

A Call to Change Science's Culture of Shaming

October 31, 2016



Susan Goldin-Meadow

New forms of media are making it easier and easier for us to react to, and comment on, research within our community. Although free-flowing comments and criticisms can often push an argument or research program forward in a good direction, they can also derail, and perhaps even threaten, the process. I invited guest columnist Susan Fiske, a former APS president, to think about the impact that the new media are having not only on our science, but also on our scientists. Importantly, Fiske's column is not intended in any way to be an attack on open science, but rather is a timely reminder that psychological scientists are not immune from using social media in destructive ways.

-APS President Susan Goldin-Meadow



The premature release of an earlier draft of this column provoked an online firestorm. In the spirit of colleagues' feedback improving one's work, this revision reflects some of the more constructive responses. The less constructive responses merely illustrate my point and are not acknowledged here. One development in parallel with this column is an independent online statement that people can sign to express concern: "Promoting open, critical, civil, and inclusive scientific discourse in Psychology," which can be found [here](#). Thanks to those who express support of mutually respectful discussions of our science.

Our field has always encouraged — required, really — peer critiques. But the new media (e.g., blogs, Twitter, Facebook) can encourage a certain amount of uncurated, unfiltered denigration. In the most extreme examples, individuals are finding their research programs, their careers, and their personal integrity under attack. In a few rare but chilling cases, self-appointed data police are volunteering critiques of such personal ferocity and relentless frequency that they resemble a denial-of-service attack that crashes a website by sheer volume of traffic.

Only what's crashing are people. Some immoderate and unmoderated attacks create collateral damage to targets' careers and well-being, with no accountability for the people engaging in the toxic behavior. Sheer volume of requests and multiple simultaneous critiques can overwhelm any researcher. More than one scientist reports being asked for a different data set every week for months, consuming all their research time for a semester or more. Several others report automatic algorithms generating automatic anonymous emails "correcting" p -values rounded to two places without affecting significance standards. Taking up research time in what often appear to be unnecessary or excessive demands can be one form of harassment.

In other cases, the tone of online critiques sometimes involves inappropriate comments that presumably would not occur face to face. Someone posted that my late father (a methodologist) would be ashamed of me. Others have impugned my motives for writing this plea for civility. Similarly, some targets have reported to me public assertions of their alleged dishonesty, incompetence, or mercenary motives. Personal insults are not scientific discourse. Indeed, speculations about another scientist's motives would not appear in any respectful form of peer review.

Our colleagues at all career stages have reported leaving the field because of what they see as sheer adversarial viciousness. I have heard from graduate students opting out of academia, assistant professors afraid to come up for tenure, midcareer people wondering how to protect their labs, and senior faculty retiring early, all reportedly because of an atmosphere of methodological intimidation. I am not naming names of alleged victims because, to a person, these dozens of individuals tell me they are afraid to go public for fear of retaliation.

I am also not naming names of alleged bullies because rare but vicious ad hominem smear tactics are already damaging our field, and they do not represent the majority of us. Instead, I am describing a dangerous minority trend that has an outsized impact and a chilling effect on scientific discourse. I am not a primary target, but my goal is to give voice to others too afraid to object publicly.

To be sure, constructive critics have a role, with their rebuttals and letters-to-the-editor subject to editorial oversight and peer review for tone, substance, and legitimacy. Some moderated social media groups monitor individual posts to ensure they are appropriate. Always, of course, if critics choose to write a personal message to the author, that's their business. If they request the original data, scientific norms demand delivery within reasonable constraints. All these venues respect the target.

What's more, APS has been a leader in encouraging robust methods: transparency, replication, power analysis, effect-size reporting, and data access. All this strengthens our field, because APS innovates via expert consensus and explicit editorial policies. Individuals' research is judged through monitored channels, most often in private with a chance to improve (peer review), or at least in moderated exchanges (curated comments and rebuttals). These venues offer continuing education, open discussion, and quality control. These constructive efforts draw on the volunteer talent of many, in the service of the greater good and respecting the individual investigator.

But some critics do engage in public shaming and blaming, often implying dishonesty on the part of the target and other innuendo based on unchecked assumptions. Targets often seem to be chosen for scientifically irrelevant reasons: their contrary opinions, professional prominence, or career-stage vulnerability.

The few but salient destructive critics are ignoring ethical rules of conduct because they circumvent constructive peer review: They attack the person, not just the work; they attack publicly, without quality controls; they have reportedly sent their unsolicited, unvetted attacks to tenure-review committees and public-speaking sponsors; they have implicated targets' family members and advisors. Most self-appointed critics do not behave unethically, but some do so more than others. One hopes that all critics aim to improve the field, not harm people. But the fact is that some inappropriate critiques are harming people. They are a far cry from temperate peer-reviewed critiques, which serve science without destroying lives.

Let me be clear: This column does not aim to criticize such standard peer-review, or, for that matter, the newer open-science initiatives.

Ultimately, science is a community, and we are in it together. We agree to abide by scientific standards, ethical norms, and mutual respect. We trust but verify, and science improves in the process. Psychological science has achieved much through collaboration, but also through responding to

constructive adversaries who make their critiques respectfully. The key word here is *constructive*. œ

Look for psychological scientists to share their insights, visions, and concerns about the future of scientific discourse in upcoming issues of the Observer.