# Suppose We Took Evidence-Based Management Seriously: Implications for Reading and Writing Management

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We are honored and flattered that AMLE solicited such an interesting and informative set of reviews, and we are appreciative of the opportunity to add our voices to the discussion of Hard Facts, Dangerous Half-Truths, and Total Nonsense: Profiting From Evidence-Based Management. The reviewers raise a number of important issues that, in many instances, have implications far beyond our book. We discuss some of these below, in the hope that we can also engage others in the conversation and, even more important, in an endeavor to change some fundamental things about the reading and writing of management research and theory.

## Things Change, and the Development and Accumulation of Knowledge Are Never Finished

There are many weaknesses in the book and the reviewers found them. So, several of the commentaries (e.g., Dierdorff, Baack, Bielmeier) correctly point out that Hard Facts does not precisely and unambiguously define what evidence and facts are or are not; does not precisely state when evidence is sufficient and how to deal with conflicting evidence as well as the need to make decisions on a timely basis; that "facts" are at times social constructions (something recognized by ethnomethodologists such as Harold Garfinkel decades ago, see, e.g., Heritage, 1984); that our reviews of the relevant literatures about the various half-truths are incomplete; that we seem to rely too much on examples and stories; and that our examples are too U.S.- and even Western-centric. These comments invite reflection on what our book or any book, or for that matter, any chapter or article is or can or should be, and therefore, invite some considerations of how to think about reading and producing management knowledge. We highlight two fundamental trade-offs that confront all writing efforts: accessibility and engagement versus comprehensiveness and proof, and "telling what you know" versus waiting until you know "almost everything."

On the first issue, we probably didn't get the balance precisely right, but we did try to provide both footnotes to relevant, peer-reviewed research, describe academic research in the text, explicate the logic for our arguments, and also write in a style—including using examples—and with an amount of text, that makes the content accessible to a wider audience of potential readers. The book was intended for both practicing managers and students—we believe if we don't intervene in the educational process, improvement in practice is unlikely. Given the Academy of Management's continuing concerns about relevance to both management practice and policy (e.g., Hambrick, 1994; Van de Ven, 2002), we believe that writers need to be sensitive both to the needs of their audience and to the requirement to muster facts and evidence and be rigorous in their analysis and thinking. While we claim no special competence in this effort, we do believe that the comments of the reviewers are helpful in highlighting this issue for researchers and writers generally. And we also believe that this trade-off is a relevant concern even for articles published in refereed, academic journals, and one that deserves continuing discussion and reflection.

The second issue concerns how to know when you have enough insight to write something— $\alpha$  real concern in  $\alpha$  world in which the bookshelves are filled with management books with little content and where the socially desirable objective of recycling has moved from the domain of waste and

natural resources to the less useful sphere of concepts and ideas endlessly redone and repeated and repackaged. The problem begins with the form that books and even articles take. They are printed on paper, for the most part, put between covers, surrounded by a jacket, and, as Miller notes in the case of books, "promoted" by their commercial publishers with various endorsements and blandishments. Perhaps because one of the first and certainly most widely sold books is the Bible, there is a tendency to take what is stated on the pages as truth, or at least as what the authors intend as some statement of the final truth.

We adopt a slightly different view. To us, what we write is inevitably what we know and the best we can do at a specific moment in time. What we know, in management much as in medicine, invariably changes over time with new research and theory. So, research ideas and methods and even what constitutes the "knowing" process evolve as others contribute to the accumulation of knowledge and insight. The process of knowledge development is, or at least should be, cumulative and progressive, and thus, research and writing ought to-we think-lay out what we know and what we don't know and pose questions and puzzles that invite the reader to also participate in a conversation and process of discovery, discussion, and learning. Many journal editing and reviewing practices don't encourage such behavior, and articles often sound more certain of their conclusions than the scholars who wrote them probably are. Books, too, take on an aura of certitude that belies the developmental nature of insight and understanding. Research and writing should be different from blogs, in that there ought to be standards and editing, but there should be, we believe, the same sense of inviting people into ongoing conversations rather than the illusion that everything is completed.

Our intent in writing Hard Facts was and is to try and get people to reflect about what we teach about organizational and management questions such as incentives, strategy, and talent management, and also to consider how we teach it, as well as how management gets practiced in real settings. We wanted readers to consider the benefits of a greater emphasis on measurement, scientific inquiry and analysis, and data—yes, research, as Williams notes—as part of an effort to stimulate a movement that would change management practice and teaching. To that end, in the fall of 2006 with the help of Paul Reist and Daphne Chang of the business school library, we launched a website, www.evidence-basedmanagement.com, that is explicitly designed to encourage contributions of thoughts and resources to continue to develop better answers to the questions of what constitutes facts, how you get them, and what the practice of evidence-based management and evidence-based teaching entails.

The appropriate and insightful comments about what *Hard Facts* lacks should—we hope—invite others to fill in the blanks. That's how we build a community of knowledge- and insight-producing people and work.

