

Back to the Drawing Board

Forschungsevaluation jenseits des Journal Impact Factors



Wieso? Weshalb? Warum?

Assessment should enable researchers, research organisations, and research funders to evaluate the quality and performance of research to achieve excellence and impact, and further strengthen societal trust in the research and innovation system and in its outputs. The assessment system should therefore incentivise higher quality, more performant and more impactful research.

Wie werden Forschungsleistungen bewertet?

Was wird belohnt?

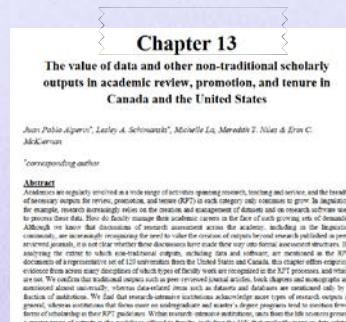
RPT Project

› **864** RPT Dokumente von
129 Universitäten und
381 akademischen Einheiten
aus den USA und Kanada



EUA Survey

› **260** Umfrageantworten von Universitäten aus
32 Europäischen Ländern



Types of academic output

Output	Examples
Traditional	Books, journal articles, presentations
Conventional	Book reviews, editorials, posters
Funding	Grants, funding
Unspecified	Publications, outputs, papers, manuscripts
Arts	Performances, creator works, exhibitions
Data	Databases, databanks, data sets
Education	Textbooks, syllabi, lectures
Events	Conferences, workshops, seminars
Information & Communication Technologies	Audiovisual resources, aids, materials; videos
Intellectual Property	Patents, inventions, technology transfer
Preprints	Preprint, working paper
Public Media	Newspaper articles, films, newsletters
Software	Software, computer programs
Third-Party Collaborations	Consulting/contract works, policy analysis
Work in Progress	Ongoing research, unpublished work

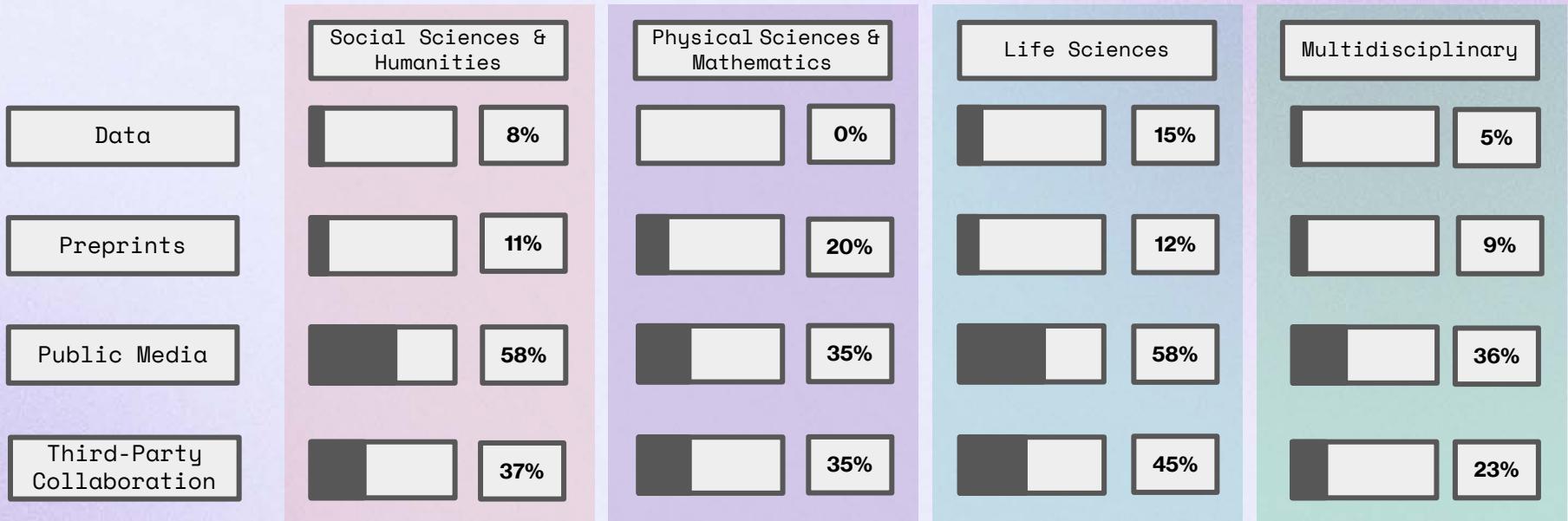
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Collect for science tenure

