False investigators and coercive citation are widespread in academic research

A recent study has revealed widespread unethical behaviour in academic research. Allen Wilhite focuses on two activities in particular; the addition to funding proposals of investigators not expected to contribute to the research, and editors who coerce authors to add citations to manuscripts even though those citations were not part of the scholars’ reference material. Research institutions, funders, rankings bodies, and scholars themselves can and should do more to address such behaviours.

In a recent study we found widespread abuses in academic citation and authorship. Two activities seem particularly egregious. The first, labelled false investigators, refers to adding extra investigators to grant proposals even though they are not expected to contribute to the research. The second is coercive citation, referring to editors who coerce authors to add citations to manuscripts even though those citations were not part of the scholars’ reference material.

We investigated the prevalence of these activities and looked into the reasons academics stoop to such measures by surveying more than 110,000 scholars from disciplines across the academic universe; in physics, mathematics, chemistry, biology, ecology, computer science, engineering, accounting, economics, finance, information systems, marketing, management, medicine, nursing, sociology, psychology, and political science. The 12,000+ responses we received document differences in the amount of abuse from discipline to discipline, but every single field reported a significant amount of cheating. In addition, our analysis suggests that abusers are making their decisions deliberately, carefully picking their opportunities to cheat.

False investigators

More than a quarter of respondents said they have added an investigator to a grant proposal who was not expected to participate in the research. We also asked why they did so. The six most commonly given reasons scholars add false investigators and a breakdown of the percentages of those responses appear in Figure 1, below.

Figure 1: Top six reasons for adding a false investigator to a grant proposal (percentage of respondents reporting each reason). 1. Reputation: their reputation increases the chances of receiving funding; 2. Director: this individual was the director of the lab or facility used in the research; 3. Authority: this person occupies a position of authority and can influence my career; 4. Mentor: this person is my mentor; 5. Reviewers: adding author(s) was suggested by reviewers; 6. Colleague: this is a colleague I wanted to help out. (Data from Appendix I; Fong and Wilhite, 2017)
The most prominent feature of Figure 1 is that over 60% of the individuals who added a false investigator did so because the individual had a reputation that might increase the chances of getting a favourable review. It is unknown whether such deception is effective, but since many grant proposals are not blind-reviewed, a prestigious name could sway reviewers. In addition scholars seem to think it is effective since it is a widely used tactic, practiced across all 18 disciplines we studied.

The second and third-most common reasons for adding false investigators (accounting for more than 25% of the responses) were that the added individual was the director of the lab in which some of the work was completed, or someone respondents knew to “occupy a position of authority and [who] can influence my career”. There doesn’t seem to be a plausible way to positively spin this response; either authority figures are exploiting scholars with less political power, or junior faculty are buttering up (or bribing) their superiors. Either is unethical.

Coercive citation

Coercive citation has been defined as editors who direct authors with manuscripts under review to add citations to articles from the editor’s journal even though there is no evidence that references are lacking. These editors do not refer to a stream of research that has been overlooked nor do they mention specific manuscripts, in fact their only guidance is that the articles be from the editor’s journal, sometimes insisting that the citations refer to recent issues of their journal. More than 35% of all academics responding to our survey were aware that some editors coerce and more than 14% have been coerced. Coercive citation seems to be an attempt to increase a journal’s impact factor score which, despite its recognised shortcomings, has become the primary measure of journal quality. But this effort is a zero-sum game; that is, as one journal moves up in the rankings by coercing its authors, other journals which play ethically lose ground. This increases the pressure on editors to coerce and that feedback loop simply exacerbates the problem, making the practice more uneven across disciplines as shown in Figure 2, below.

![Figure 2: Percentage of respondents coerced and aware of coercion. The blue bar displays percentage of respondents who report that they have been coerced by an editor to add superfluous citations to a manuscript, and the green bars indicate respondents who are aware that such coercion exists.](image)

What can be done?

There isn’t a simple fix, but there are changes that can reduce the incentives to cheat and/or to increase the costs of doing so. The incentive for editors to manipulate citations would be eliminated if self-citations were no longer counted in impact factor calculations. Currently some impact factors are calculated with and without self-citations, however offering a choice can aggravate the problem. For example, if a journal is willing to coerce authors, then giving that journal a choice of different types of impact factors means they can pick the one that most greatly rewards their manipulation. For this reason we argue that self-citations should be completely eliminated from calculations of metrics such as the impact factor.
The use of false investigators may be more difficult to eradicate. Blind review – truly blind review – of grant proposals should reduce the benefits of including a scholar with a reputation, and encouraging research institutes to adopt clear guidelines about the inclusion of investigators could help. Providing greater financial support for junior faculty members can help relieve the funding pressure that promotes the use of false investigators. Finally, funding agencies should make stronger statements about their concerns around the practice of adding false investigators.

While we do not expect such changes to eliminate these activities, they can reduce the disadvantage faced by scholars and editors who prefer to play it straight but find themselves in a system that too strongly rewards deception. Then it is up to us. The academy needs to push back, deans and department chairs need to establish clear guidelines for who is included in grant proposals and follow up to see that faculty members are not skirting the rules. Scholars need to be encouraged to do the right thing; report editors or colleagues who coerce and refuse to participate. And scholars who are brave enough to step forward to report abuses deserve safe haven and protection from retaliation at some later time. We may not be able to expect to see cheating disappear, but we can and we should do better.

This blog post is based on the author’s co-written article, “Authorship and citation manipulation in academic research”, published in PLoS ONE (DOI: 10.1371/journal.pone.0187394).

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