Using the DSpace-based Repository PsychArchives for Publishing Data and Results from the COVID-19 Snapshot Monitoring (COSMO) Project

Repositories During the COVID-19 Pandemic

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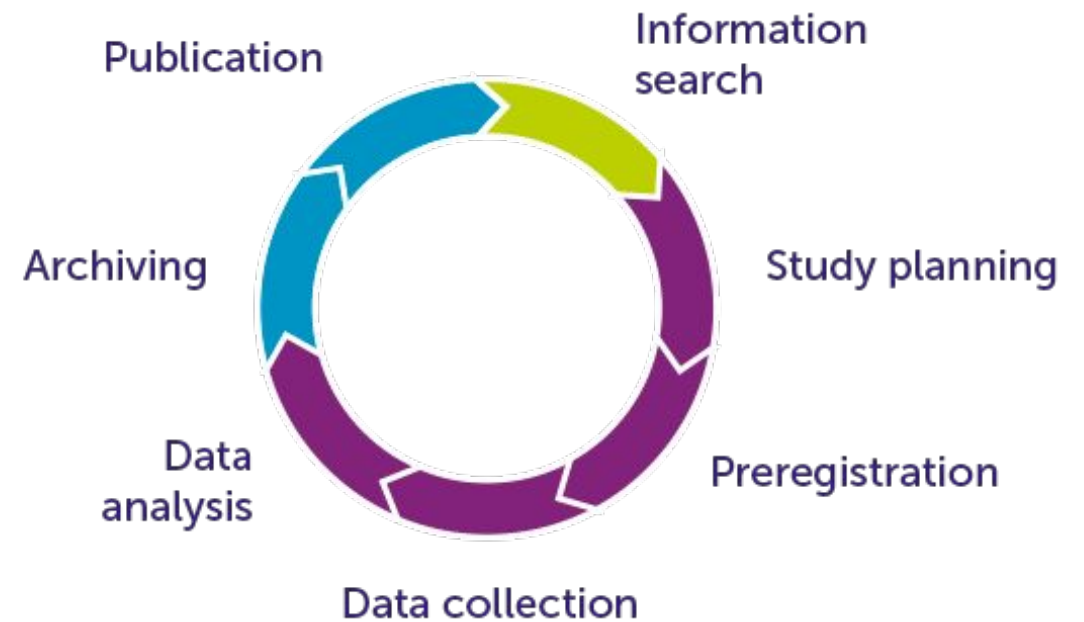https://www.leibniz-psychology.org

Overview

- About leibniz-psychology.org (ZPID)

- About the COSMO – Covid-19 Snapshot Monitoring project

- COSMO in PsychArchives – Implementation with DSpace

- Data Sharing in the COSMO project
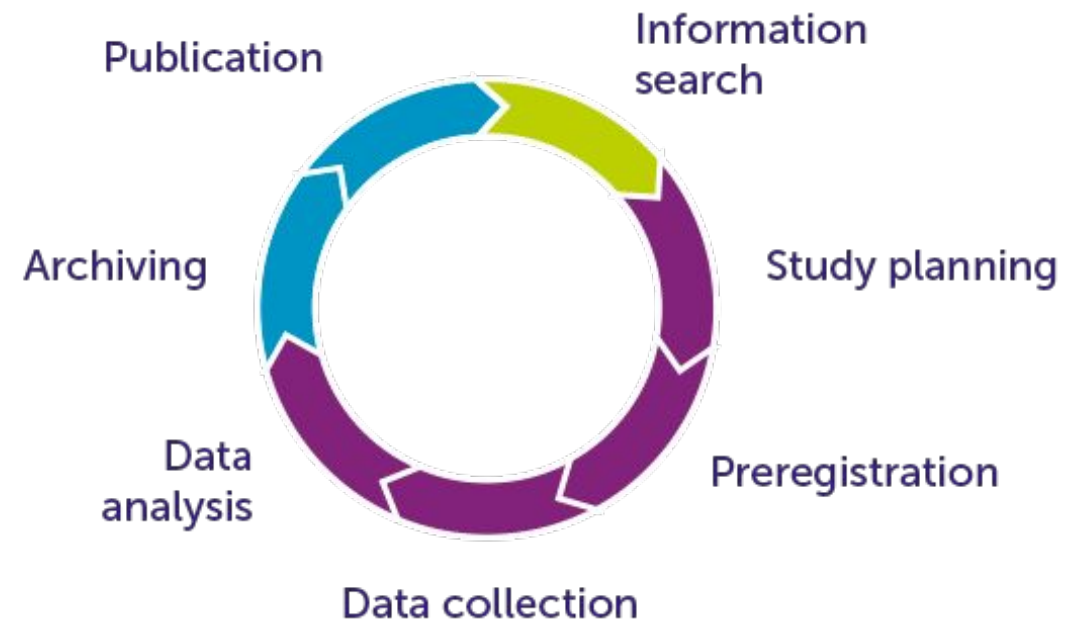
- Summary