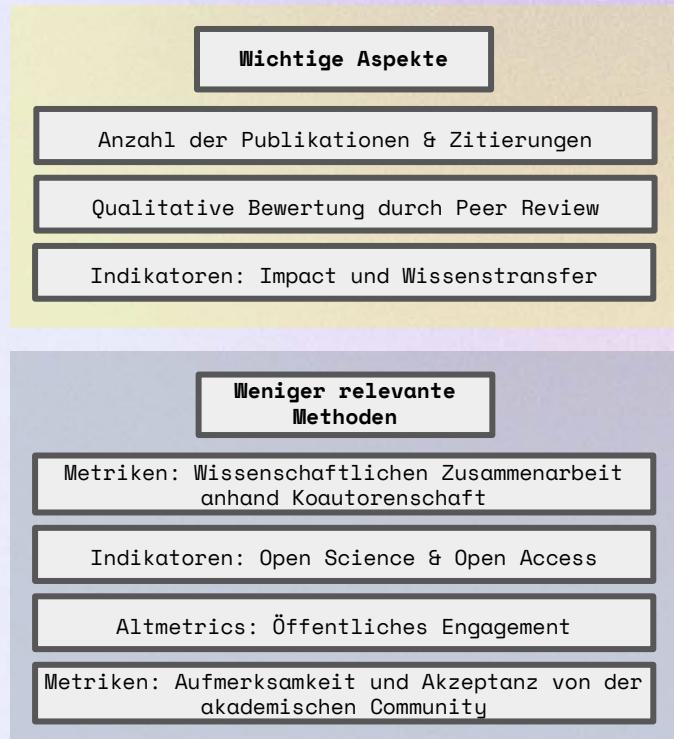


Andere Forschungsoutputs

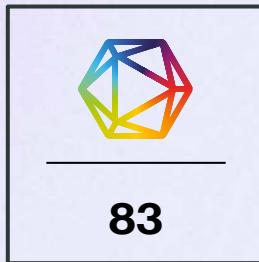
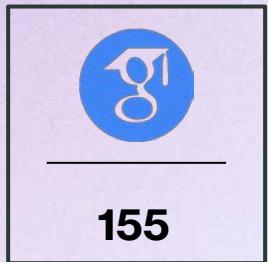
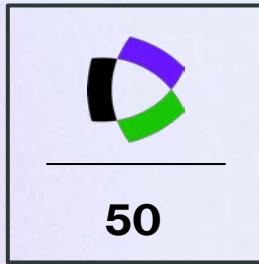


Wie werden Forschungsoutputs bewertet?

- Traditional**
Books, journal articles, presentations
- Conventional**
Book reviews, editorials, posters
- Funding**
Grants, funding
- Unspecified**
Publications, outputs, papers, manuscripts
- Education**
Textbooks, syllabi, lectures
- Events**
Conferences, workshops, seminars



Datenquellen: Citations



META-RESEARCH

Use of the Journal Impact Factor in academic review, promotion, and tenure evaluations

Abstract We analyzed how often and in what ways the Journal Impact Factor (JIF) is currently used in review, promotion, and tenure (RPT) documents of a representative sample of universities from the United States and Canada. 40% of research-intensive institutions and 18% of master's institutions mentioned the JIF, or closely related terms. Of the institutions that mentioned the JIF, 87% supported its use in at least one of their RPT documents, 13% expressed caution about its use, and none heavily criticized it or prohibited its use. Furthermore, 63% of institutions that mentioned the JIF associated the metric with quality, 40% with impact, importance, or significance, and 20% with prestige, reputation, or status. We conclude that use of the JIF is encouraged in RPT evaluations, especially at research-intensive universities, and that there is work to be done to avoid the potential misuse of metrics like the JIF.

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LISA MATTHIAS, MEREDITH T NILES AND JUAN P ALPERIN^{†*}

Durchschnittliche Zitierhäufigkeit
von Artikeln in Journal X.

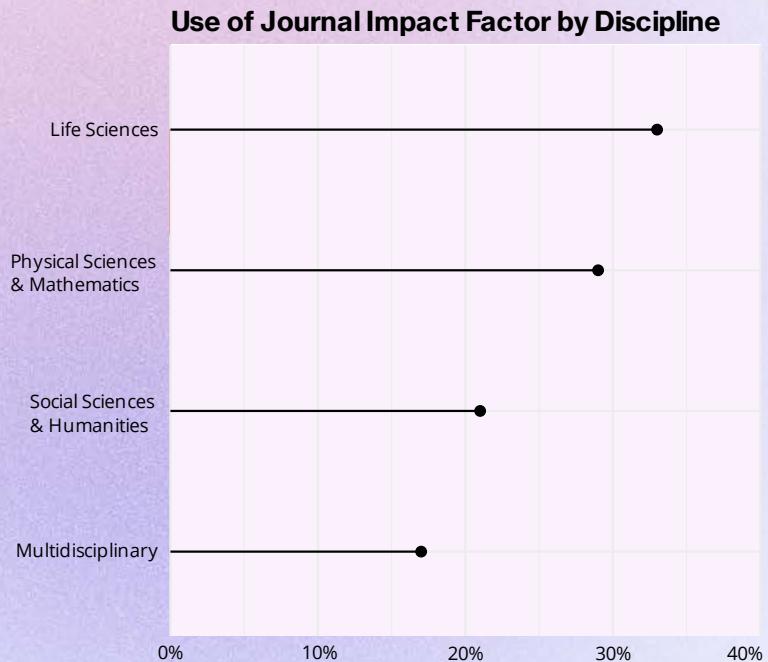
Basierend auf
Web of Science Daten.

