SUCCESSFUL ORGANIZATIONAL CHANGE: INTEGRATING THE MANAGEMENT PRACTICE AND SCHOLARLY LITERATURES

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Contemporary organizations often struggle to create meaningful, sustainable changes. At the same time, relevant organizational research lacks an easily accessible consensus on basic change management processes and principles. One consequence is practitioner reliance on popular change models that more often cite expert opinion as their foundation rather than scientific evidence. This article reviews both key tenets of widely used practitioner-oriented change models and findings from scholarly research on organizational change processes to develop an integrative summary of the available evidence of what is known, contested, untested, and underused in change management. It identifies ten evidence-based steps in managing planned organizational change along with implications for research and practice.

Advanced technology, a changing workforce, competitive pressures, and globalization are just a few of the forces that prompt organizations and their members to engage in and attempt to manage planned change (Burnes, 2004b; By, 2005; Kotter, 1996). We define planned organizational change as deliberate activities that move an organization from its present state to a desired future state (Harigopal, 2006). Often conceptualized as a managerial skill, change management has been touted as a critical competency in contemporary executive surveys (Leadership Competencies, 2008; McCauley, 2006). Making meaningful, sustainable changes can nonetheless be difficult. Recent reports suggest that executives believe that only one of three planned organizational change interventions actually succeed (Jarrel, 2017; Meaney & Pung, 2008), whereas 38 percent of respondents to a U.K. survey of executives reported that change in their organization actually had led to achieving high performance (Holbeche, 2006: 6). At the same time, organizational change is a source of considerable stress to contemporary workers. A panel study of more than 90,000 workers found that organizational change led to increased use of stress-related medication (Dahl, 2011). Whether these attributions are generalizable, they inform this article's motivation, that is, to better identify what is known about organizational change to improve the likelihood of successful change and reduce the adverse consequences of failed change on organization members and stakeholders. In fulfilling this motivation, we seek to identify ways to improve both practice and research on planned change.

Identifying ways to make meaningful and sustainable planned change is a challenge. One reason for this challenge is that the scientific literature lacks consensus regarding basic change processes (Bamford & Daniel, 2005; Pettigrew, Woodman, & Cameron, 2001), a long-standing problem even early reviews identified (Friedlander & Brown, 1974). The fragmented literature on change management can make it difficult to identify and apply change management principles based on scientific evidence. Instead, change management practitioners may rely on more readily available expert opinions from popular writers on change (Cooperrider & Srivastva, 1987; Hiatt, 2006; Kotter, 1996; Senge, Kleiner, & Roberts, 1996)—few of

which cite or make explicit use of the scientific literature on change (see Beer, 1980; Kanter, Stein, & Jick, 1992, for exceptions).

The second challenge change management practitioners face is the difficulty of learning from experience. Research on the development of expertise indicates that learning and resulting improvements in performance occur over time through repeated practice in a specific domain and direct feedback regarding results (Kahneman & Klein, 2009). Although individuals may acquire considerable expertise by many hours of practice in a specific domain (e.g., playing a musical instrument and solving technical problems regarding waste management or process consistency; Ericsson, 2009), change management differs from such practice domains in several ways. Playing the violin or solving a specific technical problem is a discrete and repeatable activity, the outcomes of which can be immediately known, making it clear to the practitioner which particular efforts are effective and which are not. By contrast, organizational change results can take years to materialize, thereby limiting the opportunities the change manager has to repeatedly make comparable change-related interventions and obtain feedback regarding their outcomes. The nature of change itself can also be quite diverse: change can be one-shot or multiphase interventions and its forms can be various, from quality improvement (QI) (Coyle-Shapiro, 1999), work family initiatives (Kossek, Lewis, & Hammer, 2010), and facility relocation (Peach, Jimmieson, & White, 2005), to restructuring and strategic change (Wanberg & Banas, 2000), mergers (Kavanagh & Ashkanasy, 2006), and downsizing (Day, Armenakis, Feild, & Norris, 2012). The very heterogeneity of change can make it difficult to interpret its outcomes, feedback on which is not always easily available.

The present article provides a review and synthesis of prescriptive writings and scientific studies on the management of planned organizational change with the goal of identifying opportunities for integration that add value to each. We offer a synthesis of popular prescriptive advice on change management practices with scientific evidence from both qualitative and quantitative research regarding organizational change. Our goal is to identify areas of convergence, contested issues should they exist, understudied change prescriptions, and underused research findings. We begin with the practitioner literature on planned change, describing the most popular practice models and then specifying their core prescriptions and relevant scientific evidence.

Next, we identify additional findings in the scientific literature that may be incompletely addressed or overlooked in popular prescriptions to highlight opportunities to improve the practice of change management. Then, we offer a synthesis of ten empirically supported steps in managing change based on scientific evidence, providing a foundation for an evidence-based approach to change management. Finally, we address the research and practice implications of our review and synthesis.

PRESCRIPTIVE MODELS OF PLANNED ORGANIZATIONAL CHANGE

The change management literature is replete with prescriptive models, largely directed at senior managers and executives, advising them how to best implement planned organizational change. Typically, these models specify a sequence of steps considered applicable across a variety of organizational change interventions. We selected seven "canonical" (i.e., popular and widely used) prescriptive models based on the criteria of Google web hits (ranging from 60,300 to 4,800,000), number of citations these models receive in the scholarly literature (Web of Science, ranging from 401 to 23,300 citations), and our own conversations with practicing managers and consultants. We note that with one exception [the critique of Kotter (1996), by Appelbaum, Habashy, Malo, and Shafiq (2012)], these models have not been subject to direct empirical study, despite their popularity as evident in citations and publicity on practitioner-oriented websites (Leppitt, 2006; Phelan, 2005). We present them roughly in chronological order of appearance, sometimes using the author(s)'s later writings to flesh out core ideas.

Lewin's Three-Phase Process

Kurt Lewin (1948), renown for the insight, "there is nothing more practical than a good theory" (Lewin, 1952: 169), proposed a three-phase change process that is ubiquitous in the practice literature: (1) unfreezing, (2) transitioning to a new stage, and (3) refreezing. Unfreezing includes establishing a change vision and developing a change plan. Doing so prepares the organization for the transition to new systems, structures, or procedures. This transition involves putting the change in place and modifying existing systems in support of the change. Refreezing entails the consolidation of the change so that it aligns with other organizational structures and

procedures. The change thus becomes embedded in the organization rather than remaining a separate unity. Critical readers of Lewin suggest that he had not only organizational changes in mind when specifying his model but also a wider array of group and societal changes (Burnes, 2004a).

Beer's Six-Step Change Management Model

The career-long focus on change management by Michael Beer, a practice faculty member of the Harvard Business School, reflects a detailed systems approach to change (Beer, 1980). Its most popular and well-cited version is a popular six-step change management model, developed with colleagues (Beer, Eisenstart, & Spector, 1990). (1) It first emphasizes the need to join two aspects of change, an accurate diagnosis of the problem situation, which in turn helps mobilize commitment to the change. (2) A change vision then should be developed specifying the focus of the change by defining new roles and responsibilities (i.e., establishing teams working on specific issues such as the strategic direction or developing the change planning in different departments). This allows organizing the change based on specific and actual problems and involving stakeholders to plan and organize the change. (3) Next, a consensus in support of this vision needs to be established, a step involving communicating the vision to stakeholders. (4) The change should now be implemented and spread throughout the organization through the involvement of stakeholders. (5) The change should then be institutionalized, that is, integrated with formal structures and systems. (6) Finally, the change should be monitored and adjusted as needed, a unique feature of Beer's model relative to others.

Appreciative Inquiry (AI)

AI, an approach developed by Cooperrider and Srivastva (1987), distinguishes among the stages of discovery, dream, design, and destiny. Unlike other change models, AI starts from a positive view of organizational features that employees feel are successful. (1) The discovery stage comprises thinking about what goes well in the current organization and what factors contribute to this success. (2) The dream stage encourages employees to think about their "ideal," new features that would make the organization even better. (3) The destiny stage next involves creating change plans to enable these "dreams," and execution is begun. AI is less specific on how dreams should be implemented, focusing more on developing a common conception of what should be changed and involving stakeholders to become part of and provide support for the change. We note that AI gives considerably more attention to change recipient participation than other models and framing the change as an opportunity or positive event for improvement.

Judson's Five Steps

Arnold S. Judson (1991), a strategic management consultant, distinguishes five steps in the change process: (1) analyzing and planning the change, (2) communicating about it, (3) gaining acceptance for the required changes particularly in behavior, (4) making the initial transition from the status quo to the new situation, and (5) consolidating the new conditions and continuing to follow-up to institutionalize the change. Judson, like Kanter et al. (1992) in the following paragraph, explicitly argues that "no single approach can possibly account the enormous variability of all the factors present in each unique situation and organization" (Judson, 1991: 166), thus the need to adjust depending on specifics of the change and organization.

Kanter, Stein, and Jick's Ten Commandments

Rosabeth Moss Kanter, Barry Stein, and Todd Jick (1992), Harvard colleagues and change consultants, prescribe ten steps, starting with (1) analysis of the organization and the need for change, followed by (2) the creation of a shared vision and common direction in which emphasis is put on (3) the separation from the past and (4) creating a sense of that important change is needed. (5) A strong leader role should support the change to increase its legitimacy, (6) where political sponsorship is sought to create a solid base for the change then sets the stage for (7) the development of an implementation plan. (8) Enabling structures should be put into place to help implement the change such as pilot tests, training, and reward programs. (9) Change communication should be open and honest and involve all stakeholders in the change process. (10) Finally, the change needs to be reinforced and institutionalized to incorporate new behaviors in day-to-day operations. Kanter and her colleagues (1992: 388) contend that these ten steps should be challenged in their applicability during change implementation to allow for nuances and contextual factors because "implementing change is an ongoing process of discovery".

Kotter's Eight-Step Model

John Kotter (1996), a leadership professor at Harvard popularized an eight-step model which starts the change process with (1) establishing a sense of urgency in which employees are alerted to the fact that change is essential. (2) A guiding coalition is formed which in turn (3) develops the change vision. (4) This vision is communicated to employees and (5) the coalition (and employees) is involved in the change process by developing change plans. (6) The next step promotes for short-term wins to reinforce the change implementation. (7) Then, he defines the consolidation stage which strengthens and continues the change by making additional changes that were not implemented yet but need to be taken care for as otherwise processes in the organization would not be sufficiently aligned with the initial change vision. (8) The final stage institutionalizes the change by integrating it with the organization's structures and systems.

Hiatt's ADKAR Model

Jeff Hiatt (2006), a management consultant, developed the ADKAR change model, the acronym standing for awareness, desire, knowledge and ability, and reinforcement. (1) "Awareness" involves promoting employee beliefs that change is needed. It involves creating a change vision and communicating it. (2) The "desire" stage entails the implementation of the change vision and focuses on empowering employees to be actively involved in the change. (3) Employee knowledge and skills are developed to support their participation in the change. (4) Finally, in the reinforcement stage, the changes are strengthened and consolidated into the organizations' processes and structures. ADKAR focuses considerable attention on the processes that help employees to serve as ambassadors of the change. It does so, for example, by taking into account their individual needs and the consequences the change might have for specific groups of employees.

