

Life after Misconduct: Promoting Rehabilitation while Minimizing Damage

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The scientific community has an interest in dealing with misconduct, but also in providing a path to rehabilitation in the aftermath of misconduct. The prospect of rehabilitation could minimize harms by improving reporting of misconduct, rebuilding damaged trust, and providing more insight into the conditions that led to unethical behavior, allowing scientists to work collectively to create conditions in which scientific misconduct is less likely.

INTRODUCTION

Misconduct damages science, doing harm to both the shared body of knowledge scientists strive to build and the human interactions within the scientific community that are essential to its knowledge-building project. Thus, the scientific community has a strong interest in dealing with misconduct—with its effects and with the people committing it. Failing to deal with misconduct leaves the damage unaddressed and the wrongdoers free to do more damage.

In the aftermath of scientific misconduct, correcting errors in the scientific record is relatively easy compared with the task of mounting an appropriate response to the person who committed the misconduct. Here, I explore what an appropriate response to a scientist who commits misconduct would look like. A clear path to rehabilitation could improve reporting of misconduct, rebuild trust within the scientific community, and foster a sense of collective responsibility for creating conditions where wrongdoers will not reoffend and where scientists are less vulnerable to the temptations to cheat in the first place.

CHALLENGES OF MOUNTING A GOOD RESPONSE TO A FIRST OFFENSE

Scientists who are caught after multiple instances of fabrication, falsification, plagiarism, or other significant scientific misbehaviors are probably not good candidates for rehabilitation. Between the errors they have introduced to the scientific record, the funding they have misused, the harm they have done to other scientists who have unknowingly used fraudulent results as a basis for their own honest work,

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and the damage they do to the reputation of scientists as a group, their fellow scientists may judge that giving them any trust whatsoever going forward is too great a risk.

But before a wrongdoer becomes a recidivist, before dishonesty and deception become entrenched in one's habits, each scientist who engages in misconduct commits a first offense.

Arguably, part of the difficulty in dealing with scientific misconduct is the reluctance of scientists who become aware of it to make official reports on, or mount other responses to, a first offense, fearing such action would be disproportionately harsh. Sometimes scientists are hesitant to report misconduct to those with the institutional authority to deal with it because the wrongdoer has more status and power in the scientific community (2) than they do, and whistleblowers frequently pay a steep professional cost for pointing out wrongdoing (5). Other times, the reluctance flows from a fear that public identification of misconduct will hurt the reputation of one's lab, department, institution, or scientific discipline. In cases where the wrongdoer is an early-career scientist, especially a scientist one has mentored or trained, unwillingness to report misconduct may turn on a judgment that the wrongdoer has talent, skill, and great potential to contribute to science, and on a belief that the unethical behavior is due to a momentary lapse of judgment rather than a deep character flaw.

Willingness to report misconduct is not helped by the perception that official channels will impose draconian penalties. Despite the fact that lifetime disbarment from funding is not a common punishment for a finding of scientific misconduct, in an extremely competitive employment and funding environment, even voluntary exclusions of three to five years can seem like enough to derail the early stages of one's scientific career. Given the significant public investment in the education and training of scientific researchers, ejecting those who commit scientific misconduct rather than attempting to rehabilitate them is arguably wasteful of both economic and human resources.

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Dealing with the transgression privately can seem like the most humane option. But handling an ethical transgression privately makes it hard to be sure that it has been handled in a lasting way. Given the persistent patterns of escalating misconduct that often come to light when big frauds are exposed, it's hard not to wonder whether scientific mentors were aware and intervening in ways they hoped would be effective. Is being caught by a mentor or collaborator who admonishes you privately and warns that they will keep an eye on you almost as good as getting away with it, an outcome with no real penalties and with no paper-trail that other members of the scientific community might access?

Handling misconduct privately may serve the interests of the wrongdoer (assuming it does not encourage patterns of bad behavior going forward), but it does less to serve the relevant interests of the rest of the scientific community, which include being able to trust that other scientists present honest results and that they will expose dishonesty when they detect it. Managing an ethical infraction privately is problematic if it leaves the scientific community with errors in the literature that are uncorrected, or with members presumed by all but a few of the community's membership to have a good record of integrity when they actually have a habit of cheating.

