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## Chapter 4

### Believing is Seeing: The Impact of Beliefs on Evidence-Based Management Practices

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#### Introduction

Managing in today's public institutions can be a very complex affair. In this complex environment, it is a conceit, we believe, to expect that by simply considering more data and obtaining more information about evidence-based management (EBM) practices, including allegedly *best* practices, managers somehow will effect wiser or more successful management practices. In this chapter, we consider EBM from the perspective of scholar-practitioners, and outline several concerns from both the theoretical and practical domains. Additionally, we detail a practical approach that managers can take to pursue the worthy aims of EBM that takes a holistic, and we believe realistic, view of the complexity and challenges of managing in modern public organizations.

The first question we explore is: *What is EBM from a practicing manager's perspective and is implementing it possible in today's public institutions?* Even if adopting EBM were a practical goal, we have deep concerns that at the heart of EBM is a critical, and terribly flawed, assumption—that the EBM practitioner is a rational actor who responds favorably to the premise that *knowing better yields doing better*. This assumption leads us to pose a second question:

Assuming a clearly determined process for implementing a best practice or most effective action as indicated by the evidence, will such a protocol be followed? In our consideration of these two questions, we present a preferred method for managing public institutions including a description of the conditions we believe necessary for EBM practices to have the greatest potential for successful implementation.

**Question One: What is EBM From a Practicing Manager’s Perspective and Is Implementing It Possible in Today’s Public Institutions?**

Evidence-based management practices have been influenced strongly by the developments, roughly over the past decade, by the practice of evidence-based medicine. Evidence-based medicine originated in the UK in the early 1970s as part of an agenda first propounded by Cochrane (as cited in Hamlin 2002) for improving the effectiveness and efficiency of medical practice in Britain. This agenda was taken up by the McMaster Medical School (as cited in Hamlin 2002) in Ontario, Canada, who coined the term ‘evidence-based medicine.’ Its Evidence-Based Medicine Group (as cited in Hamlin 2002) defined evidence-based medicine, as “the collection, interpretation, and integration of valid important and applicable patient-reported, clinician-observed, and research-derived evidence...to improve the quality of clinical judgments and facilitate cost-effective health care” (Tanner 1999 as cited in Hamlin 2002).

EBM enthusiasts err, we suggest, when implying that an evidence-based orientation for managerial practice constitutes a kind of equity with the scientific method used in the practice of medicine, applies to managing complex institutions. We conclude this for two reasons: 1) despite the body of qualitative research on managerial work in the literature, we argue that managing a public institution, with multiple constituencies of humans in dynamic relationships, numerous

pressure points resulting from conflicts in priorities, policies, and resource allocations, and numerous other sources of complexity, is not as consistent or predictable as phenomena subject to the laws of physics or biology, and 2) effective management practices, no matter how well documented, cannot be expected to be replicated the way physical science phenomena are. In plain English, managing effectively in today's public institutions is not a matter of *Insert Tab A into Slot B* or *Push on X to Cause Y* or other protocol (or, in the vernacular, *cook book*) solutions.

To our first point about the flawed analog between evidence-based medicine practices and managerial practices, organizations do not share characteristics as predictable or consistent as the human body. Every homo sapien comes into the world with a virtually identical skeletal structure (as the familiar song instructs, "the leg bone's connected to the thigh bone"...). Organizations, conversely, organize in hugely diverse ways. There may be an HR department or not; or policy research or not, or 3-layers of management or 13 or more. While every human body the world over is basically structured and functionally operates the same as all others, the same cannot be said for organizations. Even if one were to accept the desirability of EBM in public institutions, a very formidable practical challenge looms, threatening to thwart its potential implementation as a preferred method for managing public institutions.

Thus, while evidence-based medicine rests on the foundation of the scientific method—rigorous testing amid stringent controls, copious data-gathering amid defined documentary procedures, reproducible results, predictable consistency in generalized outcomes, and so on—establishing the primacy of evidence for the complexities of organizational decision-making, which takes place among myriad open systems, arguably makes it considerably different from the evidentiary base for establishing medical or other physical phenomena protocols.

Rousseau (2006a) notes that, “Arriving at consensus in social science takes different forms than it does in medicine and other fields, because cause-effect connections in organizational research are not as readily subject to controlled experiments” (p. 1091).