INTEGRATING EXISTING PRESCRIPTIONS WITH THE SCIENTIFIC EVIDENCE

Taken together, these seven prescriptive models show considerable overlap, particularly in the processes or practices they advocate. As the models share a temporal flow, our integration of them is organized sequentially from the start of the change to its full implementation and institutionalization. Note that such an organizing strategy represents what is referred to in mathematics as a fuzzy set (Zadeh, 1965) where elements representing a certain step in one model may be missing in some or overlap a different set of steps in others. (N.B. fuzzy sets help delineate hard-to-define categories such as "turn slightly right," "fairly tall," or "quite beautiful"). In categorizing elements, it is not always crystal clear whether an element should belong to a category. Nonetheless, our synthesis incorporates each model's key success factors. Importantly, because most of these change models have been documented in books rather than in journal articles, the level of precision that might result from peer review is often lacking. Thus, to specify each model's essential features, we relied on the procedural or contextual information authors provided in their original text along with their other publications at times to provide important details. We identified 10 steps or success factors prescribed in the seven prescriptive models reviewed previously (Table 1 provides an overview).

In our discussion of each success factor, we reflect on the evidence from scientific research relevant to that factor. To conduct our review of empirical research on change management, we focus on peer-reviewed journal articles, systematic reviews, and books based on this literature. Scientific research tests specific questions through empirical observation or experimentation incorporating either quantitative or qualitative methods. Using the Web of Science and ABI Inform, we searched the peer-reviewed literature from 1990 using keywords including "Organizational Change," "Planned Change," and "Change Management" to identify studies at the individual, group, and organization levels. The Web of Science revealed 1403 results and ABI Inform showed 820 search results from which we identified 38 and 57 articles, respectively (13 of these were in both sources). We selected only empirical studies and reviews and read specifically for empirical results pertaining to planned change. We compared empirical studies with those included in a set of recent reviews to highlight topics that might have been overlooked (Oreg, Vakola, & Armenakis, 2011). We also sought out both narrative and systematic reviews to evaluate previous conclusions regarding change management (ten Have, ten Have, Huijsmans, & Otto, 2016; Wensing, Wollersheim, & Grol, 2006). The reviews we identified, described in the following paragraph, differ in scope, purpose, and focus but all address studies involving planned organizational change and how employees and other organizational stakeholders respond. Table 2 gives

TABLE 1
Summary of Prescriptive Change Models

Summary of Change Steps	Lewin (1948)	Beer (1980, 2009)	Cooperrider and Srivastva (1987) AI	Judson (1991)	Kanter et al. (1992)	Kotter (1996, 2012)	Hiatt (2006) ADKAR
Assess the opportunity or problem motivating the change	Unfreeze	Mobilize commitment to change through joint diagnosis of business problem	Discovery	Analyzing the organization and planning the change	Analyze the organization and its need for change; Create a sense of urgency	Establish a sense of urgency	Awareness
Select and support a guiding change coalition			—	—	Line up political sponsorship	Form a powerful guiding coalition	
Formulate a clear compelling vision	Transition	Develop a shared vision of how to organize and manage for competitiveness	Dream	—	Create a shared vision and a common direction; Separate from the past	Create a vision	
Communicate the vision		Foster consensus for the new vision, competence to enact it, and cohesion to move it along	—	Communicating about the change	Support a strong leader role	Communicate the vision	
Mobilize energy for change		Spread revitalization to all departments without pushing it from the top	Design	Gaining acceptance of the required changes in behavior; making the initial transition from the status quo to the new situation	Craft an implementation plan; communicate, involve people, and be honest	—	Desire
Empower others to act		—	Destiny	—		Empower others to act on the vision	
Develop and promote change-related knowledge and ability		—	—	—	—		Knowledge Ability
Identify short-term wins and use as reinforcement of change progress			—	—	Develop enabling structures	Plan for and create short-term wins	Reinforcement
Monitor and strengthen the change process	Refreeze	Monitor and adjust strategies in response to problems in the revitalization process	—	Consolidating new conditions and continuing to promote change to institutionalize it		Consolidate improvements and produce more change	—
Institutionalize change in company culture, practices, and management succession		Institutionalize revitalization through formal policies, systems, and structures	—		Reinforce and institutionalize change	Institutionalize new approaches	—

TABLE 2
Overview of Journals in Which the Literature Review Articles Were Published

Journal	Number of Articles
Academic Medicine	1
Academy of Management Journal	11
Academy of Management Review	1
Administrative Science Quarterly	5
British Journal of Management	4
Employee Relations	1
European Journal of Work and Organizational Psychology	2
Group & Organization Management	1
Group & Organization Studies	1
Human Relations	5
Human Resource Management	3
Implementation Science	2
International Journal of Human Resource Management	1
International Journal of Quality and Service Sciences	2
Journal of Applied Behavioral Science	9
Journal of Applied Psychology	12
Journal of Business and Psychology	4
Journal of Business Ethics	2
Journal of Business Research	2
Journal of Change Management	10
Journal of Healthcare Management	1
Journal of Management	4
Journal of Management Development	1
Journal of Management Inquiry	1
Journal of Management Studies	3
Journal of Occupational and Organizational Psychology	4
Journal of Organizational Behavior	9
Journal of Organizational Change Management	2
Leadership Quarterly	2
Management Science	2
Medical Care Research and Review	1
Organization Development Journal	1
Personnel Psychology	2
Personnel Review	1
Psychology and Health	1
Public Administration Quarterly	1
Research in Organizational Behavior	1
Research in Organizational Change and Development	1
Social Science and Medicine	1
Strategic Change	1
The Milbank Quarterly	1
Vocations and Learning	1

an overview of the journals in which reviewed articles were published. In addition to using the literature specific to change management, we also found it relevant to apply more general research in organizational behavior in evaluating support for specific steps (e.g., goal setting, leadership, and problem-solving). We now present 10 steps identified across the prescriptive models. For each step, we describe the disputes or differences among the models and the scientific evidence pertaining to them.

Assess the Opportunity or Problem Motivating the Change

Several models advise an initial diagnosis that is gathering information to understand the specific problem(s) or change opportunity (Beer, 1980; Judson, 1991; Kanter et al., 1992). Two models (Beer, 1980; Kanter et al., 1992) emphasize that diagnosis is essential: collecting information from all stakeholders is a necessary first step, emphasizing the importance of involving employees in the process. Beer (1980) further advocates that the diagnosis should be shared preferably in a group setting. Kanter et al. (1992) also note that although diagnosis is a good start, copying practices of other companies that have successfully transformed is not.

Disputes. Practice models disagree on how planned change should begin. Several models are silent on the need for diagnosis or assume that what top management believes is the problem and provides sufficient basis for action (Hiatt, 2006; Judson, 1991; Kotter, 2012). Instead, their initial focus is on creating awareness of the need for change, the reasons for it, and the risks that come with its implementation and failing to do so appropriately. Judson (1991) further recommends the use of "balance sheets" in which managers place themselves in the position of employees and balance losses and gains (as well as the importance for each) to predict implications for employees and possible resistance. Lewin's (1948) unfreezing process emphasizes the need to question existing views regarding the organization but does not indicate how this questioning should be undertaken.

Several models place special emphasis on early creation of a sense of urgency. Lewin (1948) stresses the need to generate a state of anxiety that employees can turn into a motivation to change. Kotter (2012) advocates creating a feeling of urgency around a strategic and emotionally exciting opportunity—without specifying how to identify that opportunity. Along similar lines, Kotter (1996) argues that urgency should imply "boldness" by setting "excessive" goals which even if unreachable can help to counter employee feelings of complacency, which might hinder change.

Other practitioners disagree that urgency is always appropriate. Hiatt (2006) warns against overselling

change by putting too much stress on the urgency of every change—reducing credibility. Similarly, Kanter et al. (1992: 383) caution that messages of urgency might appear to "cry wolf" and fail to induce a felt need for change.

A related dispute is whether the diagnostic process should focus on weaknesses or strengths. AI begins with describing what already might be done well, rather than focusing on a problem or opportunity (Cooperrider & Srivastava, 1987). Management proposes a theme around which changes might be structured (e.g., teamwork and customer service), choosing it because of its energizing qualities (Cooperrider & Srivastva, 1987). Kanter et al. (1992) concur that companies should first look into their strengths to make the most of what is already there. Beer (1980) advises that organizations focus on their strengths but at the same time also detect weaknesses. Beer et al. (1990) treat problem recognition as a catalyst for solution seeking, placing less emphasis on creating a sense of urgent action and more on the need to find ways to move the organization forward. Beer (1980) advocates both managerial and employee involvement to identify ways the organization can improve and advices surveying employees to obtain insight.

Scientific evidence. The importance of a deliberate and well-conducted diagnosis to planned change is underscored by research on decision-making (Nutt, 1999) and problem-solving (Astor, Morales, Kiefer, & Repenning, 2016) and change management itself (Armenakis & Harris, 2009). Assessing the opportunity or problem motivating the change is important from the rational perspective of good decision-making (Rousseau, 2018), particularly in understanding the underlying need for the change rather than opting to implement a solution to a poorly identified problem. Not surprisingly, change recipients who view the change as implemented in a rational, planful, and deliberate fashion are found to have more favorable reactions than those who see implementation as less planful (Rafferty & Griffin, 2006). Diagnosis has downstream effects on the appropriateness with which the change is viewed by both recipients and change agents themselves (Armenakis & Harris, 2009). In particular, it is critical that what change recipients understand because meaningful reasons are associated with a more favorable attitude to the change (Lau & Woodman, 1995; Rousseau & Tijoriwala, 1999).

The focus on creating an initial sense of urgency, particularly in lieu of careful diagnosis, is not supported by research. Urgency can lead to fear,

and accompanying rigidity and avoidance (Staw, Sandelands, & Dutton, 1981), that can undermine employee responses to change. At the same time, to the extent that urgency is achieved by setting extreme goals (Kotter, 1996), we note that extremely difficult or impossible goals tend to be rejected (Locke & Latham, 1990) or encourage employees to cut corners to reach them (Schweitzer, Ordóñez, & Douma, 2004). Relatedly, employee stress from organizational change interferes with their capacity to transition to new arrangements and states (Ashford, 1988).

Select and Support a Guiding Change Coalition

A key feature prescriptive models share is the role a guiding coalition of organization members can play in overseeing the change process. This coalition is advised to maintain supportive relationships and ongoing communication with top management (Beer, 1980; Kanter, 1999; Kotter, 2012). Kanter (1999) further suggests that each coalition member has an external managerial sponsor to enhance top management's buy-in and guarantee sufficient resources for the change to succeed. In addition to obtaining critical change support from top management, the other consistent task of the guiding coalition is to communicate the vision (step #4 in the following paragraphs). In doing so, the guiding coalition can reinforce the importance of the planned change (Judson, 1991; Kanter et al., 1992; Kotter, 2012).

Disputes. The tasks and composition of the guiding coalition differ across practitioner models. Beer et al. (1990) advocate that this coalition, which can include the management team and a variety of other stakeholders, conduct problem diagnosis and alternative solution identification. To Kotter (1996, 2012), the coalition's task is to further a sense of urgency, by helping employees and leaders throughout the organization understand the reasons for change. The coalition also can help advance a shared understanding for the problem or opportunity the organization is facing (Hiatt, 2006; Kotter, 2005) by building ties to supporters of the change throughout the organization and bringing into the coalition change-related information from the organization's diverse array of departments and teams. Both Kotter (1996) and Judson (1991) advise that the coalition should determine strategic actions to promote the change process. Judson also allows for an alternative where all employees in small groups, not just the coalition, can work to design the change. Kotter (1996) argues that to function effectively, the

coalition needs to develop trust on the part of change recipients and should use adequate means of communication. The coalition also needs a commonly shared goal which incorporates a striving for excellence (Kotter, 1996).

