Introduction to the Special Section on Theoretical Models and Conceptual Analyses

Theory in Applied Psychology: Lessons (Re)Learned

Katherine J. Klein
The Wharton School, University of Pennsylvania

Sheldon Zedeck
University of California at Berkeley

The *Journal of Applied Psychology*'s call for theoretical models and conceptual analyses brought a terrific response. The editors introduce the special section and comment on lessons learned, or perhaps re-learned, about developing and writing theory in applied psychology.

Theories provide meaning. They allow us to understand and interpret data. Theories specify which variables are important and for what reasons, describe and explain the relationships that link the variables, and identify the boundary conditions under which variables should or should not be related (Campbell, 1990). Theories help identify and define problems, prescribe a means for evaluating or solving the problems, and facilitate responses to new problems. They permit generalization beyond the immediate sample and provide a basis for making predictions. Theory tells us *why* something occurs, not simply *what* occurs. Research in the absence of theory is often trivial—a technical feat more likely to yield confusion and boredom than insight. In contrast, research that is guided by theory, or that develops theory, generates understanding and excitement.

To signal the commitment of the *Journal of Applied Psychology* not only to the publication of theory-driven and theory-building research but also to the publication of theory per se, in September 2002 the journal issued a call for papers that present new theoretical models and conceptual analyses. We urged authors to submit conceptual manuscripts that extend beyond the current literature— that offer more than a review of the existing literature and more than a repackaging of established constructs and models. We emphasized that manuscripts should offer new theoretical insights and propose new explanations of constructs, relationships, and/or phenomena in applied psychology. We hoped to receive innovative manuscripts that would break new theoretical ground while offering testable propositions and applied implications.

The response to our call for papers was gratifying. We received 91 submissions, addressing topics of great interest to *Journal of Applied Psychology* readers, including motivation, leadership, teams and groups, culture, and justice. We concluded that scholars are eager to make theoretical contributions and to explore new outlets for their theoretical work. We were delighted with the reception but hasten to note that the journal has always been open to publishing nonempirical manuscripts, and we remain open to publishing nonempirical manuscripts of relevance to applied psychology in organizational settings at any time. We issued a call for theoretical models and conceptual analyses not to limit the publication of such manuscripts to a special section but to encourage the continuing submission of such manuscripts.

Although the response to our call for papers was gratifying, it also reminded us of the difficulty of creating clear, convincing, and compelling theory. At the time of this writing, we anticipate an acceptance rate of about 13% to 20%. (The overall acceptance rate for manuscripts submitted to the *Journal of Applied Psychology* in 1995 was 18%.) The review process has taught, or perhaps retaught, us important lessons about theory building—about what theory is and, in the words of Sutton and Staw (1995), what theory is not. Graduate students in applied psychology and related fields frequently take multiple classes in research methods and statistics. However, they often learn theory building on their own. We hope that our comments are useful for those in and out of graduate school who seek to develop, or simply to evaluate and appreciate, theory.

Below we offer a set of guidelines designed to assist authors in developing theory and in presenting it most effectively. These guidelines are based on our understanding of theory and our experiences in evaluating the theory submissions we received in response to the call for papers. To develop these guidelines, we examined the manuscripts we received in response to the call for papers, the reviews of each of these manuscripts, and our own action letters. These lessons are by no means original to us. They have been articulated in a number of commentaries on theory development (e.g., Campbell, 1990; Daft, 1995; Goodson & Mor-

gan, 1976; Sutton & Staw, 1995) but, like the guidelines for many other skills that are difficult to learn and practice, bear repetition.

For the *Journal of Applied Psychology*, clear, convincing, and compelling theory—in short, good theory—explains and predicts the behavior or functioning of organizations or the people within them. Good theory provides new insights that are at once testable and practical. Good theory has staying power. This does not mean that the theory is fixed in time. Rather, good theory generates new research, which leads to modification and refinement of the theory over time. More specifically, good theory has the following characteristics.