In the words of Nobel Laureate Friedrich August von Hayek, aspiring to have social science imitate physical science processes constitutes the “pretense of knowledge” (von Hayek 1989). Economist von Hayek argued that there was a danger in social sciences attempting to model themselves after the methods of the physical sciences, whereby they adopt a “‘scientific’ attitude . . . since it involves a mechanical and uncritical application of habits of thought to fields different from those in which they have been formed” (p. 3).

Sumantra Ghoshal, who until his death was a professor at the London Business School, echoes the sentiment, and injects the critical element of human intentionality as a distinction between the physical and social sciences:

We have adopted the ‘scientific’ approach of trying to discover patterns and laws, and have replaced all notions of human intentionality with a firm belief in causal determinism for explaining all aspects of corporate performance. In effect, we have professed that business is reducible to a kind of physics in which even if individual managers do play a role, it can safely be taken as determined by the economic, social, and psychological laws that inevitably shape peoples’ actions (2005, p. 77).

What is measurable and measured may not be meaningful in guiding effective practice toward successfully delivering desired outcomes. Albert Einstein was said to have a sign hanging in his office reading, *Not everything that counts can be counted, and not everything that can be counted counts*. In the same spirit, von Hayek notes, “While in the physical sciences it is generally assumed, probably with good reason, that any important factor which determines the observed events will itself be directly observable and measurable; in the study of such complex phenomena as the market, which depends on the actions of many individuals, all the

circumstances which will determine the outcome of a process . . . will hardly ever be full known or measurable” (p. 3). What ends up being measured in complex environments may not be what is important but rather that which is easily *measurable*.

Just as bad, turning to so-called expert advice as a proxy for meaningful measures may place managerial judgment teetering on the flimsiest of foundations. In her 2005 address as president of the Academy of Management, Denise Rousseau lamented, “Research findings don’t appear to have transferred well to the workplace. Instead of a scientific understanding of human behavior and organizations, managers, including those with MBAs, continue to rely largely on personal experience, to the exclusion of more systemic knowledge. Alternatively, managers follow bad advice from business books or consultants based on weak evidence” (2006, p. 257).

Regarding our objection concerning the reproducibility of so-called best practices, i.e., taking some “proven processes” from Organization A and transplanting them to Organization Z, we think it is important to think of organizational practices with a *systems* orientation. Every manager operates in a large context that involves the policies and practices not only of her area of responsibility but that interact and influence other departments within the organization and multiple constituencies beyond the institution. Such complex relationships, which can vary widely from public agency to public agency, will impact the efficacy of any evidence-based practice that one attempts to implement. Borrowing an analogy from management theorist Russell Ackoff, implementing an amalgam of “best practices” in an organization is akin to trying to build a car with the best car parts in the world collected from different makes. Because those parts, even those demonstrated as best by clear and compelling evidence, were not designed to fit together, you would have nothing more than a heap of shiny but disjointed – and therefore

useless – parts. As leadership expert Michael Maccoby, who worked with Ackoff on client change projects and shared the auto parts example with us, puts it, “Improving one part of a system does not necessarily make that system better and may make it worse” (2010).

An additional concern worth noting here, even if EBM could be implemented in an organization, it is ripe for practice in a fashion that is reductionist, formulaic, and risk-averse. In other words, favoring EBM’s “proven” techniques thereby inherently discourages innovation and risk. Once managers believe they are using the best techniques, they may conclude they have *the answer*, are doing it *right*, and stop seeking improvements, or arguably, more appropriate approaches to their challenges and opportunities. This, as Karl Popper (1985) argued is the mistake of attributing authority to empirical evidence.

All that said, as an aspiration, we believe EBM seems far more appealing than *seat-of-the-pants* management. And yet, ironically, unlike the case of evidence-based medicine, the efficacy of EBM is far from empirically established by evidence (Arndt and Bigelow 2009). It is therefore not surprising, as several other works in this volume demonstrate, the case for EBM is far from definitive.

