

Research Assessment and Research Culture: A Complex Relationship



Image by <u>rawpixel</u> from <u>Pixabay</u>

- Research assessment plays a critical role in shaping research culture
- Emerging awareness of need for thoughtful evaluation
- Narrow definition of success are a core cause of poor research culture
- Key aspects of achieving researcher wellbeing and research success are under-recognised
- Develop better research assessment using the SCOPE framework



Improving Research Culture in Norway

Key Initiatives

- NOR-CAM (Norwegian Career Assessment Matrix)
 - Holistic framework for academic career assessment
 - Aligns with Open Science transition
 - Being implemented by Norwegian universities
- Research Council of Norway Strategies
 - Portfolio for the Research System
 - Focus on open science, diversity, and research integrity

Ongoing debates

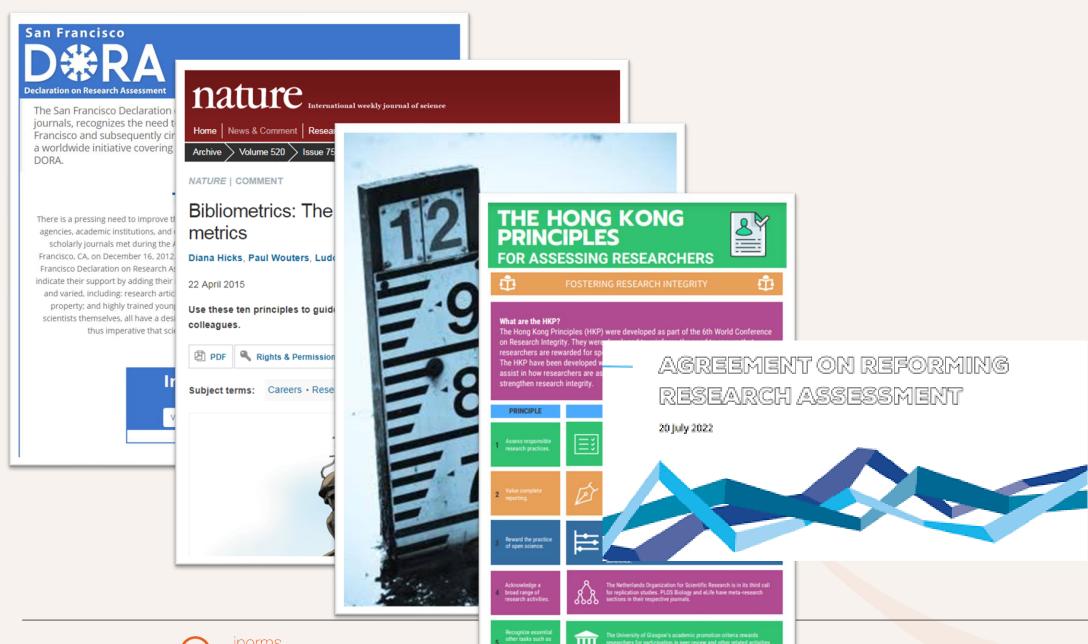
- Language in academia: English vs. Norwegian
- Tension between quantity and quality in research
- "Free Scientist Movement" led by Maria Toft
 - Aims for care and trust-based academic system

Challenges

- Intellectual harassment of early-career researchers
- Excessive co-authorship practices
- Research integrity