Diverse advice is offered regarding the connection between the coalition and top management. Kotter (1996) notes that the guiding coalition should entail from 5 to 50 people who top management trusts, some of whom are considered "outstanding leaders" (Kotter, 2005). In any case, the most important line managers should be included (Kotter, 1996, 2005), although whether this includes the CEO or other top executives is unclear. Hiatt (2006) advises that top management be included in the dominant coalition to signal their continued support. By contrast, Judson (1991) argues that the originator of the change should only have an advisory role. If top management or the CEO introduced the change, Judson suggests that they only give advice and not be involved directly in change-related decisions beyond developing the change's rationale, objectives, and scope.

Models also differ in their advice regarding how to select coalition members, aside from top management's trust in them. Kanter et al. (1992) advocate including stakeholders who will be impacted by the consequences of the change along with stakeholders "powerholders," that is, those who have the necessary supplies to make the change work such as information (expertise or data), resources (money or materials), or support (legitimacy and political influence). Beer (1980) agrees and describes how power could be obtained by status, expertise, trust, credibility (as in competence), or capacity to represent dissatisfied parties in the organization (here, he suggests including those members able to meet the needs of the dissatisfied). Kotter (1996) advocates selections based both on trust by others as well as relevant knowledge and expertise, and further suggests that individuals be allowed to volunteer. AI also focuses on the participants' competence and knowledge related to the specific change theme while emphasizing the importance of incorporating multiple perspectives. It also advises including those stakeholders affected by later stage recommendations (Cooperrider & Srivastva, 1987). Last, Kotter (1996) notes that two types of people should not be part of the coalition: those with a big ego who would take over the conversation and those who would create mistrust by engaging in pessimism and blaming.

Scientific evidence. The evidence is limited in support of the role of the guiding coalition in successful change, with only qualitative case studies reporting on it (Appelbaum et al., 2012; Loeser, O'Sullivan, & Irby, 2007; McCracken & McIvor, 2013). As ten Have et al. (2016) point out, identifying evidence related to the guiding coalition and its role in change can be accomplished by breaking the concept of a coalition its constituent parts, including the basis of coalition member trustworthiness and credibility, their position power in organization, relevant expertise, and leadership skills. Trustworthiness from a management perspective is the dominant issue in the practice literature on coalitions; however, their trustworthiness from an employee perspective has received little attention. However, credibility, an aspect of trustworthiness, is related to individuals with both trusted ties (Pornpitakpan, 2004) to others in the organization and the power to execute their roles (Nesler, Aguinis, Quigley, & Tedeschi, 1993).

There is little scientific study of the tasks performed by the guiding coalition and their role in change success. However, research on social movements (Kellogg, 2012) indicates that reformers' (cf. coalition members) frames and identities should match the beliefs of those in the organization. Furthermore, research on communication during change suggests that one task of such a coalition is to convey bad news to employees in a fashion change recipients can accept. Building a coalition of powerful and influential employees or other leaders can help signal consensus regarding a change message (Bies, 2013; Kellogg, 2012). Coalitions can also be important in aiding effective diagnosis because of the diversity of inputs members offer. Dutton and Ashford (1993) observe that membership in the coalition comprises an important part of the message sent to change recipients (such as the choice of the sender of the message, message framing, and the breadth of involvement). We note, however, there is virtually no systematic research on change-related activities by a "guiding coalition."

Formulate a Clear Compelling Vision of the Change

Models focus on the nature and features of a compelling and motivating vision, separating the composition of the vision from how it is then communicated (step #4). Vision is a compelling expression of the change's end goal or state and should signal a separation from the past (Kanter et al., 1992). Kotter (2012) argues that vision translates opportunity into action. Vision would express where the change process is intended to lead (Kanter et al.,

1992) and the goals being pursued (Kotter, 1996), but it should not be so specific that the vision's actions become ends in itself (Kanter et al., 1992). One feature of an effective vision is its appeal to a broad range of stakeholders (Kotter, 1996). Vision is seen as needing to be feasible in the eyes of change recipients, easy for leaders and members to communicate, emotionally appealing, and flexible enough to allow for individual initiatives and alternative actions (Kotter, 1996). Moreover, Beer et al. (1990) advocate a consistently expressed statement of the vision, such that it is clear to employees what their roles and responsibilities in the change might be; at the same time, advising that the vision avoid specifying the structures and systems to be changed to avoid inducing resistance. Vision in AI (Cooperrider & Srivastva, 1987) is developed by participants in the "dream" stage, developing a future image of the organization and its possibilities. Kanter et al. (1992) would refer to a similar "organizational dream" in which change is defined in terms of rethinking what is possible for the organization. Beer (1980: 84) argues that organizations should define the "state of the organization they desire in the future", expressing not only numerical targets but also relevant behaviors and attitudes.

Disputes. Although models agree on the importance and general nature of vision, they differ regarding who should participate in vision formulation. The guiding coalition should be well placed to elaborate and expand on the central idea of the change or even a rudimentary vision statement (Kotter, 2005). Beer et al. (1990) also advise involving a large group of employees to expand on the vision to enhance change commitment. We note that Judson (1991) and Cooperrider and Srivastva (1987) already involve diverse stakeholders in vision expression at earlier stages in defining the problem to be addressed.

Scientific evidence. Research underscores the importance of formulating attractive goals in pursuing change, which can take the form of a compelling vision (Baum, Locke, & Kirkpatrick, 1998; Unsworth, Dmitrieva, & Adriasola, 2013). Like a goal, vision itself is expected to be effective if individuals accept and are committed to realizing it (Kirkpatrick, 2009). Research on goal setting informs how employees may be motivated to implement changes by setting clear objectives and regular feedback (Locke & Latham, 2006). Identifying appropriate content and emphasis for a compelling vision may be informed by a meta-analysis on group and individual-level goals (Kleingeld, van Mierlo, & Arends, 2011) where group goals that focus on shared interests have more positive effects on collective outcomes than individual-focused egocentric goals. To the extent that a key assumption of change models is that the vision will address stakeholder needs, scholars note it is less clear what this might mean if those needs are closely tied to the status quo (Proudfoot & Kay, 2014). A major issue in formulating a compelling vision can be the extent to which it entails losses (departures from the status quo that employees react to negatively; Rousseau, 1995, 1996). Legitimacy of reasons for change is particularly important when losses occur (Rousseau, 1996).

We note that the characteristics of a vision that members are likely to accept have received little explicit scholarly attention. Existing research suggests that individuals will differ in their endorsement of a vision, depending on its compatibility with existing beliefs and their view of the favorability of the change it signals (Oreg et al., 2011). For example, Griffin, Parker, and Mason (2010) observe that a leader's vision promoting employee initiative is more likely to be effective among those employees who are open to change and see themselves as able to move the vision forward. Thus, although research seems to concur as to the importance of vision to change management success, empirical study suggests unresolved challenges in creating visions that yield shared understandings among change recipients. The vision may interact with the ways in which it is communicated in shaping how change recipients respond, the matter to which we next turn.

Communicate the Vision

How the vision is communicated is essential for generating awareness (Hiatt, 2006) and support for the change (Kotter, 2005). The effect of vision may thus depend on the other messages embedded in its communication, particularly the extent to which these other messages relate to change recipients' interests and concerns. The support generated by a vision is aided not only by its accessibility and memorability but also by the extent to which interests of change recipients are addressed in its communication, including fairness and future opportunities. Hiatt (2006) argues that awareness is more easily obtained when the reason for change is external and readily observable (e.g., new government regulations). Kotter (1996) warns against message inconsistencies in the process of communicating vision (e.g., if employees are let go while management takes luxury trips in private jets). He emphasizes that management should be open and transparent in their

communication while rooting out inconsistencies that encourage resistance. Furthermore, Judson (1991: 175) argues that the initial change plans should be communicated as proposals and not as fixed plans for "those involved to believe that their comments and suggestions will be considered seriously". Only after this preparatory step, Judson argues, should the specific changes be communicated, resembling the vision stage in other prescriptive models.

Change models agree that vision should be broadcasted using multiple channels including newsletters, articles, video, social media, or workshops. An important form of vision communication is executives who serve as role models (Hiatt, 2006; Kotter, 2005). By doing so, executives signal not only their endorsement of the change but also put words into deeds and express the importance of changes ahead (Kotter, 2005). Along these same lines, Beer et al. (1990) and also Kanter et al. (1992) emphasize the role of the general manager to embody the change and offer support to those who help implement it. Role modeling by formal leaders and visible opinion leaders helps communicate vision, in a transparent fashion so its meaning is clear, disseminating the form the change might take and actions to come (Hiatt, 2006).

Open and honest communication is an important aspect of vision communication. Judson (1991) and Hiatt (2006) argue that managers should encourage employees to ask questions and be open and honest in their answers. Judson, however, mentions that employees need not know the full details of the change but need an overall understanding of the change. Without it, employees would experience fear and uncertainty. But, he does emphasize that communication should be organized before any action is carried out and has the purpose to create a complete understanding about the reasons, objectives, benefits, and implications, as well as the timing of the change. Kanter et al. (1992) also emphasize complete openness even though they also state that not every change situation may need full disclosure. Hiatt (2006) and Kotter (1996) also stress the need for "repeating" change-supporting messages. Using the vision as a reference point in manager conversations with employees ensures that the message is spread and reinforced (Kotter, 1996). Judson (1991) also emphasized the skill to "listen" to evaluate the effectiveness of managers' communication. As earlier, the vision should be communicated through the guiding coalition (Judson, 1991; Kanter et al., 1992; Kotter, 2012). When the guiding coalition exists of members from different departments in the organization,

the vision communication is expected to better reach all the corners of the organization.

Disputes. Hiatt (2006) acknowledges that communicating the vision may require adapting approaches to different audiences affecting messaging, timing, and the communication channels used. Here, it is less clear what the order of communication should be as both top management and the coalition are involved in communicating the change. It is also not clear who should communicate what to whom as this might effectively be different for top management and the coalition. Judson (1991) and Kanter et al. (1992) agree that complete openness may not always be necessary, whereas Hiatt (2006) does suggest full transparency. Judson also seems the only one focusing on the preparation of managers in delivering the message and how to be open to questions employees may have. Interestingly, AI (Cooperrider & Srivastva, 1987)—as multiple groups would engage in the dream stage—remains silent in how the vision should be communicated to these different groups or how one overarching vision would have to be created.

Scientific evidence. The prescription to implement a multichannel strategy in communicating a compelling vision is underscored by findings regarding the importance of factors that motivate change recipients to perceive the change as favorable (Oreg et al., 2011). For example, if employees believe they understand the reason for a change and consider that reason to be meaningful, they tend to have a more favorable attitude to the change (Lau & Woodman, 1995; Rousseau & Tijoriwala, 1999). The scientific literature supports the importance of trust in management in terms of accepting the reasons offered for change and the formation of a favorable attitude toward change (Rousseau & Tijoriwala, 1999). At the same time, perceptions of meaning appear to have a greater impact on change recipients when there is a shared sense of meaning and understanding supported by the work groups and social networks change recipients are part of (Hülsheger, Anderson, & Sargado, 2009; Rousseau & Tijoriwala, 1998).