leibniz-psychology.org (ZPID)

- … is a Public Open Science Institute for Psychology and related disciplines

- … is in the process of strategic expansion towards becoming a one–stop research support organization (i.e., research infrastructure), providing services for the entire research cycle

Publication

Information search

Archiving

Study planning

Data analysis

Preregistration

Data collection

leibniz-psychology.org (ZPID)

Supporting the (scientific) community in psychology (and beyond) to make research

- accessible
- transparent
- reproducible,
- and replicable.

PsychArchives

- disciplinary repository for psychological science maintained by ZPID (Leibniz Institute for Psychology Information)
- online since December 2018
- DSpace 6.3 with jspui
- assigns DOIs

https://www.psycharchives.org

COSMO - Covid-19 Snapshot Monitoring

Project Goals:

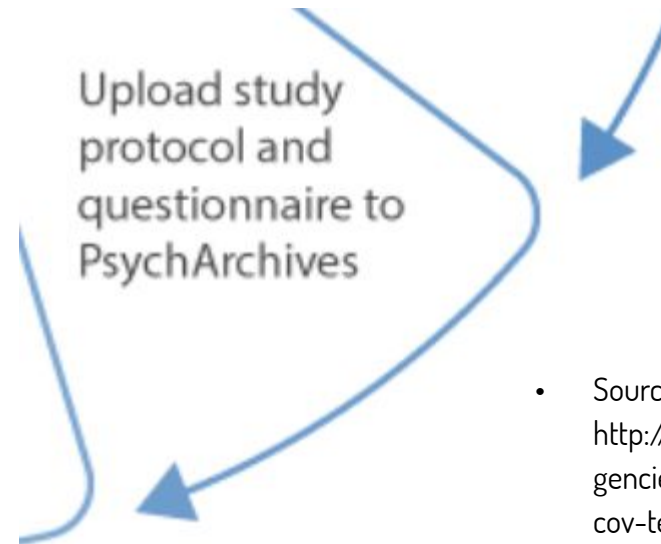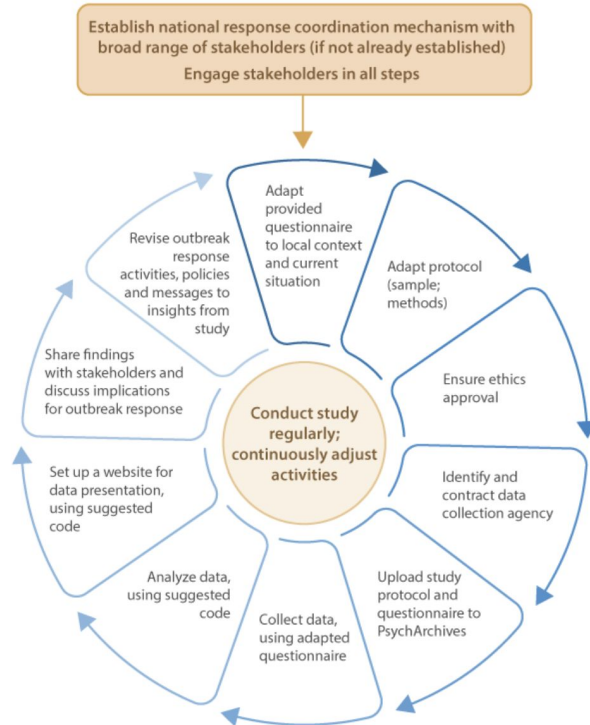Monitoring public perceptions of risk, behaviours, and public trust

