



UiO : **University of Oslo**

# To share or not to share?

**Alvaro Köhn-Luque**



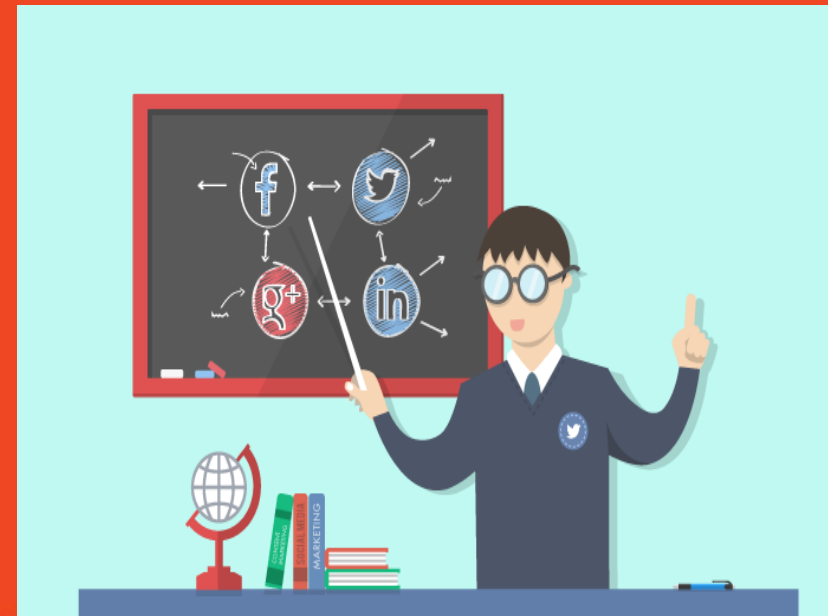
**@AlvaroKohn**

Oslo Centre for Biostatistics  
and Epidemiology  
Faculty of Medicine

# Disclaimer



**AFICIONADO**



**EXPERT**

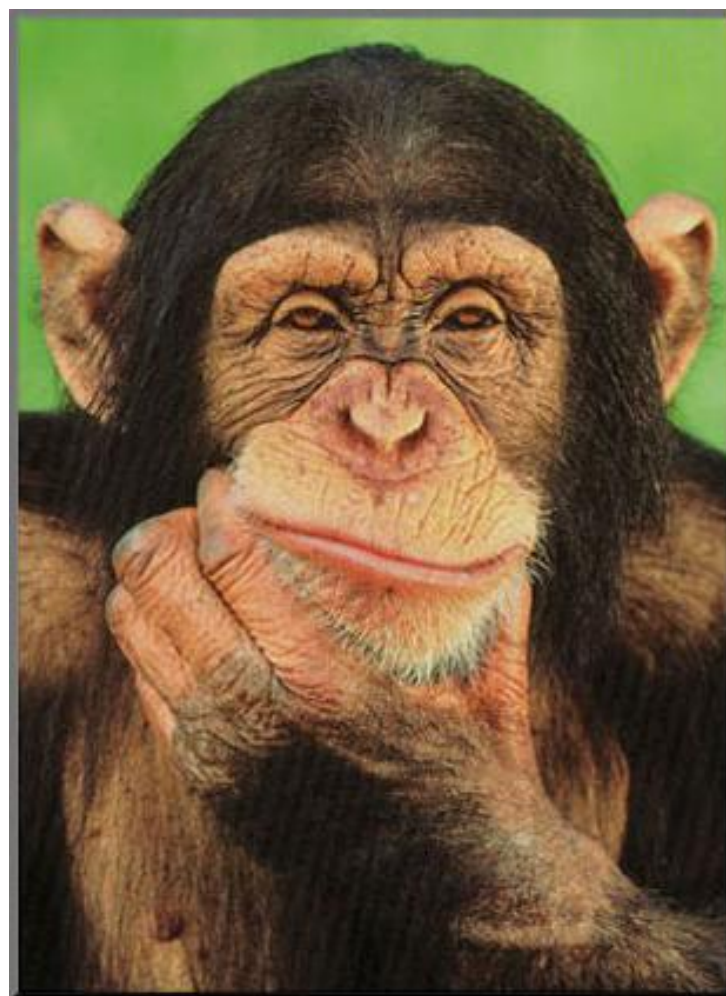




OK to  
share



Do not  
share  
please





Please

~~OK to~~

share !!!





