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Footprints in the Sand: Denise Rousseau



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INTRODUCTION

One of the most important missions of Organizational Dynamics has been to serve as a bridge between widely recognized scholars in Organizational Science and professional managers and M.B.A. students — those who translate basic research into real world results, theory into practice.

To accomplish this mission, we want to feature some of the most well-known, insightful and productive researchers and thinkers in Organizational Science to talk about their work in a more personal voice and easily accessible format.

Welcome once again to "Footprints in the Sand," the fourth in our series of interviews with leading organizational scientists.

Following interviews with Bruce Avolio, the Marion B. Ingersoll Professor at the Center for Leadership & Strategic Thinking at the University of Washington, Michael Beer, the Cahners-Rabb Professor of Business Administration, Emeritus, Harvard Business School and Edgar Schein, the Society of Sloan Fellows Professor of Management Emeritus at the MIT Sloan School of Management, we're delighted to provide an in-depth conversation with Denise Rousseau, the H. J. Heinz II University Professor of Organizational Behavior and Public Policy, Carnegie-Mellon

University, a ground breaking researcher and thinker on such topics as the "psychological contract" between employees and their employer, employee well-being and career development, organizational effectiveness, the management of change, firm ownership and governance, industrial relations and evidence-based management. Our interviewer is Barry Mike, M.A, M.B.A., the managing partner of Leadership Communication Strategies, LLC, a management consultancy specializing in working with leaders and organizations to mitigate the risks of change and solve business problems whose cause is rooted in or whose solution requires communication.

Fred Luthans John Slocum

BARRY MIKE: Let's start with one of the concepts for which you're most well-known: the "psychological contract," which at one point you've defined simply as "beliefs concerning the reciprocal obligations between employees and their employer." It's a complement to your impact that the term has entered the common business parlance. The question: though spoken of frequently, is it actually used in business management? That is, do you see leaders incorporating psychological contracts into business planning or is it a term that never makes it out of the Human Resources function?

PSYCHOLOGICAL CONTRACTS

DENISE ROUSSEAU: That's a good question, and as with many things in management practice, there's not a simple response. Let's take firms where they've already made a lot of investment in people, implementing what in HR we'd

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call a "make-oriented" strategy, that is, where they develop and generate value through the skills of their workforce. In these kinds of firms, the concept of a psychological contract tends to loom very large. Managers there tend to think in terms of: "How do we work with the investments we've made in people? How do build on these? How do we avoid eroding the contract?" In these firms, notions of high performance are thought of in terms of what their people can do as opposed to what financial capital can do.

BARRY MIKE: How common is the "make-oriented" strategic approach?

DENISE ROUSSEAU: It's more common in Europe than it is in the United States, especially in the low countries, Netherlands and Belgium, and in Scandinavia. This is a concept they think a lot about in Denmark, for example, where I've done workshops for heads of employer associations and union leaders. In France, where there's been some erosion of the French social contract, which is a collective notion, the idea of the psychological contract, which is very individual, is increasingly popular. In fact, my book, *Psychological Contracts in Organizations*¹ was just translated into French, 20 years after its first publication. For the French, it's a new concept. Of course, maybe it has appeal because of my last name and their thinking that I'm the second coming of Jean-Jacques Rousseau (*laughs*.)

BARRY MIKE: Why do you think some countries have taken to the concept of "psychological contracts" more than others? What makes it salient in one place and not another?

DENISE ROUSSEAU: I think, to a large extent, it reflects the degree to which the concept of contract is filtered through a financial markets perspective rather than an employee perspective. So in the U.S., for example, a lot of the emphasis in contracting has to do with managing and mitigating financial risks. As a result, explicit contractual terms tend to be the focus and there is less emphasis on implicit terms relating to a psychological contract. When you talk to CEOs and CFOs who hold that financial perspective, only the explicit matters, only the things that are directly enforceable by law. But there are environments in the U.S. where people are less focused on legal contracts alone and more concerned with managing through relationships and through developing networks of constructive ties. I see a lot of this in knowledge-work organizations in the U.S.; the psychological contract matters more because people are thinking in terms of: "How will my partners react? How will my customer react?" Their thinking is not so much about what they're obligated to do, but more about what is appropriate to maintain constructive relationships. When you think more about matters of relational quality rather than strictly monetary matters, psychological issues and the beliefs the parties hold loom larger.

BARRY MIKE: Can that kind of thinking hold in poor economic conditions where, at least in the U.S., people seem to be fired at the first sign of financial difficulties, for example in the Great Recession of 2008—2009 or in the oil and gas industry in 2014—2015 given the drop in oil prices?