This takes us back to our concern over how one defines EBM in the first place. In Britain, for example, the type of evidence used in the practice of EBM can vary in strength ranging typically from “a systematic review of multiple, well-designed randomized controlled trials” to “the opinions of respected authorities based on clinical evidence, descriptive studies or reports of expert committees” (Sackett 1997 as cited in Hamlin 2002). To Stewart (1998 as cited in Hamlin 2002), EBM is simply an attitude of mind that:

- Thinks in terms of evidence for decisions and about the nature of the evidence;

- Asks questions such as: What is happening?; How is it happening?; Why?; and, What are the consequences?
- Is aware of the potential limitations of the different answers; and
- Is interested in research to try to find the answers or at least to reduce the ignorance.

*In theory*, we conclude that EBM, as an attitude of mind, is certainly possible within public institutions. And, while we accept the fact that EBM cannot match the research, clinical trials, and patient preferences of evidence-based medicine, EBM should consist of good quality research, consensus of recognized professional experts and/or affirmed professional experience that substantiates practice; quality improvement, operational or evaluative data; and the systematic feedback of opinions or preferences of client managers (Hamlin 2002). An ideal was suggested crisply by Rousseau (2006, p. 267), “Evidence-based practice is not one-size-fits all; it’s the best current evidence coupled with informed judgment.”

*In practice*, though, as scholar-practitioners, we suggest that actual implementation of EBM is another matter. Our fear is that EBM once popularized will manifest itself as merely a more sophisticated version of prevailing practices that might be described as *Techniques of the Month*. Significantly, however, under EBM’s rubric such hodgepodge approaches to so-called best practices will appear to have the imprimatur of *Legitimate Authority*. When patchwork implementations fail to show great efficacy, EBM will be tossed like another worn-out fad of the month. “We tried that it and it didn’t work; EBM is over-rated” will go the common refrain.

Any serious attempt to port the principles of EBM into real organizational environments must answer a key question for any *hot* or “proven” practice: *Why* does this method or approach work? In other words, what are the general underlying theories or principles giving rise to a

specific practice’s effectiveness? Without identifying that principle-based foundation, one can’t predict the applicability of a technique that is apparently successful in Environment A to the differing particulars in Environment Z. As Cavazos and Cavazos write hauntingly in this work, “For all of the attention, relatively few of the much touted public sector EBM initiatives have yielded repeatable findings or discovery of a general principle” (p.yyy). While repeatable findings may or may not equate to valid evidence of best practice, as noted above, the idea of discovering and stating a general principle to guide additional implementations is vital. As Kurt Lewin, the social psychologist, wrote more than a half-century ago, “Nothing is as practical as a good theory” (Lewin 1945, p. 129). Without clearly establishing the underlying theoretical bases for the “evidence-base,” EBM risks becoming a mish-mash of practices available wholesale from *Tactics R Us*.

Let’s now consider our second question.

**Question Two: Assuming a Clearly Determined Process for Implementing a Best Practice or Most Effective Action as Indicated by the Evidence, Will It Be Followed?**

Implicit in the EBM proposition is the assumption that a practitioner is a rational actor. In practical terms—*give the manager enough good data and she will take prudent and effective action*. This sounds both appealing and reasonable in the abstract. However, this same rational actor assumption that undergirds much traditional, economic theory has been discredited because of its glaring deficiencies. Any theory, framework or practice model largely predicated on rational actors fails to explain and predict how real people make real decisions regarding their own economic interests — with their hearts and guts, hopes and fears, prides and prejudices.

***Opposition from the Depths***

Human behavior is largely driven by influences that are neither rational nor often even in the actor's conscious awareness. Consider that *manager* is but a role occupied by individuals subject to all the predilections and foibles facing other humans. As with the general population at large, it is not difficult to locate over-weight managers with poor eating habits, or those who smoke, drink too much, or sleep too little. As should be obvious to even the most casual observer, information about best practices, even those for one's own well-being, do not effectively and consistently influence behavior. Well-educated and savvy individuals who make poor lifestyle choices live in a media-saturated society. While they certainly have been exposed to ample evidence that they are making choices in opposition to best practices for good health and longevity, they often make choices contrary to their own interests.