A major issue is the lack of clarity regarding what harms change recipients may experience should be expressed in communicating the vision. Explanations as in social accounts offered to explain bad news and consequential changes (Bies & Moag, 1986) have been shown to discourage negative perceptions and reactions in terms of fairness perceptions, cooperation, retaliation, and withdrawal. Explanations enhance positive recipient reactions in layoffs

(Wanberg, Gavin, & Bunce, 1999), pay cuts (Greenberg, 1990), company relocations (Daly & Geyer, 1994), and organizational changes (Cobb, Folger, & Wooten, 1995). For example, employees were 43 percent less likely to retaliate and resist change if an explanation was given (Shaw, Wild, & Colquitt, 2003). Yet, explanations need to be adequate to be accepted. For example, explanations that are clear and reasonable are defined as adequate, whereas inadequate explanations would result in feelings of unfairness more so than when no explanation at all would be given (Shapiro, Buttner, & Barry, 1994). Excuses signaling that there was no other option possible to engage in the change or that there were no other options feasible even have been shown to be more effective than mere justifications. Justifications are particularly powerful in low outcome favorability situations such as situations which have high instrumentality (e.g., hiring and promotions). They are also more effective if employees value being included in the organization and being part of the whole as well as when the topic is strongly morally laden (e.g., change in diversity policies). Such explanations are consistent with research on influence tactics which showed that managers' use of rational persuasion, inspirational appeals, and consultation are the tactics most widely used and tend to be the most successful in gaining employees' acceptance of a message (Bennebroek Gravenhorst & Boonstra, 1998).

Mobilize Energy for Change

Mobilizing energy for change means planning the actual change implementation across multiple levels of the organization. Several models also advise information gathering at this phase with the goal of helping to plan the change interventions, sequence specific change activities, and roll out important change supports (Hiatt, 2006; Kanter et al., 1992). Hiatt (2006) also advises a change and readiness assessment at this point, targeting the number and particular groups of employees who will be impacted by the change.

Models take different approaches to the timing of assessment and planning. Assessing change readiness, according to the ADKAR model, involves identifying the impact and success of past changes, the frequency of change (e.g., all-at-once and sequential), available resources, and the organizational structure needed to support it (Hiatt, 2006). This process appears to come relatively late (in the ADKAR's Desire step right after creating Awareness) compared with Kanter et al. (1992) and Judson

(1991). In keeping with the notion of integrating assessment into a comprehensive change vision and guide to change planning, both engage in change planning after the change vision is developed. Kanter et al. (1992) refer to this as the "roadmap" in which all the specifics are detailed of the change.

Beer (1980) also suggests a readiness assessment early on in which the importance of the problem, capability, the values of the key managers, the probability that a "critical mass" is able to be achieved, the degree of political support, and the competence of the change agent (manager or consultant) is taken into account.

AI takes a somewhat different but related approach. In the design stage, AI (Cooperrider & Srivastva, 1987) determines how the future images and organization's potential translates into specific processes and change of systems. Here, employees in multifunctional and multistakeholder groups would also determine what will be changed and how. This could involve changes in different systems and processes such as staffing, leadership, or evaluation procedures. AI proposes that this would go together with setting ambitious goals so to hold on to the ideal future image employees developed in the dream stage.

Disputes. Perhaps, the biggest difference across models is the speed with which mobilization is advised. Judson (1991) argues that time is an important factor as initially in the preparation, the change should be slow to be less threatening and allow employees to get used to and process the change. He argues that employees will tend to rationalize the thought that change is needed. Hence, sufficient time should be taken so that only once acceptance exists should the change be implemented. Subsequently, Judson argues that the change needs to be implemented faster as otherwise the process would be too prolonged; in deciding on timing, other considerations should be taken into account that could increase employee commitment such as the choice for other change events that could either facilitate or obstruct the focal change. Beer (1980) takes a related but somewhat different perspective and argues that the pace of the change is dependent on the readiness of management (possibly what Judson refers to as the preparation) and the resources that are available. If resources are lacking, going too fast is a risk for failure according to Beer as insufficient investments can be made to properly develop change events [see also Hiatt (2006)]. By contrast, Kotter (1996) advocates urgency advising the creation of crises and high targets that cannot be reached by business as usual.

Scientific evidence. The research literature is relatively silent on the role of time in the change process [see Kim, Hornung, & Rousseau (2011) for an exception]. However, it has a lot more to say about the nature of change interventions and the kinds of activities that are likely to lead to effective change outcomes. Consistent with Beer, the empirical literature recognizes that management itself may not be ready for change and suggests that investments may need to be made in advance of more complicated changes to better support change. Management effectiveness in managing change is positively related to implementation success (Lok, Hung, Walsh, Wang, & Crawford, 2005) and negatively related to change recipient stress (Amiot, Terry, Jimmieson, & Callan, 2006) and skepticism regarding the change (Stanley, Meyer, & Topolnytsky, 2005). Thus, an important part of actual change planning may be readying managers for the change, their skills in implementing change, and the extent to which they are trusted by change recipients. An example in which time and the role of management is examined is the study of Babalola et al. (2016). The authors reasoned that if change is frequent, there is no clear beginning or end, which creates uncertainty for employees. Their study indicates that managers still may need to offer reassurance to employees undergoing frequent change. Carter, Armenakis, Feild, and Mossholder (2013) also showed that the link between a high-quality relation with one's leader and organizational citizenship behavior is stronger if change is frequent. This is consistent with Hiatt's (2006) observation that change frequency should be taken into account in change implementation. Change history matters to how the current change is perceived (Bordia, Restubog, Jimmieson, & Irmer, 2011; Rafferty & Restubog, 2017). Past change successes are related to a positive attitude toward change (van der Smissen, Schalk, & Freese, 2013) and increased capacity for change (Heckmann, Steger, & Dowling, 2016).

Studies also inform the kinds of activities likely to support effective change. Research on the theory of planned behavior (TPB) (Ajzen, 1991) identifies three categories of intervention essential to successful planned changes in human behavior (Ajzen, 1991): (1) ability, the capability of individuals, groups, and organizations to engage in new behavior and responses; (2) motivation, the underlying drive or willingness to behave and respond in new ways; and (3) opportunity to practice, the support available to actually demonstrate new behavior and responses. This framework, alternatively referred to as the AMO mode, has been widely found to help explain changes in behavior, for example, in systematic reviews as diverse as the effects of human resource practices (Bos-Nehles, Renkema, & Janssen, 2017; Marin-Garcia & Tomas, 2016) and health-care interventions (Bednall et al., 2013; Rich et al., 2015). It suggests that change interventions target skill building related to the change, incentives, and rewards that motivate new behavior and supports for engaging in new behaviors. We note that there is no systematic attention in the prescriptive models to the sets of change interventions likely to promote desired outcomes.

Empower Others to Act

Employees should be empowered to act in ways consistent with the vision, and in doing so develop new ideas and ways of working that come out of their own understanding of the change (Judson, 1991; Kanter et al., 1992; Kotter, 2005). Empowerment can take the form of coaching and supporting employees to solve problems (Hiatt, 2006) and removing obstacles to the change (Beer et al., 1990; Kotter, 2005) or allowing them to participate (Judson, 1991). AI (Cooperrider & Srivastva, 1987) proposes that in the design stage, employees formulate specific change plans so that they take ownership and can implement changes in processes and systems. They take up responsibilities and develop specific actions for each of the project. In this approach, AI argues that more people will be drawn into the process and take responsibility in project teams. This is similar to the findings of Judson (1991) who also argues that employees can be involved in the development of the change. Beer et al. (1990) suggest that employees in their respective teams should be responsible for implementing the change, coming up with their own solutions as problems arise. Kotter (2012), relatedly, describes how employees can create self-managing change teams in which they autonomously, and with the support from management, aim to implement change. Employees organize their efforts and bring in expertise from other departments if needed. Empowering and encouraging employees to proactively implement change and solve problems based on their day-to-day experience foster responsibility (Beer et al., 1990).

From the perspective of change recipients, empowerment entails creating opportunities for them to act in ways they find positive to meet their needs in the context of change. Hiatt (2006) argues for managers to have frequent conversations with their

employees to hear out about their concerns and objections. Rather than neglecting or being defensive regarding any objections raised, Hiatt (2006) stresses the importance of employees' voice for removing barriers, so that employees see opportunities to act in new and valued ways. Managers should use various influence tactics such as personal appeal ("I need your help in this") or the act of negotiation to gain support for the change. Hiatt (2006) focuses on individual needs that when fulfilled by the change also would enable desire for change. These needs would act as motivators for employees to help them keep focused on their work for the organization. To Judson (1991), influence tactics should be adapted based on the motive for resistance. If resistance is triggered by economic motives, for example, influence should target giving rewards.

Group and team-level activities also can be targeted at this stage, with local managers taking initiative to provide opportunity for change recipients to get involved in the change, including use of temporary groups or task forces. Kanter et al. (1992), recognizing that different individuals and groups may become involved in the change, add that an important element in building commitment is to specify who is responsible for specific actions to avoid confusion. If groups or task forces are involved, it should be clear what their role is and how they link to the rest of the organization, how their performance will be measured, and when they will disband.

Management needs to encourage employees to propose initiatives and reward them for their efforts, whereas avoiding reacting defensively to their concerns and ideas (Beer et al., 1990; Judson, 1991; Kanter et al., 1992; Kotter, 2005). Hiatt (2006) and Judson (1991) also argue for the importance of managers helping employees through the change process, being in frequent touch (e.g., by having regular face-to-face meetings) and collecting feedback from them. Here, Kotter (1996) argues that an important element is to get rid of structural barriers such as rules or job descriptions that might obstruct employees from acting in change-consistent ways. Another important structural barrier is management's conventional notions of its own role, which can be a barrier to empowerment if managers discourage employees from taking initiative or react defensively to employee proposals for new practices.

Disputes. Despite the heterogeneous nature of approaches advocated to empower employees, we identified no fundamental disputes across the models.

Scientific evidence. Mobilizing energy for change reflects the essential role of motivation at all three levels, individual, group, and organization, addressed in the empirical literature. Research literature largely supports the role of active behavior as a means of expressing employee agency, providing input, and in stimulating new learnings and experiences in the work environment. Employees' participation individually or in a group (Eby et al., 2000) has been argued to increase employees' readiness to accept change. The early work by Coch and French (1948) demonstrated that involving employees in the change process reduced resistance to change. Wagner (1994) underscored the centrality of information acquisition and sharing in the context of participation, allowing people to gain new information and feedback from the environment as they actively engage in autonomy-expressing behavior. Nurick (1982: 418) defined participation as the "perceived influence a given individual may exert within a particular decision domain." Participation also may enhance employee change-related abilities as it can increase the employee's sense of self-efficacy (Latham, Winters, & Locke, 1994). We note, however, that at the individual level, participation in change has inconsistent effects on commitment to change but appears more likely to promote positive attitudes when it occurs in the context of procedural justice (Oreg et al., 2011). Voice (as an element of procedural justice) especially is mentioned by Hiatt (2006) who emphasized the possibility for employees to voice their opinion during the change process. Voice indeed has been shown to be a valuable element in encouraging employee cooperation (Tyler & Blader, 2003). Dutton, Ashford, O'Neil, and Lawrence (2001) showed that managers use influence tactics to bring up issues by providing employees with data in a logical structure, as well as repeating the issue many times. The authors also report that managers present changes as incremental rather than as a full package in to unpack large change operations in smaller segments, which the authors argue is more likely to create acceptance. However, the effectiveness of these strategies is less clear. The literature seems to dispute Judson (who stated that if resistance is based on economic motives, then rewards should be given) on the fact that attaching issues to already agreed on and valuable goals is more likely to be successful for issue selling.