Milestone publications supporting research assessment reform







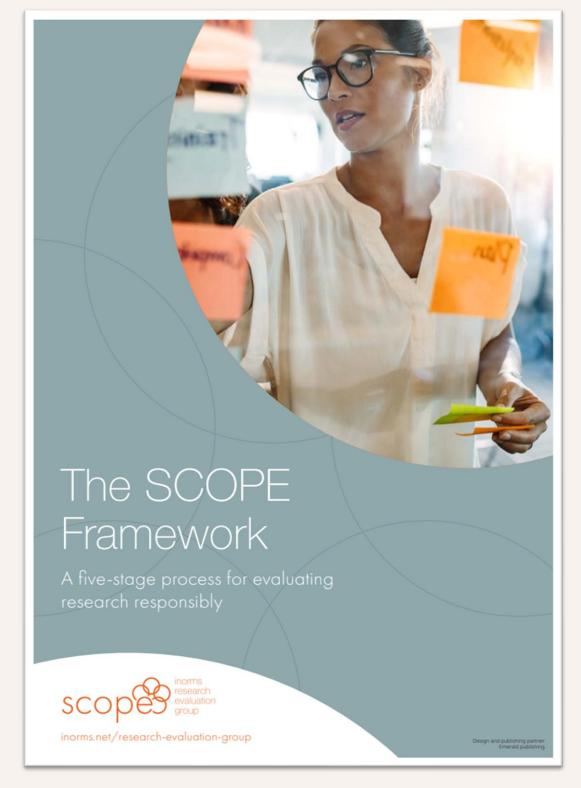
Educating leaders and policymakers

- Understanding the limitations of assessments, especially commercial rankings
 - Critically evaluating the reliability of commercial data providers
- Relying more on community-provided guidance and infrastructures
- RRA is important:
 - Maintaining institutional autonomy
 - Valid Decision-making
 - Evaluation costs time and money- make sure they're meaningful





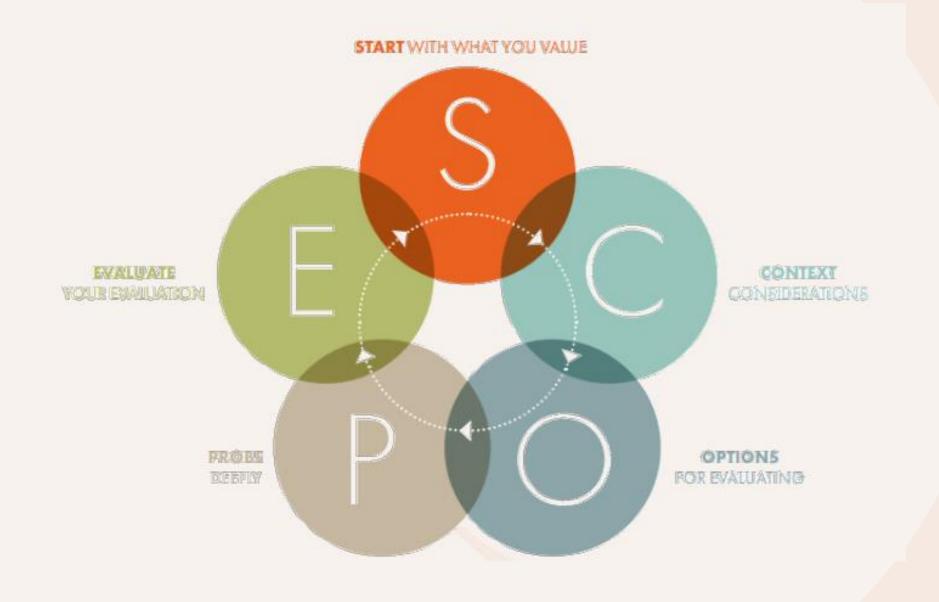
We need to build trust in research assessment







The SCOPE framework for responsible research evaluation





Who are we?







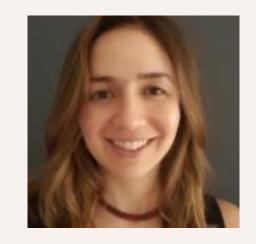




























The INORMS REG is a group of research managers from 16 international Research Management Societies and Associations

We represent groups from UK, Norway, the US, Canada, China, Japan, Australia, Finland, Denmark, Malaysia, Germany, South Africa, Brazil, Ukraine, the Philippines, and Sweden.