DENISE ROUSSEAU: Many employers, particularly in the U.S., have not figured out what it costs them to manage labor

as a cost rather than an investment. They often limit their arrangements with employees to a very minimal psychological contract, call it the "tit-for-tat", I pay you and you do this, period. Such contracts yield limited returns for both parties and often in uncertain environments generate considerable stress on the part of employees. And when people are stressed, they're not necessarily able to contribute as much intellectually and emotionally, or be as adaptive in their work.

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On the other hand, there are organizations like those I work with in health care and research and development that pay a great deal of attention — because they need to — to how to get people to go above and beyond. In that case, it's not what you pay people that leads them to make high performance contributions, it's other kinds of resources that make a job valuable and that provide the basis for a psychological contract that is deep and broad in terms of what employee and employer contribute to each other.

By the way, one of the things that has become more explicit over time is how much of the psychological contract is linked to individuals attaining their goals. And to the degree that employees are frustrated in achieving their goals, the psychological contract with their employer becomes relatively inelastic and less able to motivate people to contribute highly to their employer.

BARRY MIKE: It certainly makes sense that where companies invest in their people as a competitive differentiator and organize work in a way that allows individuals to achieve their goals, psychological contracts will be strong. Which makes it all the more surprising that you found evidence for a psychological contract in studying China, with its very different social and organizational context. What does mean for our understanding of psychological contracts?

DENISE ROUSSEAU: If I could just say one thing. I used to believe that psychological contracts function largely in environments where there was already some sort of rule of law; where people already had a basis for voicing their individual rights.

Now, I no longer think that... because of China. China is a very good example of a country with little rule of law where employees are concerned. It has a hierarchical political environment with a lot of reliance on social ties and limited individual rights. Chinese workers often think along the lines of, "My boss wants this from me. Is he speaking for himself or is he speaking for somebody else? How will these people give me what I want in this situation?"

Instead of more explicit terms of exchange, it seems that in China workers think more about how to capitalize on relationships to achieve what they personally want. People form mental models of their exchange relationships and what they can expect of others in roles like boss or business partner. That allows a psychological contract process that really has very little to do with the rule of law. But it's still a psychological contract of personally relied upon obligations employees and employers are motivated to fulfill. It's a

¹ Rousseau, Denise, *Psychological Contracts in Organizations: Understanding Written and Unwritten Agreements*, Sage Publications, May 1995, 264 pages.

psychological contract that functions within a different framework, but it yields many of the same benefits as well as hazards as a psychological contract between an employee and employer in the West.

BARRY MIKE: Though the social and organizational contexts between employees and employers in China may be different than in other parts of the globe, there is something Chinese employees and employers share in common with most of their global counterparts: their interaction occurs face-to-face. This provides a basis for both employee and employer to read signals, even if subtle, of what's going on in their relationship.

But one of the biggest changes in employee—employer relationships since you did your work on psychological contracts has been the rise of virtual employment. Which raises the question: how can you have a psychological contract when the distance between employee and employer is so great that all those nonverbal cues and implicit understandings built into face-to-face interaction may simply be absent?

DENISE ROUSSEAU: One of the things we do know from looking at how virtual teams and virtual work operate is that, yes, some cues are filtered out. So people aren't relying on subtle signals to figure out what's going on. Instead, a lot of what makes virtual teams work is developing what Karl Weick and others call "swift trust²" where you have strong mental models of your role in the project and your role in relation to the group. So the role you hold is likely to be the main source of expectations: here's what I owe the other party, here's what they're likely to do.

It's also true that in virtual teams there can still be exchanges of intimate information and requests for support or flexibility. But it takes more time and people need to work at it more, as opposed to a face-to-face situation where you don't have to make that same effort to attain some sense of mutual understanding. There's a learning curve in virtual teams that can allow people to achieve a very high quality, rich psychological contract in a distributed work environment, but it's effortful. A wise actor in a virtual team will make expectations more explicit in order to avoid misunderstandings.

That said, I do agree with what you're implying: that because of the distance we're very likely to see a somewhat greater incidence of a more limited transactional exchange of obligations and commitments in virtual groups versus faceto-face groups.

BOUNDARYLESS CAREERS

BARRY MIKE: Working virtually has also given new meaning to another of the concepts with which you're associated: boundaryless careers. Virtual work makes the idea of boundarylessness real and concrete in a way that you couldn't have imagined 20 years ago. Though I would assume you had something very different in mind originally, what does the

current state of virtual work in employment mean for employees in terms of boundaryless careers?