Project Partners:

COSMO - Covid-19 Snapshot Monitoring

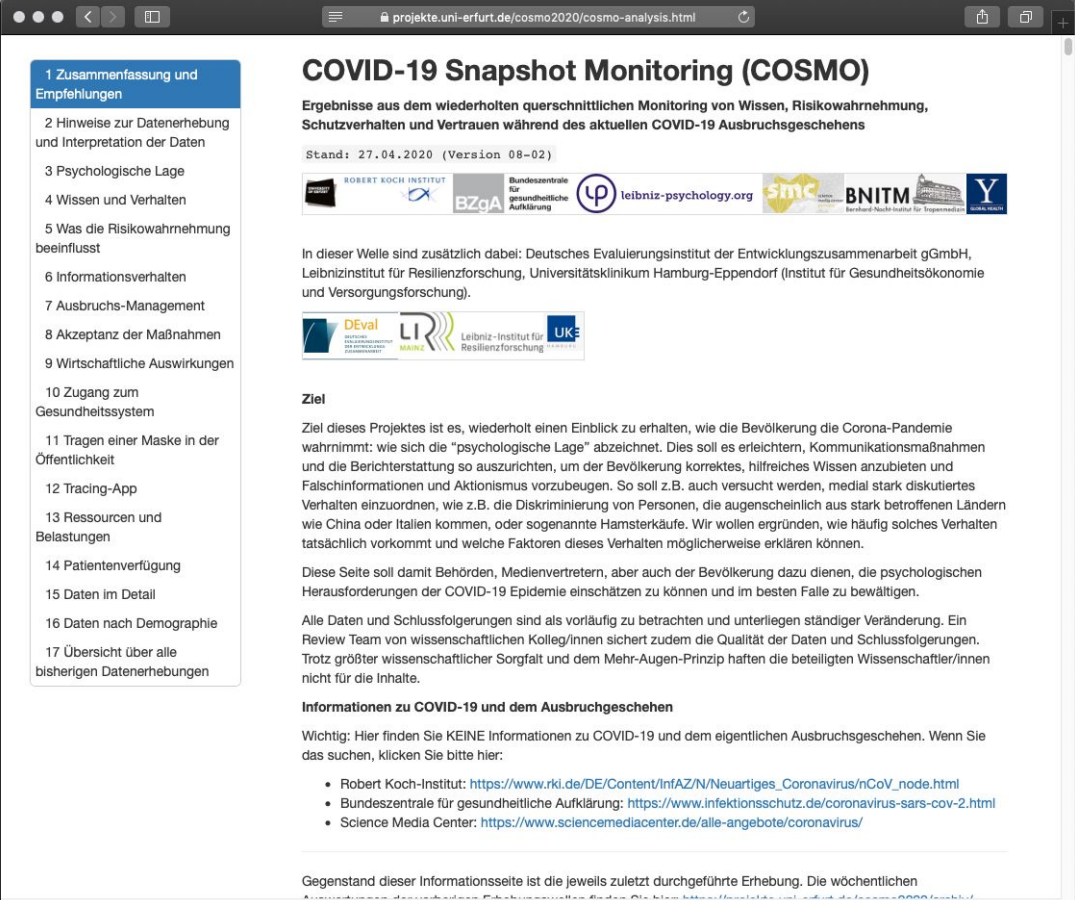- PsychArchives is part of the official guidelines for the WHO tool for behavioural insights on Covid-19

- Source: http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/novel-coronavirus-2019-ncov-technical-guidance/who-tool-for-behavioural-insights-on-covid-19

