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REJOINDER

The Methodology and Theory of Future Research on Advice-Based Decisions

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We summarize and respond to the three commentaries on our systematic review of advice research in management and psychology (Kämmer et al., 2023). All three commentaries focus on empirical methodology, perhaps in reaction to the research's bottom-up approach. We discuss the opportunity for developing more ambitious, broader theoretical frameworks.

Keywords: advice, decision, management, psychology, organizational behavior

The commentaries by Blunden and Rader (2023), Dalal and Baines (2023), and Van Swol et al. (2023) each provide insightful perspectives on the future of advice research. We are grateful for these perspectives, and for the breadth that they add to the discussion and interpretation of the empirical findings on advice-based decisions that we summarized in our review (Kämmer et al., 2023). We also note that the three commentaries share a concern about the methodology of advice research, a concern that echoes the distinction between the methodologies of behavioral and organizational advice research that permeates our review. In the remainder of this reply, we briefly summarize each of the commentaries and respond to them. We then relate the methodological points raised in the commentaries to the opportunity for developing theoretical frameworks for future research on advice-based decisions.

In "Advice as a Subjective Subject," Blunden and Rader (2023) call for a greater focus on subjectivity when studying advice taking. The authors note that whereas most of the extant research has measured objective aspects of the utilization and outcomes of advice, there are also subjective aspects that reside in the minds of advisors and decision makers. For example, a recipient of advice may hold a certain perception

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of the extent to which they have used the advice they received, whereas the individual's advisor may hold a different perception. Blunden and Rader contend that the measurement of decision makers' and advisors' perceptions and feelings about their interactions, and about the resulting advice-based decisions, may lead advice researchers to discover new and psychologically rich dimensions of advice-based decisions.

Dalal and Baines (2023) explore ways of "Operationalizing Advice Utilization for Productive Research and Application." They argue that behavioral advice research relies too strongly on the "weight of advice" and similar, formula-based, measures for quantifying advice utilization. Instead, they propose advice research should transition toward polynomial regression, a statistical methodology popular in other areas of organizational (Shanock et al., 2010) and psychological research (Humberg et al., 2019). Dalal and Baines (2023) then go on to raise a more general question about how the outcomes and influence of advice should be measured. They independently arrive at a recommendation that resembles Blunden and Rader's (2023), suggesting that future research should look beyond the effects of advice on the decision maker's judgments and choices and should take into consideration the decision-maker's cognitive, affective, and behavioral reactions to advice.

Finally, in "You can't pound a nail if you don't have a hammer: The role of methodology in advice research," Van Swol et al. (2023) examine the methodological limitations of current advice research. In line with Dalal and Baines (2023), they go on to suggest that advice research should move beyond its traditional operationalizations of advice and advice utilization. They point to natural language processing (NLP) as a powerful alternative to extant approaches that would allow advice researchers to analyze the language of advice and its reception in- and outside the behavioral laboratory. NLP, they argue, allows researchers to analyze big data on interactions between advisors and decision makers and could open a new window to the process of advising, which has been a black box for both behavioral and organizational research. Alongside these innovations, Van Swol et al. (2023) also suggest that future research could study advice from chatbots.

Each of the commentaries highlights an innovative methodological approach for future advice research. We agree that the new approaches put forward in the commentaries deserve consideration, and we believe that advice researchers stand to gain from incorporating these approaches into their methodological toolbox. In this sense, we view the commentaries as complementary to one another. We also view them as complementary to important developments in the empirical advice research covered by our review— that the contributions of organizational research have broadened the field's perspective, and that behavioral research has begun to look beyond its traditional quantitative estimation tasks. As we detail in the review's general discussion, this methodological diversification has helped consolidate some findings (e.g., the appeal of expert advisors), has shifted attention to new research areas (e.g., advice solicitation), and has helped identify questions that merit further research (e.g., relational outcomes of advice solicitation and utilization). Further methodological diversification and innovation would likely yield further benefits of this kind.

In the end, we believe that both our review and the three commentaries emphasize methodology because behavioral and organizational research on advice-based decisions has fundamentally been a bottom-up endeavor. Advice researchers usually design their studies and select their stimuli around ad hoc theoretical insights. Empirical investigations of any one such insight are often confined to a single article and thus frequently rely on a single methodological approach (e.g., one experimental paradigm). As we point out in the review, this represents an opportunity for developing the more ambitious, broader theoretical frameworks that both organizational and behavioral research have been lacking. Perhaps popular frameworks in cognitive psychology like Anderson's (1991) influential "rational analysis," or the more recent "resource-rational analysis" (Bhui et al., 2021; Lieder & Griffiths, 2019) could serve as an inspiration. An application of these frameworks to advice solicitation or utilization, for instance, would likely depict decision makers as adaptively juggling social and relational concerns with concerns for judgment accuracy or well-informed choices (and in the latter framework, with the limitations imposed by cognitive constraints). In the meantime, absent broader theories, a willingness to explore new methodologies is crucial for ensuring the successful conceptual replication of existing

findings in different experimental paradigms and under different approaches to measurement, and thus for ensuring their generalizability.

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