**“If I have seen further...  
It is by standing on  
the shoulders of giants....”**

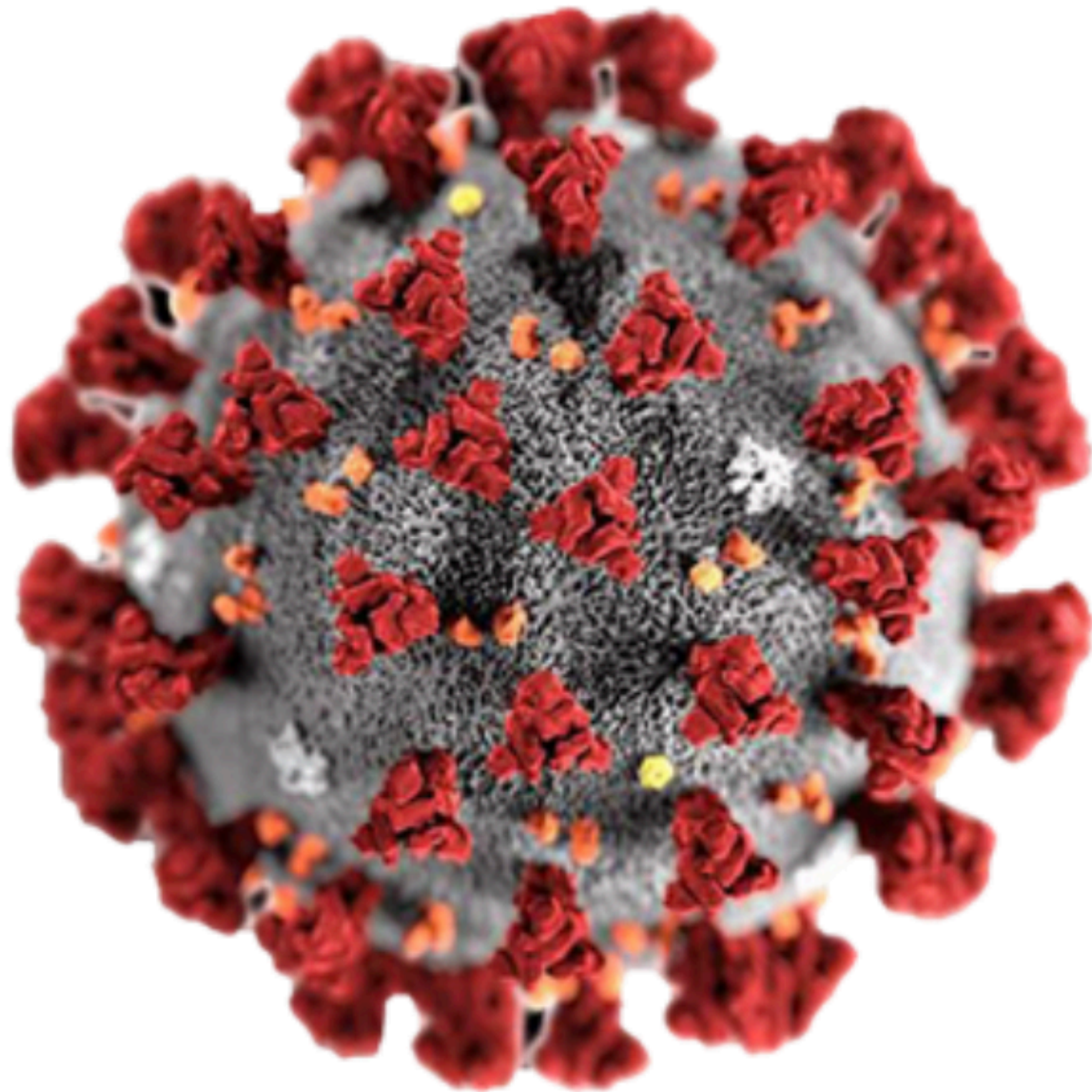
**Isaac Newton  
1676**

**If you not into social media you are probably missing half of the game**





**And it became more evident  
during COVID pandemic**



# More use of your work and ideas





**More cites of your work**

**[*citation needed*]**

# Not only classic citations!



## Altmetric



News (4)

Blogs (2)

Twitter (9)



Mendeley (50)



PlumX Metrics



# Who's talking about your research?

Thousands of conversations about scholarly content happen online every day. Altmetric tracks a range of sources to capture and collate this activity, helping you to monitor and report on the attention surrounding the work you care about.