Empowering others to act gets at the importance of expanding change-related action beyond the leadership of the organization and may reflect the importance of bottom/up processes and proactivity underscored by the empirical literature. Research

highlights the value of managerial efforts to support bottom/up initiatives where an environment is created that encourages individuals to take initiative and proactively initiate local changes (e.g., taking charge, Morrison & Phelps, 1999, or job crafting, Wrzesniewski & Dutton, 2001). In a quasi-experimental field study, Demerouti, Xanthopoulou, Petrou, and Karagkounis (2017) showed that training employees to self-set job crafting goals predicted openness to change. In fact, in his work with change processes at Harwood, it was Kurt Lewin's conviction that the context needed to facilitate the change rather than the mere communication of change (Burnes, 2015), particularly in terms of creating opportunities for new behavior. Employee control permits more adaptive responses to the uncertainty organizational change generates (Bordia, Hobman, Jones, Gallois, & Callan, 2004). Energy may be mobilized by inviting individuals to address local problems they identify and to encourage such initiative in the context of groups and teams. In a systematic review and meta-analysis of 20 work engagement interventions, Knight, Patterson, and Dawson (2017) find that interventions focused at the group-level rather than at the individual were more effective, although effects were small.

Develop and Promote Change-Related Knowledge and Ability

Effective change typically involves learning new skills and knowledge. Developing knowledge and ability related to the change emphases the learning aspects of organizational change and can be related to both understanding the vision and how to practice new behaviors the change motivates. Of our seven prescriptive approaches, however, only Hiatt (2006) specifies a change step for learning and knowledge [Kotter (1996) touches on learning indirectly in his step to empower others to act]. Both Hiatt (2006) and Kotter (1996) argue that even employees who are motivated to change can lack sufficient knowledge or ability to do so. Learning is enabled by receiving sufficient support (Beer et al., 1990) and resources (Hiatt, 2006) to be able to implement change. In that context, Beer argues that a key managerial role may be to provide support so that employees can act autonomously and proactively.

In Hiatt's framework, using new skills and knowledge is facilitated by removing barriers to their application. Hiatt (2006) calls attention to potential "psychological blocks" employees may face when the new knowledge is not compatible with their roles. He cites the example of a fire fighter who had to obtain a medical technician certification, but when being called for his first severe road accident, he froze and was unable to act. Organizations, hence, should make sure employees are psychologically ready to develop and apply required new skills. At the same time, possessing new knowledge or skill is not the same as being proficient in performance of new behaviors. Knowledge can be further developed through training, workshops (e.g., with exercises), coaching, or user groups. Yet, managers need to have the specific expertise to be a good coach. An important element even though is that the environment should be psychologically safe to make mistakes and learn from them. Hence, managers should be helpful to employees and ask for feedback to assess how they are progressing in the development of their abilities. Moreover, employees should have sufficient time to develop new skills and knowledge, which would give HR an important role in this development (Hiatt, 2006).

Disputes. How that knowledge should be obtained is not clear across models. The prescriptive models pay little attention to how and when learning should occur.

Scientific evidence. Developing knowledge and ability related to the change emphases the importance of learning to successful change and is related to both understanding the vision and being motivated to change. A critical factor in the TPB (Ajzen, 1991) is having the requisite ability to engage in new behavior. In individual-level change, ability is a relatively early focus in planned change efforts, whereas in organizational change it often comes later in the process. Research on learning related to organizational change suggests that the uncertainties associated with change can hamper both learning and the motivation to accept change. Perceived uncertainty makes it more difficult to store, retrieve, and put to use new information (Schechter & Qadach, 2012), whereas learning leads to self-efficacy, which itself is related to change motivation (Kao, 2017). Effectively involving change, recipients in learning can include receiving their suggestions for learning, supporting individual learning opportunities, and surfacing problems arising in the course of learning (Valleala, Herranen, Collin, & Paloniemi, 2015). Finally, a set of studies by Edmondson et al. (Edmondson, 1999, 2002; Edmondson, Bohmer, & Pisano, 2001) highlight the importance of support for team learning as a key mechanism in promoting the uptake of change, including implementation of new technology and new practices. Support includes gaining member

commitment by enrolling them in training, leader modeling of new behavior, practice sessions, and early trials to build psychological safety regarding new behaviors.

Identify Short-Term Wins and Use as Reinforcement of Change Progress

The change models reviewed here support the importance of conveying a sense of progress, for example, by explicating successes the change has brought. For the success of the change to be apparent, clear goals and objectives need to be specified. Evidence of progress should be clearly communicated and visible to many, conveyed in a way that reinforces the change vision (Hiatt, 2006; Kotter, 1996, 2012). Kotter uses the term short-term wins, to refer to the setting of short-term goals whose accomplishment can create a sense of accomplishment and progress toward longer term change objectives. These short-term goals need to be meaningful to employees, else they might be disregarded. Such "short-term wins" should be achieved within one or two years after the start of the change (Kotter, 2005). These wins could be increased in productivity or customer satisfaction and new production facilities or offices which are celebrated. Kotter (1996) states that short-term wins not only positively reinforce the change coalition's efforts but also demonstrate that the vision can be practically implemented. At the same time, short-term wins help convince those members cynical about the change that it is viable.

Disputes. Only Kotter focuses on short-term outcomes, Hiatt speaks of progress indicators and others say little in this regard. The key issue we see is whether short-term outcomes are change-enhancing activities in themselves, as in the case of progress made in customer satisfaction as an indicator of improved service quality. By contrast, an emphasis on short-term financial outcomes may cause other less easily monetized activities such as learning or improved communication to be given short shrift.

Scientific evidence. Research findings underscore the importance of the kinds of indicators used as signs of progress. For example, short-term results that come at the sacrifice of long-term investments for future success can give a false reading of change progress and even undermine change-related activities. Two key issues from the scientific literature have to do with the kinds of indicators that change recipients will see as important and valuable and the kinds of metrics that are indicative of future progress. Metrics that indicate change over time in important outcomes employees value, from health and safety to patient or client satisfaction, may be more salient than metrics attractive to management, such as financial indicators. It can be important in change to focus on learning new skills and putting the change in place before actually measuring change outcomes; thus, relevant metrics may pertain to learning (Seijts & Latham, 2005) and implementation (Goodman, 2000). Thus, for example, metrics that reflect progress on important change mechanisms such as learning (mastery of change-related knowledge, skills, and abilities), information sharing (percentage of employees serving on committees with others outside their department), and extent of employee contributions to organizational improvement (# ideas/employee vs #ideas/year) may serve as lead indicators for outcomes that take a longer time to manifest (e.g., innovation, coordination effectiveness) (Malina & Selto, 2001; Reiman & Pietikäinen, 2012).

Monitor and Strengthen the Change Process over Time

Models widely agree on the need to sustain attention to managing the change. This entails continuing to invest resources (leader time and effort, staffing, and money) in the change process to remind people of the urgent character of the change and keep the pace moving (Kotter, 2012). Similarly, Hiatt (2006) argues for a continuous reinforcement of the change so that people are encouraged to sustain change-related behavior. Kotter (1996) advises top management to continue focusing on the change vision and its urgency, whereas middle management and employees keep working on specific projects that the change requires.

A second aspect of sustained attention is the monitoring and strengthening of the change process by making adjustments in change plans as needed (Beer et al., 1990). This can include the modification of initial change plans to increase the odds of realizing objectives (Judson, 1991). Making adjustments also pertains to consolidating gains to further the change effort (Kotter, 1996). This might entail adopting additional changes not identified in the initial change effort which are subsequently understood to be misaligned with the change vision. Here, new project teams could be implemented to restructure current structures, systems, and procedures to better reinforce the change.

The activities involved in monitoring and adjusting change progress should be shared among both

the guiding coalition and other important stakeholders. The monitoring can be informed by regular employee surveys to identify how employees are reacting to the changes. Planning teams can be formed based on the challenges that the monitoring results bring to light to tackle these effectively. This can entail revising the change focus over time to address apparent structural or systemic features not well aligned with the change (Kotter, 2005). These subsequent implementation activities can also entail revising change plans as new barriers are recognized or opportunities to reinforce positive factors emerge (Judson, 1991; Kanter et al., 1992). The coalition can also examine how change has been carried out across different sites to capture change lessons.

Disputes. Only Beer (1980) calls attention to the need for ongoing auditing or explicit monitoring of the change process over time, providing feedback as to progress and opportunity to identify needed corrections and course changes (Beer et al., 1990).

Scientific evidence. Research findings tend to support Beer's advice. Failure to provide sufficient and appropriate resources undermines change implementation (Buchanan, 2011; Wiedner, Barrett, & Oborn, 2017) and ongoing monitoring and strengthening of the change is critical to support the change process (Cummings & Worley, 2009). At times, the stress of change may require suspending internal demands to promote more effective reorientation after change interventions (Sastry, 1997), a change support that can only come when change leaders are aware of the capacities and challenges of the organization in the face of change. At the same time, well-timed adjustment to the changes implemented can improve their effectiveness by reducing stress and increasing change recipient sense of control (Dirks, Cummings, & Pierce, 1996). The absence of feedback makes improvements (via informed adjustments) difficult (Kluger & DeNisi, 1996; Neubert, 1998). At the same time, Nadler (1976) notes that feedback effects depend on the strategies used to respond to it (e.g., how managers use and react to feedback).

Institutionalize Change in Company Culture, Practices, and Management Succession

The final step is incorporating the change in day-to-day activities (Beer et al., 1990; Kanter et al., 1992; Kotter, 2005, 2012). Two aspects are key according to Kotter (2005). First, making it explicit to employees that performance has improved because of the change. Explaining the results of the change using multiple communication channels helps employees to see the added benefit and support the credibility and legitimacy of the changes now in place. Beer (1980), Judson (1991), and Kanter et al. (1992) also focus on the quantification (Kanter et al. refer to "routine data collection") of change results to make its outcomes visible and to see whether its intended objectives were met. These authors suggest that managers might interview employees or organize focus groups to gather this information. Second, top management (Kotter, 2005) but also middle management (Beer, 1980) succession should be consistent with the change vision and the behavior that derives from it. If future (top) management does not embrace the behaviors or focus that have been implemented, change efforts are in vein. This also stresses the importance of involving the board of directors in the change process to ensure the change vision for management succession is taken into account.

Disputes. Models largely agree as to the importance of institutionalizing the change by better aligning existing structures and routines with the change's new practices and processes.

Scientific evidence. There is widespread academic discussion of the value of institutionalization in thought pieces and summaries of case observations (Armenakis, Harris, & Felid, 1999; Goodman, Rousseau, & Church, 2004). Actual systematic empirical evidence of institutionalization processes is more limited and often focused less on change per se and more on effects of alignment of disparate systems on firm performance (Chan, 2002; Zheng, Yang, & McLean, 2010). Research does highlight the role of creating routines embedded in the larger organization (Edmondson, 2002; Rerup & Feldman, 2011) to both introduce and sustain change. The processes whereby loose ends of incompatible structures and rewards are aligned with the change have received less attention.

Implications

The ten steps change management experts prescribe reveal a degree of agreement regarding activities to enable organizational change interventions. At the same time, each specific framework includes other distinctive and often unique dimensions (see Table 1). Importantly, they tend, with the exception of AI and Beer, to assume a top/down planning process. This top/down focus appears consistent with the typical audience for the writings of these experts, senior executives in organizations. To some

extent, these experts do recognize the importance of bottom/up motivation and activity on the part of lower level employees in support of change—but are less specific on how to enable or activate it. All models are neutral with regard to the nature of the change (a relocation or a merger) and for the most part ignore the larger history of the organization and its management with respect to change [see Beer (1980) and Hiatt (2006) for exceptions].

