

Organizational Research Methods

<http://orm.sagepub.com/>

Reconsidering Theoretical Progress in Organizational and Management Research

Jeffrey R. Edwards

Organizational Research Methods 2010 13: 615

DOI: 10.1177/1094428110380468

The online version of this article can be found at:

<http://orm.sagepub.com/content/13/4/615>

Published by:



<http://www.sagepublications.com>

On behalf of:



[The Research Methods Division of The Academy of Management](#)

Additional services and information for *Organizational Research Methods* can be found at:

Email Alerts: <http://orm.sagepub.com/cgi/alerts>

Subscriptions: <http://orm.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://orm.sagepub.com/content/13/4/615.refs.html>

Reconsidering Theoretical Progress in Organizational and Management Research

Organizational Research Methods
13(4) 615-619
© The Author(s) 2010
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/1094428110380468
http://orm.sagepub.com


Jeffrey R. Edwards¹

Abstract

Theory development is a high priority in organizational and management research. However, theory development is often equated with building new theory, a practice that is rewarded in the publication process and encouraged by norms that pervade the field. This practice has produced a proliferation of theories, most of which are not exposed to rigorous empirical research that probes core propositions and puts theories at risk. In the interest of theory development, management and organizational research would make better progress if we devoted more attention to theoretical refinement, conducting research that identifies the boundaries and limitations of theories, stages competitive tests between rival theories, and increases the precision of theories so they yield strong predictions that can be falsified. These issues are addressed by the articles that constitute this feature topic, with the goal of enhancing theoretical progress in management and organizational research.

Keywords

ethics in research, philosophy of science, research design

Research in organizations and management places a high premium on theory. The importance of theory is well deserved, given that theories allow us to make sense of the phenomena that surround us in organizations, help us synthesize the insights we gain from our observations and imaginations, and influence the numerous decisions that guide our empirical research, such as the hypotheses we test, the measures we use, and the analytical methods we employ. Our recognition of the importance of theory has generated volumes devoted to theory development (Smith & Hitt, 2005), guidelines for building and evaluating theory (Bacharach, 1989; Dubin, 1976; Sutton & Staw, 1995; Weick, 1995; Whetten, 1989), prescriptions for developing theory using simulations (J. P. Davis, Eisenhardt, & Bingham, 2007), case studies (Eisenhardt, 1989), narrative (Pentland, 1999), paradox (Poole & Van de Ven, 1989), and disciplined imagination (Weick, 1989), assessments of trends in theory building and testing (Colquitt & Zapata-Phelan, 2007), and evaluations of the theories that populate the field

¹ The Kenan-Flagler Business School, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

Corresponding Author:

Jeffrey R. Edwards, The Kenan-Flagler Business School, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599, USA

Email: jredwards@unc.edu

(Miner, 1984, 2003; Webster & Starbuck, 1988). Moreover, major journals in organizational and management research emphasize the importance of developing theory with each submission (Rynes, 2005; Sutton & Staw, 1995), and some scholars have observed that theory development has become an end in its own right (Hambrick, 2007; McKinley, 2010; Miller, 2007).

Given the value placed on theory and the pressures and rewards that emphasize theory development, it would seem safe to assume that organizational and management research has made great theoretical progress. This assumption is arguably tenable if we equate theoretical progress with the development of new theories, an outcome that would naturally result from the norms and incentives in our field. However, if we broaden the meaning of theoretical progress to include the refinement of theories, such that we expose theories to stringent tests and modify or eliminate contenders that fail such tests, our record of theoretical progress would appear less positive. Although many studies in organizational and management research are grounded in theory (Colquitt & Zapata-Phelan, 2007), few studies actually test the specific propositions set forth in the theories they cite (Kacmar & Whitfield, 2000). When theory is developed as a companion to the study itself, the result is often a one-shot exercise in which the theory is not revisited in subsequent empirical work (Eden, 2004). This pattern has created a proliferation of theories, some partial and others more complete (Weick, 1995), that are continually slotted into an increasingly crowded conceptual marketplace (Pfeffer, 1993). As a field, we have become purveyors of theories much like merchants plying their wares in the bustling Roman Forum. We would have much to gain by relocating to the Colosseum, girding our theories for battle, pitting them against one another, and applauding as the strong vanquish the weak. In this manner, theoretical progress would be gauged not by how many theories we develop but by how we refine theories by sharpening their predictions, putting them at risk through strong inference tests, revising them as indicated by the obtained results, and setting them aside when they prove inferior to competing theories.