For Publishers

For Institutions

For Researchers

For Funders

For R&D



# Keep yourself up to date



# Improve visibility

(when applying for a position/grant, for instance)



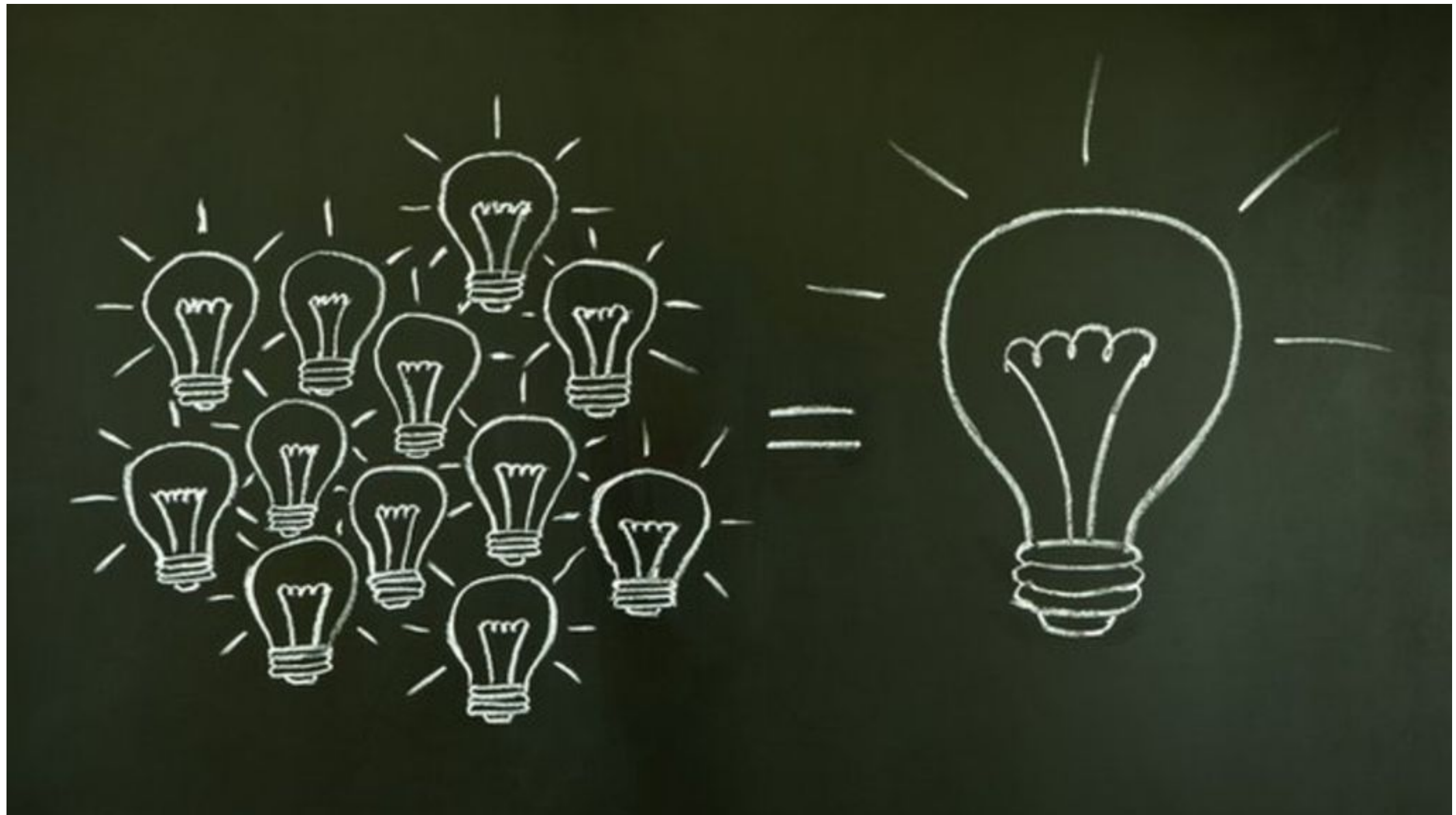