Our examination of the scientific evidence relative to practitioner models suggests a fair amount of convergence, some more nuanced findings relative to prescriptive claims, and a few largely unstudied topics. Several prescriptions are well supported, including the importance of an initial diagnosis (and avoiding inducing a crisis or extreme sense of urgency). Moreover, the importance of change planning underscored by practitioner models is consistent with evidence that planning inspires confidence in change leaders and that planning (i.e., rational decision making) improves outcomes. However, the nature of change planning processes (Which activities? How sequenced?) has received only limited attention in the models reviewed here. The prescription to empower others is well supported by scientific research, which highlights both top/down and bottom/up approaches to doing so. The prescription to develop change-related knowledge, skills, and ability is supported by research highlighting the importance of learning in change. Advice to engage in ongoing monitoring and strengthening of the change process is also supported by research on the value of feedback and knowledge of results for improving performance. At the same time, the prescription to institutionalize the change by aligning structures and systems with the newly introduced practices and processes is understudied, although findings tend to be supportive.

More mixed is the research support for a focus on short-term results because the indicators that might create a sense of progress among change recipients appear to be more nuanced from the perspective of the scientific literature on metrics and outcomes measures. Although the importance of a compelling vision is the consensus view among practitioner models, there is little research on its attributes, such as the degree of challenge, domain of focus, and relative emphasis on employee vs organizational needs. On the other hand, scientific evidence supports the criticality of vision communication, a multifaceted process all models advise, particularly in terms of the other messages in which the vision is embedded and the degree of trust and fairness perceptions these messages generate.

One prescription receiving scant scholarly attention is the central role practitioner models assign to a guiding coalition. This is particularly the case with regard to the appropriate composition of a coalition overseeing change or the kinds of tasks to assign it. The absence of research on guiding coalitions is not evidence of their irrelevance, but at the same time, we cannot rule out the value of broader participation among employees and managers.

Having examined the link between change management prescriptions and the research literature, we now turn to the change management practices and processes identified in the scientific literature with the goal of gaining insights to enhance our understanding of planned organizational change.

INSIGHTS FROM THE SCIENTIFIC LITERATURE ON CHANGE MANAGEMENT

The typical outcomes focused on in the empirical literature on organizational change largely focus on (1) *employee commitment to change* (Oreg et al., 2011) and (2) *uptake and use of new organizational practices*, and relatedly the attainment of desired organizational effects (Wensing et al., 2006). We sought to make sense of the factors related to change acceptance, uptake, and organizational outcomes. Based on findings from the empirical literature we reviewed: (1) micro studies of individuals, particularly change recipients, (2) meso studies of interpersonal, group, and intergroup phenomena, and (3) macro studies of organizational-level phenomena.

Micro: Individual-Level Findings Regarding Change Recipients

Although wide variation and inconsistency in measures used to assess individual-level outcomes is noted, the review of quantitative studies conducted by Oreg et al. (2011) highlights the centrality of the outcome *employee commitment to change*. As was the case in early research on commitment in organizations (Mathieu & Zajac, 1990), empirical studies focus considerable attention on the individual differences that serve as antecedents to commitment to and acceptance of change (Oreg et al., 2011), a factor largely ignored in the prescriptive literature we reviewed. Individual differences as contributors to change commitment highlight two important dynamics, an individual's self-perceived ability or potential to engage successfully in change and his or

her personal preference for change experiences. Even though organizations may select members for certain traits, dispositional factors may be somewhat hard to change. However, micro studies report numerous instances where individual's self-perceived ability and personal preference to change are affected by organizational practices, the matter to which we next turn.

Predispositions toward change. Several individual traits have been found to predispose employees to respond to change with positive emotions and affective commitment to the change itself. Examples include dispositional employability (Fugate & Kinicki, 2008), the inclination toward being flexible and adaptive (Hornung & Rousseau, 2007), tolerance for uncertainty (Ashford, 1988), and a general predisposition referred to as positive change orientation or change self-efficacy (Fugate, Prussia, & Kinicki, 2012; Wanberg & Banas, 2000). Furthermore, employee optimism (Armstrong-Stassen, 1994; Scheck & Kinicki, 2000) and the extent individuals feel they can control the change (Nelson, Cooper, & Jackson, 1995) are shown to elevate employees' readiness to adopt change. Employees more open to change tend to show more adaptive performance and those who felt more efficacious showed a stronger proactive performance during the change (Griffin et al., 2010). Last, the effects of a predisposition toward self-efficacy can be more important to employee commitment to change when the organization is underlying numerous simultaneous and overlapping changes (Herold, Fedor, & Caldwell, 2007).

Importantly, the predispositions change recipients manifest may to some extent be a function of settings in which they work—for example, because of the degree of workplace autonomy and the control individuals can assert in their jobs (Frese, Garst, & Fay, 2007; Hornung & Rousseau, 2007; Parker, Williams, & Turner, 2006). Indeed, general individual predispositions, especially those based on experiences on the job, can be indicative of the organization's overall readiness for change.

Dispositional resistance, a tendency to reject change, has been found to be negatively related to attitudes toward change (Soenen, Melkonian, & Ambrose, 2017). Fugate, Prussia, and Kinicki (2012) suggest that these change-related dispositions reflect the degree of self-threat associated with change. Self-efficacy is related to enhanced problem-focused coping during a merger allowing individuals to reduce their experience of threat (Amiot et al., 2006). Prescriptive models of change give little attention to ways of reducing the threat experienced by employees. Indeed, both Lewin (1948) and Kotter (1996) advocate creating a strong sense of urgency but remain largely silent on how one might cultivate employee adaptability in face of change.

Affecting recipient motivation. Several factors are found to be fundamental to recipients' motivation to change. The first is the perceived favorableness of the change. Favorableness is related to change acceptance, reflecting an individual's beliefs in anticipated benefits from the change. Importantly, anticipated or current changes are often associated with perceived losses on the part of change recipients (Ashford, 1988; Michela & Vena, 2012), making the balance of gains and losses, and the emotions it generates, a potentially important factor in motivating change recipient acceptance (Bartunek, Rousseau, Rudolph, & Depalma, 2006). There are indications that change interventions that work to provide benefits (e.g., supports and rewards), and mitigate losses (e.g., offsetting losses with additional resources such as involvement to reduce uncertainty and increase control) can increase change acceptance (Soenen et al., 2017). Research as cited in our aforementioned discussion of vision highlights that if employees believe they understand the reason for a change and consider that reason meaningful, they tend to have a more favorable attitude to the change (Lau & Woodman, 1995; Rousseau & Tijoriwala, 1999).

Importantly, the overall level of employee commitment to the organization itself appears to facilitate change acceptance (Iverson, 1996). Employee commitment to change is related to the support their managers provide them for change implementation (Meyer, Srinivas, Lal, & Topolnytsky, 2007). Commitment may overlap the dimension of change recipient trust in leaders, which prescriptive models also underscore as important (Hiatt, 2006; Kotter, 2005). Employee commitment to change is related to the support their managers provide for change implementation (Meyer et al., 2007). In shaping change commitment, the extent to which change recipients believe that a change is a benefit (or a harm) interacts with the change's magnitude (size of effect on the organization or unit) and the nature of the effect on individuals' job (Herold et al., 2007). Similarly, changes in the extent to which the individual's self-perceptions fit with the work environment are related to experiences in the change process (such as Meyer et al., 2007), the extent of change, and certain change-related individual

differences (such as mastery orientation; Caldwell, Herold, & Fedor, 2004).

Stress is widespread in the experience of change recipients (Ashford, 1988; Dahl, 2011; Schweiger & DeNisi, 1991). Thus, empirical research calls attention to the importance of stress triggers, including the negative appraisal of a change's implications, reducing the recipients' sense of control (Fugate & Kinicki, 2008). Change is often considered a source of harm or of frustration to individual goal attainment. Additional support that organizational change is accompanied by harm and the lack of goal attainment is illustrated by the fact that change often elicits negative emotions such as fear (Ashford, 1988; Mirvis, 1985; Rafferty & Griffin, 2006; Robinson & Griffiths, 2005), indicative of perceived anticipation of negative outcomes and limited control (Lazarus & Folkman, 1984). Recipients are more likely to let go of the status quo and react less negatively if they see change as inevitable (Laurin, Kay, & Fitzsimons, 2012); however, they may be more likely to hold on to the status quo if they feel the threat is external to protect current established systems (Proudfoot & Kay, 2014).

Perceptions of fairness. Fairness beliefs are important in implementing change both in terms of acceptance and perceived efficacy (Daly & Geyer, 1994) as well as change commitment (Bernerth, Armenakis, Field, & Walker, 2007). We note that some prescriptive models refer to the importance of fairness in the change process (Hiatt, 2006; Kanter et al., 1992; Kotter, 1996) but are vague regarding the forms fairness should change. Rodell and Colquitt (2009), for example, showed that interpersonal justice (e.g., employees' perceptions of respectful treatment by supervisors) was especially important to change reactions. Still, they suggest that the type of fairness reactions might well depend on the available information. If information is available on how respectfully they were treated (i.e., interpersonal justice) or whether they were allowed to voice concerns (i.e., procedural justice), such forms might be more salient.

Employees also appear to rely on anticipatory justice beliefs to shape their current justice perceptions. Fairness anticipation is especially relevant if employees feel there is high uncertainty about the change they experience and low outcome favorability (Rodell & Colquitt, 2009). Moreover, employees can observe the fairness beliefs of their supervisors and incorporate them into their own judgments. In fact, employees are inclined to reconsider their initial anticipation on how fair the change will be when leaders are exemplars for the change (Soenen et al., 2017). This is consistent with research showing that perceptions of managers as exemplary role models are tied to employee co-operation with the change (Melkonian, Monin, & Noorderhaven, 2011). The focus on leader role modeling also was emphasized in several of the change models (Beer et al., 1990; Hiatt, 2006; Kotter, 1996) and has received some support based on research on ethical leadership (Babalola, Stouten, & Euwema, 2016; Sharif & Scandura, 2014). Given the relevance of fairness (see also Koivisto, Lipponen, & Platow, 2013) and fairness anticipation, research seems to inform on the relevance of pre-change surveys to assess concerns and frustrations employees might experience (which underpin fairness perceptions), so as to direct the change process to take this into consideration [this seems to be consistent with Hiatt's (2006), change and readiness assessment].

Identification. When employees identify with the organization, it appears to shift their focus away from the outcomes of change, often viewed as negative, toward processes of change implementation (van Knippenberg, Martin, & Tyler, 2006). In a field study and an experimental study, van Knippenberg et al.'s results showed that those high in organizational identification were more interested in whether the change was implemented fairly and provided them opportunity to participate. By contrast, employees low in organizational identification were more interested in change outcomes. Identity transformation may itself be part of the change process. Clark, Goia, Ketchen, and Thomas (2010) argued that creating a transitional identity—which retains elements of the current identity but also captures elements of the changed state—helps employees evolve a new change-supporting organizational identity. Social movement research shows that the identity frame used (e.g., by reformers) needs to match employees' beliefs (Kellogg, 2012).

Meso-Level Findings

Meso-level phenomena involve cross-level effects, such as between individuals and groups or groups and the larger organization, where effects can be either higher to lower level (top/down) or the reverse (bottom/up).