Permanent expulsion or a slap on the wrist is not much of a range of penalties. Neither option really addresses the question of whether rehabilitation is possible and in the best interests of both the wrongdoer and the scientific community. Moreover, if no errors of judgment are tolerated, people will do anything to conceal such errors. Mentors who are trying to be humane may become accomplices in concealment. Conversations about how to make better judgments may not happen because people worry that their hypotheticals will be scrutinized for clues about actual transgressions.

It would be perverse for the scientific community to adopt a stance that rehabilitation is impossible when the reluctance of many of its members to pursue official sanctions for misconduct suggests that they feel rehabilitation is possible. If the official penalty structure denies the possibility of rehabilitation (or makes it practically impossible by making a continued career in science impossible), those scientists who believe in rehabilitation will take matters into their own hands. To the extent that this exacerbates the problem, clearer paths to rehabilitation deserve more prominence.

REHABILITATING THE INDIVIDUAL AND ADDRESSING HARMS TO THE COMMUNITY

Given that misconduct is harmful to the community of scientists and to their shared knowledge-building project, it needs to be addressed by official organs of scientific institutions in a way that mitigates the harms, including the erosion of trust among scientists. But it must also be done

in a way that recognizes the humanity of scientists. Part of this involves recognizing that we regard ourselves and other humans as capable of learning from mistakes.

Rehabilitation, therefore, requires the wrongdoer forthrightly to acknowledge their bad act and the harm it has done rather than offering excuses or minimizing the magnitude of the harm. It also requires the wrongdoer to make serious efforts to repair the harm of their misconduct, for example by correcting or retracting journal articles and grant proposals (and being transparent that the problems that need correction or retraction flow from misconduct rather than from honest mistakes) or by returning funds to funders.

Perhaps the biggest lingering harm of misconduct is damaged trust within the scientific community. To the extent that individual scientists are committed to the shared project of building a reliable body of scientific knowledge, they ought to recognize that lying scientists are like faulty measuring devices: you do not necessarily throw them out, but you do need to go to some lengths to reestablish their reliability. After a breach, one is not entitled to a full restoration of the community's trust. Rather, that trust must be earned back. Restitution to the community will likely require having to meet a higher burden of proof to make up for having misled one's fellow scientists in the past. It may also involve shifting to less prestigious scientific labor—for example, away from discovery toward replication.

Especially for first offenses, records of misconduct ought not to be expunged, precisely because public knowledge of the problem gives the scientific community some responsibility for providing guidance to the scientist who erred. Acknowledging your lapses in judgment rather than burying them creates a context in which it may be easier to ask for oversight and help in avoiding similar lapses in the future.

It is important to understand the temptations that the cheaters felt—the circumstances that made their unethical behavior seem expedient, or rational, or necessary. Casting cheaters as monsters is glossing over our own human vulnerability to these bad choices, which will surely make the temptations harder to handle when we encounter them. Moreover, understanding the cheaters as humans (just like the scientists who have not cheated) rather than "other" in some fundamental way lets us examine those temptations and then collectively create working environments with fewer of them.

The community is participating in creating the environment in which people commit misconduct. Trying to understand the ways in which behaviors, expectations, formal and informal reward systems, and the like can encourage big ethical transgressions or desensitize people to "little" lapses may be a crucial step to creating an environment where fewer people commit misconduct, whether because the cost of doing so is too high or the payoff for doing so (if you get away with it) too low (6). But seeing members of the community as connected in this way requires not seeing the

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research environment as static and unchangeable—and not seeing those in the community who commit misconduct as fundamentally different creatures from those who do not.

Adams and Pimple (I) suggest the importance of attending to situational factors that increase or decrease scientific misbehavior. Drawing on case files from the Office of Research Integrity, Davis et al. (3) argue that examination of causal factors implicated in misconduct may focus needed attention on strategies and support mechanisms for dealing with work stressors. De Vries et al. (4) found that in certain areas of research there is unavoidable ambiguity about methodology and results, as scientists who feel pressured to produce and to distinguish themselves engage in "normal behaviors" which fall short of misconduct but which scientists themselves recognize as compromising the integrity of their work. Martinson et al. (7) found correlations between perceptions of injustice and scientific misbehavior; they also found more mid-career than early-career scientists reporting that they engaged in misbehaviors, suggesting the perception that a certain amount of misbehavior is required to make it to the mid-career stage.

