Research Data Publication

Workshop: FAIR and Frictionless workflows for tabular data

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Up to now, we have learned about:

- Reproducibility and FAIR principles – concepts that need to be considered along the whole research process

And, about:

- Data Organization
- Data Extraction
- Data Validation
- Data Description

Which are very relevant in the collection and analysis phase of the research process

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Moving to the next step of **writing and publishing** your results

You may ask yourself:

- What are the benefits of publishing data?
- Which data to publish?

What are the benefits of publishing data?

- Transparency and reproducibility boost **trustworthiness**
- Articles with linked data have up to 25% higher citation **impact** (Colavizza et al., 2020)
- Saving time and resources increases **efficiency** and accelerates **innovation**
- Funder, institution and journal **requirements**

Which data to publish?

Some criteria to decide which data to preserve*:

- ✓ Consider potential reuse
- ✓ Identify long-term value
- ✓ Weigh up the costs
- ✓ Consider legal or policy

*DCC (2014). 'Five steps to decide what data to keep: a checklist for appraising research data v.1'. Edinburgh: Digital Curation Centre.

“As open as possible, as closed as necessary.”

European Commission, 2016

Share & Impact of Research Data

To ensure that the data of your project are optimised for reuse and have a greater impact remember to apply the FAIR principles:

- Make sure the data is well documented to make it reusable
- Make sure the data is interoperable (e.g. open file format)
- Add a usage licence to make data accessible
- Give the data a unique and persistent identifier to make it findable

Publishing the data of your project in a data repository can help increasing the impact of your research! But…

- How to choose a good data repository?

Choosing a data repository

essential

- be **recognized** in the research community
- have clear **terms and conditions**
- guarantee **sustainability**
- use common **metadata standards**
- provide persistent and unique **identifiers**
- offer standard **licences** for data and/or code

optional

- enable data set **reviews**
- offer **embargo periods** and **control over data access**
- deliver download/citation **statistics**

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Discipline-specific repositories

- Offer optimal solutions for your data, e.g. preferred metadata standard
- Are used by people likely to be interested in your data

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Data Journals

- Publish a description of the dataset in a data journal
- Publication will be reviewed and indexed
- Note you will need to share data openly in a repository!

scientific **data**

Geoscience Data Journal
Open Access

Demo

4TU.ResearchData Sandbox
https://sandbox.data.4tu.nl/

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