# To improve social science publications let's lose the discussion section

In quantitative social science papers, the discussion section serves as a place to analyse and put findings into a wider context. **Philipp Schoenegger** and **Raimund Pils** argue that rather than adding value, these discussions can leave findings open to the cognitive biases of researchers and that much could be gained from separating them out of the research paper as a distinct form of academic writing.

Many fields of the social sciences are currently navigating a <u>series of interconnected</u> <u>crises</u> that threaten their scientific integrity and public perception. These range from difficulties in replicating studies to challenges in theory development and failures to translate scientific findings into practice. These crises erode public trust, hinder interdisciplinary collaborations, and question the validity of social science research altogether.

In response to this set of crises, several reform measures have already been initiated, particularly under the banner of 'Open Science'. For instance, there has been a large-scale adoption of the practice of preregistration and, albeit to a lesser extent, registered reports, where research methods and analysis plans are openly stated and reviewed prior to data collection. This reduces many of the biases that plagued social science research over the past decades. And while there has been much progress over the past years, specifically in preregistration, we argue that there still remains a lot to be done in attempt to properly reform the social sciences and establish credibility and earned trust in its findings. As an example, take the finding that barely <u>11% of studies in marketing outlets</u>, including in journals such as the *Journal of Consumer Research*, replicate at all. If we want to do high quality work that actually impacts society, we ought to do better.

## Our proposal: Eliminate the discussion section

We propose a new approach that is fully in line with the current efforts to improve the social sciences. Here's the deal: let's get rid of the discussion section in research papers and instead, have those discussions in separate papers. Why? We argue that the

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discussion section, where researchers traditionally interpret their own results, is a breeding ground for cognitive biases and incentive misalignment that directly contribute to the situation that we find ourselves in by misstating true limitations and framing one's results disingenuously. Eliminating it promises to realign researchers' personal aims with the broader goals of scientific truth finding. Importantly though, our proposal only works if it is implemented alongside many of the current and future reforms. Specifically, we see four ways this change could make a real difference.

### Reduced bias and enhanced objectivity

The discussion section of a research paper is traditionally where authors interpret their findings. But here's the catch: this section frequently falls victim to cases of confirmation bias—where authors focus more on the findings, data, and interpretation that support their original ideas and leave out those that don't. This kind of selective reporting can consequently distort the scientific record, resulting in failed replications of non-existent effects and applications of widely overstated effect sizes. So, what if we just remove this discussion part altogether? By doing this, we're cutting down the chances of such bias to creep into research. This could lead to a clearer and more accurate understanding of the research's true findings and limitations.

#### Division of labour efficiency

Right now, the team that writes a research paper does everything—planning the study, gathering data, analysing it, and then putting it into context with prior and future work as well as theory and policy. This all-in-one approach can dilute the effectiveness and efficiency of the research process. Imagine if, instead, we split the tasks up. Remove the discussion part, and suddenly, you've got room for different experts to do what they do best; some run and analyse experiments while others put them into context. This division of labour could improve the quality of research and help us knit together knowledge from different fields in a more effective way.

#### Enhanced adversarial mode

The new way we're thinking about structuring social science research papers builds on the principle of adversarial rigour. Simply put, the idea here is to separate the roles that researchers play in science: let one team do the empirical research and another team interpret it. This way, a fresh set of eyes, not involved in the original research, gets to make sense of the findings. This setup naturally creates an adversarial setting where the interpreting researchers, who are much less likely to have any inherent bias towards the data, are incentivised to critically analyse and challenge the findings. Think of it as an amped-up version of the peer-review process but built right into how we write and understand research papers. Plus, it opens the door to diverse perspectives and fresh takes on the data. This new model also reshapes what drives scientific publishing: Researchers would be rewarded not just for producing novel data, but also for critically analysing existing data, thereby promoting a culture that values thorough scrutiny and critical thinking as much as innovation and novelty seeking. This could have a profound impact on the overall quality and reliability of social science research.

#### Improved public trust and communication

Last, the proposed structural change could also play a significant role in restoring public trust. By making sure research is reported clearly and honestly, we could seriously boost people's trust and understanding of what we do. In a world where misinformation is rampant, rebuilding trust in science isn't just nice—it's crucial. Getting rid of the discussion section in research papers could contribute to changing the game in how we share our findings with the world. Currently, science reporting often simply echoes the main points from a study's abstract or discussion section. Removing the overstatements and distortions often found in discussion sections could thus make public communication of scientific findings more reliable.

## **Final thoughts**

The idea of removing the discussion section from social science research papers is bold and comes with its share of challenges and uncertainties (for more, please see our full paper where we discuss many of them). However, its potential benefits—realignment of incentives, reduction in bias, and enhancement of scientific integrity—are substantial. As the social sciences strive to address their current crises, such structural innovations, in conjunction with other ongoing reform efforts, could be pivotal in rejuvenating trust in these disciplines' findings. This proposal is more than just a methodological adjustment; it is a call for a fundamental rethinking of how social science research is conducted and communicated. It opens up a necessary conversation about the core structure of scientific research and its far-reaching impact on the credibility, utility, and public

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perception of science in our society.

This post draws on the authors' article, <u>Social sciences in crisis: on the proposed</u> <u>elimination of the discussion section</u>, published in Synthese.

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