Dramatic testimony to the failure of information to trump other motivations can amply be found in the medico-psychological literature (for example Gordon and Haskell 1997; Linden, Stossel, & Maurice 1996; Nordmann et al. 2001) covering the challenges of prompting sustained lifestyle changes in patients who have suffered a heart attack. When a cardiologist tells a patient, one who has already suffered a heart attack, "Change your lifestyle to healthier habits or you will *die*," that, it sadly turns out, is not sufficiently motivating evidence to provoke behavioral change. Much more elaborate interventions, such as a 12-month counseling program including a 4-week residential stay are required to effect "everyday habitual behavioral changes" (Lisspers et al. 2005, p. 43).

Is it reasonable to expect that managers exposed to EBM will be more conscientiously rational stewards of their organizations than so many appear to be of themselves? We contend that implementing EBM, or any practice that necessitates modifying behavior, requires more

than a persuasive or even compelling list of reasons as to why this makes sense. We argue it requires a rational actor exercising what Chalmers Brothers (2005) calls the “big eye”—the increased ability to see and notice ourselves and our actions which, in turn, requires, according to Brothers, “taking a look at how we look at things” (p.3).

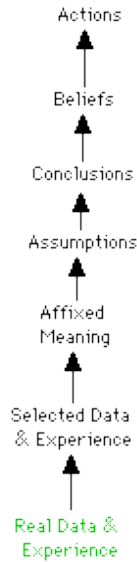
Many of the inputs to behavior, even for the most rational of managers, lie outside the rational, intellectual mind. Every mind holds many conceptions of the world and beliefs about it that shape one’s perceptions, judgments, and actions. Consider for example, why a large percentage of organizational change initiatives go nowhere. It’s not, we suggest, because they lack grand visions, noble intentions, and sound business cases but because people can’t see or appreciate the “real” reality they face. Likewise, in the words of Senge et al. (2004), “Studies of corporate mortality show that most Fortune 500 companies fail to outlast a few generations of management, not because of resource constraints, but because they are unable to ‘see’ the real threats they face and the imperative to change” (p. 29). They quote Arie de Geus: “The signals of threat are always abundant and recognized by many. Yet somehow they fail to penetrate the corporate immune system response to reject the unfamiliar” (p. 29). In short, behavior can be thought of as the visible output of many complex inputs, most of which are invisible and some of which are largely elusive or inaccessible within the recesses of the mind.

In a variation on the familiar phrase from the US Declaration of Independence, we all hold certain truths to be self-evident. In the diverse world at large, and even in an organization with clearly declared, self-avowed “core values,” people don’t all hold the same truths, no matter what they profess. Even one’s deepest held truths may be evident to everyone except the person holding them, and this has fueled psychotherapy for a century and a half.

Truths and beliefs are essentially synonymous (Dewey 1910; Newberg and Waldman 2006; O'Connor and McDermott 1997). A belief is a conception and conviction about how things are or should be (Koltko-Rivera 2004). We each hold our own distinct beliefs about the nature of the world, the nature of humanity, about morality and justice, about our own capabilities and worth, the appropriate role of our institution in society, and the capability and potential of the people we work with. We believe that the world is ordered and rational or not; that justice tends to prevail or not; that people are basically good or not, and trustworthy or not; that the future is secure or not. A person may believe that she has free will, or not; that she is autonomous, or not; that she is worthy of loving, or not; that she is competent, or not and so much more (Beck 1995; Koltko-Rivera 2004; McMullin 2000; Rokeach 1960).

Beliefs influence actions. This simple, albeit powerful, hypothesis was graphically depicted in the Ladder of Inference, Figure 1, initially developed by Chris Argyris and subsequently presented in Peter Senge's *The Fifth Discipline: The Art and Practice of the Learning Organization* (1992).

**Figure 1**



### Ladder of Inference

As explained by Bellinger (2004), what the diagram shows is that we begin with *Real Data & Experience*, the kind that would be captured by a movie camera that didn't lie. We then choose a set of *Selected Data & Experience* that we pay attention to. To this *Selected Data & Experience* we *Affix Meaning*, develop *Assumptions*, come to *Conclusions*, and finally develop *Beliefs*.