DENISE ROUSSEAU: That's a very good question, and I think you're quite right to say that my notion of what is a boundaryless career has evolved, though there were bits and pieces of what we see today even manifest in the early 1990s. I didn't invent the term, by the way, but built on the insights of people like Mike Arthur and Barbara Lawrence³ and others.

What we recognized in the 1990s was that lot of what once made industries different was being homogenized by the fact that the administrative and communication mechanisms that used to characterize particular industries now used common platforms. Everybody was working in Word and Excel and Outlook or accessing the internet through something like Mozilla Firefox. That meant that an individual's skill set could be more transferrable across different settings, allowing more careers to be made across different companies and, potentially, different industries. That was "boundarylessness."

Now I think it means something different. Now people can bring value to new employers totally untethered from company, industry or continent because of the knowledge, experience and resources they have acquired. Opportunities arise because of the internet and the social ties it supports, allowing people to make career choices that didn't exist previously based on their external ties and the information they have about what's possible elsewhere. So the concept of boundarylessness has gotten very rich in terms of the potential resources and opportunities individuals can have.

But there was an aspect of boundaryless careers even in the 1990s that though present is now more salient today: "boundaryless" as the consolation prize for job security, the idea that in a boundaryless career you wouldn't be able to remain in one place for too long and might need to move to other cities or countries to find opportunities.

Today, when people lose their jobs they'll say, "Okay, I'm supposed to have a boundaryless career, let's try to apply it." It's become a frame of reference in managing job transitions. It's not necessarily seen as always a positive, though, but rather as a necessary way of coping with the instabilities of the workplace. I think that's a useful application of the term, and I would like to see more research on how workers deal with the uncertainty this acceptance of instability can bring. I'm actually working with some colleagues in Greece looking into what happens when all job markets and career ladders fall apart, as happened following the financial crisis. What does boundarylessness then mean? It's eye-opening, the resilience some people show as well as the resignation of others not faring so well. Boundarylessness doesn't seem to be a choice, but a necessity.

² D. Meyerson, K. E. Weick, and R. M. Kramer, "Swift trust and temporary groups," in *Trust in Organizations: Frontiers of Theory and Research*, M. Kramer and T. R. Tyler, Eds. Thousand Oaks, CA: Sage Publications, 1996, pp. 166–195.

³ See, e.g., Arthur, Michael B., Hall, Douglas T., and Lawrence, Barbara S., "Generating New Directions in Career Theory: The Case for a Transdisciplinary Approach," in *Handbook of Career Theory*, edited by Arthur, M., Hall, D., and Lawrence, B., Cambridge University Press, 1989, pp. 7–25, or Arthur, Michael B., "The Boundaryless Career: A New Perspective for Organizational Inquiry," *Journal of Organizational Behavior*, 15, 4, July 1994, 295–306.

BARRY MIKE: They didn't choose boundarylessness, it's chosen them.

DENISE ROUSSEAU: Exactly. And it's a very a different frame of reference than, let's say, Mike Arthur was talking about, you know, upside of boundarylessness. I've never fully believed that; maybe I'm too blue-collar. I think most people like stability in their lives and would like to work with a lot of the same people if they could.

CHOOSING INDUSTRIAL PSYCHOLOGY

BARRY MIKE: You mentioned your blue collar background and its influence on your understanding of boundaryless careers. Did that background also influence your choice of industrial psychology?

DENISE ROUSSEAU: Well, my father, who was a cable splicer for the phone company, really disliked his job. So it's perhaps not a surprise that my major interest has always been how to help people have better quality of work experiences despite feeling themselves to be relatively low in power — not powerless — but low in power. So while I didn't set out to be an industrial psychologist, Industrial Psychology found me. And when it found me, it was like, click, this is what I understand intimately, how difficult the work experience can be for a human being.

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BARRY MIKE: Though you may have a blue collar background, your career has been made in a white collar profession: you're a tenured professor with a Ph.D. Has that in any way had an impact on your perspective?

DENISE ROUSSEAU: When I went to teach at Northwestern, it was the first time I had taught MBAs. And to my surprise, it turned out they didn't necessarily want to pillage the world. (Laughs.) They were people who wanted to be good managers and decent professionals. Working with them, I came to realize something that my father never knew: that managers can sometimes be as miserable as the employees they manage. Most of my students had had professional jobs but still felt screwed over and without a lot of control and thought that the system didn't always make sense. And that to me was very healing. I lost a lot of my blue collar "us-versusthem" way of thinking as a result; I've come a long way from my original notion that the psychological contract is important in factoring the employee experience. I now realize the importance of valuing the subjective experience of all the organization's stakeholders.

WOMEN IN ACADEMIA

BARRY MIKE: One group whose subjective experience in wasn't factored into thinking about the workspace for a long time was women. When you first entered academia, the number of women in your field was just not very high.

