: Opinion and habits of Spanish researchers about research data sharing

Conclusions

- They often use local computers or portable storage device to save their data.
- Most of them would like to use research data collected by other researchers.
- One of the perceived threats is the restriction of access and use related to intellectual property.
- The main reason for developing a data management policy was the requirement to complete the research.

Approach 1: Opinion and habits of Spanish researchers about research data sharing

Conclusions

- It is necessary to perform:
 - Awareness campaigns to release the data
 - Create infrastructures/facilities that enhance their deposit and preservation
 - Define the “game rules” that clarify many of the implications of data sharing
 - The official bodies must become the driving force behind this movement.

Approach 1: Opinion and habits of Spanish researchers about research data sharing

- *O2. Studies and methodological recommendations*

Guides and recommendations

HOW TO EVALUATE AND SELECT RESEARCH DATA

CHECKLIST FOR A DATA MANAGEMENT PLAN


HOW TO MEASURE THE IMPACT OF RESEARCH DATA

Approach 1: Opinion and habits of Spanish researchers about research data sharing

- *02. Studies and methodological recommendations*

Guides and recommendations

CÓMO EVALUAR Y SELECCIONAR DATOS DE INVESTIGACIÓN



Cómo evaluar y seleccionar datos de investigación

Whyte, A. & Wilson, A. (2010). "How to Appraise and Select Research Data for Curation". DCC How-to Guides. Edinburgh: Digital Curation Centre. Available online: <http://www.dcc.ac.uk/resources/how-guides> - See more at: <http://www.dcc.ac.uk/resources/how-guides/appraise-select-data#sthash.BuHquRcD.dpuf>

Introducción

Esta guía pretende ser útil para gestionar la evaluación y selección de datos para su preservación. Proporciona un conocimiento práctico de los enfoques actuales en este tema, sus problemas y desafíos y las funciones de los grupos de investigación y los servicios de datos.

**HOW TO EVALUATE AND
SELECT RESEARCH DATA**

Approach 1: Opinion and habits of Spanish researchers about research data sharing

- *O2. Studies and methodological recommendations*

Guides and recommendations

LISTA DE CONTROL PARA UN PLAN DE GESTIÓN DE DATOS



Lista de control para un Plan de Gestión de Datos

Esta lista de verificación se basa en la realizada por el DCC [Checklist for a Data Management Plan](#).

La lista es una síntesis de los requerimientos que solicitan algunos patrocinadores, de guías institucionales y de buenas prácticas. Una guía más amplia se puede encontrar en: http://www.dcc.ac.uk/sites/default/files/documents/resource/DMP/DMP_Checklist_2013.pdf (4ª versión de 2013).

1. Datos administrativos

CHECKLIST FOR A DATA
MANAGEMENT PLAN

Approach 1: Opinion and habits of Spanish researchers about research data sharing

- ***O2. Studies and methodological recommendations***

Guides and recommendations

CÓMO MEDIR EL IMPACTO DE LOS DATOS DE INVESTIGACIÓN



Cómo medir el impacto de los datos de investigación
Alex Ball (DCC) and Monica Duke (DCC)
Borrador 29 abril 2015

Ball, A., & Duke, M. (2015). 'How to Measure the Impact of Research Data'. *How-to Guides*. Edinburgh: Digital Curation Centre. Available online: <http://www.dcc.ac.uk/resources/how-guides>

Introducción.

Esta guía quiere ayudar a medir el impacto de los datos de investigación de un departamento o institución. Proporciona una visión general de los conceptos clave para medir el impacto y los servicios y herramientas disponibles para realizarlo. Después de tratar algunos de los problemas y retos actuales, se aportan sugerencias sobre cómo se puede mejorar el impacto de los datos. La guía puede ser de interés tanto para los investigadores como para los bibliotecarios y los servicios administrativos que trabajan en la evaluación de la calidad de la investigación.

¿Por qué medir el impacto de los datos de investigación?

Una de las medidas clave del valor de la investigación es el impacto que tiene dentro del área de conocimiento a la que pertenece y fuera de la misma. En los últimos años los

HOW TO MEASURE THE IMPACT OF RESEARCH DATA

Approach 1: Opinion and habits of Spanish researchers about research data sharing

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Guides and recommendations



UISYS Research lines – DATA SHARING

- Two approaches:
 1. Opinion and habits of Spanish researchers about research data sharing.
 2. Editorial policies on data sharing.