Beliefs then form the basis of our *Actions* which create additional *Real Data & Experience*. It is our *Beliefs* which influence the *Selected Data & Experience* we pay attention to—they essentially establish an internal reinforcing loop which short-circuits reality. The tendency is to select data to pay attention to which supports our beliefs. Bellinger (2004) suggests that as our Beliefs become more and more rigid, the *Selected Data & Experience* we are willing to pay attention to will become a smaller and smaller portion of reality and poses a relevant question: *How do we stop short-circuiting reality and begin to see reality for what it really is?*

Again, beliefs influence actions. Thus, if one believes at a deep level that life is a zero-sum game and that rewards tend to flow to those who are the most fortunate no matter how

earnest their work effort, one is going to be a very different kind of boss (or parent) than one who believes that life is boundless in its abundance and that rewards should be shared equally among team members.

Mark Koltko-Rivera won an award from the American Psychological Association for his article on beliefs, or *worldviews* as he calls them. “Worldviews,” he wrote, “exercise a pervasive influence on many different kinds of behavior throughout many levels of social abstraction, from the individual and the dyad to the collective and the society” (Koltko-Rivera 2006, pp.11-12).

Beliefs, more than objective evidence, color judgment and action. As Albert Bandura (1995) contends, “People’s level of motivation, affective states, and actions are based more on what they believe than on what is objectively the case” (p.2), or on what the evidence suggests, one might say. In turn, what people believe is often bolstered by evidence, but only such evidence as selected consciously or not, to confirm what they already believe. Psychologist Martin Seligman (1993) explains, “It is perilously easy to live our lives noticing only evidence in favor of our deep beliefs and to shun testing whether those beliefs are false” (p. 246).

A book chronicling many examples of “the irresistible pull of irrational behavior,” recently made it onto the bestseller lists of both the *New York Times* and the *Wall Street Journal* (Brafman and Brafman 2008). Evidence of humans’ irrationality and apparent immunity to information born of rational thought abounds (see some notable examples below).

EBM is positioned as a counterbalance to these proclivities. In this volume, Cavazos and Cavazos write that “cognitive biases . . . influence the perceptions and thus decisions and performance of all managers, leaders, and all humans. EBM is thus viewed as a means to obtain objectivity” (p.xxx). Likewise, Lyles, elsewhere in this work suggests, “Optimally, EBM should

counterbalance bias, overcome individuals' limited personal experiences, develop judgment and challenge groupthink" (p.zzz).

While we agree that would be optimal, *by what mechanism will EBM somehow trump humans' pervasive propensities to eschew objectivity?* People, after all, are renowned for their capacity to ignore the evidence.

### ***Three Examples of Truly Irrational Decision-Making***

Here's a disturbing cautionary tale of non-rational decision-making overruling the other kind, as documented by PBS's NOVA (NOVA 2006). KLM airlines pilot and aviation safety expert Jacob Van Zanten, with more than 11,000 hours in the cockpit, is frustrated after being routed for an unscheduled stop in the Canary Islands (Spanish territory off the coast of Africa). About to come up on his mandatory rest time, a practice designed to minimize human error caused by fatigue, during which the pilot could not fly under penalty of imprisonment, Van Zanten grows impatient at the small airport which is crowded by other planes also diverted there.

Apparently Captain Van Zanten believes that takeoff is paramount to avoid the inconvenience of an unscheduled overnight in a tropical backwater requiring accommodations for 234 passengers, 52 of them children. Compounding the impact, an unscheduled overnight stay for KLM 4805 would mean the delay of returning 14 crew to their home base in Amsterdam. Furthermore, that implies the ripple effect of disrupting flights elsewhere in the KLM system because a large plane and more than a dozen crew will not be where they are expected to be.

While waiting for clearance to depart the Tenerife airport, Van Zanten seizes the opportunity to refuel his plane. He fills up — 55 tons, not just enough to get to the scheduled next destination, but enough to take the plane back all the way back to Amsterdam, adding

significant weight to the plane's takeoff from the small airport with its short runways. With weather worsening, and many diverted planes jockeying for take-off position, Van Zanten, KLM's chief pilot, whose main job at the Dutch airline was to train other pilots in safe flying procedures, orders his crew to do the unthinkable. He initiates takeoff of his 747 on a heavily fog-shrouded runway, without clearance from the tower.

Klaas Meurs, the first officer in Van Zanten's cockpit speaks up. "Wait a minute, we don't have an ATC clearance," he says according to the cockpit voice recorder. The captain, caught in a potentially embarrassing lapse of safety protocol, tells his co-pilot to ask for clearance from the tower. The tower responds with permission to fly the planned route once airborne, but, critically, not permission to take off which is given in a distinct communication protocol.

