

Responsible Research Assessment II: The RESQUE web form for hiring and promotion

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Slides: <https://osf.io/gd3ze/>

Academic contributions are multifaceted

Types of academic contributions:

1. Research

2. Teaching

3. Leadership
(e.g., mentoring, management and organizational skills, strategic thinking)

4. Service to the academic institution/ field

5. Societal impact
(e.g., science communication/ citizenship)

Contributor roles

Research outputs (ROs):

Publications

Data sets

Research software

Evaluation dimension:

Rigor
(for each RO)

Impact
(for each RO)

Quantity
(aggregated)

- Registered report
- Analysis script provided
- Open material
- Independently verified reproducibility
- Formal modeling
- Manipulation checks
- Follows reporting guidelines
- ...

- Citation count
- Altmetrics
- Societal impact
- ...

- Number of papers
- ...

- FAIRness
- Representativeness
- Size
- Uniqueness/effort of data collection
- ...

- Citation count
- # of reuses from other authors
- ...

- Number of published data sets
- ...

- Independent review
- Unit testing
- Documentation
- Technology Readiness level
- ...

- Citation count
- Dependencies
- Github stars
- ...

- Number of published software
- Duration of active maintenance
- % of applicants contribution to a product
- ...

Academic contributions are multifaceted

BUT: HOW TO ASSESS?

For both users and hiring/promotion committees, it should be:

- Easy to use
- Fast, not time-consuming
- Economical
- Secure
- Sustainable



RESQUE Web form

RESQUE = RESearch QUality Evaluation

- Online evaluation scheme for **publications, data sets, and research software**
- Enter necessary information for your best research outputs (e.g., 5/10 outputs)
- Export **profile** that shows your research style (and possible points)
- For **CV** or in **hiring and tenure committees**

Privacy

- Nothing leaves your device!
- [Web Storage API](#): Website itself is hosted on a server, data is only stored and processed in local browser



RESQUE Web form

The screenshot shows the RESQUE web form interface. At the top left, there is a header with the text "RESQUE" and three buttons: "Clear", "Load", and "Export". Below this, it says "0 of 12 slots used". The main content area is titled "Author / Metadata" and has a "Last name" input field. To the right of the main content, there is a button that says "Click on an indicator to see detailed information". Below the main content, there is a section titled "Extract DOI from PDF" with a "DOI (optional)" input field. At the bottom left, there is a section titled "Add" with three buttons: "Publication", "Software", and "Data Set".

The modal dialog box is titled "Welcome to the RESQUE tool!" and has a "Continue" button. The text inside the modal reads: "We need to change the way we assess research - with a focus on quality (over quantity). The [RESearch Quality Evaluation \(RESQUE\)](#) framework provides an evaluation scheme for publications, data sets, and research software. With this tool, you can enter the necessary information for your best research outputs, export a profile that shows your research style, and use it for your CV or in hiring and tenure committees."

Below the welcome message, there is a section titled "How to use the RESQUE tool?" with a list of five questions:

- ▶ How do I add a new publication / software project / data set?
- ▶ How do I export my data?
- ▶ How do I load data I previously exported?
- ▶ How can I clear all information I entered?
- ▶ What should I do if I want to use RESQUE on a shared/public computer?

Below the list, there is a section titled "Privacy" with a lock icon and the text: "Is my data stored privately in a safe location?".

Below the privacy section, there is a section titled "Nothing leaves your device." with the text: "We use the [Web Storage API](#) supported by all major browsers. Although the website itself is hosted on a server, your data is *only* stored and processed in the local browser:

The data is processed only locally. Your score is calculated in the browser. The local PDF files you open on this website are *not* uploaded to a server.

RESQUE Web form

RESQUE

Clear

Load

Export

3 of 12 slots used

Author / Metadata
Gärtner

Publication 1

Software Project 1

Data Set 1

Extract DOI from PDF

DOI (optional)

Add

Publication

Software

Data Set

Author / Metadata

Last name

Gärtner

Name of external rater (optional)

Name of external rater (optional)

Top papers

No papers selected

Date created

24.9.2023, 16:13:32

Last change

24.9.2023, 16:13:32

RESQUE Web form

Publication

Date added: 26.9.2023, 11:43:09

Paper title (do not provide journal name)

Empfehlungen zur Bewertung wissenschaftlicher Leistungen bei Berufungsverfahren in der Psychologie 10

Year of publication

2023

DOI

10.1026/0033-3042/a000630

Top papers: currently selected: 0/3

This is one of my three best papers.

Publication type (check all that apply)

- Empirical paper
- Meta-Analysis
- (Mainly) Theoretical contribution / Review
- Simulation
- Other (please specify)

Publication type

- Published paper / Paper in press
- Preprint
- Conference proceeding
- Stage 1 registered report with IPA
- Monograph
- Book chapter
- Test or instrument
- Other (please specify)

Does this contribution fit well into the assessment scheme? (If 'No': Skip all other indicators; the paper will not be included in the scoring but processed manually)

- No, it should be processed manually (provide explanation)
- Yes

Does this paper use any kind of data in a substantive way (new data, reuse of existing data, or simulated data?)