Three Principles of SCOPE



Evaluate only where necessary



Three Principles of SCOPE



Evaluate only where necessary



Evaluate with the evaluated



Three Principles of SCOPE



Evaluate only where necessary



Evaluate with the evaluated



Draw on evaluation expertise



SCOPE CONTEXT



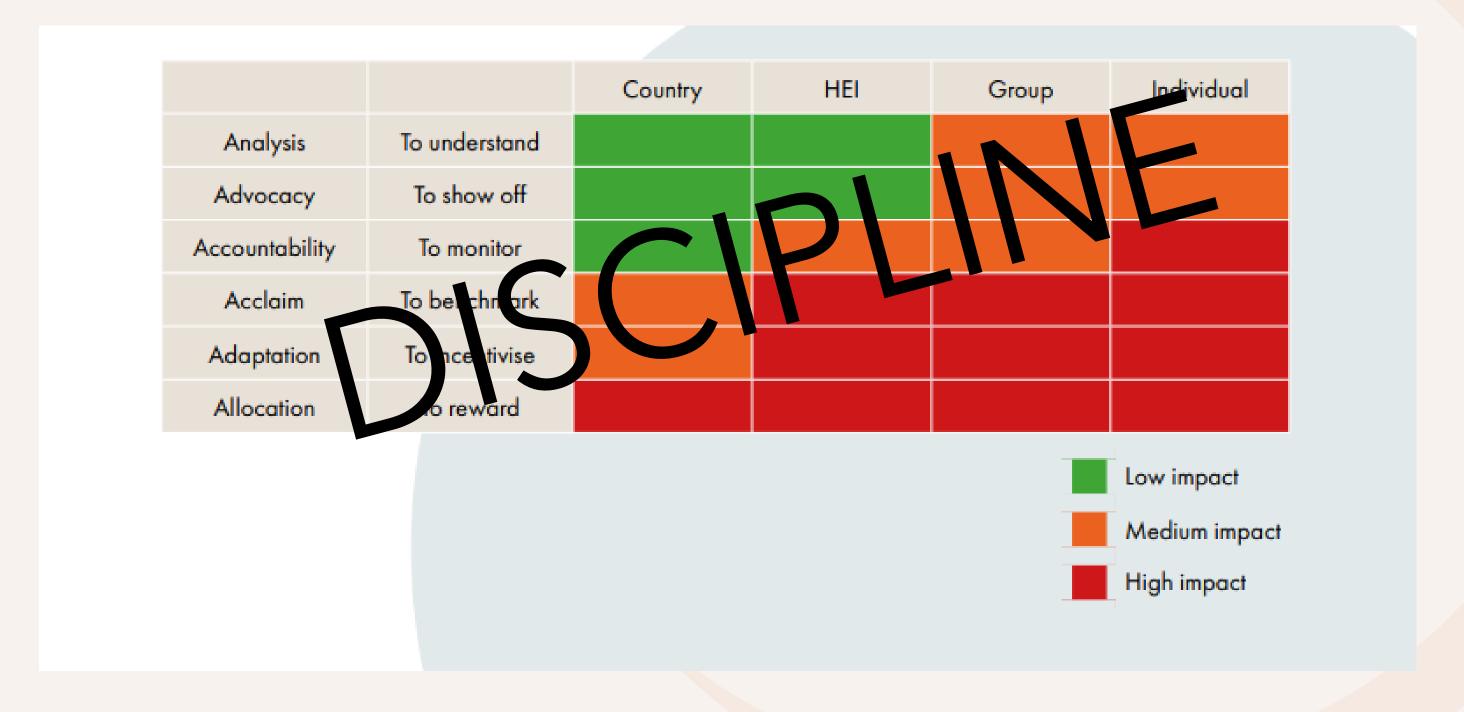
Context consideration: the unit and the purpose

			Country	HEI	Group	Individual
	Analysis	To understand				
Low impact Medium impact	Advocacy	To show off				
	Accountability	To monitor				
	Acclaim	To benchmark				
	Adaptation	To incentivise				
	Allocation	To reward				



High impact

Context consideration: discipline





SCOPE Start with what you value



The Streetlight Effect

Don't let data dictate your path; let your mission guide your metrics.





Starting with what we value

WHO'S 'WE'?

- The evaluators
- The evaluated
- Research beneficiaries
- Other stakeholders

Demographics & inclusivity

SURFACING WHAT WE VALUE

- What do we value about [X]?
- What don't we value about [X]?
- What value results when we have [X]?
- How can you tell when we don't/ have [X]?
- What does [X] look & feel like?
- Why would we care about [X]?