# A way of finding potential collaborators

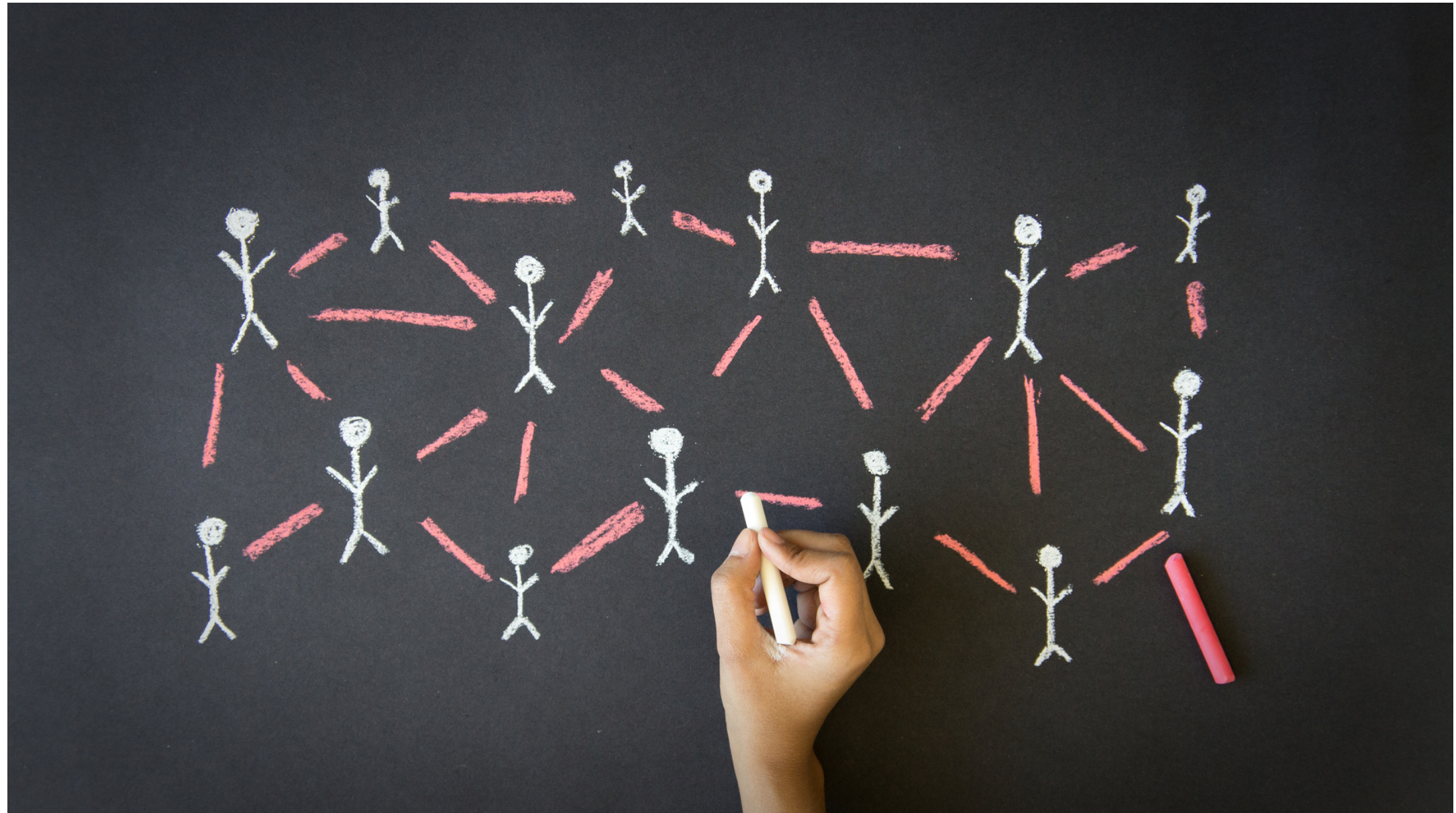




# Quick exchange of ideas



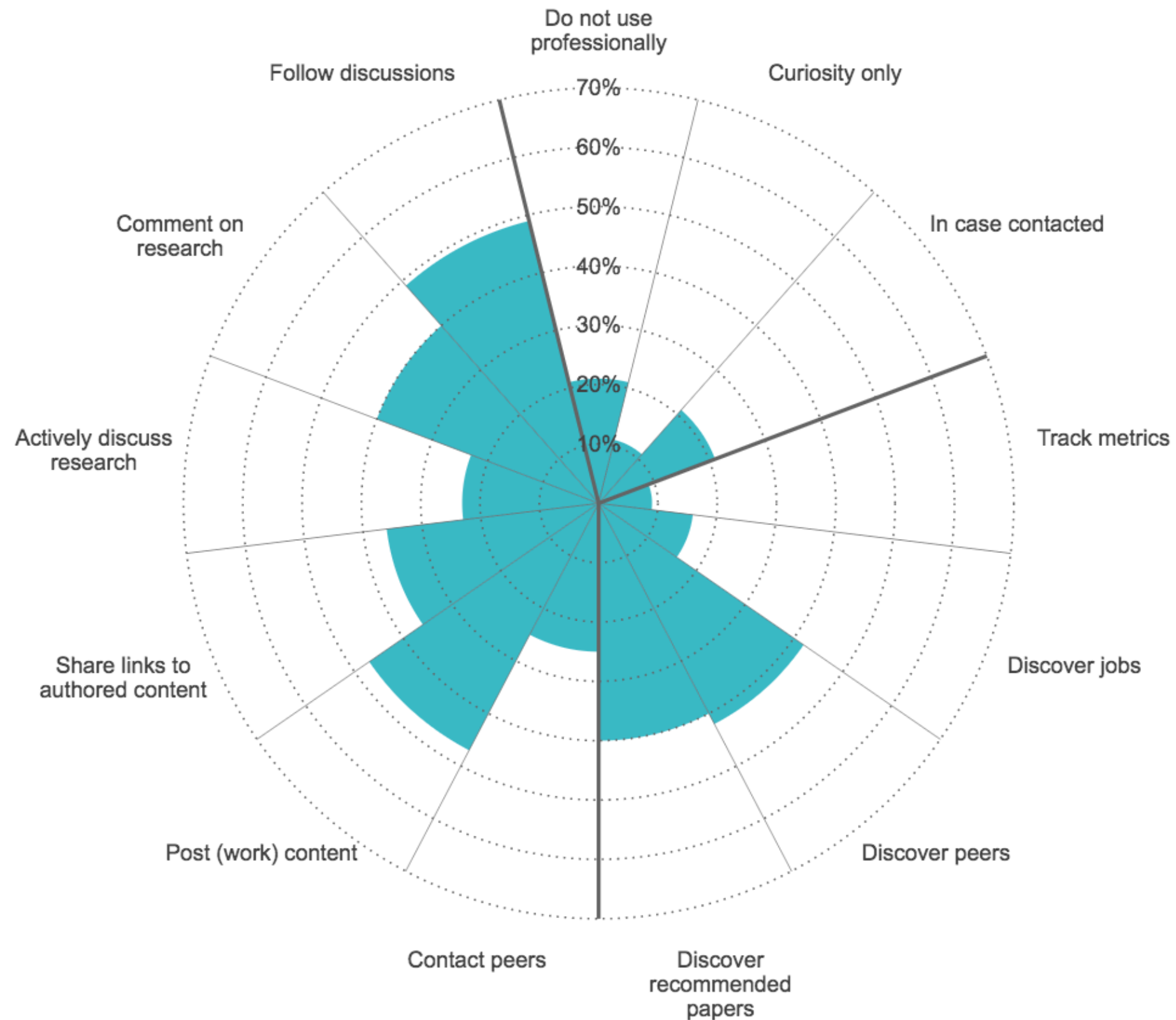
# Be part of a community in your field





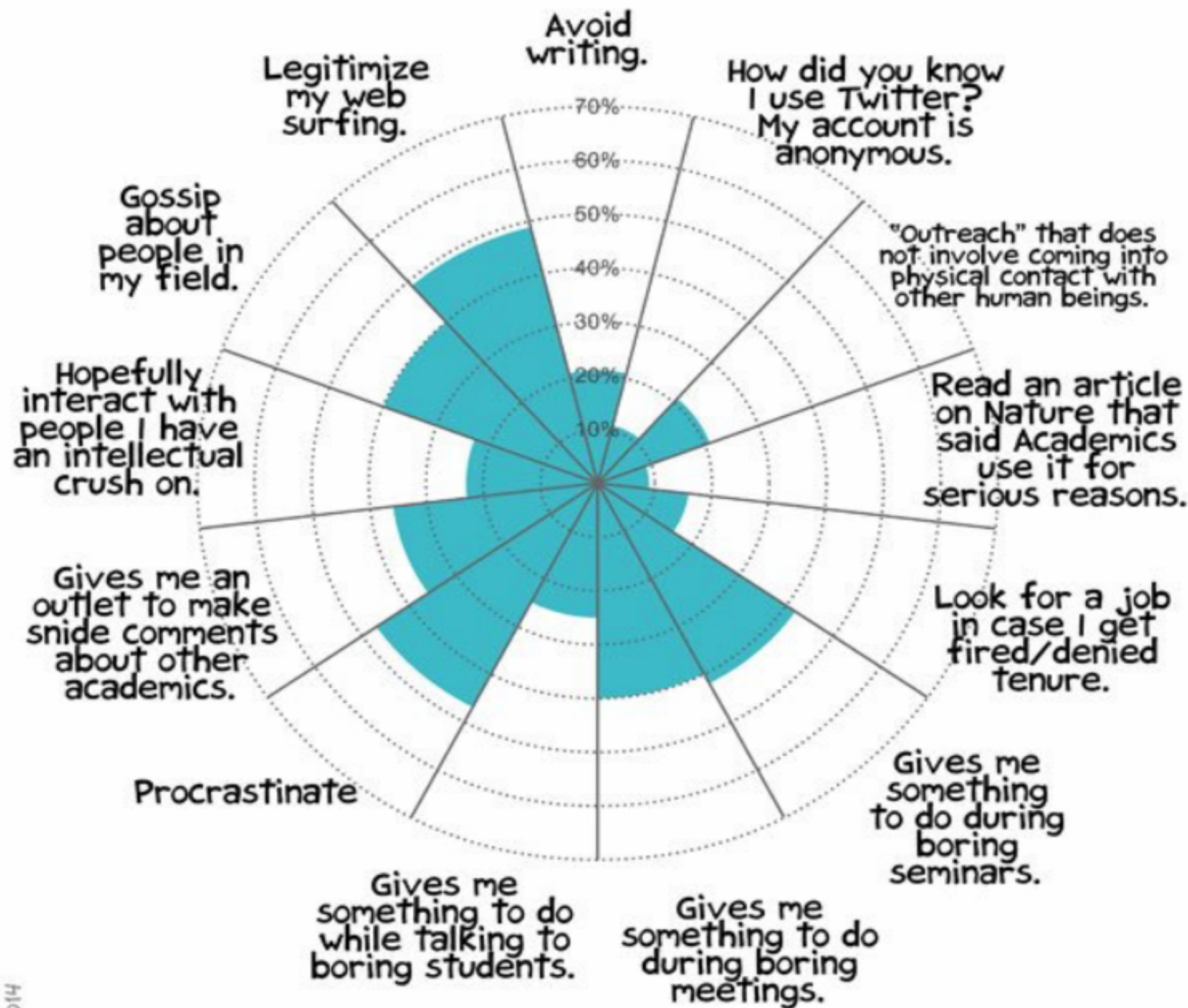
## Interactive: Why scholars use social media

In *Nature's* survey, a subset of scholars who said they 'regularly visited' social media sites were quizzed in detail about their activities.





# Why Academics *REALLY* Use Twitter



# What is your own recipe?



# Are there any drawbacks?





It can be time consuming



**My work is not yet published!!!**



# My work is not yet published!!!



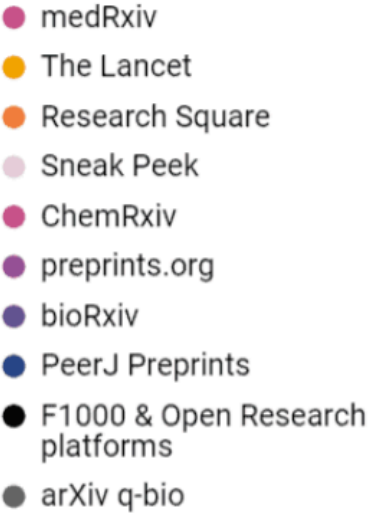
# Work not published yet?