$$\text{Journal Impact Factor} = \frac{\text{Citations (n)}}{\text{Citable Objects (n)}}$$

Unklare Definition.

Wie oft wird der JIF in RPT Dokumenten & Prozessen verwendet?

- **RPT:** 23% der Universitäten erwähnten den JIF oder einen ähnlichen Begriff
 - 40% der R-types
 - 18% der M-types
 - 0% der B-types
- **EUA:** 75% der befragten Institutionen verwenden weiterhin den JIF



Wie wird der Gebrauch des JIFs in Evaluationsverfahren bewertet?



Vorsichtige Kritik (?) am JIF

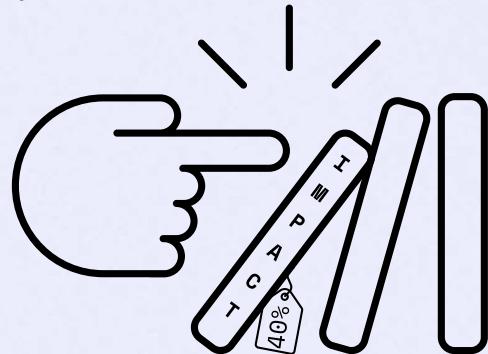
“The reputation and impact of the journal or other publication format will be considered, but takes secondary consideration to the quality of the publication and the nature of the contributions. Impact factors of journals should not be used as the sole or deciding criteria in assessing quality.”

Guidelines for Appointment, Promotion, and Tenure of Academic Staff (2008), Faculty of Veterinary Medicine, University of Calgary

Was misst der JIF?



Nicht näher beschrieben (77%)



Prestige (20%)

JIF und Qualität

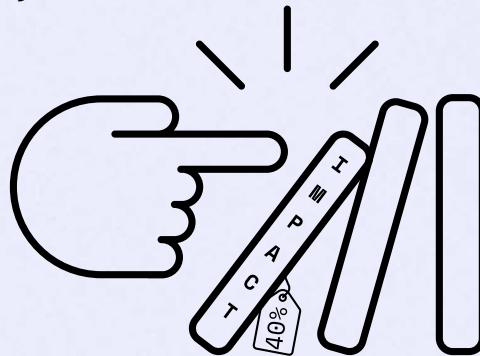
“We will employ the metric: Article Impact Factor (AIF) = (JIF * citations) where “citations” represents the number of citations for the particular publication. Employing this metric, faculty have incentive to publish in the highest quality journals (which will increase the JIF) and simultaneously produce the highest quality research manuscripts, potentially increasing the number of citations, and increasing the AIF.”

Tenure and Promotion Guidelines (2015), Institute of Environmental Sustainability, Loyola University Chicago

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JIF und Impact

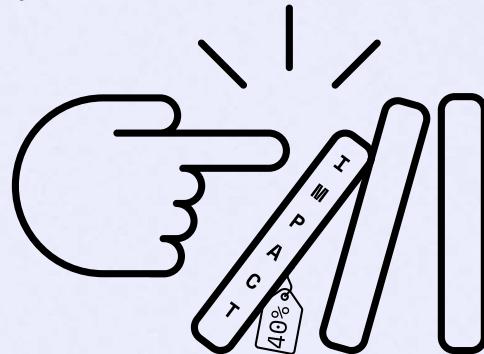
“Candidates will be encouraged to submit a statement that explains the importance of their publications, which may include factors such as journal impact factors, citation rates, publication in journals with low acceptance rates, high levels of readership, demonstrated importance to their field.”