SCOPE Options for evaluating



- Is your indicator a suitable proxy for what you are evaluating?



OPTIONS for evaluating

- Approaches should offer fair proxies for the value under evaluation and in the context
- No evaluation is perfect.
 - Should involve human judgement
 - Be honest about uncertainty
 - Consider both quantitative and qualitative options
 - Citations ≠ quality
- Consider time-frame
- Evaluate with the evaluated



SCOPE PROBE deeply



The Rationale



Many of the problematic approaches to research evaluation that currently dominate the research ecosystem could have been avoided if they were 'probed' for harmful impacts and possible unintended consequences at their inception.



PROBE



- 1. Who might this discriminate against?
- 2. What might the unintended consequences be?
- 3. How might this be gamed?
- 4. What is the cost-benefit?



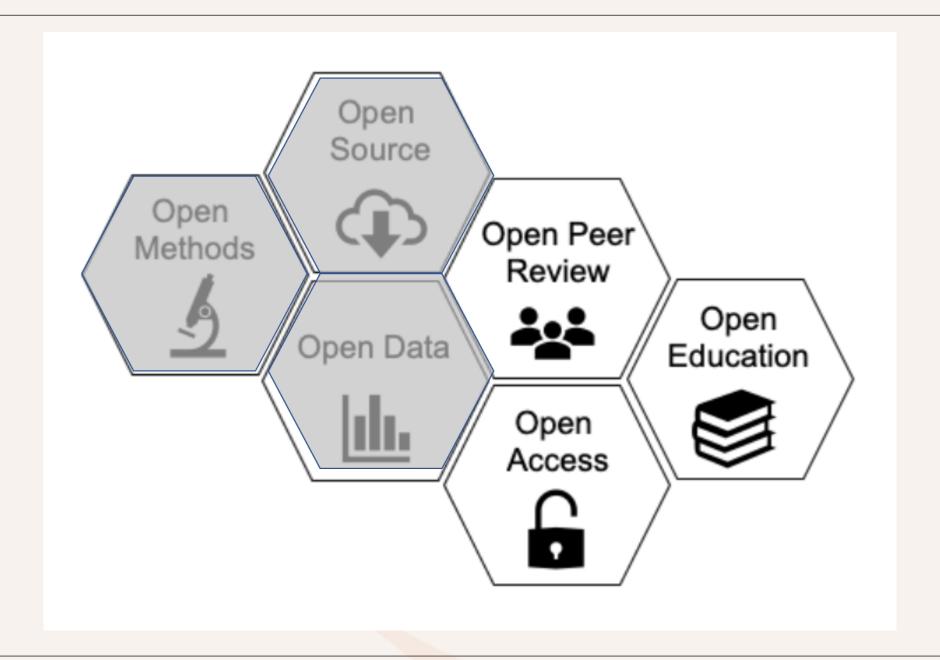
Assessing for discriminatory effects



The discriminatory effects of some forms of evaluation, are well-documented. Such evidence can support evaluators to put in place mitigating actions



Example: Assessing the openness of research groups





Citation biases

Understanding the Extent of Gender Gap in Citation

One journal now asks authors to explain citation gap.

By Rachael Pells for Times Higher Education // August 16, 2018



Research into the gendered citation patterns of academics has confirmed what many have long suspected -- that male authors tend to cite other men over women in their article bibliographies. But

HOME > NEWS > WOMEN CITED LESS OFTEN IN NEWS THAN MEN, STUDY FINDS

Women Cited Less Often in News Than Men,

MAY 28, 2005





Despite rising numbers of women in the workforce and of the day still largely reflects a male perspective, a new Excellence in Journalism finds.