Nonetheless, the impatient-to-fly captain orders, "Let's go," and thrusts the plane's engines. Thirteen-seconds later, as the KLM crew begins taking off, it sees through the fog a wayward 747 on its runway. That Pan Am jet, also unexpectedly diverted to Tenerife airport, took a wrong turn at the unfamiliar airport. It lay immediately in the path of the prematurely accelerating KLM plane.

Captain Van Zanten catches sight of the obstructing jet in front of him and implores his fuel-laden craft to rise faster than aerodynamics will allow. "Damn! Come on! Come on! Come on! Come on!" Finally, he implores, "Please!"

The force of his impatient will and all of his formidable experience and skill were insufficient to overcome the physics of the situation. The bottom of the KLM jet strikes the top of the Pan Am jet. The KLM plane plummets and explodes into a massive fireball, killing

everyone onboard plus taking the lives of many Pan Am passengers. This collision between two 747s, in 1977, became the worst accident in aviation history, taking the lives of 583 people.

From an evidence-based practice perspective, ample evidence, knowledge, training and experience were tragically trumped in this situation by other factors, very human factors that lie outside the rational domain. This highly dramatic example of a professional overruling what he knows in service to other needs or commitments (in this case, maintaining a schedule, preserving customer service by avoiding inconvenience, upholding a reputation for reliability) might be dismissed as a glaring aberration, a rarity that proves the general rule that people yield to their knowledge and act rationally and responsibly. That hopeful interpretation is not supported by the evidence.

For example, Senge et al. (2004) describe how in the early 1980s, executives from US auto companies started making regular trips to Japan to find out why the Japanese automakers were outperforming their US counterparts. Speaking with one Detroit executive after such a trip, Senge could see that the executive hadn't been impressed by the competition. "They didn't show us real plants," the Detroit executive said.

"Why do you say that?" Senge asked.

"Because there were no inventories. I've seen plenty of assembly facilities in my life, and these were not real plants. They'd been staged for our tour."

Within a few years, it became painfully obvious how wrong this assessment was.

According to Senge et al. (2004),

These managers had been exposed to a radically different type of "just-in-time" production system, and they were not prepared to see what they were being exposed to. They were unprepared for an assembly facility that didn't have huge piles of inventory.

What they saw was bounded by what they already knew. In short, they hadn't developed the capacity for seeing with fresh eyes. (p. 28)

Human perception is not only selective, people commonly overrule the evidence they do perceive. This is further demonstrated in our third example.

It is generally accepted that it was Al Qaeda terrorists from several different nations and not the Iraqi government that executed the destruction of the World Trade Center buildings in New York City and crashed commercial airliners into the Pentagon and a Pennsylvania farm field on September 11th, 2001. From an evidentiary standpoint, the nation of Iraq was no more culpable than Ireland. And yet, during the 2004 US presidential campaign, several polls showed that majorities of those surveyed believed that Saddam Hussein was either partly or largely responsible for the 9/11 attacks (University at Buffalo 2009). Even when confronted with what researchers described as overwhelming evidence that there was no link to Iraq during "challenge interviews," voters who reported believing in a link between Saddam and 9/11 continued to believe their own arguments in support of the discredited link (with one lone exception). So common is this tendency to freely dismiss evidence, our vernacular offers a sardonic shorthand to describe the situation: *Don't confuse me with facts, my mind is already made up.*

Such an attitude can be found in abundance. Drive down most any freeway and notice the well-dressed, apparently smart and successful professionals and managers who are reading and texting while driving. This, despite ubiquitous and incessant news reports presenting compelling evidence that such practices can be fatally dangerous. In 2008, nearly 6,000 people died in crashes involving a distracted or inattentive driver, and more than half a million were injured; driver distraction accounted for about one in five crashes (NHTSA 2009). A study by Virginia Tech showed that texting while driving increased one's risk of a crash more than 20-fold (Box

2009). It is not a lack of evidence or awareness of the facts that contributes to the problem, which is growing not shrinking despite the publicity of the dangers.