DENISE ROUSSEAU: That is really true. And those who were there were really warriors. Colleagues of mine that had been in the field only five or six years ahead of me had an arduous path. One friend of mine, who was the first tenured woman at one of the well-known business schools, adopted a child instead of getting pregnant because she felt the idea of having a pregnant faculty member would have been more than her male colleagues could handle; she would not have been seen as being a serious professional.

BARRY MIKE: Was that your experience as well?

DENISE ROUSSEAU: I had none of that. At my first job at Northwestern University, I showed up and four months later had twins. The attitude I met was more "Who's the new puppy on the block? Maybe we better make sure she doesn't get lost!" People were very kind and supportive of me. In that sense, I've had a blessed career. I am grateful to both the psychology department at the University of Michigan and the Kellogg School of Management at Northwestern for the quality of the support I got in my early years.

But I know of a lot of other places that were very negative for women and were run, in effect, as old boys' clubs. I just didn't encounter that and it's probably just as well, because back then I wasn't very assertive. If someone had said, "Boo!" to me, I would have jumped. (Laughs.)

I'm very different now, in part because of all the times I felt I needed to step in because other people were being hurt. I'm a mama bear; I can always protect the cubs. And over time a mama bear may learn to fight for herself. But I didn't have to fight for me. Until I was a relatively senior academic, I never really felt discriminated against.

BARRY MIKE: What happened when you became a senior academic?

DENISE ROUSSEAU: Well, for one thing, I had changed universities in order to move to where my husband worked and it turned out to be much less supportive of women. Some business school administrators and faculty thought that I was "just a spouse," not really a tenured full professor. In the first few years there, a few people literally told me that I should be grateful for the job I had. Meanwhile I'm thinking, "Gee, that's really interesting; you know, I was a full professor at Kellogg before I came here and you think I should be grateful?!"

Strong people didn't do this. Indeed, I have often had the thought that "small dogs are mean," that is, less confident people can feel the need to take others down to prove themselves. I was on a faculty committee with Herb Simon, the Nobel Prize winning polymath economist and he was incredibly supportive. He said, to me, "I can't tell you how happy I am that you're here; we need more people like you to be at this table." And that gave me great solace. I thought, "Okay, I can deal with the rest." I was also better able to handle this negativity because it came later, not earlier, in my career.

BARRY MIKE: Did you consider other opportunities?

DENISE ROUSSEAU: I've had opportunities. When, my husband died a few years ago — that was very hard — I had to make the decision: do I stay here or do I go? And after a lot of thought and other job offers, I decided to stay. After 20 years, my university has become a much more supportive environment and I cannot say enough about how much I have learned from my wonderful colleagues here. So even unsupportive environments can change. But

for that to happen, people have to change and grow, and that is very threatening. I'm a change management researcher and I know that the losses a change initially brings can be more painful than its promised gains seem good; it's difficult to ask people to give up things when they are unaware how hard they're holding onto them. It just took time. And it also takes time to learn how to bring value to the place where you work, and after all these years, I think I have found good ways to do that.

CAREER ADVICE FOR COLLEGE STUDENTS

BARRY MIKE: One of the themes of our conversation so far has been careers, whether as a subject of study — boundaryless careers — or more personally, about the personal and social influences on your own career. Given that you still teach—

DENISE ROUSSEAU: I love to teach. I'm a teaching junkie! (Laughs.)

BARRY MIKE: As opposed to doing fulltime research, what career advice do you give to your students as they look out ahead and try to understand what the nature of careers is going to be in the future? What do you tell them?

DENISE ROUSSEAU: In general, what I say is that there's no way to know what the key competencies will be in the future or what your choices will be. Your learning is the strongest resource you have for investing in your future. The capacity to think critically and learn to learn are the two most valuable capabilities a person can develop in a lifetime. And since there are no experts I know of on critical thinking or learning to learn - these are always works in progress improving your capabilities for judgment and your ability to reflect really require attention. What forms these might take is what we often talk about in my classes. My message to students is to develop those capabilities, and do it first by reflecting on what you've done: "What happened here and why and how I could have done it better?"; and second, by continuing to challenge your approaches to problems: "Why do I think this works? Do I really have evidence that what I did before worked well?" . . . Besides the fact that it didn't blow up? (Laughs.)

In other words, be more attentive to ways of getting feedback and improving. I practice it for my own classes. I assess what they learn. And honestly, that's humbling. They might learn some of what we covered and not a whole lot of everything else. But I'm modeling in my teaching the kind of practice that I think they'll need in order to become better and better at what they care about for the rest of their lives.

