

Exploring the Meaning and Perception of Altmetrics

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*metrics Project

Towards a better understanding of metrics for research evaluation:

- Assess their general significance and their perception amongst stakeholders
- Promote greater openness and transparency of the different metrics' meaning and impact
- Offer recommendations for their standardization

Survey Setup

Starting point: explorative survey on the professional social media usage of researchers.

- **Setup:** online survey conducted between March and May 2017.
- **Questionnaire:** ~20 questions on the intensity of researchers' social media usage at work.
- **Participants:** 3,400 researchers from 84 countries.
- **Disciplines:** emphasis on Economics and Social Sciences.

Results

Frequently Mentioned Services

What are the most popular social media services in the professional lives of researchers?

Most Popular Services

Share of survey participants that use the service at least occasionally in their professional life.

	Service	Used by
1.	Google Scholar	75.2%
2.	JSTOR	60.7%
3.	Wikipedia	60.1%
4.	ResearchGate	55.6%
5.	EBSCO	36.7%

Most Frequently Used Services

Share of survey participants that use the service at least once a day in their professional life.

	Service	Used by
1.	Google Scholar	31.0%
2.	Wikipedia	21.0%
3.	Facebook	14.0%
4.	Twitter	10.0%
5.	JSTOR	10.0%

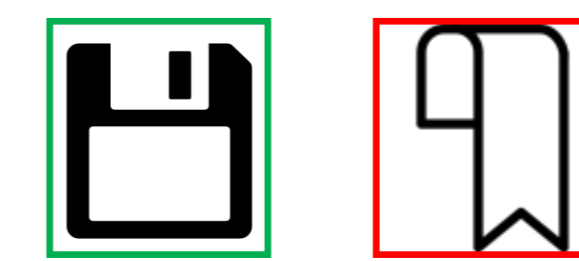
Audiences of Services

How does the frequency with which the services' functionalities are used vary between different types of users?



Early-Stage Researchers

Actions that early-stage researchers perform significantly more frequently than professors:



Downloading
&
Bookmarking



Professors

Actions that professors perform significantly more frequently than early-stage researchers:



Writing
&
Facebook Actions
&
Twitter Actions

Which social media services did recently attract particular attention among researchers? Which have been used for a long time by now?

Long-Established Services

Share of a service's users that have been using that service for more than 5 years in their professional life.

	Service	Used by
1.	Wikipedia	81.9%
2.	Amazon	73.6%
3.	JSTOR	70.2%
4.	Facebook	66.6%
5.	ICPSR	65.6%

Up-and-Coming Services

Share of survey participants that started using that service less than one year ago in their professional life.

	Service	Used by
1.	ResearchGate	5.1%
2.	Academia.edu	2.7%
3.	Mendeley	2.6%
4.	sci-hub.io	2.5%
5.	Twitter	2.5%

Especially popular among...

- ... younger researchers: Citavi
- ... older researchers: Google+
- ... early-stage researchers (n = 1,010): Mendeley
- ... professors (n = 1,419): Twitter
- ... economists (n = 2,072): RePEc
- ... social scientists (n = 767): Academia.edu
- ... other disciplines (n = 435): GitHub

Conclusions

- Three services are specially popular among researchers regardless of age, career stage or discipline: *Google Scholar*, *Wikipedia* and *ResearchGate*
- **Older** and **more established researchers** have a higher interest in services that primarily serve the purposes of **evaluating or showcasing research impact**, e.g. *Harzings Publish or Perish*, *Scopus*, *JCR* and *Web of Science*
- **Younger** and **less experienced researchers** have a higher usage of tools for the **practical stage of scientific work**, e.g. *Citavi*, *GitHub*, *StackExchange*, *StackOverflow* or *Mendeley*, as well as of services **facilitating access to scientific literature**, e.g. *EconBiz* or *sci-hub.io*

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