

TARG Meta-Research Group
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Group authorship to
increase researcher
engagement

submitted for the category of Improving Quality

Open Research Prize 2022

Summary (100 word abstract)

Authorship lists on scientific publications are cryptic. Even after making some assumptions, authorship lists only vaguely portray the degree and content of each author's contribution. A better system would clearly identify how each team member contributed—like the credits at the end of a movie.

In early 2020, our research team began outputting a selection of our work—including preregistrations, posters, preprints, and manuscript submissions—under our group name “TARG Meta-Research Group (& collaborators)”, accompanied by a Contributor Roles Taxonomy (CRediT) statement that outlines the contribution of each team member. We take this *contributorship* approach to encourage team science and provide fair recognition to everyone involved in a research project.

What did you do? Our team now outputs collaborative projects under a group name and includes a CRediT statement that details the contribution of each team member. While some journals and research groups now publish CRediT statements, these often come after an ordered authorship list. Our key innovation is *replacing* ordered authorship lists with contributor statements.

Why did you do it?

Journal authorship is perhaps the most valued academic currency—it helps researchers secure jobs and funding. Authorship lists, however, fail to describe the value that each author contributed to an output. In the life and health sciences, people often assume that the first author did most of the work, that the last author had the idea for the project and oversaw its operation, and that middle authors did very little. This assumption creates at least three major problems, all of which are solved by group authorship alongside a CRediT statement.

First, authors fail to receive suitable recognition for the content and degree of their contribution. Some vital contributors such as statisticians and data collectors are sometimes not even included as authors because they do not meet certain authorship criteria (e.g., those of the International Committee of Medical Journal Editors, ICMJE). Thus, some contributors to research are being devalued and their contribution can be hard to identify for hiring committees and funding agencies.

Second, this lack of clarity and assumption about the meaning of authorship order can create perverse incentives. For example, middle authors get some recognition (e.g., their citation count and h-index will increase), but they are often assumed to have contributed little. Thus, there is an incentive to contribute just enough to receive middle authorship, but no more. Having two project leads is also disincentivized because only one can be placed as first-author (even if “**authors contributed equally*”, the citation will read “*First Author et al.*”). Providing proper recognition to diverse contributors could increase their involvement and in turn improve the quality of a research output.

Third, opaqueness and perverse incentives can lead to authorship disputes. There is a whole literature on authorship disputes and dealing with them can be a major role of university

ombudspersons. Unfortunately, power imbalances between junior and senior researchers can sometimes inappropriately factor into decisions on authorship order.

In short, using contributorship statements *rather than* (i.e., not alongside) ordered authorship lists paves the way for team science while providing appropriate credit, realigning incentives, and abolishing authorship disputes and their residual harm.

How did you do it?

We discussed the idea as a group and decided on an opt-in system where someone leading a project may choose to use a group authorship alongside a contributorship statement. We feel that first-authorship is particularly important for graduate students to advance their career. For preregistrations, posters, and preprints, group authorship is easy to implement. We may receive pushback from publishers, but we will deal with this issue when it comes.

What barriers / challenges did you have to overcome?

We acknowledge that team members who would otherwise appear as first author, may be reducing their chances of winning grants from conventional sources that emphasize first authorship. We hope, however, that this negative will be balanced out by departments, universities, and funding agencies who recognize the value of our innovation.

What does it mean for you and your research?

Team science and transparency! We can easily ask people if they want to join a project and tell them they will be recognized for their precise contribution. If we want to ask a team member to help with an additional aspect of a project, they will then also be listed as a contributor for that task. The contributorship in place of authorship system creates a collegial environment where total group output is prioritized.

How might your findings / approach help other researchers?

Our practice may encourage other researchers to adopt the CRediT system. Our major contribution, however, is demonstrating that authorship lists may be dropped altogether. We hope this inspires a team science approach for our collaborators and fellow research groups.

Additional Information

A selection of outputs demonstrating group authorship alongside a CRediT statement

- Preprint: [Statistics education in undergraduate psychology: A survey of UK course content](#)
- Preregistration: [A peer review intervention to minimize discrepancies between preregistrations and published manuscripts: a feasibility study](#)
- Poster: [Registered Reports Funding Partnerships: two studies](#)