EVIDENCE-BASED MANAGEMENT

BARRY MIKE: Your description of your practice in the classroom leads naturally to a subject with which you're currently preoccupied: evidence-based management. In your Presidential Address to the Academy of Management⁴ you cited this definition: "...a paradigm for making decisions that integrate(s) the best available research evidence with decision maker expertise and client/customer preferences to guide practice toward more desirable results." It would seem obvious that this should be the standard for key management decisions. Yet, you've pointed out that the promise of evidence-based management remains unfulfilled with significant barriers working against it. Why should this be so hard?

DENISE ROUSSEAU: First, there are very human limitations at work here. Remember that we're talking about flesh-and-blood human beings, not computers. Our rationality is bounded by the limited information we are able to process without memory or decision aids. We are attentionally challenged; and for the most part, we can only give the full weight of our cognitive attention to one thing at a time.

In real life, we're often trying to do more than one thing at a time and if we had to pay full cognitive attention to everything we do, we wouldn't be able to do anything. So we rely on habit and mental routines, or "intuition," for most of the actions we take. It's necessary and works frequently enough to allow us to get through the day just fine.

The problem is that, because our intuitions seem to work most of the time, we get overconfident and act as if our intuition is 100% correct. We tend to think our decisions this time will play out exactly how they appeared to have done before, even if we didn't really even look into how well things really worked out last time. Of course intuitions are not 100% accurate, and in adhering to them, we can make huge errors of judgement. Psychologist and Nobel Prize winner Daniel Kahneman⁵ and others have shown that intuitive judgements are prone to systematic errors and biases.

BARRY MIKE: You make it sound like we are the biggest barrier to evidence-based management, that is, that humans are not naturally built for it.

DENISE ROUSSEAU: We're not, but we can learn. There is nothing particularly natural about a lot of what we do. The caveat is that, as cognitive psychologist Gary Klein and those who study naturalistic decision-making have shown, within a specific context, human judgement can get better with experience. They've studied people who work in a specific domain, domain experts, people like violinists, civil engineers, mathematicians, jet pilots, accountants, and insurance analysts. They've found that when people work in a domain where there is a knowledge base which they can learn, if they get timely and relevant feedback on their actions and then apply that feedback, they can improve their decision quality and make better decisions over time.

In other words, for domain experts, knowledge of results improves performance. But only if you have timely and relevant feedback. Now, it is true that with many decisions in life, for example, making a long-term financial

⁴ Rousseau, Denise M., "Is There Such A Thing As Evidence-Based Management?", *Academy of Management Review*, 31, 2, 256–269.

⁵ See, e.g., Kahneman, Daniel, *Thinking Fast and Slow*, Farrar, Straus & Giroux, (reprint edition), April, 2013, 512 pages.

⁶ See, e.g., Klein, Gary, Sources of Power: How People Make Decisions, MIT Press, January, 1998 338 pages, or Klein, Gary, Streetlights and Shadows: Searching for Keys to Adaptive Decision-Making, Bradford Books, September, 2011, 352 pages. A comparison of similarities and differences between the "heuristics and biases" perspective and "natural decision-making" can be found in Kahneman, Daniel & Klein, Gary, "Conditions for Intuitive Expertise: A Failure to Disagree," American Psychologist, 64, 6, 515–526.

investment where you cannot know whether it will work or not for years, it's hard to correct any false assumptions made at the time of the investment. But if I am a violinist or an engineer or a statistician or an industrial psychologist working with a company that's going to try to make something happen in the next three months, I'm likely to find out whether a decision panned out pretty quickly and can learn from it.

But, again, only if you monitor the outcomes of your decisions. If you're a leader who wants to appear decisive, making quick decisions and trusting in your intuition based on what's worked before, then you don't gather feedback on whether your decisions were successful or not. Instead, you just go ahead and act: you tell those who work for you to buy from this company or hire this person or cancel this appointment and so on. And if in doing that you are someone who has achieved a leadership position, the odds are you're just lucky rather than good. Worse, in that situation, it is very easy to have inflated confidence that even if you shoot from the hip, things will be fine. That attitude can be dangerous. And it has been.

The sad reality is that unless we seek feedback on the effects of decisions we make, we probably don't know what works and what doesn't. And if we don't, unless things absolutely collapse around us, it's easy to believe that we are competent and things are going well. I actually think that is the normal condition of non-evidence-based practice: people going around feeling they're doing their best and that things are fine. We know, though, that when people don't get accurate feedback, they are likely to work less effectively than if they had good feedback. There's not a lot of pressure on them to change their behavior. And that's the condition of many leaders today because they're on autopilot around a lot of their decisions, and not very mindful regarding how they make those decisions.

