Broadening the View of What Constitutes “Evidence”

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To make industrial–organizational (I–O) psychology more evidence based than it is, Briner and Rousseau (2011) focus on improving the knowledge “product” that will serve as evidence. Make this product more usable (i.e., understandable) and useful (i.e., relevant to real-world issues) to the practitioner, and they will consume more of it. To this end, academics are asked to do what amounts to “user-centered design”—spend more time engaged with practitioners and their world to know what the customer wants and to help them choose wisely. Underlying this solution is the idea that academics and practitioners need to be more similar, also advocated in various ways by other authors (see the 2007 special issue of Academy of Management Journal). This perspective sees practitioners as buyers in a market where academics are sellers, and we think this is simplistic.

The market perspective treats the evidence-based practice as a simple product, like a hammer. We will argue that it needs to be treated as a complex one, like an assembly line robot—for it to work well it needs to have quality components, be well manufactured, be appropriate for the specific task, and should fit with the rest of the line. Building and integrating such a complex product requires specialization and coordination among those who play different roles in the machine’s creation and use. Thus, the key difference between our view and Briner and Rousseau’s is that where they see a market, we see a supply chain. In our response, we justify our supply chain metaphor and conclude by explaining the changes that our view implies for achieving what Briner and Rousseau advocate, which we believe is a worthy aim.

The Evidentiary Basis

Briner and Rousseau’s description of evidence is, to us, a thin version of what a good evidence-based practice is. An evidence-based practice is a complex synthesis of heterogeneous knowledge. Take their example of the HRM VP looking to create a practice to reduce absenteeism. The applied sciences (e.g., management and I–O psychology) may have relevant theories for what causes and cures absenteeism, but this research is best when it is supported by more fundamental evidence from basic science about human psychology and group interaction as supported by disciplinary research (e.g., psychology and sociology). Even with scientifically validated management theories, the HRM VP still needs to integrate this evidence with practitioner’s professional judgment and possibly with other kinds of nonscientific but nonetheless relevant knowledge (e.g., what other organizations are doing). This process of creating such an evidence-based practice is therefore like a supply chain, where the manufacturers of basic science feed...
suppliers of management theory; these theories will go into custom practices designed for specific organizations.

For simplicity, we have represented the chain in Figure 1 as involving four classes of actors. The end user represents the stakeholders. This group includes those who will underwrite and evaluate a proposed (evidence-based) practice or the actions of the practitioner. Practitioners, professionals in management or consulting positions, are the “producers” in our supply chain. Practitioners’ recommendations should be informed by research provided by academic scholars who work on original research (the “suppliers”). Ideally, these scholars could be differentiated from the manufacturers—those working in the more basic disciplines such as psychology and sociology, who create (discover) the building blocks of management knowledge.

An evidence-based practice is of highest quality when it can be justified (i.e., costs vs. benefits) by the end user, applied to the particular context by the practitioner, has empirical backing from the management scholar, and is grounded in established mechanisms that themselves have scientific backing as shown by disciplinary researchers. Each of these judgments of quality is a complicated one; we therefore think it is too much to ask that any single group in the supply chain be skilled in making all of them. Developing good basic or applied knowledge is very difficult, which is why academics have long and intense training in their specific areas of expertise. This training is not the same across disciplines. Similarly, practicing professionals must rely on a broad array of knowledge that includes the organization’s values, existing policies, and the law. Evidence of a high degree of technical accuracy is not necessarily evidence that a decision is socially defensible (recall Briner and Rousseau’s discussion of the use of IQ in selection as effective but hard to sell).

Our characterization is different from Briner and Rousseau’s market-like characterization, where what is produced is essentially what is used, and the producers and the users are likely to have similar knowledge, skills, and abilities (KSAs) and metrics for quality. This market characterization overburdens the academics and ultimately restricts the quality of what is created. So, metaphorically, if evidence-based practice feeds the stakeholders’ satisfying and nutritious meals, Briner and

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1. We recognize that often they are not—many business schools put out basic science research, we discuss this at the end.
Rousseau's transactional characterization tasks the academics with figuring out what people will want to eat, also what is most nutritious, and putting these together into attractive meal choices so they can be purchased off the shelf by practitioners, thrown in the microwave, and served to stakeholders. We are advocating that the practitioners be chefs who choose good ingredients from their academic suppliers (butchers, bakers, and fishmongers) and who have faith that these ingredients come from quality farmers (disciplinary academics). The chefs can then make meals (evidence-based practices) to suit the taste of particular customers.

**Implications for Specialization Among Roles**

We seek to support Briner and Rousseau's call for improving both the production and the use of academic evidence, but we think that a few points need to be made. The first is to recognize that what constitutes "evidence," particularly credible evidence, changes across the supply chain, but all these need to work together. Evidence that something is true to the basic scientist (e.g., IQ is predictive of job performance) is not evidence that it will be organizationally defensible, but this incongruity does not invalidate the basic science, nor does it imply that the basic scientist needs to do something different—their job is to create valid knowledge. On the other end of the spectrum, practitioners create evidence just as much as scientists do, and sometimes, that is the best available. As Briner and Rousseau note, practice is ahead of science when it comes to evidence about business problems. We do not see how it could be otherwise. Business was being conducted long before management even existed as a field of study, and the business landscape evolves quickly. Systematic analysis of why something works takes much longer than the simple demonstration that it does work. In the interim, the fact that there is no scientific basis for why practice X works does not invalidate the practitioner's evidence that it does, nor should it task the practitioner with discovering why. That is the academics' job.