Good Theory Offers Novel Insights

Good theory teaches readers and researchers something new, something they could not have learned elsewhere. Good theory offers more than old wine in new bottles. In reading good theory, one has a sense of discovery and illumination. Many of the manuscripts we received missed this mark. We often asked authors, "What is new here?" "It is not clear how your description of ____ differs from established models and measures of ____." "What does this manuscript tell us that we did not already know?" Further, we urged authors to make explicit the value added by their manuscript: "Present a clear, strong punch line early in the manuscript. Be bold and tell us why we should be excited about your manuscript." Authors can, of course, oversell their contributions. However, making the manuscript's most novel and significant contributions salient and explicit is surely a more effective writing and thinking strategy than is allowing these contributions to remain murky and hidden.

Good Theory Is Interesting

Sometimes a theoretical manuscript's contributions are novel but nevertheless dull. Perhaps no one in the field had articulated the manuscript's points in press before. If, however, readers' reaction to the manuscript is that its key points are commonsensical, familiar, and "ho-hum," then the manuscript has failed to clear a fundamental standard of good theory. If researchers tested the model's propositions and supported them, would reviewers comment that the study simply documents the obvious? If so, the model does not constitute good theory.

Good Theory Is Focused and Cohesive

Good theory illuminates and clarifies, often by organizing, and thus simplifying, a set of previously unorganized and scattered observations. The real world is, of course, complex and overdetermined. However, good theory renders real-world processes and phenomena clear and coherent by simplifying and structuring our inchoate understanding of them. This is only possible if the theory itself is clear and coherent. Thus, in theory building, more (constructs, propositions, boxes, and arrows) is often less. In our letters to authors, we often commented that the manuscript seemed choppy, crowded, overly complex, or scattered. What are the manuscript's two or three main points? If the answer is not clear to the reader (or to the author!), then the manuscript does not offer good theory.

Good Theory Is Grounded in the Relevant Literature but Offers More Than a Review or Integration of This Literature

To offer novel insights, an author must know in detail prior theory and research that have addressed his or her chosen topic. Authors who are unaware of relevant prior theory and research risk recreating the wheel; their insights may be new to them but not to others. Further, a manuscript that reveals a lack of knowledge of prior work lacks credibility. Reviewers can and do readily comment that "your manuscript does not give the impression that you have a thorough grasp of the current literature on ____."

However, whereas knowing relevant theory and research is critical, summarizing a great deal of it in a theoretical manuscript is usually a mistake. Readers seek novel and focused insights from theory articles. An extensive literature review is neither novel nor focused. It is a distraction within a theoretical manuscript. Thus, the challenge is to make clear one's knowledge of the literature without reviewing it in detail. Of course, a detailed, integrative review or meta-analysis of the literature can be tremendously useful. Although a review or a meta-analysis may provide the foundation for a theoretical advance, in and of itself a review or a meta-analysis does not constitute good theory.

Good Theory Presents Clearly Defined Constructs and Offers Clear, Thorough, and Thoughtful Explanations of How and Why the Constructs in the Model Are Linked

Clearly defined constructs are the building blocks of good theory. The process of defining one's constructs sounds easy but is not. Reviewers of the theory submissions to the *Journal of Applied Psychology* often described authors' constructs as "loosely defined, vague, and confusing" and urged greater precision and specificity. Recent discussions in the literature regarding the precise meaning and dimensions of organizational commitment, organizational citizenship, leadership, and other prominent constructs in applied psychology attest to the difficulty of defining, delineating, and differentiating constructs. A construct that seems clear and meaningful to the author who has been thinking about it for months or years may seem vague and confusing to the reader first exposed to it. The author's duty is to be as clear as possible. The review process can be a great aid in this process, prompting authors to revise and refine their construct definitions.

If clearly defined constructs are the building blocks of good theory, then thorough and thoughtful propositions linking the constructs—explaining what construct leads to what, when, how, and why—provide the mortar. The statements and propositions that link constructs must be explained and reasoned in detail. Simply providing a diagram or a figure that lists constructs or variables is not sufficient. Nor is the specification of hypotheses sufficient, as hypotheses describe which variables are related to one another but do not explain why. A link that seems obvious to the author, and thus in no need of explanation, may seem obvious and thus dull to the reader or, alternatively, confusing and unclear. Neither of these reader reactions is desirable. Many authors justify a link between two constructs by simply noting that prior research found measures of the two constructs to be significantly related. However this does not explain how, when, and why the constructs are linked. In good theory, assertion and even evidence are no substitute for explanation and interpretation.