COSMO - Covid-19 Snapshot Monitoring

- through population surveys, the project explores people's perceptions, acceptance of restrictions, mental and physical health, behaviours, information needs, misperceptions and more
- data is collected weekly via online panels, so that changes in risk perceptions or knowledge/misinformation can be identified as they emerge
- national pandemic response groups can use the findings to inform pandemic response measures, such as interventions, policies and messages
- results can also be made available to the media to support high quality and responsible reporting
- COSMO invites any country interested to use their questionnaire to collect data among its respective population
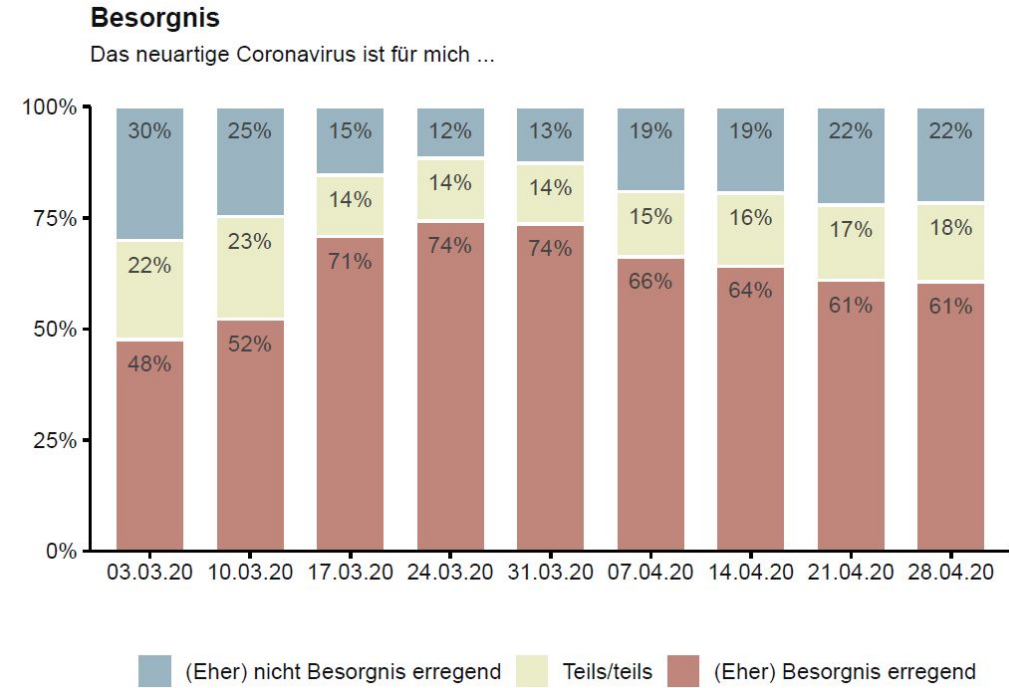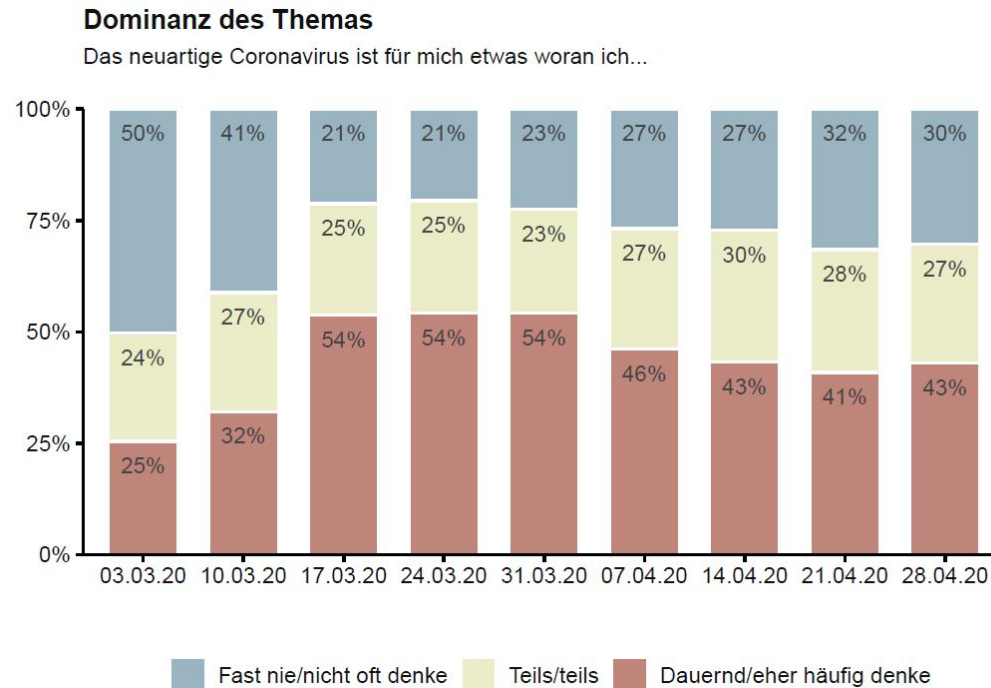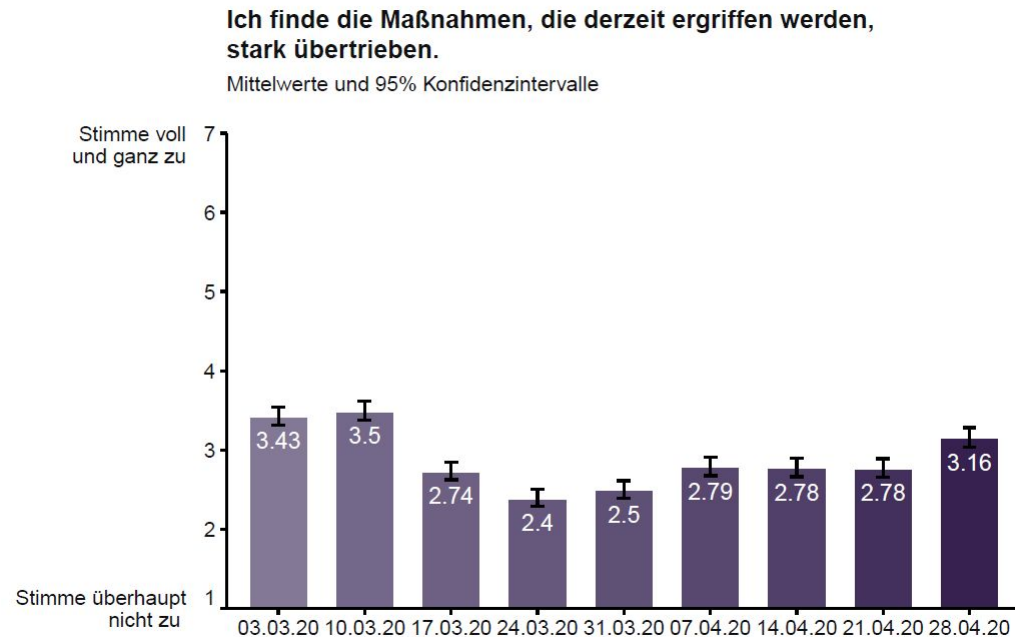
DISCLAIMER