Becoming aware of information or best practices does not necessarily change behavior—in the workplace as well as life-at-large. Rynes, Brown and Colbert (2002) surveyed experienced managers of the human resource (HR) function and found that a majority of them labored under mistaken assumptions about effective HR practices according to the research literature. In the “executive commentary” following the article in the Academy of Management’s *Executive* journal, Richard A. Hansen, both an HR practitioner for more than a quarter century and a former professor at the City College of New York, with a Ph.D. from Columbia, wrote a most candid and revealing rejoinder to the indictment of practitioners’ professional ignorance. “For most HR officers, belief follows practice. We tend to believe in those things we do and are able to implement.” Then, in an astonishingly candid challenge to the very premise of EBM, Hansen, the practitioner with scholarly roots, concludes with, “Unfortunately, I don’t think that greater exposure to the literature will have much impact on us” (Hansen 2002, p. 103). Need we translate? *Don’t confuse me with facts, my mind is already made up.*

A manager who neither is open to considering the value of evidence, nor appreciates how she uniquely processes and assesses data, cannot derive the benefit of EBM, we posit, no matter how deeply steeped she becomes in its intricacies.

The challenge might be thought of as managers becoming aware of and balancing their personal beliefs (personal creed or dogma) with evidence. As scholar-practitioners who coach managers and executives in the public, private and not-for-profit sectors, we recognize the opportunity to improve management of public institutions (and others) includes an orientation to

evidence—the attitude of mind we suggested earlier. The approach we advocate is broader, however. It entails helping managers learn to think more holistically about themselves, the people they lead, and the environment in which they operate. Thinking more holistically about themselves entails increasing their awareness of their unique mindset and its attendant beliefs and worldviews including their preferred ways of knowing, their taken-for-granted processes for drawing conclusions, making judgments, their core beliefs, and the like. Thinking more holistically about the people they lead entails the ability to exercise what Maccoby (2007, p. xviii) calls personality intelligence—the ability to understand people including different kinds of personality. Thinking more holistically about and acting skillfully in the context they are working in entails developing what Maccoby (2007) calls strategic intelligence—an interactive mix of analytic, practical and creative elements (p. 186). Maccoby’s model, described below, not only encompasses the critical elements capabilities today’s leaders need, we believe it rises to fulfill the *intent* of EBM.

### **The Leaders We Need**

In his book, *The Leaders We Need, And What Makes Us Follow* (2007), leadership expert Michael Maccoby concludes that managers who are effective leaders of change take a systems view of themselves and their organizations. Maccoby terms this managerial competence, strategic intelligence. This capacity includes *foresight*, the ability to see patterns and trends that are likely to impact the organization; *partnering*, the ability to work with others who complement the manager’s skills, to develop an effective leadership team; *visioning*, the ability to think systemically and design the holistic system that fits the organization’s purpose; and *motivating*, the ability to empower and motivate followers and collaborators to implement

programs and processes that realize the vision. Such abilities are further strengthened, in truly effective managers, by *personality intelligence*, the understanding of self and others, which requires both intellectual and emotional development.

In leadership workshops based on his book, Maccoby added that leaders gain the trust of followers by communicating and practicing a defined, personally relevant leadership philosophy. The most effective philosophies, he suggests, include a statement of the organization’s purpose, the core values necessary to achieve that purpose, and specific definitions of how results will be evaluated. By articulating a leadership philosophy, Maccoby argues, managers clarify what people can expect from them, and it becomes the basis for open dialogue about decisions. These elements are graphically represented in Figure 2.

**Figure 2**



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This model, like so many others offered by countless management theorists and consultants, might be assailed as overly idealistic. It is, we admit, comprehensive. And that is exactly why we find it appealing. Managing today means doing more than solving problems, it means, as Harvard's Heifetz put it, adapting to complexity (Heifetz 1998). The energy behind interest in EBM in public institutions, we suggest, is really a call for better, meaning more thoughtful and effective, management. Steeping public sector managers and leaders in models such as Maccoby's—and helping them move past their biases, blind spots and limiting worldviews—is what we believe public institutions need to do. While it may seem self-serving for us to say so, our experience as executive coaches leads us to conclude intensive, candid, dialogue-based management development serves as an excellent antidote to managerial mental myopia. Mentoring, peer groups, and other dialogue-based methods may also be effective in helping managers to *think* more effectively—and this, we contend, really is the challenge.