Working Session on Developing Promotion and Tenure Criteria for Research
(2016), University of Windsor

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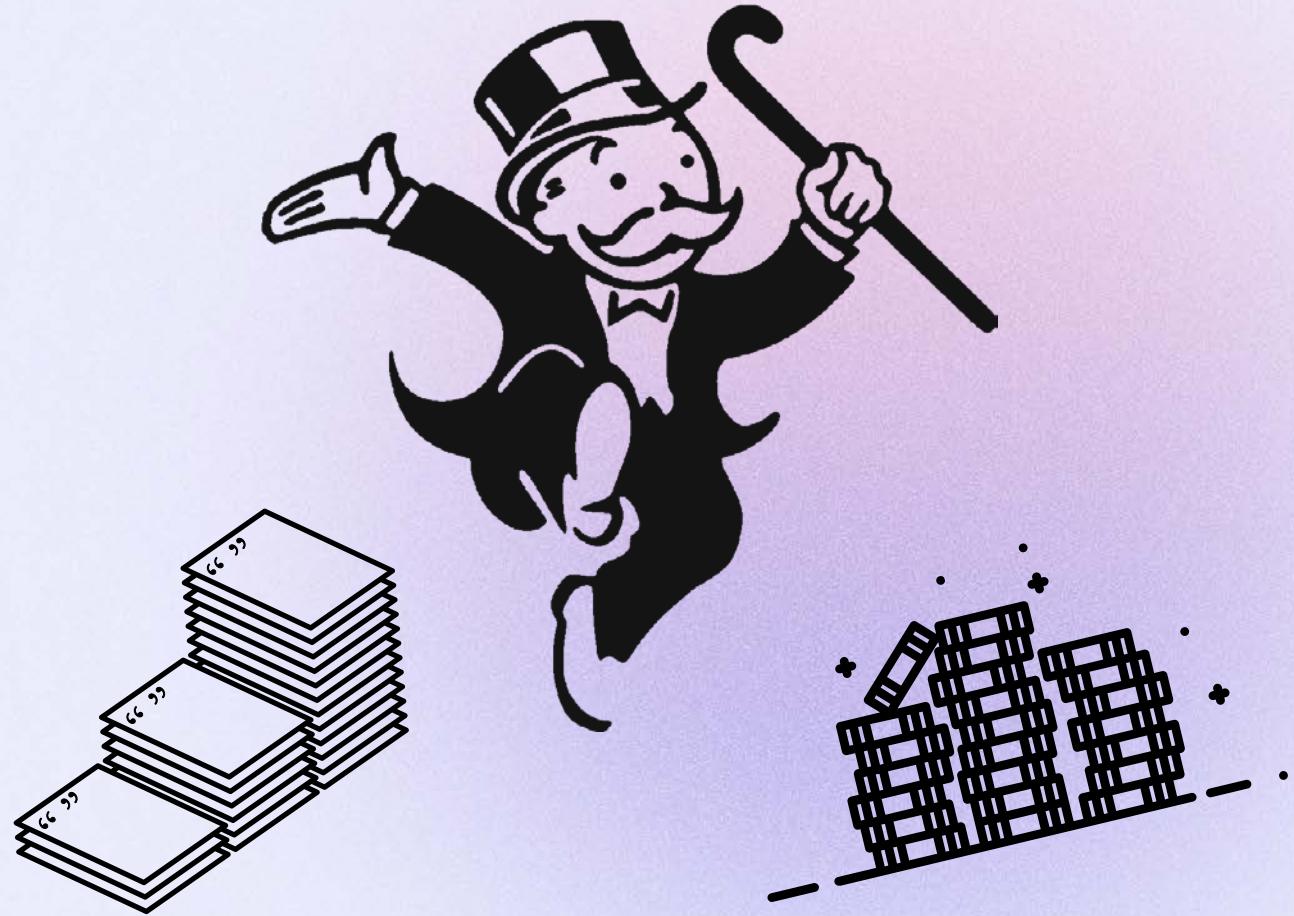


Prestige (20%)

JIF und Prestige

"Publication in respected, highly cited journals ... counts for more than publication in unranked journals. The top journals in sociology and all other social sciences are ranked in the Thompson/ISI citation data base (which generates the well-known Impact Factors) ... In general, it behooves faculty to be aware of the prestige rankings of the field's journals and to publish in the highest-ranked journals possible."

Department Criteria for Tenure and Promotion (2015), Department of Sociology, College of Science, University of Central Florida



So now what?

(\cup \circ \square \circ) \cup \cap \perp \perp



March 2015



May 2013



July 2020



November 2020



November 2021



Collaboration und Co-creation

Funders, research performing organisations, national & regional assessment authorities, learned societies

Vielfalt von Tätigkeiten und Outputs

z.B. Peer review, Training, Science Communication, Knowledge Transfer, Artikel/Bücher, Datensätze, Code, Ausstellungen.

Qualitative & quantitative Methoden

Unterschiedliche Kriterien je nach Disziplin und Karrierestufe

Transparenz

Was sind unsere Werte?

Welche Veränderungen halten wir für notwendig?

Wie definieren wir Qualität? Impact?

Wen begünstigt/benachteiligt das System?