COSMO - Results (Examples)

Shifts in people's emotional reactions to Covid-19 over time: decrease in mental preoccupation with and worrying about the virus

Dominanz des Themas
Das neuartige Coronavirus ist für mich etwas woran ich...

	03.03.20	10.03.20	17.03.20	24.03.20	31.03.20	07.04.20	14.04.20	21.04.20	28.04.20
Fast nie/nicht oft denke	50%	41%	21%	21%	23%	27%	27%	32%	30%
Teils/teils	24%	27%	25%	25%	23%	27%	30%	28%	27%
Dauernd/eher häufig denke	25%	32%	54%	54%	54%	46%	43%	41%	43%

Besorgnis
Das neuartige Coronavirus ist für mich ...

	03.03.20	10.03.20	17.03.20	24.03.20	31.03.20	07.04.20	14.04.20	21.04.20	28.04.20
(Eher) nicht Besorgnis erregend	30%	25%	15%	12%	13%	19%	19%	22%	22%
Teils/teils	22%	23%	14%	14%	14%	15%	16%	17%	18%
(Eher) Besorgnis erregend	48%	52%	71%	74%	74%	66%	64%	61%	61%

COSMO - Results (Examples)

Meanwhile, the number of people who think that the preventative measures are vastly exaggerated has been on the increase.

Ich finde die Maßnahmen, die derzeit ergriffen werden, stark übertrieben.
Mittelwerte und 95% Konfidenzintervalle

COSMO researchers' recommendation:
- necessary to react to this change of mood
- public should be reminded of the reasons for the measures: to protect others and to maintain the freedoms that we have achieved so far
- the successes achieved by the measures should be further emphasized

Source: Betsch, C., Korn, L., Felgendreff, L., Eitze, S., Schmid, P., Sprengholz, P., Wieler, L., Schmich, P., Stollorz, V., Ramharter, M., Bosnjak, M., Omer, S. B., Thaiss, H., De Bock, F., Von Rüden, U., Crockett, M., Krauth, C., Brockmann, D., & Schlosser, F. (2020). German COVID-19 Snapshot Monitoring (COSMO) – Welle 9 (28.04.2020). PsychArchives. https://doi.org/10.23668/PSYCHARCHIVES.2890

COSMO in PsychArchives

- PsychArchives collects and distributes COSMO materials:
  - WHO standard protocol with the questionnaire, protocol template and a guidance document
  - study protocols of the national projects
  - preprints describing study results
  - code (data analysis template)
  - *research data obtained through the repository (coming soon)*

Start page with static link to COSMO community page

and

static "Highlighted Submissions" box

COSMO in PsychArchives

Community for COSMO project with collections for the national projects

Study protocols from Argentina, Canada, Denmark, Ethiopia, Germany, Israel, Kuwait, Palestine, Saudi Arabia, and Sicily (Italy)

https://www.psycharchives.org/handle/20.500.12034/2397

Useful DSpace Standard Features

- Hierarchical structure with collections in communities
- Images for Communities/Collection
  we've never used this feature before!
- Introductory text of community is very flexible
- Mapping of items into different collections
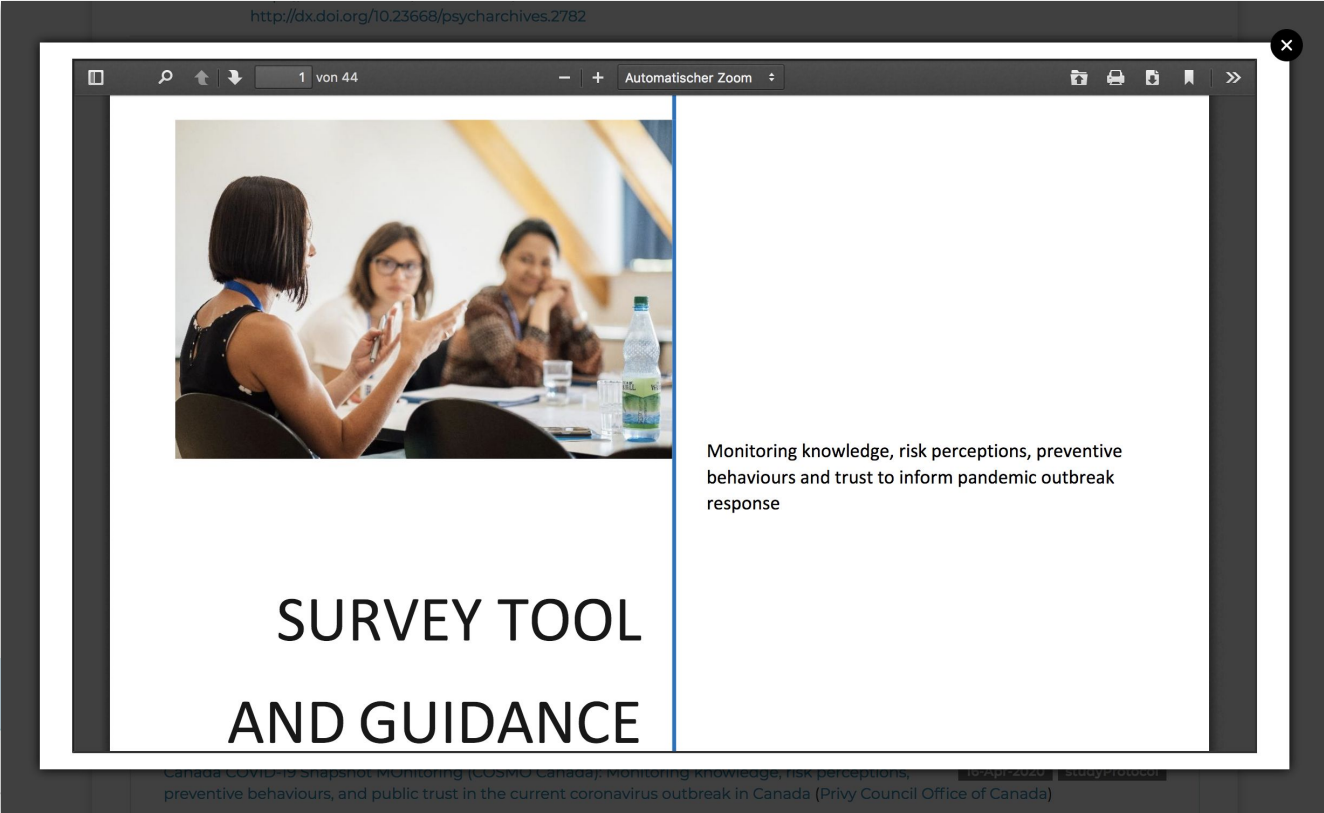- *Adding of additional metadata fields*