Approach 2: Editorial policies on data sharing

Scientometrics (2019) 118:439–451
<https://doi.org/10.1007/s11192-018-2978-1>

 CrossMark

Policies regarding public availability of published research data in pediatrics journals

Rafael Alexandre-Benavent^{1,2} · Antonia Ferrer Sapena³ · Silvia Coronado Ferrer⁴ · Fernanda Peset³ · Alicia García García¹


Received: 5 June 2018 / Published online: 4 January 2019

Scientometrics (2016) 107:1–13
DOI 10.1007/s11192-016-1868-7

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Correlation between impact factor and public availability of published research data in Information Science and Library Science journals

Rafael Alexandre-Benavent¹ · Luz María Moreno-Solano² · Antonia Ferrer Sapena³ · Enrique Alfonso Sánchez Pérez⁴

 Journal of Substance Use

ISSN: 1465-9891 (Print) 1475-9942 (Online) Journal homepage: <https://www.tandfonline.com/loi/jjsu20>

The availability of raw data in substance abuse scientific journals

Antonio Vidal-Infer, Rafael Alexandre-Benavent, Rut Lucas-Domínguez & Andrea Sixto-Costoya

Clin Oral Invest
DOI 10.1007/s00784-017-2108-0

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ORIGINAL ARTICLE

Public availability of research data in dentistry journals indexed in Journal Citation Reports

Antonio Vidal-Infer¹ · Beatriz Tarazona² · Adolfo Alonso-Arroyo¹ · Rafael Alexandre-Benavent³

STEM CELLS AND DEVELOPMENT
Volume 27, Number 11, 2018
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DOI: 10.1089/scd.2018.0036

ISSUES IN DEVELOPMENT

The Sharing of Research Data in the *Cell & Tissue Engineering* Area: Is It a Common Practice?

Rafael Alexandre-Benavent^{1,2,*} Rut Lucas-Domínguez^{1,3}
Andrea Sixto-Costoya^{1,3} and Antonio Vidal-Infer^{1,3,*}



Policies regarding public availability of published research data in **pediatrics** journals

Rafael Alexandre-Benavent^{1,2} · Antonia Ferrer Sapena³ · Silvia Coronado Ferrer⁴ · Fernanda Peset³ · Alicia García García¹

Received: 5 June 2018 / Published online: 4 January 2019
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Approach 2: Editorial policies on data sharing

