

Groups Weight Outside Information Less Than Individuals Do, Although They Shouldn't: Response to Schultze, Mojzisch, and Schulz-Hardt (2013)

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By suggesting that dyads should give less weight to outside advice than individuals should, Schultze, Mojzisch, and Schulz-Hardt (2013) raise important questions regarding whether and when collaborative judgment outperforms individual judgment. The authors argue that, normatively, the judgments of dyads should be weighted twice as heavily as those of individuals because the former are made up of two independent inputs, whereas the latter are a product of solitary contemplation.

The problem, however, is that estimates produced by dyads are not actually made up of two independent inputs. Prior work suggests that group interaction creates shared perspectives, viewpoints, emotions, and cognitions, such that any member's contribution reflects and is influenced by the group's contribution (Kenny, Mannetti, Pierro, Livi, & Kashy, 2002; Salancik & Pfeffer, 1978). Thus, group members should not be treated as independent individuals but rather as interdependent contributors (Nezlek & Zyzniewski, 1998; Raudenbush & Bryk, 2002).

In the research that Schultze et al. address (Minson & Mueller, 2012), we asked dyad members to interact without initially committing to individual estimates—a common practice in many real-world judgment contexts. How did such joint estimation affect their judgments? To answer this question, we first compared the error of dyads' initial estimates with the error of estimates that would have resulted if participants in the individual-judge/individual-advisor condition averaged their judgments with those of their advisor. We found that dyads' estimates were less accurate (M = 40.4 percentage points) than those produced by averaging the estimates of two independent individuals (M = 34.4 percentage points), b = -0.060, z = -2.19, p < .03, which suggests that dyads' judgments should not be weighted as heavily.

Furthermore, we can calculate the weight that participants should have given to peer input on any given item in order to reach the correct answer. In the conditions in which dyads received input from dyads and individuals received input from individuals, the result had to be (and was) 50%. However, the conditions of interest are the ones in which dyads received input from individuals and vice versa. In those cases, reaching the correct answer would have required that dyads yield 52.9% of the weight toward the estimates of individuals and individuals yield 47.1% toward the estimates of dyads! These weights are not significantly different from 50% (or from each other) and are far from the 66.7% vs. 33.3% benchmark proposed by Schultze et al. Furthermore, if these weights (which account for the nonindependence introduced by making judgments jointly) are used as the "rational weights" in Table 1 of Schultze et al., the conclusions will be the same as those in our research: namely, that dyads are more biased than individuals in their use of advice.

These data did not allow us to address the psychological processes that lead to such rapid loss of independence on the part of dyad members. Although the fact that the judgments of interacting group members are not independent, it is somewhat surprising that such judgments do not more closely resemble the sum of their independent parts. The Schultze et al. commentary exposes a need for future research in this domain. Researchers, managers, and consumers would benefit from a deeper understanding of when, why, and to what extents two heads are truly better than one.

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Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

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