Letter

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Groups Weight Outside Information Less Than Individuals Do Because They Should: Response to Minson and Mueller (2012)

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In a recent article, Minson and Mueller (2012) compared advice taking in dyads and individuals by manipulating whether judges were individuals or dyads and whether advice was provided by individuals or dyads. They concluded that "collaborators' reluctance to integrate external input into their decisions may substantially impair their ability to achieve their goals" (p. 223). This conclusion rested on the finding that dyads utilized advice less than did individuals working on the same task, regardless of whether the advice was provided by an individual or by a dyad (the weight given to advice was 19.5% vs. 32.3%, respectively). At first glance, this finding seems in line with previous research pointing out the many insufficiencies of group performance (see Hill, 1982; Kerr & Tindale, 2004). However, we argue that the dependent variable that Minson and Mueller (2012) chose for their analysis, namely, the percentage weight given to advice, is somewhat misleading because it erroneously treats dyad and individual judgments equally.

In the absence of information about relative accuracy, normative rationality dictates that each individual judgment should be weighted equally (e.g., Hogarth, 1978). A single judge should then assign a weight of 50% to advice from a single advisor (Soll & Larrick, 2009). However, this rational benchmark weight decreases to 33.3% for dyad judges because their initial estimates are comprised of two independent opinions, and, hence, there are three independent judgments to be aggregated. Dyads should, therefore, assign two thirds of the weight to a piece of outside information when compared with individuals. Accordingly, when advice discounting between individuals and groups is compared, the relevant dependent variable is the difference between the observed weights of advice and the normatively correct weights.

Using this difference score, we reanalyzed Minson and Mueller's (2012) data. The difference scores were significantly different from zero in all four conditions (see Table 1), which replicated the well-known tendency to underweight advice (see Bonaccio & Dalal, 2006; Yaniv, 2004). More important, a 2 (judge type: individual vs. dyad) × 2 (advisor type: individual vs. dyad) analysis of variance on the difference scores revealed results that differed fundamentally from those reported by Minson and Mueller (2012). Whereas they found only a main effect of judge type, this effect fell short of significance in our reanalysis, $F(1, 168) = 0.70$, $p = .40$. Instead, we found a significant main effect of advisor type, $F(1, 168) = 11.76$, $p < .001$. The interaction was not significant ($F < 1$). This suggests that individuals and dyads discounted advice equally, which contradicts the conclusion of Minson and Mueller (2012) that dyads are less able to utilize advice. Instead, both individual and dyad judges failed to acknowledge the increased reliability of dyad advice compared with individual advice, which resulted in stronger discounting of the former.

In sum, our reanalysis reveals an overlooked gem in Minson and Mueller's (2012) study, namely, an asymmetry in assessing the informational value of aggregated judgments: Whereas judges seem to be sensitive to the increased reliability of their own aggregated initial estimates, they ignore the same increased reliability when it comes to aggregated advice.

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Table 1. Mean Percentage Weights Given to Advice as a Function of Condition

Condition	Rational weight	Observed weight	Difference
Dyad judge			
Dyad advisor	50.0	19.9 (28.4)	30.1 (28.4)
Individual advisor	33.3	19.1 (26.4)	14.2 (26.4)
Individual judge			
Dyad advisor	66.7	33.2 (31.5)	33.5 (31.5)
Individual advisor	50.0	31.6 (30.8)	18.4 (30.8)

Note: Standard deviations are shown in parentheses. The difference between rational and observed weights was significantly different from zero for all four conditions (all ts > 3.48, all ps < .01). The respective t and F statistics of our reanalyses were calculated using the means, standard deviations, and sample sizes reported by Minson and Mueller (2012).

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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