Here, reintegration of scientists who have committed misconduct into the community provides an opportunity for better information about the stressors and vulnerabilities that can lead to misconduct. The path to rehabilitation should require an allocution, in which the wrongdoer spells out the precise circumstances of the misconduct, including the pressures in the foreground when the unethical course was chosen. This would not be an excuse but an explanation, a post-mortem of the misconduct available to the community for inspection and instruction. Ideally, others might recognize familiar situations in the allocution and then consider how close their own behavior in such situations has come to crossing ethical lines, as well as what factors seemed to help them avoid crossing those lines. Inclusion of the scientist who has committed misconduct in the community would enable a continuing dialogue beyond the allocution, one where interactions between the erstwhile wrongdoer and the community improve everyone's understanding of the terrain around the bad decision. As well, researchers could think together about what gives rise to the situations and the temptations within them and explore whether common practices, including how science is funded and how scientists are trained, can be adjusted to remove some of the temptations while supporting knowledge building and knowledge builders.

At the moment, there are no obvious models for rehabilitation of researchers who have committed scientific misconduct. The nature and shape of a scientist's rehabilitation could be jointly determined by the oversight agency making the ruling of misconduct and the institution that employed the scientist when the misconduct was committed. Ideally, the wrongdoer would not be removed from the normal places where research is done, since this would also move him out of the sight of others in the research community. Such isolation might hasten a return to "business as usual," in

which researchers focus on pressing problems like securing funding, generating data, and producing manuscripts, rather than attending to the places where they may themselves be teetering on the edge of ethical danger.

Instead, if at all possible, the wrongdoer should resume duties at the institution where the wrongdoing took place, supervised closely by designated colleagues (possibly even by the colleagues who served in supervisory or mentoring roles for the wrongdoer at the time of the misconduct). As part of the program of rehabilitation, a significant portion of the wrongdoer's professional duties should include working with the institution to develop and implement effective strategies to support responsible conduct of research and to cultivate a scientific culture in which being ethical is never sacrificed to the goal of getting more and faster results. But, I would argue, this reparative work will have the greatest impact if it takes place within the research community rather than in isolation from it.

While misconduct involves individuals making bad decisions, it happens in the context of social structures and reward systems that exist because of collective choices and behaviors. If the structures that result from those collective choices and behaviors end up incentivizing some individual choices that are pathological to the shared endeavor, making them seem like rational choices under the circumstances because they help individuals secure rewards, the community has an interest in examining the structures it has built. Such examination is more likely if misconduct is not framed as the aberrant act of an irredeemable other.

It is important to note that some breaches of trust may never be fully repaired, and that being part of the scientific community after misconduct does not mean staying on the career trajectory one was on before. Getting a second chance does not mean getting a clean slate. However, casting cheaters as monsters who cannot be rehabilitated does little to help people make good choices in the face of difficult circumstances. Ignoring the ways we contribute to creating those circumstances does not help, either—and may even increase the risk that we will become like the "monsters" we decry.

But to move away from casting scientists who commit misconduct as monsters who cannot be rehabilitated, the scientific community must make paths to rehabilitation available. Given the heightened level of scrutiny scientists on such paths will face, the prospects for reoffending undetected are low. Moreover, clear paths to rehabilitation and reintegration will not only make reporting first offenses by promising young scientists seem less draconian but also make erstwhile offenders a resource that could help the whole scientific community establish conditions that better encourage honesty and fairness in the knowledge-building project.

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REFERENCES

- Adams, D., and K. D. Pimple. 2005. Research misconduct and crime: lessons from criminal science on preventing misconduct and promoting integrity. Account Res. 12(3):225–240.
- 2. **Couzin, J.** 2006. Truth and consequences. Science **313:**1222–1226.
- Davis M., M. Riske-Morris, and S. Diaz. 2007. Causal factors implicated in research misconduct: evidence from ORI case files. Sci. Eng. Ethics 13(4):395–414.
- 4. De Vries, R., M. S. Anderson, and B. C. Martinson. 2006. Normal misbehavior: scientists talk about the ethics of research. J. Empir. Res. Hum. Res. Ethics 1(1):43–50.
- 5. **Gunsalus, C. K.** 1998. How to blow the whistle and still have a career afterwards. Sci. Eng. Ethics **4(1):**51–64.
- 6. **List, C. J.** 1985. Scientific fraud: social deviance or the failure of virtue? Sci. Technol. Human Values **10(4):**27–36.
- Martinson, B. C., M. S. Anderson, A. L. Crain, and R. De Vries. 2006. Scientists' perceptions of organizational justice and self-reported misbehaviors. J. Empir. Res. Hum. Res. Ethics 1(1):51–66.