BARRY MIKE: But surely all business decisions are not made based on intuition. Leaders are often surrounded by highly-detailed, fact-filled business cases.

DENISE ROUSSEAU: Of course, there are times when leaders dedicate more of their attention to a decision because it's going to have consequences that are important to them. But the facts don't necessarily speak for themselves. And when leaders do have the opportunity to put time and effort into making a decision, they often don't have a lot of knowledge or experience in making evidence-based decisions, even when the evidence is quite accessible.

Finally, there is also psychological resistance involved when you raise the issue of evidence in decision-making. It's a new concept to many leaders, who sometimes react defensively as if it implied they aren't good decision makers. It can also appear to threaten their autonomy.

BARRY MIKE: So the human-factor can be a huge barrier in the adoption of evidence-based management. You've also talked about institutional and cultural barriers as well.

DENISE ROUSSEAU: And they're there. For example, the reality is that most managers are unaware of the research on decision-making. It's estimated that less than one percent of them regularly read the academic literature pertinent to their management practice. And there are cultural myths that good management is an "art," and that uptake of evidence-based practices will diminish innovation. There's also the fact that management decisions must incorporate

the often competing perspectives of different stakeholders - shareholders, employees, communities, government - and so decisions are often constrained.

We understand that. The fundamental issue in evidence-based management is not so much that you always use high quality evidence, but that you make a decision with awareness of the quality of evidence you do have. And that's not nothing. The vast majority of people practicing in organizations have no clue as to the quality of information they're working with. Awareness of evidence quality can breed reflection and mindfulness.

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What we're trying to do in the movement toward more evidence-based practice is to move things forward through small wins where there can be large accumulated payoffs: reducing the variations in the quality of people hired into the organization; solving problems over time with on average better outcomes; freeing up resources to do something proactive. Even during routines in which the same decision is being made over and over again in different guises — hiring people, setting objectives, calling meetings — knowing ways to make those routines work better can produce increasingly reliable and consistent outcomes.

You've got to start with a small win approach because if you started thinking about how seldom we really rely on the best quality evidence, you would just tear your hair out. What we're trying to do is help people do it just a little bit better in the areas they really care about. There's low-hanging fruit everywhere.

BARRY MIKE: You've made the case for just how difficult implementing evidence-based management is. Given that, what makes you think that it's going to succeed?

DENISE ROUSSEAU: My expectations are not that evidence-based management will save the world, but that we can really improve it and that numerous small wins are within our reach. And one reason I believe that is because the ever-growing body of management research that tells us about practices that work and practices that don't work is becoming more available in user-friendly ways. And in an environment where it can be difficult for organizations to really sustain improvement, people are finding that paying attention to evidence quality gives them an edge. That's the first reason.

The second reason is the rising public demand for accountability and legitimacy in decisions; that makes the use of evidence and attention to its quality important for governance reasons. For example, in the highly regulated health care environment, it is hard for a hospital to say, "Well, the reason we adopted this particular approach to treatment is because our physicians prefer it." No, they have to be able to say, "Well, we adopted this because the scientific evidence tells us that on average this will lead to a better outcome." And individual practitioners will also gain advantages for

themselves, their careers and for their patients or other clients by paying attention to the evidence. That's going to carry the movement for evidence-based management forward.

ARE MANAGERS "DOMAIN EXPERTS?"

BARRY MIKE: You've mentioned a number of occupations where there are "domain experts," that is, where developing expertise, getting feedback, and building on that feedback leads to better decisions and improved judgement. But you didn't mention management as an area of domain expertise.

DENISE ROUSSEAU: There are domains in which people get better over time; management as currently practiced is not necessarily one of them. One of the things that I started noticing when I was at Kellogg — that I was very struck by — was that, unlike lots of other fields, older managers are not necessarily viewed as more knowledgeable and more competent than younger managers. That's downright weird. Older violinists? "Oh my, he's a master, right?" Older physician? "She's a genius in dealing with neurological problems," or whatnot.

There are domains in which people get better over time; management as currently practiced is not necessarily one of them.

If you are building knowledge in a technical domain where you're actually getting feedback and you're learning what works and what doesn't — it could be tying knots — you get better and better over time because you're doing a lot of it and learning. But if you're not focusing on getting better in a particular area, you will not benefit from your experience. I call this the difference between 20 years of experience and one year of experience repeated 20 times.

And I think that a lot of managers are in that latter case. A huge human waste and a big, fat waste of money because we pay them more. And the tragedy for them is that they may leave rich because they've been a manager for a long time, but they don't leave accomplished in what they have done in the world because they haven't gotten better.