1. Policies of data sharing in scientific journals

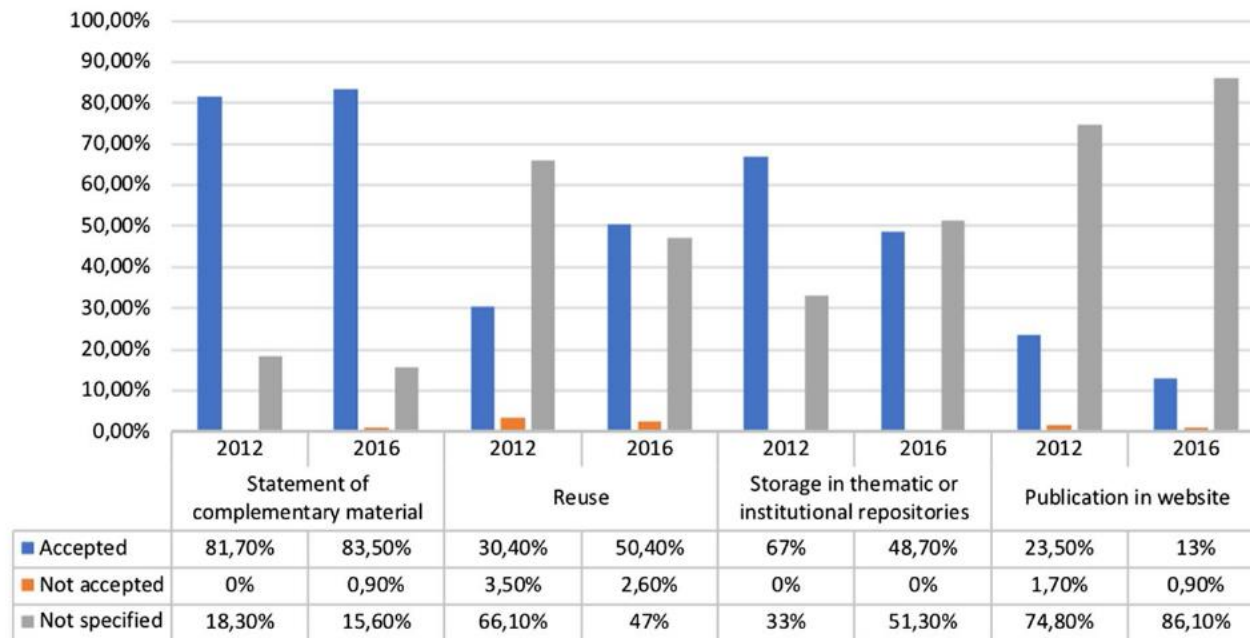


Fig. 1 Comparative visualization of the four variables

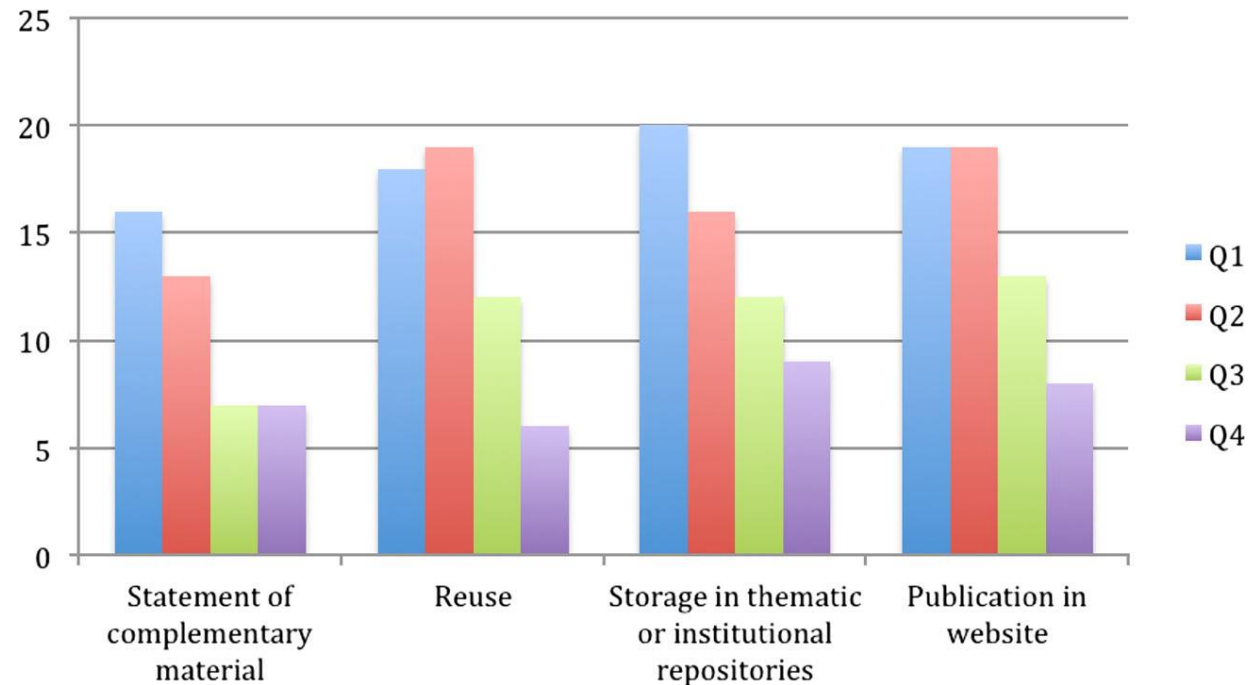
- Statement on deposit of supplementary material attached with the manuscript
- Acceptance of reuse of data included as supplementary material
- Acceptance of storage in thematic or institutional repositories
- Possibility of publication in website (authors')

Approach 2: Editorial policies on data sharing

1. Policies of data sharing in scientific journals

Correlation between impact factor and public availability of published research data in Information Science and **Library Science** journals

Rafael Aleixandre-Benavent¹ · Luz María Moreno-Solano² ·
Antonia Ferrer Sapena³ · Enrique Alfonso Sánchez Pérez⁴