### We Ought to Know What Doesn't Work, and Why

As Williams makes clear in her review, much is left out of the resources available when people go to gather evidence about management and what is known in the field of organization studiesnamely, we don't know what hasn't worked or isn't true. In medicine, some of the most important studies are often about what doesn't work—and why-or the unanticipated side effects of drugs (such as Vioxx); diagnostic tests (such as those for prostate cancer that can lead to overtreatment); and various medical procedures (such as back surgery). In organization and management studies, one would need to read a long time to find many (or any) articles or books about failures to find predicted effects, what experimental or field interventions failed to generate expected results, or discussions of what didn't work—a few books about Enron, failed wars, and space missions notwithstanding. Others have commented on this bias and the problems that result for learning and knowledge development by attending only to successes and ignoring failures (e.g., Mackenzie & House, 1978; Denrell, 2003). We should use this important point to, perhaps one more time, reexamine what we value in what we publish and what sort of research we ought to do. Learning what isn't true that we expected to be is, as we know from medicine and other sciences, potentially as important as learning what is apparently true.

But such an activity will require not only a change in journal practices, it will also require some reorientation about our mission as scholars, including our preoccupation with what's new and interesting and novel (e.g., Mone & McKinley, 1993) at the expense of what's true and enduring. When one of us (Pfeffer, 1993) had the temerity to suggest that "pruning" was as important an activity as "growing"—that figuring out what was incorrect so it could be discarded, at least for the moment, was as important as figuring out what was true and what worked—we were accused of being fascists or worse. But in medicine, if ineffective treatments and incorrect knowledge about biology and bio-

chemistry were never discarded, health outcomes would be awful, and we would not have witnessed the amazing, albeit imperfect, progress we have seen in improving the treatment for many dread diseases.

## The Dilemma of Reconciling Science With Uncertainty

Many people seek a level of certainty and clarity in research and writing on organizations and management that may not be achievable. Many, and not just those who commented on our book here, believe that if we had just reviewed more studies, had more precise, less ambiguous prescriptions for how to practice evidence-based management, had better and clearer definitions of what facts and evidence were and how to obtain them, then we could come up with a more polished or finished or complete product—book—and set of answers to provide more specific guidance to those who practice, teach, and research management. Without for a moment excusing the many imperfections and deficiencies that undoubtedly exist in Hard Facts, we don't completely agree, although we also don't adopt the position that everything is relative and the scientific study of people and organizations is inherently impossible.

The idea that certainty is in some absolute sense achievable is a mythical idea, as several of the reviewers note. But that doesn't mean that complete relativism should reign, or that we should be satisfied with the current state of knowledge or practice. As a colleague who is both an MBA and MD breast surgeon commented, "everything I learned in medical school about treating breast cancer is now obsolete, but learning how to think, read the literature, and practice was invaluable." Doctors live on a daily basis "doing" the attitude of wisdom—acting on the basis of the best knowledge they have at the moment, with the full realization that in the future, that knowledge may be found to be partly or even wholly incorrect, so they should remain open to learning, seeing, and doing things differently. As management scholars and practitioners, we should do the same. We should

both recognize that certainty is an ephemeral goal and at the same time try to use the best theory and data available to resolve as much uncertainty as we can at the moment. This process is about living with ambiguity and contradiction—something we are certainly far from effective in getting our students to accept and appreciate.

At the end of the day, not only is management a craft, so is the study and teaching of management. Practicing a craft involves perhaps the ultimate contradiction—on the one hand valuing experience and intuition, but on the other also valuing and seeking more precise answers and facts on which to base one's practice. Hard Facts makes the argument that management, the business press, and consultants frequently have emphasized experience and practice at the expense of data and activities that have the potential for actually learning in ways that improve theory and practice over time. To the extent we have encouraged others to engage with this issue, in the same thoughtful way as each of the reviewers here, we have been successful in our own small way in stimulating the data gathering, thinking, and writing that may make organizations not only more productive but also more humane places.

#### **REFERENCES**

Denrell, J. 2003. Vicarious learning, undersampling of failure, and the myths of management. *Organization Science*, 14: 227–243.

Hambrick, D. C. 1994. What if the Academy actually mattered?

\*\*Academy of Management Review, 19: 11–16.

Heritage, J. 1984. *Garfinkel and ethnomethodology*. Cambridge, UK: Polity Press.

Mackenzie, K. D., & House, R. 1978. Paradigm development in the social sciences: A proposed research strategy. *Academy of Management Review*, 3: 7–23.

Mone, M. A., & McKinley, W. 1993. The uniqueness value and its consequences for organization studies. *Journal of Management Inquiry*, 2: 284–296.

Pfeffer, J. 1993. Barriers to the advance of organizational science: Paradigm development as a dependent variable.

\*\*Academy of Management Review\*, 18: 599–620.

Van de Ven, A. H. 2002. Presidential address: Strategic directions for the Academy of Management: This Academy is for you! Academy of Management Review, 27: 171–184.

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