Custom DSpace Extensions I

- *Related Items* view to show connections between items

Custom DSpace Extensions II

- *Preview PDF*

  to enable a quick preview

Limitations to DSpace Functionality

Order of metadata fields cannot be set manually – developing a solution would be expensive

Sharing Data in Psychology

- Regarding GDPR

Article 89

Safeguards and derogations relating to processing for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes

1. Processing for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes, shall be subject to appropriate safeguards, in accordance with this Regulation, for the rights and freedoms of the data subject. Those safeguards shall ensure that technical and organisational measures are in place in particular in order to ensure respect for the principle of data minimisation.

- Compliance with the purpose of use agreed in the informed consent
- Default sharing level in PsychArchives (DSpace) does not correspond to researchers' wish to share their data under their own conditions

Sharing Level Concept

Access Level 0 Public Use File
    means open access
✔ DSpace

Access Level 0+ Public Use File
    generally open access, but the submitter requests feedback regarding intended use
✘ DSpace

Access Level 1 Restricted/Scientific Use File
    only for scientific use; procedure 'Request a Copy' has a step for verification of this purpose
✔ DSpace

Access Level 2 Restricted/Scientific Use File with veto
    scientific use with individual agreement between submitter and requester
✘ DSpace

- ○ Default process to get data not sufficient, but easy to change
- ○ 'Request a copy' is not an individual agreement between submitter and requester
- ○ 'Download' procedure does not include individual consent

How to grant access to the COSMO research data?

- Changed displayed text for default 'Download' procedure

- Simple workaround for 'Request a copy'

Summary

- PsychArchives, our DSpace-based repository, could be quickly adapted to provide convenient access to psychological research about Covid-19 from a variety of countries on one platform
- DSpace made it easy for us to highlight this research (temporarily) via
  - the creation of a special COSMO community containing a number of separate national collections
  - the mapping of COSMO items into their respective collections
  - the presentation of information on COSMO and the submission process for COSMO content on the PsychArchives start page as well as the community page
  - the integration of images in the community overview
  - the inclusion of additional metadata fields such as zpid.tags.visible
  - the use of our *Related Items* view
  - and the implementation of a workaround to access scientific use files.

Thank you!

If you have further questions or feedback, contact us via:
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