- No
- Yes

+ Credit Roles

RESQUE Web form

Correctness of computational results has been independently verified

- Not applicable [provide explanation]
- No
- Yes [provide doi or URL to verification report]

Open reproducible scripts

- Not applicable [provide explanation]
- Not available
- Yes, parts of scripts [provide doi or URL]
- Yes, entire scripts [provide doi or URL]

Open materials (beyond the open reproducible scripts entered above)

- Not applicable [provide explanation]
- Not available
- Yes, parts of material [provide doi or URL]
- Yes, entire material [provide doi or URL]

Preregistration

- Not applicable [provide explanation]
- No
- Yes (but not RR) [provide doi or URL]
- Registered Report [provide doi or URL]

Formal modeling of a theory

- Not applicable [provide explanation]
- No
- Yes

The paper contains a preregistered replication attempt (either direct/close or conceptual)

- Not applicable [provide explanation]
- No
- Yes

Please report all considerations regarding statistical power (assumed effect size, power, N, ...)

Official open science badges awarded by journal? (check all that apply)

- Open Data
- Open Material
- Preregistration

Sample size (if applicable, differentiate by levels / items / ...)

Merit / impact statement (narrative, max. 150 words)

0 / 150

RESQUE Web form

CRedit roles

Conceptualization

Lead Equal Support No Role

Data curation

Lead Equal Support No Role

Formal analysis

Lead Equal Support No Role

Funding acquisition

Lead Equal Support No Role



P_CRediT_Conceptualization

Ideas; formulation or evolution of overarching research goals and aims.

Score

0.0% • 0 / 12

Click on an indicator to see detailed information

[What is RESQUE?](#) / [Help](#) / [Privacy](#) • [GitHub](#)

RESQUE Web form

↳ FAIR format

- Timestamped repository
- Version control
- Reproducible manuscripts (e.g. with R Markdown)
- Proper documentation of code
- Reproducible software environments (e.g. conda environment, renv environment in R)

Score

3.3% • 0.4 / 12

RESQUE Tool

Selection of other criteria

Criteria for Data Sets

Criterion		Pt.
...		
DataCrediT roles	Collection Validation Curation ...	
Data types	Questionnaire Behavioral Physiological Other	
Study mode	Online Laboratory Field study ESM Other	
FAIR format	No Yes, parts of data Yes, entire data	2.5 5
Sample size	<i>please specify</i>	
Number of items	<i>please specify</i>	
Citations/Reuse	<i>please specify</i>	
Merit statement	<i>please specify</i>	

Criteria for Research Software






Criterion		Pt.
...		
Contributor roles	DA CD MS	0-3 Ø 0-3
License		
Downloads		
Reusability Indicator	R1 R3 R2 R4	0.25 - 8
Merit statement	<i>please specify</i>	

Github Repository

RESQUE Tool



Table of content:

- RESQUE: The Research Quality Evaluation scheme for psychological research
 - Publications and commentaries by the scientific community
 - Publications
 - Commentaries
 - Resources
 -  Rating sheets (core set)
 -  Rating sheets (expansion packs)
 -  Coding manual
 -  Analysis scripts for R
 - How to get started
 - ...as hiring committees
 - ...as tenure track committees
 - ... as applicants
 -  How to contribute
- still work in progress and constantly updated
- contains links to RESQUE **core set** and future **expansion packs** of evaluation criteria (e.g. for each DGPs section, will be collected soon!)
- **Coding manual** with further information
- **R Analysis scripts** for hiring and promotion committees that provide summary export file

OSF Project

RESQUE Indicators as Excel Files



RESQUE: The Research Quality Evaluation Scheme

This OSF project contains the most current version of the RESQUE scheme.

(Note: old versions and current development versions can be found on a [Github project](#)).

Please find below the proposed evaluation criteria for hiring and promotion in psychology. For current use, open the respective Google Sheet, download the file (File > Download) and fill in the Excel file offline.

Publications:

<https://docs.google.com/spreadsheets/d/1pgh6-Ct2xomij7Y4IOsEWPf3Krg-cs97JQwL7hooGN4/edit#gid=485121430>

Data sets:

<https://docs.google.com/spreadsheets/d/1bGZ2XmHUIGR9P9Ut37yCDWHMOrGzhrkEh5GtLIDkxZ0/edit#gid=485121430>

→ current release

Research Software:

https://docs.google.com/spreadsheets/d/1pwYKRa-ssQJSel37kj0-nk0_upDXySbAYwrR7ZPphpY/edit#gid=485121430

We will soon provide offline Excel files for optimal use. Furthermore, we are developing an R Markdown script to process the information from the Excel files (e.g., to provide summary statistics). All files will be listed here as soon as possible.

<https://osf.io/4wynr/wiki/home/>

Discussion

- How do you like the online **implementation** of the RESQUE web form?
- Would you use it?
- What might be **hurdles** in implementing these indicators and tools in hiring and promotion decisions?
- How could these be **circumvented**?

Interested?

- Join our mailing list: <https://www.listserv.dfn.de/sympa/info/psy-dora>
- Join hiring committees (Berufungskommissionen, tenure track) and point to alternative indicators
- **Try the RESQUE tool (and give us feedback!)**



Further information

Change of the incentive structure

Responsible Research Assessment I:
Implementing DORA for hiring and promotion
in psychology

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AUTHOR ASSERTIONS
Conflict of Interest: No ▾ Public Data: Not applicable ▾ Preregistration: Not applicable ▾

Responsible Research Assessment II: A specific proposal
for hiring and promotion in psychology

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AUTHOR ASSERTIONS
Conflict of Interest: No ▾ Public Data: Not applicable ▾ Preregistration: Not applicable ▾

Meta-Psychology
(Special Issue with 15 commentaries)

Diskussionsforum

Empfehlungen zur Bewertung wissenschaftlicher Leistungen bei Berufungsverfahren in der Psychologie

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Psychologische Rundschau
(Diskussionsforum with 6 commentaries)

Thank You!

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Slides: <https://osf.io/gd3ze/>

RESQUE Web form:
<https://nicebread.github.io/RESQUE/web/>