## Easy solution: Preprint servers





Sources: Jordan Anaya (PrePubMed), Naomi Penfold, EuropePMC, arXiv, Crossref, SSRN



# Some in the medical field are still not convinced

JAMA Network™

≡ JAMA®

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Enter Search Term

*Original Investigation | January 28, 2020*

*Original Investigation | February 4, 2020*



**This Issue**

Views **12,067** | Citations **15** | Altmetric **70**



**Editorial**

**FREE**

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November 10, 2020

## Preprints Involving Medical Research—Do the Benefits Outweigh the Challenges?

Annette Flanagan, RN, MA<sup>1</sup>; Phil B. Fontanarosa, MD, MBA<sup>1</sup>; Howard Bauchner, MD<sup>1</sup>

» [Author Affiliations](#) | [Article Information](#)

JAMA. 2020;324(18):1840-1843. doi:10.1001/jama.2020.20674

# But there are actually multiple benefits

RAPID DISSEMINATION OF YOUR RESULTS



CAREER ADVANCEMENT



INCREASED ATTENTION (AND CITATIONS!)



UNLIMITED AND TIMELY UPDATES



ESTABLISHING PRIORITY



COMMUNITY





**You have something else than a manuscript?**

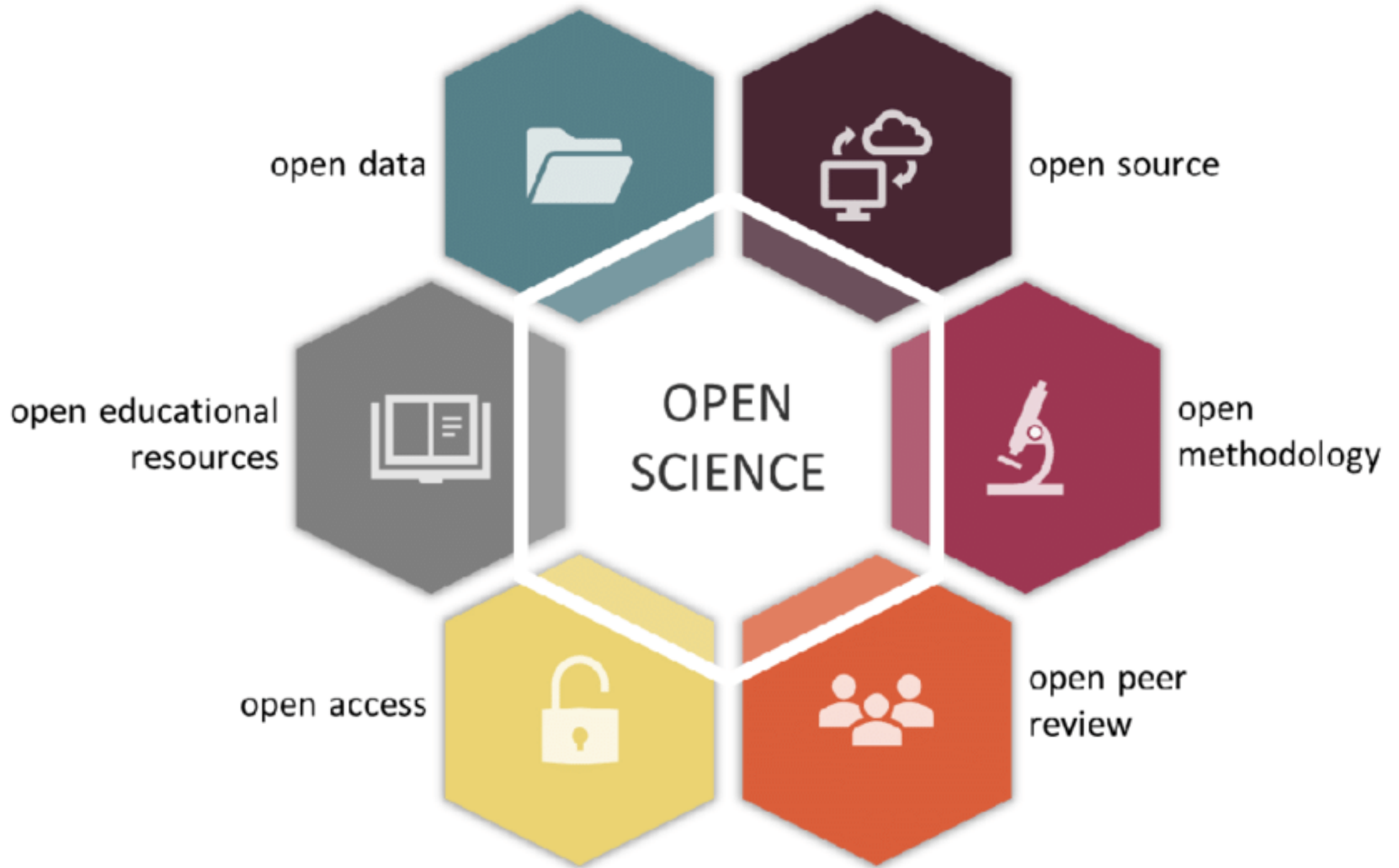


[nature.com](https://www.nature.com)