As executive coaches who work with managers, we strive to help them overcome common lapses and distortions in thinking about evidence. These include:

- \* "Will the boss buy it?" (*An idea's attraction to power is not a test of its efficacy*)
- \* "I know this works because it has in the past." (*Trend bias error*)
- \* "Obviously this works – everybody does it." (*Popularity as efficacy error*)
- \* "This must work. Organization X uses it. They're successful. So this method must be an effective 'best practice.'" (*Attribution error*)
- \* "You may have those figures, but..." (*Dismissal / preemptory negation error*)
- \* The error of over-privileging particular data or ignoring a dimension of salient value. For example: tracking efficiency measures such as units per whatever, without also measuring—or

valuing—quality, customer satisfaction, or retention of competent employees. Additionally, this error could manifest itself by not seeking relevant data such as employee input on or assessment of key programs (see Mykalovskiy et al. 2008).

\* Over-valuing irrelevant data. A couple of familiar examples: 1) "Smile sheet" evaluations in training courses. Liking a course, an instructor, or venue may have no correlation to either actual learning, or whether any learning ends up being applied in new action or sustained performance improvement. 2) Customer satisfaction scores. "Satisfied customers" are not necessarily loyal or well-served ones.

\* Relying exclusively either on experiential *or* objective data. (*Data selection error*)

\* Ignoring what you know in order to meet a psychological need (such as to be liked, to be perceived as a "team player," to appear bold or conservative, to not draw attention to yourself or to be the center of attention, and so on).

\* Confirmation bias, seeking or valuing only data that confirms your current opinion or judgment.

\* Diagnostic prejudice, staying ardently committed to your first impression or initial judgment.

This is an incomplete list of how thinking about—and emotionally reacting to—even otherwise compelling facts or evidence can quickly go wayward. For EBM to take successful hold in organizations, managers will need not only to understand its rudiments, but their own personal pitfalls in trying to apply the discipline effectively. Furthermore, since we subscribe to Michael Maccoby's model and definition of a leader—a leader is *someone people follow* (to which we add, *willingly*)—we advocate not just the importance of EBM, but integrating its ideals

into public institutions via a more comprehensive conception about, and systemic approach to create, the leaders we need.

## **Conclusion**

The trick for EBM, and indeed all management methods is to identify effective and practical means for integrating humans' unique capacity to be both rational and intuitive. If managers truly could manage by the evidence, by the data alone, they quickly would be replaced by devices optimized for rational computation—computers.

As actors inextricably linked to their humanity, the social character of their culture, and the specific situations they find themselves in, managers set priorities, solve problems and make decisions with their inherent intuition, emotion, and judgment born of both experience and moral sensibilities. An effective implementation of EBM, will, in our opinion therefore, place greater emphasis on cultivating effective managerial judgment—inclusive of personality and strategic intelligence—and less reliance on adhering to allegedly best practices. In this regard, instead of asking, *What is the best demonstrated practice?*, managers will apply strategic intelligence, and from the EBM “mindset” advocated by Stewart, ask a question such as, *Based on what we know about our specific situation and the best available information, what is the most appropriate practice to achieve our aims? And how can we test that?* This is a subtle but critical shift. And, if public institutions can get their managers to think and act this way, and *that* is what one means by EBM, we're all for it.

We return to von Hayek and Ghoshal for perspective here. “If man is not to do more harm than good in his efforts to improve the social good,” von Hayek argued, “he will have to learn that in all fields where essential complexity of an organized kind prevails, he cannot acquire the

full knowledge which would make mastery of the events possible” (p. 7). Ghoshal wasn’t writing about EBM when he penned these words, but they couldn’t be more appropriate. “Excessive truth-claims based on extreme assumptions and partial analysis of complex phenomena can be bad even when they are not altogether wrong. In essence, social scientists carry an even greater social and moral responsibility than those who work in the physical sciences because, if they hide ideology in the pretense of science, they can cause more harm than good” (2005, p. 87).

Committing to gathering good quality data, along with commitments to fully consider and weigh the evidence appropriately, coupled with the capacity to exercise personality and strategic intelligence as presented in Maccoby’s model of leadership, are worthy objectives for humans engaged in the craft of management. And, we expect, will cause more good.

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