The second point is that the value of evidence is determined by more than just the next party in the supply chain; the vertical market also matters (e.g., others in one's part of the supply chain). For example, although academics are interested in the attention of practitioners, they are not the only customer. Academics also use what is created by other academics to advance knowledge. Practitioners use what is created by other practitioners to help guide practice (as argued above). It is and should be legitimate that people within a vertical market use their own standards for what is quality evidence; this is how the next stage can be ensured to have quality ingredients. The systematic reviews that Briner and Rousseau advocate need to be composed of quality research—the academics who consume each others' work help ensure that.

The third issue is that when quality is encouraged to be different among stages, we have more generativity. Quality to the academic is very much in terms of validity, whereas quality to the practitioner will be in terms of functionality. Forcing people to only operate in the intersection of those two sets is limiting. Valid research may have no immediate applicability (e.g., Feigenbaum's, 1961, work was merely a theory of knowledge acquisition until it became the basis for text and speech recognition software 30+ years later), and many methods that work well enough (rational choice) are based on faulty assumptions (e.g., selfishness, see Dawes & Thaler, 1988). Academics may notice problems that practitioners do not, and practitioners may discover problems that make academic research suddenly very applicable.

**Implications for Coordination Among Roles**

We are not advocating silos; there must be horizontal connections among people within the supply chain. We also believe that the output of each phase in the supply chain will be improved by attention to those
before and after in the supply chain. But for the entire chain to be maximally productive, we need to be clear about the coordination among the stages.

**The Need for Trust and Respect**

Academics should not be accountable for what the end users might want. That translation should be the HR practitioner’s job. Similarly, the end user does not need to justify all practice decisions using the high standards of science. If it works, it works. The practitioner has the job of verification that there are no ill side effects. But for people to have faith that others have done their job well there needs to be a solid foundation of trust and respect. This faith is expedient because as the evidence-based product becomes more an integrated whole, it becomes more difficult to verify the basic research on which it rests. Trust increases the willingness to rely on what others in different phases of the supply chain create, and respect helps people within a phase realize that what happens outside their own phase merits attention. To go back to our food analogy, the applied academic baker needs the customers to trust that he or she is only using the best ingredients, and the practitioner consumer needs to respect the academic’s skill enough to believe that the academic’s product is something better than they themselves could create. This is true across all phases of the supply chain—far too often management scholars reinvent concepts from basic disciplines and in doing so limit the strength of the evidence they rely on for their findings.

**An Educated Consumer Helps**

The horizontal links in the supply chain can be improved. This is what Briner and Rousseau as well as many others want, but doing this requires a very specific kind of learning, one that will probably take more than simple contact (which seems to be the typically advocated means for these ends). It is difficult to establish the credibility of knowledge across professional boundaries (Gulati, 2007). Frequently, this is explained by a bias toward one’s own method or approach, but we would like to suggest that even under conditions of high openness to foreign knowledge, comprehension of other’s thought worlds is very difficult and takes time. The upshot is that consumers can benefit from knowing how their producers create quality evidence, but this will take deliberate effort. So rather than making the knowledge more accessible, as Briner and Rousseau suggested, put that energy toward educating the practitioner in the fundamentals of recognizing quality basic knowledge. The practitioner can similarly try to “improve the stakeholder’s palette” (to go back to our food analogy) by educating their tastes rather than trying to turn them into chefs. The education we advocate must be one of translation not assimilation. We are trying to make people in different parts of the supply chain understand each other better, and value each others’ strengths, not look more similar.

**Feedback**

The upshot is that those who come before and after in the supply chain should be integrated partners, but they should know how they are different and how to translate among these differences. This is what Cramton and Hinds (2005) called mutual positive distinctiveness—that, for example, the practitioner knows the strengths and weaknesses of the product the academics produce with respect to the practitioner’s purpose and does not discount the utility of the academics’ scientific purpose (see Briner and Rousseau’s discussion of IQ as a selection criteria). Each stage has a job, and each stage should endeavor to do that job well. In this regard, we (academics) should not apologize (as a field) for “failing to offer managers integrative solutions to relevant and narrowly defined problems” (McGahan, 2007, p. 751) any more than practitioners should apologize for wanting easily applicable knowledge. This dialectical tension should be managed not eliminated. In our view, the supply
chain framework goes beyond “educating the consumer.” It argues for the benefits of a partnership between pairs of actors in the flow (supply) of knowledge. As in any partnership, it leverages the dynamics of specialization and coordination, of mutual trust, respect, and mutual influence. As another advantage, it places the responsibility for evidence-based practice where it belongs at every point in the supply chain not just with academic researchers (Klimoski & Jones, 2008; Rynes, 2007).

References