Maybe that's just my blue collar background. You practice in an area; you ought to get better. My father was trained as a sheet metal mechanic before working at the phone company. He was great at it. My brother's a sheet metal mechanic today; he's a fabulous and inventive metal worker. I find the lack of deep competence among long-serving managers as very sad.

And of course these people wind up on boards and the front pages of the business press, but they may not really know anything truly useful or effective.

EVIDENCE-BASED PRACTICE AND MANAGEMENT EDUCATION

BARRY MIKE: If the way to make managers "domain experts" requires mastering the knowledge of what works and what doesn't work as well as the skill of, as you said

earlier, "learning to learn," getting feedback and incorporating that into practice, one would think that the logical source for this would be in management education. And yet you've suggested that much of current management education consists of "fads and false conclusions," as opposed to "real learning." If so, how do you break through the current paradigm in management education to give the managers the "real learning" required for evidence-based practice?

DENISE ROUSSEAU: I do think it's true that fads and false conclusions are pervasive in management education. And I think it's because business schools have had a steady stream of people wanting their credential and willing to pay a lot of money to get it. Many schools have had no incentive to improve.

Two colleagues and I just finished a special issue of Academy of Management Learning and Education on teaching evidence-based practice⁷. And I think it's very clear from the people who wrote for it that a lot is known about the educational practices that promote evidence-based management: mastering knowledge domains that reflect cumulative research findings; developing a critical mindset; and understanding how to find evidence for different kinds of decisions. None of the material is rocket science; it is readily taught. But the faculty need to have a formal education themselves in the research base of their discipline. That's very clear.

The good news is that I do see the rise of evidence-based programs and activities, both in consulting - where firms are now selling evidence-based practice services that aren't just marketing hype, but are backed by substantive findings – and in academia, where management programs are starting to take up the evidence-based practice approach. Where I teach, at Carnegie Mellon, in both Heinz College, which focuses on public policy and information systems, and at the Tepper School, which is the business school, we do have evidence-based courses training students in the substantive areas of management, ranging from marketing and strategy to accounting and people management. We teach researchbased practices. (I have checked this out with my students and my colleagues.) Other elite schools vary considerably in this regard. For example, Harvard relies on cases to teach management, and its students do not really learn how to obtain scientific evidence in order diagnose or solve caserelated problems.

BARRY MIKE: So case-based management education is the antithesis of evidence-based management education?

DENISE ROUSSEAU: Not necessarily. I understand the use of cases: students enjoy cases and get a realistic sense of the kinds of issues they might face. There is face validity in cases. But cases can be taught in a very different way, one that that turns them from conventional teaching tools into evidence-based practice opportunities.

Let me give you an example from a Canadian colleague of mine, Blake Jelley. Typically, in the United States, students will solve cases by using their own judgment. In contrast, my colleague started a case competition in Canadian universities where the students had to take apart the issues of their case,

⁷ Academy of Management Learning and Education, 13 (3) September 2014, 305–503.

gather industry facts from the internet, and garner scientific evidence with regard to what is known about the particular set of issues faced in the case. Their solution to the case is then based on a broad synthesis of evidence from multiple domains.

This is the way physicians historically have been trained to use evidence. They're given a case, examine the patient data available to them, and review the scientific literature to learn what might be appropriate therapeutic approaches. Why can't we do that in management education, too?

Actually, I think we do, sometimes; we just need to do that more. Right now my task is to help explain the benefits of evidence-based management education, open opportunities for that approach and to promote examples and models and proofs of concept so that people can see there are alternatives to the status quo. Then of course, we need to evaluate the results!

THE IMPACT OF BIG DATA

BARRY MIKE: You've made a good case for how evidence-based management can succeed as a management paradigm: focusing on small wins, setting realistic expectation, building models and proofs of concept for management education. But we are entering the era of "big data," with a veritable tsunami of evidence being generated, maybe more than has ever existed before. What does this mean, if anything, for evidence-based management?

DENISE ROUSSEAU: Well, first and foremost, you wouldn't be collecting all this data if you didn't already have a pre-existing notion or concept that something you're collecting constitutes useful information. We wouldn't know what kind of data to collect. In other words, we already have framed up in our minds some sort of what you might call "logic models" of what's useful to know. We don't know what we're going to do with those notions yet. But the data, all these raw, uncorrected bits that exist in files and databases, they await our application of logic models or mental frameworks in order to be turned into potentially useful information.