- 50 % of journals in LIS include the possibility to deposit data as supplementary material
- There is a positive correlation between being a top journal in impact factor ranking of JCR and having an open policy

Fig. Journals supporting each variable by quartile. Q = Quartile in JCR, 2012 edition

Approach 2: Editorial policies on data sharing

2. Existence of supplementary material

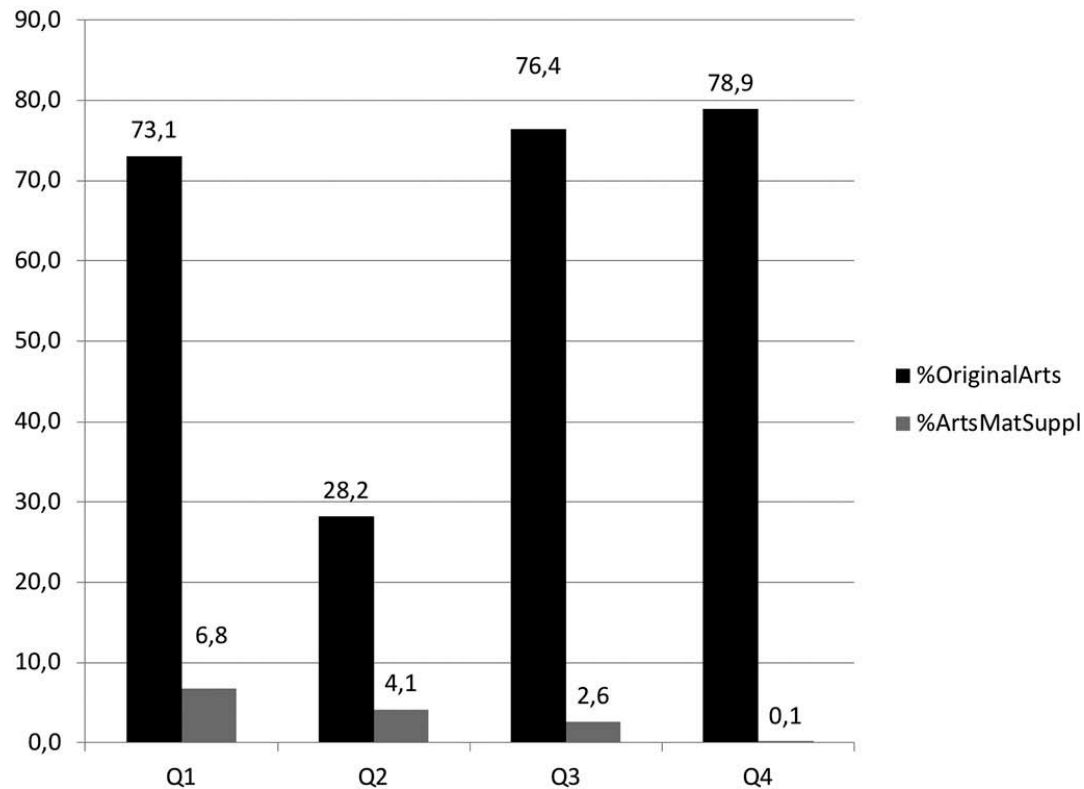



Figure 1. Distribution of total number of original articles and articles with supplementary material per quartile.

 Journal of Substance Use
ISSN: 1465-9891 (Print) 1475-9942 (Online) Journal homepage: <https://www.tandfonline.com/loi/ijsu20>

The availability of raw data in **substance abuse** scientific journals

Antonio Vidal-Infer, Rafael Alexandre-Benavent, Rut Lucas-Domínguez & Andrea Sixto-Costoya