Good Theory Is Testable

When constructs are clearly defined and specified, and links among the constructs are explained and justified thoroughly, researchers seeking to test the theory are likely to have a very good idea of how to do so. Conversely, when a theory's constructs and propositions are vague and imprecise, two researchers may set out to test the theory but ultimately test very different interpretations of the theory. One person's operationalization of a construct may bear little or no conceptual relation to another person's operationalization of the same construct simply because the construct itself is unclear. A number of the manuscript reviews indicated that an author's ideas were untestable. Accordingly, we often asked authors to describe in greater detail how key constructs should be measured and how key ideas should be tested.

Good Theory, at Least in Applied Psychology, Has Practical Implications

As illuminated in the title of the *Journal of Applied Psychology*, the journal's focus is the application of psychology. Thus, for the journal, good theory is theory that can be used to address problems in organizations. Moreover, consistent with the journal's general policy for empirical manuscripts, we are concerned with effect sizes. Thus, the manuscripts to which we were most receptive were those that held the potential to address important organizational and societal problems. We hope that the future research that develops from the articles in this special section will generate reasonable effect sizes and, ultimately, benefits for organizations and their members.

Good Theory Is Well-Written

Many of the aforementioned guidelines both engender and reflect effective writing skills. Effective writers create works that are clear, focused, and interesting—among the hallmarks of good theory. Still, the process of writing a clear and effective conceptual manuscript is likely to be more difficult than the act of writing a clear and effective empirical manuscript. The rules for organizing and structuring empirical manuscripts are well-known. One presents an introduction, a subsequent section summarizing prior research and presenting hypotheses, followed by the method, the results, and a discussion. The rules for organizing and structuring conceptual manuscripts are uncertain. What goes into a theory piece and in what order? Authors submitting to this special section appeared to struggle with this question. We often commented to authors that their manuscripts lacked a clear, logical flow. We urged authors to be sure that readers would know on every page of the manuscript why they were reading what they were reading and where the manuscript was taking them. We asked authors to trim their papers of excess verbiage. Many journals routinely suggest to authors of empirical manuscripts that they ask colleagues to read their papers prior to submitting them. This is a crucial practice for authors of conceptual manuscripts as well. Our only elaboration is to suggest that prior to submitting conceptual manuscripts for journal review, authors seek comments from multiple colleagues who are not familiar with their ideas.

Conclusion

We are pleased to present seven articles for the journal's first special section of theoretical models and conceptual analyses. The topics range from individuals' motivations, dispositions, and behavior to issues of group diversity and performance to workplace victimization. The editorial team for the journal found the ideas expressed in these articles to be novel, interesting, focused, grounded in the relevant literature, clear, explained and justified in detail, testable, practical, and well-written. Of course, no paper is perfect. In the reviewers' and our judgment, however, the articles published in this special section excel in meeting the standards of good theory. A number of conceptual manuscripts are currently in the journal's review and revision process. We look forward to publishing a second and perhaps even a third special section of theoretical models and conceptual analyses in subsequent issues of the journal. However, we most eagerly await the routine and frequent submission and publication of theoretical and conceptual manuscripts in the journal, without the special invitation of a call for papers. We hope and believe that more and better theories will enhance our ability to explain and predict behavior in and of organizations. Theory development has a crucial place in the research process and in the pages of this journal.

References

Campbell, J. P. (1990). The role of theory in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol. 1, 2nd ed.). Palo Alto, CA: Consulting Psychologists Press.

Daft, R. L. (1995). Why I recommended that your manuscript be rejected and what you can do about it. In L. L. Cummings & P. J. Frost (Eds.), *Publishing in the organizational sciences* (2nd ed., pp. 164–182). Thousand Oaks, CA: Sage

Goodson, F. E., & Morgan, G. A. (1976). Evaluation of theory. In M. H. Marx & F. Goodson (Eds.), *Theories in contemporary psychology* (pp. 286–299). New York: Macmillan.

Sutton, R. I., & Staw, B. M. (1995). What theory is not. *Administrative Science Quarterly, 40*, 371–384.