Social ties and relationship quality. In the context of change, meso effects often involve the embedded effects of social influence and relational ties. Having the ability to implement a change has a large social component, whereby individual readiness

and willingness to accept change can be shaped by the quality of relationships individuals have in the organization and the effects of their peer's relationships on them. For example, the readiness of employees to change is related to the trust they have in their peers (Soenen et al., 2017) and the support received from the larger organization (Rafferty & Simons, 2006). Importantly, in a controlled experiment, Lam and Schaubroeck (2000) demonstrated that change could be more effectively promoted by identifying key opinion leaders among a group of peers and training them to be change agents, an approach that worked better than training randomly selected change agents (see also Balogun, 2003).

Meso effects in change can entail the simultaneous influence of multiple relationships. For example, middle managers are often central nodes in the cascading implementation of change (Balogun, 2003). They often need to negotiate competing demands to handle employee concerns regarding change while delivering positive results to higher management (Bryant & Stensaker, 2011; Valentino, 2004). Juggling these different roles, managers need to balance their abilities to address the different interests of employees, customers, their superiors, and themselves, while at the same time pushing the change further.

Social ties influence the appropriateness of choosing particular individuals as change agents. Battilana and Casciaro (2012) show that the connections employees have with other organization members contribute to their personal adoption of change. Results demonstrate that employees who have a strong connection to peers are well equipped to help endorse the change, particularly when the change does not diverge from current systems and structures. If the change does require a substantial deviation from the status quo, employees with a few quality connections with peers but lacking others ("structural holes") are more likely to adopt change when they can go beyond their own network in seeking relevant information. Last, employees appear to be more responsive to changes introduced by leaders of their own group than they are to change activities initiated by leaders of other groups (Griffin, Rafferty, & Mason, 2004).

Emergent processes of change. Emergent processes refer to small-scale changes that can lead to higher level effects. Research demonstrates that organizational routines can be a source of emergent change, serving as a source of both flexibility (as a target of change) and change implementation (by routinizing new practices) (Feldman & Pentland, 2003). Reay, Golden-Biddle, and Germann (2006)

describe implementation of a nurse practitioner system in Canada through local creation of change opportunities. Employees embedded in a team or department can be well equipped to identify where a change is hampered and take small initiatives to resolve change-related problems. In doing so, they may initiate ways to incorporate new roles and practices into the existing organization and demonstrate their value (Reay et al. 2006). Moreover, having peers who make small local improvements can lead less committed change recipients to increase their acceptance of change, in line with the effect that direct experience with new routines can have on the change acceptance of later adopters (Kim et al., 2011).

Small local changes are an important aspect of implementing more complex higher level changes. For example, Hornung, Rousseau, and Glaser (2008) found that when supervisors are charged with the responsibility of approving customized work practices, idiosyncratic deals (Rousseau, 2005) negotiated between employee and supervisor become a vehicle for policy implementation. These negotiations also play a role in how managers can obtain support for change from their employees, by offering individuals particularly valuable work arrangements to motivate them to behave in ways that support the change.

Shared goals and beliefs. The strength of agreement among individuals in a larger social unit is also a meso-level process relevant to change, particularly in the context of the effect of shared beliefs and goals. In comparison with other team-level variables such as communication and support for innovation, shared vision has the highest impact (ten Have et al., 2016), an effect consistent with findings from meta-analyses on the positive impact group goals have on group performance (Hülsheger et al., 2009; O'Leary-Kelly, Martocchio, & Frink, 1994). Along these lines, Rousseau and Tijoriwala (1999) find that shared (unit-level) understandings regarding the reasons for change also positively affect implementation of change. The development of group-level shared beliefs is an important building block of change implementation, capitalizing on the immediacy of group influence and power of local factors in shaping the day-to-day work experience. Shared beliefs are commonly related to joint interactions work group members have with their managers and the development of local norms. Indeed, there may be parallels in change management with findings from implementation of human resource practices. That is, the intended practices that top management

believes it has introduced need to be realized through the actual practices that lower level managers execute, resulting in the perceived practices rank and file employees experience (Wright & Nishii, 2013). Local management's execution of new practices is thus key to implementation.

The value of shared group-level beliefs in support of change is underscored by a study of implementation teams (Higgins, Weiner, & Young, 2012). In a school district-wide change project, teams in which members were selected by the superintendent based on each team's focus provided a mechanism for implementing instructional improvements. Coaching in support of team efforts along with team continuity despite the coming and going of members together facilitated learning and change implementation. We note that this strategy of having an array of teams throughout the organizations with somewhat related and somewhat separate functions, a sort of "let many flowers bloom" approach, can facilitate both local initiatives and change diffusion across the organization (Bruch & Sattelberger, 2001).

Macro: Organization-Level Findings

Organizational characteristics themselves play a role in change processes. For example, a random sample of public firms found that smaller organizations tend to increase their rate of change when their performance is increasing, whereas larger firms do so when their financial performance is reduced (Bloodgood, 2006). Other organization-level factors have been found to play a consistently powerful role in change acceptance and results.

Leadership competency. A critical set of organization-level factors involve employee perceptions of their leaders. One important factor is leadership's competency in implementing change (Babalola et al., 2016; Battilana, Gilmartin, Sengul, Pache, & Alexander, 2010; Oreg et al., 2011). Management effectiveness in managing change is positively related to implementation success (Lok et al., 2005) and negatively related to change recipient stress (Amiot et al., 2006) and skepticism regarding the change (Stanley et al., 2005).

Research suggests there is value in having several change leaders working together with diverse but complimentary competencies (Battilana et al., 2010). Note that change leaders appear to do different things in managing a change depending on their competencies. Those with task competencies appear to spend more time on mobilizing and evaluating activities, whereas those with interpersonal skills are more likely to focus on communication activities. Similarly, the social skills of change agents can contribute to new meanings and means for action in planned change, for example, where change agents are able to create new collective identities and managing meanings ascribed to them (Creed & Scully, 2011; Fligstein, 1997). We note, however, that the literature on change agency appears inconsistent and inconclusive regarding the skills or attributes of effective change agents (McCormack et al., 2013).

Leadership competency is linked to how well managers themselves cope with change. Managerial coping has itself been found to be related to dispositional traits that fall into two factors, positive self-concept and risk tolerance (Judge, Thoresen, Pucik, & Welbourne, 1999). In this context, a strong self-concept and risk tolerance can help managers themselves cope with their own role in change.

Trust in leaders. Trust in leaders is another central concept that accounts for employee responses to change. Employees who can rely on and trust their leader have been shown to be more open and ready for change (Rafferty & Simons, 2006) and more likely to perceive what leaders say about the change as credible (Rousseau & Tijoriwala, 1999). Because a core meaning of trust is willingness to be vulnerable to the intentions of another (Mayer, Schoorman, & Davis, 1995; Rousseau, Sitkin, Burt, & Camerer, 1998), the presence of trust may contribute to several change-facilitating processes. Trust can help focus employee attention on what leaders have to say about the change and also reduce the sense of threat that change might bring.

The nature of the change itself. Many different forms of planned organizational change exist and stakeholders may not share the same understandings when using the term (Marshak, 2002). The change can be technical, social, or managerial (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004), a crosscutting aspect that can have different outcomes for the organization and its members (as has been found in systematic reviews of organizational interventions to implement patient care improvements; Wensing et al., 2006). For example, work–life initiatives have the potential for being a genuine benefit to both the firm and employees (Kossek et al., 2010) that some organizational restructurings may lack (Simpson, 1998).

In complex change it can help to implement multiple mutually reinforcing changes, which we term "bundles," to include critical success factors. A systematic review of QI strategies to improve

diabetes care combined 66 QI trials and found that employing more than one QI strategy at a time led to improved implementation and clinician adherence and better patient outcomes (Shojania et al., 2004). Along these same lines, a meta-analysis by Neuman, Edwards, and Raju (1989) found that multifaceted organizational development interventions, which combined technostructural interventions such as job redesign or flexitime with changes related to human functioning such as goal setting or training, were more successful in altering employee change-related attitudes than more narrowly focused changes. Moreover, Lok et al. (2005) found that even bundled interventions need to be aligned with the firm's strategic objectives to be effective. That is, interventions that are well aligned with firm strategy make it easier for employees to make sense of the change by helping them discern consistent patterns in the organization's decision-making.

Several systematic reviews (on organization-wide changes in health-care settings) provide evidence from highly controlled studies regarding the effectiveness of specific interventions. Wensing et al. (2006) report that organizational interventions involving revision of professional roles generally improve the performance of professionals (e.g., physicians). By contrast, interventions involving computer systems improve knowledge management. Patient outcomes were generally improved by multidisciplinary teams, integrated care services, and computer systems. Cost savings were attained from integrated care services. The benefits of quality management remained uncertain. These authors note that none of the specific strategies reviewed produced consistent effects across all studies, raising issues of differences in implementation quality and compliance, factors noted in other systematic reviews, and meta-analyses of specific interventions (Pritchard, Harrell, DiazGranados, & Guzman, 2008). Nonetheless, the evidence suggests that certain interventions can work better than others and affect different outcomes.

Readiness of the organization for change. It is important to recognize that before a change, organizations differ in their overall readiness for change. For one, the general level of employee commitment to the organization itself appears to facilitate change acceptance, suggesting that a positive employee relations climate is valuable for organizations coping with change (Iverson, 1996). Organizational history is particularly implicated in the quality of the employee relations climate and its implications for change (Bordia et al., 2011). Similarly, the

organizational factors aforementioned including trust in management and their change-related competencies appear important (Cinite, Duxbury, & Higgins, 2009). Cunningham et al. (2002) observe that having an active job that promotes decision-making and personal initiative increases employee readiness for change. This observation is in line with the notion that organizations that promote the change-supporting individual-level motivations reviewed earlier to a critical mass are likely to support a broader readiness for change. At the same time, a systematic review of the readiness literature (Weiner, Amick, & Lee, 2008) points to considerable inconsistency in frameworks for assessing readiness. Nonetheless, an important precursor of effective change management is likely to be how well the organization and its workforce were managed *before* the change.

INTEGRATING PRESCRIPTIVE AND EMPIRICAL LITERATURES ON CHANGE MANAGEMENT

Synthesizing the empirical literature on change leads us to some general conclusions, which we will present in ten key evidence-based change management principles. These principles are sometimes consistent with the prescriptive literature we have reviewed (e.g., the importance of change leadership and communicating vision) and sometimes largely ignored (e.g., improving readiness for change and the value of pilot testing and experimentation). As we describe each, keep in mind that although some principles might apply earlier or later than others (e.g., diagnosis comes before implementation, which comes before assessing the change and its effects), most can be applied concurrently and repeatedly over time (e.g., change leadership, vision communication, and experimentation).

Get Facts Regarding the Nature of the Problem (s)—Diagnosis Step #1

A key first step is gathering facts to assist in a diagnosis of whether change is needed. This key step, advocated by Beer and Kanter but ignored by others, involves obtaining information regarding the organization, its functioning, outputs, and outcomes from several sources and multiple stakeholders. Our review of the empirical literature suggests that two types of facts are important in this first key phase: (1) information to provide insight into the need for change (Armenakis & Harris, 2009) and (2) information regarding preexisting conditions or constraints

that might affect implementation (Rafferty & Restubog, 2017).

The "micro-level" empirical literature we reviewed previously points to a key fact: change recipients and other stakeholders need to believe that the reasons for change are legitimate and its direction rational. Careful gathering of facts from multiple sources (metrics and qualitative information) and stakeholders (managers, employees, and customers) ensures that the underlying motive for change is based on a good understanding of the organization and its context—and not biased by a narrow point of view (top management, HR, etc.). Obtaining information from multiple sources also helps identify where important discrepancies exist between current assumptions and facts. A diagnosis can lead to new thinking about the organization and its need for change (Rousseau, 1996). Careful diagnosis avoids basing change initiatives on a poorly understood problem.