**protocol**exchange

**etc. etc. etc.**

**Solution: Sharing platforms for  
code, data, protocols, posters,...**





*“If you don't reveal some insights soon, I'm going to be forced to slice, dice, and drill!”*



# p-value hacking

1. Stop collecting data once  $p < .05$
2. Analyze many measures, but report only those with  $p < .05$ .
3. Collect and analyze many conditions, but only report those with  $p < .05$ .
4. Use covariates to get  $p < .05$ .
5. Exclude participants to get  $p < .05$ .
6. Transform the data to get  $p < .05$ .

# Pre-Registration



## What is Preregistration?

When you preregister your research, you're simply specifying to your plan in advance, before you gather data. Preregistration separates *hypothesis-generating (exploratory)* from *hypothesis-testing (confirmatory)* research. Both are important. But the same data cannot be used to generate and test a hypothesis, which can happen unintentionally and reduce the credibility of your results. Addressing this problem through planning improves the quality and transparency of your research, helping others who may wish to build on it.

# The preregistration revolution



Brian A. Nosek, Charles R. Ebersole, Alexander C. DeHaven, and David T. Mellor

PNAS March 13, 2018 115 (11) 2600-2606; first published March 12, 2018

<https://doi.org/10.1073/pnas.1708274114>

## Abstract

Progress in science relies in part on generating hypotheses with existing observations and testing hypotheses with new observations. This distinction between postdiction and prediction is appreciated conceptually but is not respected in practice. Mistaking generation of postdictions with testing of predictions reduces the credibility of research findings. However, ordinary biases in human reasoning, such as hindsight bias, make it hard to avoid this mistake. An effective solution is to define the research questions and analysis plan before observing the research outcomes—a process called preregistration. Preregistration distinguishes analyses and outcomes that result from predictions from those that result from postdictions. A variety of practical strategies are available to make the best possible use of preregistration in circumstances that fall short of the ideal application, such as when the data are preexisting. Services are now available for preregistration across all disciplines, facilitating a rapid increase in the practice. Widespread adoption of preregistration will increase distinctiveness between hypothesis generation and hypothesis testing and will improve the credibility of research findings.



Help support open science today.

[Donate Now](#)

Future-proof your research. Preregister your next study.

## Resources

### Articles and Blogs About Preregistration

- [The Preregistration Revolution](#)
- [Research Preregistration 101](#) (and other articles about preregistration at APS)
- [Preregistration: A Plan, Not a Prison](#) (and other blogs about preregistration on [cos.io/blog](#))
- [A manifesto for reproducible science](#)
- [Trust in science would be improved by study pre-registration](#)
- [Let's think about cognitive bias](#)
- [Seven Selfish Reasons for Preregistration](#)

### Presentations, Teaching Materials, and Instructions

- **Webinars:** [Preregistration: Improve Research Rigor, Reduce Bias](#), [Preregistration on OSF](#), [Registered Reports for Early Career Researchers](#)
- **Teaching materials:** A general [introductory presentation](#). A [workshop](#) at LMU by Schönbrodt, Scheel, & Stachl. A [workshop](#) at APS 2019.
- **Contact** [researchers who have preregistered before](#) and who have said they would be happy to help you.
- **Templates** of many preregistration forms are available [here](#).
- **Help docs and instructions** to register any project on OSF.
- **Checklist of items to include** when creating an analysis plan for some common statistical models.
- **Checklist items to include when writing up** the results of preregistered research.
- **Transparent Changes** When you write up the results of preregistered research, it is important to transparently disclose any changes from the proposed plan. See [here for a template Transparent Changes document](#) and [here for an ongoing project to help structure these disclosures](#).
- **Example preregistrations** are available in [this curated list](#) or by searching through the [OSF Registry](#)



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