Reframing theoretical progress in terms of theoretical refinement raises various issues and challenges, which are examined by the articles in this feature topic. The opening article, "Pursuing Failure" (Gray & Cooper, 2010), argues that theoretical progress can be facilitated by seeking to identify the limits, boundaries, and shortcomings of the theories that guide our research. Gray and Cooper (2010) explain that pursuing failure requires us to rethink the meaning of theory development, such that we broaden our focus from building and seeking support for new theories to include generating evidence that reveals when, how, and why our theories fail. The pursuit of failure can be accomplished by probing the tacit assumptions that underlie theories, uncovering boundary conditions beyond which theories are unlikely to hold, staging strong inference tests of competing theories, and seeking to explain instances that run counter to theories. Gray and Cooper note that pursuing failure not only calls for a change in mind-set for individual researchers, but also requires us to confront barriers that can inhibit the pursuit of failure, such as professional incentives that encourage us to introduce new theories to the field, biases in the review process that favor results in support of theories, and the practical difficulties of finding samples and settings that are sufficiently similar to permit the repeated tests needed to expose theories to the risk of failure. The authors offer suggestions for overcoming these barriers and provide a detailed treatment of the tactics researchers can use to systematically pursue failure in the interest of theoretical progress.

The second article, "Theory Pruning: Strategies to Reduce Our Dense Theoretical Landscape" (Leavitt, Mitchell, & Peterson, 2010) characterizes theoretical progress in terms of theory pruning, which the authors describe as specifying hypotheses and conducting studies to reduce the set of possibilities allowed by theories. In the spirit of strong inference (Platt, 1964), Leavitt et al. (2010) contend that research in the organizational sciences would make greater strides if studies that examine individual theories by attempting to reject null hypotheses were replaced by studies that compared alternative theories by pitting competing hypotheses against one another. To conduct

studies that provide critical tests such as these, Leavitt et al. indicate that the theories involved must be comparable, meaning they deal with the same constructs, time frames, and levels of abstraction, and at the same time make contradictory predictions. The authors then consider various ways in which comparable theories can be pitted against one another, such that the different predictions yielded by theories can be framed in terms of effect size, functional form, parsimony, and variance explained. Leavitt et al. conclude by outlining strategies for designing, analyzing, and presenting studies that provide competitive tests, thereby helping researchers realize the benefits of strong inference research for pruning theories in the field.

The third article, "The Presence of Something or the Absence of Nothing: Increasing Theoretical Precision in Management Research" (Edwards & Barry, 2010), takes the position that theoretical progress depends on the degree to which theories are precise. Drawing from Meehl (1967), Edwards and Barry (2010) note that management research faces a paradox in which conducting studies with greater methodological rigor puts theories at less risk. This paradox exists because most management theories simply make directional predictions, such as stating that some relationship will be positive or negative. As methodological rigor increases (e.g., samples become larger, measures have less error), the probability that an estimated effect will differ from zero in the predicted direction approaches 50%. Edwards and Barry show that these conditions exist in management research by evaluating 20 highly cited theories published during the past quarter century. Following this assessment, the authors describe various tactics for making theories more precise, with each tactic intended to reduce the set of outcomes considered consistent with a theory. Edwards and Barry conclude by identifying barriers to increasing theoretical precision, some of which are institutional and others that are ingrained in the behavior of researchers themselves, and discuss how these barriers can be overcome.

The fourth and final article, "Do Theories of Organizations Progress?" (G. F. Davis, 2010), takes up matters of theoretical progress in the field of organization theory. Davis (2010) summarizes key developments that have occurred during the half century since the emergence of organization theory as a distinct field (March & Simon, 1958). These developments include the founding of journals that publish research on organization theory, the establishment of paradigms that have dominated the field for much of its existence, and the explosion of information and communication technologies that greatly enhance the availability and analysis of data relevant to organization theory. Despite these developments, Davis questions whether organization theory has become more precise, general, or accurate. He attributes this lack of progress to various issues endemic to the study of organizations, such as the notion that organizations are tools rather than natural objects susceptible to laws, the use of nonexperimental designs that limit causal inference, changes in underlying causal factors that limit empirical generalization over time, and the observation that major organization theories pursue different questions and therefore cannot be readily pitted against one another to conduct strong inference research. In light of this assessment, Davis concludes that theories of organizations need not be precise or general to be useful, instead urging researchers to pursue careful empirical research that yields insights into substantively important organizational processes, even if that research contributes little to theory.

Taken together, the articles in this feature topic address fundamental issues concerning theoretical progress and how it can be accelerated in management and organizational research. The articles consider whether and how theories can be made more precise, rendering them more susceptible to falsification, and discuss strategies for testing theories in ways that promise to refine the theories we build and thin out the dense theoretical landscape that we confront. The articles also take on challenges to theoretical progress, which arise from norms and practices in the field as well as the subject matter of our research. We hope these articles will encourage researchers to reconsider the meaning of theoretical progress, determine how it can be better achieved, and take concrete steps toward enhancing theoretical progress in management and organizational research.

