REPLY TO HERSCHLAG:
Enhancing integrative science by acknowledging our biases
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In a commentary on our recently published article in PNAS (1), demonstrating that scientists pose strong self-enhancing biases when requested to evaluate their contribution to published teamwork, Herschlag (2) extends the discussion and proposes potential explanations for these observed biases. We enjoyed reading Herschlag’s examples and insights and think that this kind of discussion is paramount for raising awareness of this important issue.

We also agree with Herschlag (2) that some elements of contribution to collaborative science are not easily apparent or measurable. Indeed, this inherent ambiguity is likely an important factor contributing to the self-enhancing biases we reported, which may extend even to individuals whose effort has not been apparent or deemed relevant enough to deserve any formal credit.

Herschlag (2) also suggests that simple additive models, as we applied in our study, might not appropriately assess the amount of contribution to a scientific project. The idea that “the whole could be more than the sum of its parts” is offered as a potential approach for promoting a positive atmosphere in teamwork, and again, we agree. Nonetheless, when the time comes, scientists must face the need to decide to credit dissemination for end products (i.e., published manuscripts), which unfortunately still reflect a single entity with only 100% credit to go around. The simplified additive model we tested revealed a strong bias. More complicated analytics (e.g., ref. 3) may be more precise. It is doubtful, however, that such models could eliminate self-enhancing judgments. Whatever subjective models coauthors currently apply, they are strongly biased in their own favor. As evident from figure 1B in ref. 1, authors consistently believe they contribute more to a publication than their coauthors think they have, and this bias remains even after authors are given a chance to adjust their self-contribution. Dissatisfaction resulting from such a gap runs the risk of hampering integrative and synergistic team science and therefore calls for conscientious handling that starts with awareness of the bias. We believe that such awareness can further enhance the motivation for collaborative work in science and beyond, an important goal in itself, as highlighted by Herschlag’s commentary (2).


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The authors declare no competing interest.

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