Supplementary material in PubmedCentral repository

Approach 2: Editorial policies on data sharing

3. Distribution of supplementary material regarding quartiles

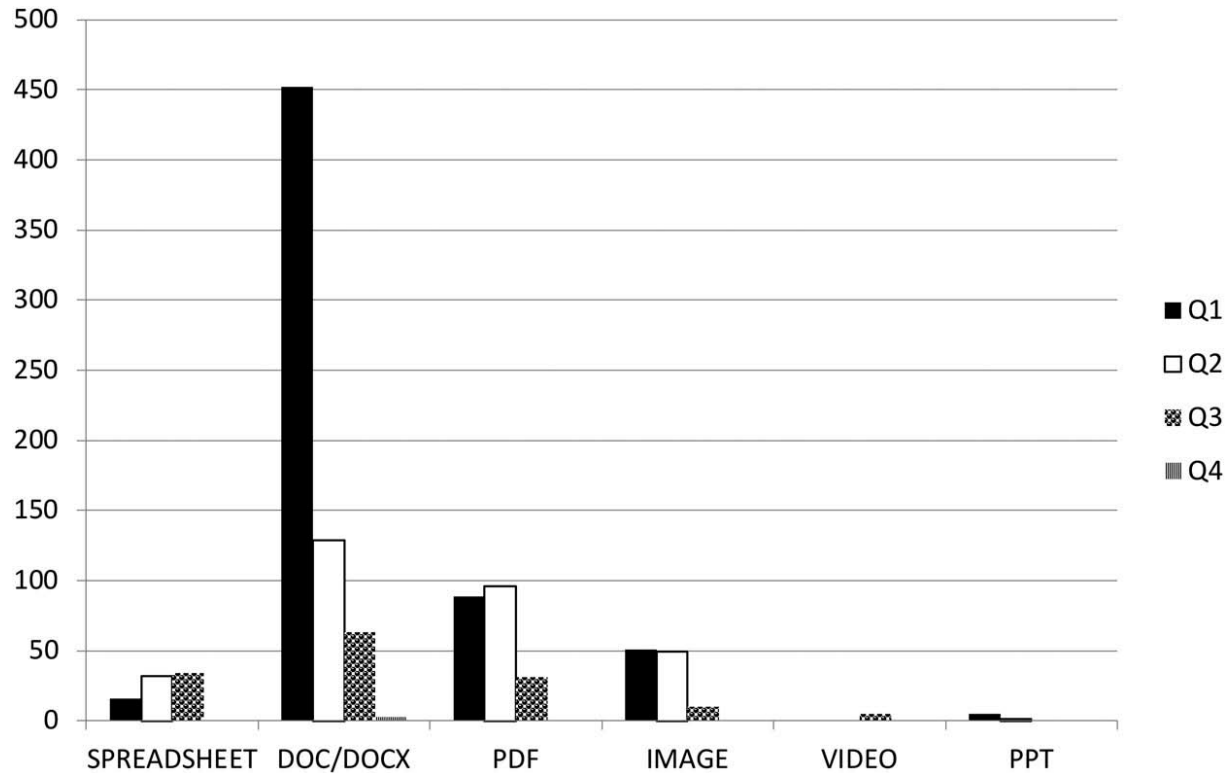


Figure 2. Quartile distribution of files.



Types of files in supplementary material

Approach 2: Editorial policies on data sharing

Public availability of research data in **dentistry** journals indexed in Journal Citation Reports

Antonio Vidal-Infer¹ · Beatriz Tarazona² · Adolfo Alonso-Arroyo¹ · Rafael Aleixandre-Benavent³