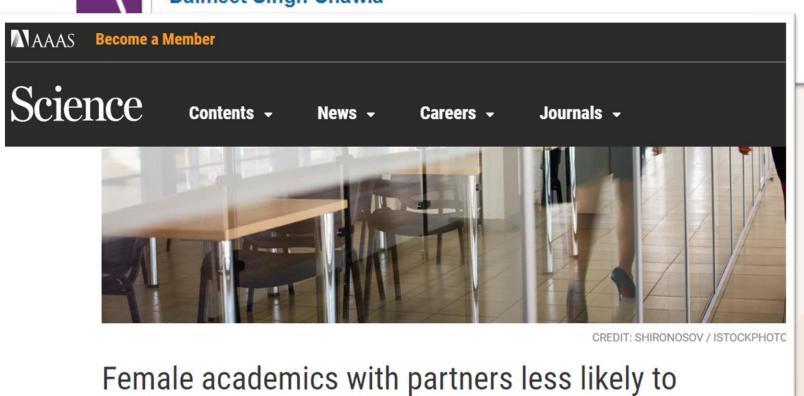


NATURE | NEWS

Men cite themselves more than women do

The apparent trend has been on the rise over the past two decades.

Dalmeet Singh Chawla



Female academics with partners less likely to collaborate internationally

By Beryl Lieff Benderly | Oct. 22, 2015, 1:30 PM

Geographical coverage

Arianna Becerril-García, Responsible Research Assessment Conference, GRC, November 2020





Disciplinary coverage

Table 3. Percentage of citations found by each data source, relative to the total number of citations found overall and by broad areas.

-		% of citations found (relative to N)							
	N	Google Scholar	Microsoft Academic	Scopus	Dimensions	Web of Science	COCI		
Humanities, Literature & Arts	89,337	87	39	31	29	25	18		
Social Sciences	406,661	88	47	40	36	33	20		
Business, Economics & Management	235,338	88	47	34	32	29	19		
Engineering & Computer Science	691,164	88	63	61	54	48	30		
Physics & Mathematics	317,320	90	57	64	59	59	36		
Health & Medical Sciences	1,001,507	85	63	59	58	51	27		
Life Sciences & Earth Sciences	571,817	89	68	64	63	60	32		
Chemical & Material Sciences	253,990	90	69	75	72	72	32		

Google Scholar, Microsoft Academic, Scopus, Dimensions, Web of Science, and OpenCitations' COCI: a multidisciplinary comparison of coverage via citations. Martin Martin et al. (2019)



When is Peer Review the Gold Standard, and When is it Only Tin?

Published on October 22, 2016 by Tony Waters





Assessing for unintended consequences

Another way of approaching unintended consequences is to explicitly explore the following common unintended consequences of research evaluation

(Adapted from Muller, J. T. (2018). The Tyranny of Metrics. Princeton Press)

Goal displacement - what are you not evaluating that may get overlooked as a consequence?

Short-termism - what long term aims may be missed as a consequence of focusing on short-term evaluation goals?

Discouraging risk-taking and innovation – will the evaluation work against creativity and serendipitous opportunity-taking?

Discouraging co-operation and common purpose – will the evaluation lead to greater cooperation or less?



SCOPE Evaluate & evaluate your evaluation



EVALUATE evaluations using SCOPE

- Did the evaluation approach bring new insight to what you value?
- In what contexts might you evaluate your evaluation?
- What is your **options for evaluating** your evaluation?
- Can you probe the evaluation outcomes to identify any unintended consequences or discriminatory effects?





Responsible Research Assessment: Building a Healthier Research Culture



1. Educate leaders and policymakers on:

- Limitations of assessments, and caution with commercial providers and rankings
- 2. Develop a healthier research ecosystem that:
 - Foster integrity, collaboration and innovation
 - Incentivize open research practices
 - Advancing Equity, Diversity and Inclusion
 - Enhancing research quality
 - Supporting career development
 - Allows for failure
 - Serves humanity
- 3. The SCOPE framework as one way of achieving these ends



Discussion: Explore some options for evaluating the things you value about research culture.



Discussion: Probing your options.

Avoid harmful impacts and possible unintended consequences

- 1. Who does the chosen approach discriminate against?
- 2. How might this approach be gamed?
- 3. What might the unintended consequences be?



What do you believe is the biggest barrier to implementing responsible research assessment in your institution?







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Email: <u>tanja.strom@oslomet.no</u> LinkedIn: <u>linkedin.com/in/tanja-strøm-3805822</u> Orcid: <u>https://orcid.org/oooo-ooo2-2937-858X</u> What improvements would you like to see in research assessment practices?