And, to me, what's just too delicious and so beautiful about this is the kinds of logic models or mental frameworks that are going to help us make sense of this ocean of data heading our way. We're going to have to start thinking really differently to exploit big data. And that's the part where I think evidence-based practice is important, because people can't use data until they have logic models or frameworks to apply. So what models are going to be helpful for us? What can we conceptualize here we couldn't have thought about before?

We're in a new age where the frameworks that will make the complexity of "big data" friendly are just now starting to emerge. And only that will enable us to exploit the data well. The data don't speak to us per se. Even in data mining, you have to have categories already to see the patterns.

I think this is offers a wonderful opportunity for educators, researchers, and practitioners to collaborate to make the complexity of all this burgeoning information friendlier to decision makers.

THE RESEARCH-PRACTICE GAP

BARRY MIKE: That collaboration may seem ideal, but it would not appear to be the current norm. One other issue

you've weighed in on, one that cuts across a lot of what we've discussed and which presumably will have a direct impact on the success of evidence-based management, is the so-called "research-practice" gap. You've already mentioned that only about one percent of managers are familiar with the academic literature relevant to their work. So there is at least some current disconnection. And other interviewees in this series have suggested that the problem is something in the structure of academia itself or that at the least, the structure of academia exacerbates it. Would you agree?

DENISE ROUSSEAU: Oh, I think that has to be true, yes, but I would point to changes in the attention to cost and other strategies of industry as much as changes in academia. There's a history to this. It used to be quite common for companies to sponsor their own managerial research. Organizations had big HR departments and experimented with things like incentive systems and job design. A good deal of behavioral science research was done with industry support and no one was writing about there being a gap between the two.

But over time firms didn't see that as a very strategic investment; they saw that there were low-cost competitors who were not doing it. So they put their money into other things, and the in-company research departments closed up shop. Today, that's pretty much gone with a few exceptions.

On the other hand, the scientific legitimacy of business schools has been an ongoing issue at least since 1880 when Joseph Wharton created the Wharton School. Accounting had struggled to be a legitimate discipline since the 1920s; they were told, "All you guys are is bookkeepers, that's not really research, that's not really science." The same issue has applied to what we do in Organizational Science as well. And it has resulted in the tendency for our research to become more abstract and for organizational scientists try to build a career path by trying to do something new and disconnected from what came before so they're known as an idea generator to other academics. That certainly can fuel research that's hard to use.

Given those two trends and the tendency in business schools for people to work for themselves and not for their discipline or the public, it's amazing to me that there's still so much management research that is cumulative and relevant to decisions: on incentives, on compensation, on how to present information to people. We can probably go a long time before we run out of material with which to bridge that research-practice gap. So while I think that there's much more we could do, we somehow have still done a lot. And having a better understanding of how the world works tends to improve management practice. It's not likely to hurt it.

And the good news for the future is that we have only just started to plumb the depths of understanding how to improve management practice by changing how it is supported, changing information flow, and incorporating quality evidence for better informed decision-making.

FINAL REMARKS

BARRY MIKE: We covered a lot of topics, but before we conclude, I'd like to ask you to step back for a minute and

take a look at the field of Organization Science. How has it changed over the course of your career? Where do you think it's going and where do you think it needs to go?

DENISE ROUSSEAU: That's an interesting question. I've always been leery when people make lists about what we should get rid of and where we need to do more research, that kind of buy-and-sell approach. I don't believe in that. I prefer to rely on human innovation and interest to guide where people will go.

That said, I would like to see more appreciation for the value of building on what's been known, on accumulations of knowledge. We're very big on publishing research on novel topics, but less so on synthesis, on pulling bodies of research together and summarizing what we know or don't know. I see great advantages in the future for at least some segment of management doctoral programs and executive degree programs to engage their students in conducting research syntheses where they try to summarize what was known in a systematic way about practical issues. We would make so much more progress if we knew what issues were settled issues and where the gaps were. For example, right now we have a really clear idea about how decision-makers deal with uncertainty; what we don't have a clear idea about is the processes that improve their decision outcomes. That would be so helpful.

We're very big on publishing research on novel topics, but... I see great advantages in the future for at least some segment of management doctoral programs and executive degree programs to engage their students in conducting research syntheses where they try to summarize what was known in a systematic way about practical issues.

BARRY MIKE: This has been a wonderful interview, thank you. We've covered a wide range of topics. But before closing, I'd like to offer you the opportunity to add any final comments.

DENISE ROUSSEAU: Real value lies in testing our assumptions about what works in practice and what doesn't. We've built a whole set of managerial and organizational practices on belief and tradition and authority, but not evidence of any quality. And we have this wonderful opportunity to unsettle settled questions and create some open space for new experiments and learning. Let's begin to take more advantage of this.



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