4. File formats of supplementary materials

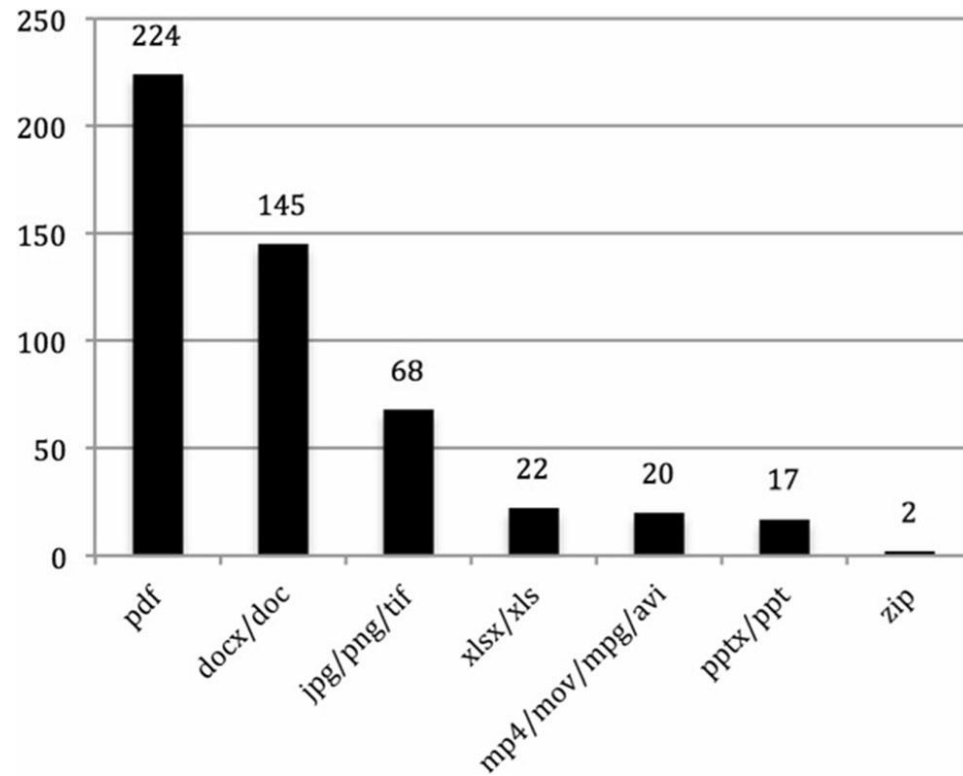


Fig. 1 File formats of supplementary materials

Approach 2: Editorial policies on data sharing



2016 Annual Meeting the Association for Information Science and Technology

Copenhagen, October 14-18, 2016



Journals' policies of storage and reuse of raw research data and their impact in five scientific areas

Alexandre-Benavent, R. (1); Ferrer-Sapena, A. (2); Vidal-Infer, A. (3); Alonso-Arroyo, A. (3); Sánchez Pérez, E.A. (4); Peset, F. (2).
 1. Ingenio (CSIC- [Universitat Politècnica de València](#)). UISYS (CSIC – University of Valencia). Spain. 2. DCADHA. [Universitat Politècnica de València](#). Spain. 3. Department of the History of Science and Information Science. School of Medicine and Dentistry. University of Valencia. Spain. 4. [Instituto Universitario de Matemática Pura y Aplicada](#). Spain.

BACKGROUND

To enhance the fast dissemination of information and exchange of knowledge, it is required to make available for researchers both scientific literature and research raw data.

The Open Access movement has allowed accessing the full text of many articles, thereby facilitating universal access to scientific advances. A further step is to open the raw data that support research to be shared and reused (data-sharing).

Many scientific manuscripts consist of full text plus supplementary data to support the presented information. These additional data are too extensive to include them in the full text of the article, but some researchers may require these data to ensure that the experiment has been correctly conducted (Murray-Rust, 2008). Moreover, these data can also be useful, if reused, to supplement other work, make comparisons or generate new hypotheses.

The purpose of this study is to analyse open-data policies concerning the availability of raw data in journals included in 5 subject categories (SC) of the Journal Citation Reports (JCR) and the relation of these policies with the impact factor and the quartile.

METHODS

Table 2. Acceptance of the variable “Reuse”

Quartile in JCR	Dentistry	FS&T	IS&LS	Pediatrics	Substance abuse
1	9 (10.2%)	31 (25%)	18 (21.2%)	6 (5.2%)	8 (20.5%)
2	4 (4.5%)	27 (21.7%)	19 (22.3%)	9 (7.8%)	6 (15.4%)
3	1 (1.1%)	25 (20.2%)	12 (14.1%)	13 (11.3%)	5 (12.8%)
4	3 (3.4%)	8 (6.5%)	6 (7.1%)	7 (6.1%)	3 (7.7%)
Total*	17 (19.3%)	91 (73.4%)	55 (64.7%)	35 (30.4%)	22 (56.4%)

The next variable, “Acceptance of storage in thematic or institutional repositories” (Table 3) presents results near 65% in three subject categories: IS&LS, Pediatrics and FS&T, near 60% for Substance abuse and only 37.5% for Dentistry. Here again, the acceptance is higher in the upper quartiles.

Table 3. Acceptance of “Storage in thematic or institutional repositories”

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Our challenges and future projects

- Qualitative approach to assess knowledge, beliefs and attitudes of researchers facing the data sharing behaviour.
- Application of new emerging technologies to data (blockchain)
- Study of the quality of data repositories
- Analysis of the quality of data
- Measure of reuse in specific scientific or strategic areas
- Expand our international collaboration



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Social and Health Information and
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MareData

DATASEA
DATASEA - Datos Abiertos de Investigación - Open Research Data

Thanks for your attention!