Declaration of Conflicting Interests

The author(s) declared no conflicts of interest with respect to the authorship and/or publication of this article.

Funding

The author(s) received no financial support for the research and/or authorship of this article.

References

- Bacharach, S. B. (1989). Organizational theories: Some criteria for evaluation. *Academy of Management Review, 14*, 496-515.
- Colquitt, J. A., & Zapata-Phelan, C. P. (2007). Trends in theory building and theory testing: A five-decade study of the *Academy of Management Journal*. *Academy of Management Journal, 50*, 1281-1303.
- Davis, G. F. (2010). Do theories of organizations progress? *Organizational Research Methods, 13*, 690-709.
- Davis, J. P., Eisenhardt, K. M., & Bingham, C. B. (2007). Developing theory through simulation methods. *Academy of Management Review, 32*, 480-499.
- Dubin, R. (1976). Theory building in applied areas. In M. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 17-39). Chicago, IL: Rand McNally.
- Eden, D. (2004). Reflections on the *AMJ* Associate Editor Role. *Academy of Management Journal, 47*, 167-173.
- Edwards, J. R., & Berry, J. W. (2010). The presence of something or the absence of nothing: Increasing theoretical precision in management research. *Organizational Research Methods, 13*, 668-689.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review, 14*, 532-550.
- Gray, P. H., & Cooper, W. H. (2010). Pursuing failure. *Organizational Research Methods, 13*, 620-643.
- Hambrick, D. C. (2007). The field of management's devotion to theory: Too much of a good thing? *Academy of Management Journal, 50*, 1346-1352.
- Kacmar, K. M., & Whitfield, J. M. (2000). An additional rating method for journal articles in the field of management. *Organizational Research Methods, 3*, 392-406.
- Leavitt, K., Mitchell, R. R., & Peterson, J. (2010). Theory pruning: Strategies to reduce our dense theoretical landscape. *Organizational Research Methods, 13*, 644-667.
- March, J. G., & Simon, H. A. (1958). *Organizations*. New York, NY: John Wiley.
- McKinley, W. (2010). Organizational theory development: Displacement of ends? *Organization Studies, 31*, 47-68.
- Meehl, P. E. (1967). Theory-testing in psychology and physics: A methodological paradox. *Philosophy of Science, 34*, 103-115.
- Miller, D. (2007). Paradigm prison, or in praise of atheoretic research. *Strategic Organization, 5*, 177-184.
- Miner, J. B. (1984). The validity and usefulness of theories in an emerging organizational science. *Academy of Management Review, 9*, 296-306.
- Miner, J. B. (2003). The rated importance, scientific validity, and practical usefulness of organizational behavior theories: A quantitative review. *Academy of Management Learning & Education, 2*, 250-268.
- Pentland, B. T. (1999). Building process theory with narrative: From description to explanation. *Academy of Management Review, 24*, 711-724.
- Pfeffer, J. (1993). Barriers to the advance of organizational science: Paradigm development as a dependent variable. *Academy of Management Review, 18*, 599-620.
- Platt, J. R. (1964). Strong inference. *Science, 146*, 347-353.
- Poole, M. S., & Van de Ven, A. H. (1989). Using paradox to build management and organization theories. *Academy of Management Review, 14*, 562-578.
- Rynes, S. L. (2005). Taking stock and looking ahead. *Academy of Management Journal, 48*, 9-15.

- Smith, K. G., & Hitt, M. A. (2005). *Great minds in management: The process of theory development*. New York, NY: Oxford University Press.
- Sutton, R. I., & Staw, B. M. (1995). What theory is *not*. *Administrative Science Quarterly*, 40, 371-384.
- Webster, J., & Starbuck, W. H. (1988). Theory building in industrial and organizational psychology. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (pp. 93-138). Chichester, UK: John Wiley.
- Weick, K. E. (1989). Theory construction as disciplined imagination. *Academy of Management Review*, 14, 516-531.
- Weick, K. E. (1995). What theory is *not*, theorizing is. *Administrative Science Quarterly*, 40, 385-390.
- Whetten, D. A. (1989). What constitutes a theoretical contribution? *Academy of Management Review*, 14, 490-495.

Bio

Jeffrey R. Edwards is the Belk Distinguished Professor of Organizational Behavior at the Kenan-Flagler Business School, University of North Carolina. He is past editor of *Organizational Behavior and Human Decision Processes*, past chair of the Research Methods Division of the Academy of Management, and a fellow of the Academy of Management, the American Psychological Association, the Society for Industrial and Organizational Psychology, and the Center for the Advancement of Research Methods and Analysis. His methodological research addresses difference scores, polynomial regression, structural equation modeling, construct validity, and the development and evaluation of theory.