Assess and Address the Organization's Readiness for Change—Diagnosis Step #2

A related aspect of the fact-gathering phase involves assessing the organization's readiness for change, a factor identified as critical in the "macro-level" scientific literature. Readiness refers to the capacity of the organization and its members to take on the demands effective change requires—a key principle prescriptive models tend to overlook.

A first matter of readiness is the organization's history and previous change successes or failures, which shape change recipient perceptions and anticipations of change (Bordia et al., 2011). History can be generally positive where there is collective memory of successful changes in structures, services, and capabilities, and where employees recall being fairly treated in the process. Change managers can build on a positive history to maintain change strength, potentially incorporating historical themes into the change vision or its communication. If change has been generally unsuccessful or implementation was experienced as unfair, efforts need to be taken to separate the present change from the past and take credible actions to reduce fear and mistrust (Rafferty & Restubog, 2017).

A second matter of readiness identified in the "micro-level" scientific literature is the degree of stress that change recipients currently face (Oreg et al., 2011; Vakola & Nikolaou, 2005). Consistent with research on the effects of stress on cognitive

bandwidth (Linden, Keijsers, Eling, & Schaijk, 2005; Meuris & Leana, 2016), change recipients strained by existing demands are less able to respond adaptively to new demands and to engage in the cognitive and emotional work engaging in change requires. The presence of high stress can be a negative indicator for reliance on a sense of urgency as a basis for change initiation (Kotter, 1996).

A third matter of readiness is the capability of senior leadership to guide and implement change. Although change typically involves the need for training and development at all levels, particularly in support of specific features of the change (described in the following paragraphs), the ability to manage planned organizational change is likely to vary with managerial education and experience. Careful attention to the change skills of senior leaders is an important aspect in assessing readiness.

Identifying weakness in any of the three facets of readiness should be followed up by early efforts to improve the capacity of the organization and/or its members to support and implement change. These efforts may need to precede actual change implementation or may be rolled out concurrently (Bruch & Sattelberger, 2001). The prescriptive literature as we have observed is largely top/down. It starts from the premise that the change identified by senior leaders is needed and appropriate. Thus, it is largely silent on whether the planned change makes sense given the concerns of other stakeholders. Our review of the empirical literature suggests wide variation in the readiness of both organizations and individuals to engage in change. By remedying weaknesses in the organization's readiness for change, an evidence-based approach to change management can help increase the odds of success.

Implement Evidence-Based Change Interventions

Solution identification is the next step. A well-conducted diagnosis identifies the kind(s) of change needed and ways to improve readiness. As shown in our review of the "macro-level" literature on the nature of the change, the specific changes put in place affect the results attained (Neuman et al., 2006; Shojania et al., 2004). Prescriptive models are largely silent on how to identify appropriate interventions to address the problems found in diagnosis. However, based on the empirical literature and research on evidence-based practice (Barends & Rousseau, 2018; Sackett et al., 2002), we advise that three sources of evidence be sought to identify appropriate solutions.

First, a diverse array of people inside and outside the organization who are experienced with the problem can help identify plausible solutions. Second, stakeholders, including affected employees and managers, are important sources of information about possible solutions and may be able to test alternatives to see what might work. Third, scientific evidence may exist on the likely benefits (and risks) of specific kinds of change and how to effectively implement it. Scientific evidence can be obtained via google scholar and other online research databases giving access to peer-reviewed journals. We suggest special attention be given to systematic reviews and meta-analysis of particular interventions. Keep in mind that many changes require a combination of interventions to be effective rather than a single change (Dutton et al., 2001; Neumann et al., 2006; Shojania et al., 2004). Practitioners should keep in mind that some change interventions work better than others and many work best in combination with supporting interventions (e.g., intervention teams appear to work better with coaching support, Higgins et al., 2012).

Empirical research highlights the importance of interventions that develop change-related skills, offer rewards and incentives to motivate change, and provide opportunities to practice change activities in supportive environments (Bos-Nehles et al., 2017; Marin-Garcia & Tomas, 2016). Relatedly, research suggests the value of using a set of mutually reinforcing interventions (Neuman et al., 2006), aligned with strategic objectives to help employees make sense of the change (Lok et al., 2005).

Intervention compliance also can matter, when success depends on fully implementing key aspects of a targeted change (Pritchard et al., 2008). There is a real danger in change efforts where what is actually adopted is the "label" but not the essential practices that underpin a particular intervention. For example, incentive systems that purport to build teamwork but actually incentivize only individual performance reflect the classic "Folly of Rewarding A while Hoping for B" (Kerr, 1975, 1995). A better approach is to adhere to an evidence-based process. For example, many interventions that attempt to alter behavior require adherence to specific practices, including effective communication and persuasion, setting clear and motivating change goals, increasing skills, modeling appropriate behavior, and providing appropriate planning and social support (Hardeman, Johnston, Johnston, Bonetti, Wareham, & Kinmonth, 2002; Pritchard et al., 2008).

Develop Effective Change Leadership Throughout the Organization

Leaders play a central role in change. The "micro- and macro-level" scientific literature we reviewed previously calls attention to the roles played by leadership at multiple levels of the organization, including senior leaders, mid-level managers, and influential employees at lower levels, all of whom can serve as change agents and role models. Individual leaders who are trustworthy, supportive, honest, and transparent about the nature of the change and future plans are likely to effectively create a psychologically safe environment where there is room for voice, mistakes, and learning.

Effective change requires training and developing existing leaders in change-related skills (see Bruch & Sattelberger, 2001) with a focus both on how to deal with change themselves and how to effectively manage change from the perspective of their employees. Despite the general optimism of prescriptive models regarding the readiness and competence of leaders to implement change, the empirical research indicates that leaders often struggle to reconcile the different demands change brings (Bryant & Stensaker, 2011). Top and middle managers can play different roles in change and need to be prepared for the varied activities involved in initiation and execution (Heyden, Fourné, Koene, Werkman, & Ansari, 2017). Relatedly, internal change agent competency needs to be built and not assumed (Lam & Schaubroeck, 2000). Change leaders working together with complementary competencies and roles have been shown to be valuable (Battilana et al., 2010).

Develop and Communicate a Compelling Change Vision

The prescriptive and academic literatures strongly agree on the importance of articulating a compelling change vision (see the aforementioned managerial prescriptions #3 and #4 and the research evidence we cite). What is still unclear, however, is what *content* or features make a compelling change vision. Advice often seems contradictory, from making the vision broad and appealing to being specific about the roles employees play. What is clear from the empirical literature is that stakeholder perspectives matter to the content of an effective vision. In formulating a compelling vision, information from stakeholder groups (e.g., employees, managers, and clients) can be gathered to help identify motivating features. Vision must reflect a goal that can be broadly shared. A vision of improved shareholder

value, for example, might only appeal to those who hold stock in the company, whereas a vision of quality service might have broader appeal. The "meso-level" scientific literature previously offers that shared goals (Kleingeld et al., 2011) and positive beliefs about the reasons for change that are in line with the vision (Rousseau & Tijoriwala, 1999) improve the likelihood of successful change implementation.

More agreement exists on the *process* of communicating vision. Prescriptive models emphasize consistently communicating the change vision through multiple channels (media, meetings, one-on-one, etc.). Research also supports the value of a vision communication process based on (1) repetition and (2) quality evidence to convey a logical structure (e.g., by presenting specific numbers derived from change data; Dutton et al., 2001). However, where stakeholders incur losses from the change (e.g., job loss), it is less clear how to create a shared vision. Explanations that help change recipients to understand the reasons for the change can enhance their positive reactions (Bies & Moag, 1986).

Last, we note that although prescriptive models differ in the extent that they advise creating a sense of urgency to motivate change, research does not support urgency as a tactic (Staw et al., 1981). Consistent with Hiatt (2006), urgency if overused can also undermine change credibility.

Work with Social Networks and Tap Their Influence

Social networks play a critical role in influencing change, as demonstrated in the "meso-level" scientific literature previously, but prescriptive models largely overlook them. First, change agent efficacy derives not only from personal skills but also from the network ties the individual has (Battilana & Casciaro, 2012; Lam & Schaubroeck, 2000). The attachment of individuals to their team or professional group (e.g., physicians, nurses, and academics) leaves them open to influence by that group (Ferlie, Fitzgerald, Wood, & Hawkins, 2005). From a change management perspective, individuals in highly cohesive teams are likely to be more swayed by appeals directed to the team and by change efforts that engage the team as a whole than to efforts disconnected from their team. Finally, relational ties to potentially influential organization members who support the change can be important ways to coopt fence sitters who remain resistant (Battilana & Casciaro, 2013).

Use Enabling Practices to Support Implementation

A set of enabling processes are useful in supporting a variety of change interventions. They can support the initial rollout of complex change and over time can be used to help the change progress.

Goal setting. Specifying individual, unit, and organizational change-related goals is critical for realizing change, addressing fundamental motivation issues reviewed under "micro-level" research described above. Goal setting is important to help address persistent conflicting goals and missions between units, lack of managerial accountability for the change, or the possibility that some units or individuals might attempt to opt out of the change (Szamosi & Duxbury, 2002). The process of setting change-related goals at the unit and organizational level also helps to identify the scope and scale of the change that is required. If the change is more complex, it is reasonable to set goals related to the development of competencies and then build transition teams to oversee the steps of change. Over time, goal setting also can be used as a basis to monitor the progress made in the change process (step #9).

Learning. Learning plays a central role in virtually all change processes—despite the inconsistent attention given to learning by prescriptive models. Group and team-level learning requires psychologically safe environments supportive of practice, experimentation, and behavioral change (Edmondson, 1999; Kao, 2017). In implementation design, providing room for learning and skill development help prompt greater change motivation (Kao, 2017). The "macro-level" scientific literature also points to the relevance of learning for leaders.

Employee participation. Employee participation is emphasized in both prescriptive models and "micro-level" change research. Research highlights the role participation plays in information sharing and obtaining feedback (Wagner, 2009). It is enhanced by structures in which employees are invited and supported to express concerns and make decisions. Managers need to be ready to deal with active employees to respond effectively to bottom/up initiatives. Employees should be encouraged to address local issues themselves in groups or within departments (Knight et al., 2017). As change inevitably unravels many loose ends, employees need to be supported to tackle the issues they encounter day-to-day.

Fairness and justice. Interpersonal and procedural justice are central to enacting change successfully (Bernerth et al., 2007; Rodell & Colquitt, 2009), a key finding in the "micro-level" research reviewed

previously. Managers need to use fair procedures in making decisions and treat people respectfully (Melkonian et al., 2011) because they set the tone for what employees anticipate will be the fairness of change (Soenen et al., 2017).

Employees with strong organizational identification have been found to focus largely on the fairness of change processes and opportunities for participation—whereas downplaying the outcomes change generates (van Knippenberg et al., 2006). Importantly, procedural fairness appears to encourage formation of an organizational identity (Tyler & Blader, 2003). And in turn, identity is relevant in the change process (Clark et al., 2010; van Knippenberg et al., 2006) as identification with the organization during change may alleviate adverse responses employees otherwise have to the burdens change brings.

Transitional structures. A gradual process of change implementation can include myriad pilot tests, experiments, and local initiatives, which together make complex change easier to implement (Golden-Biddle, 2013). This process can involve use of transitional structures that capitalize on the flexibility offered by "meso-level" emergent processes reviewed previously. These are temporary arrangements like task forces that help oversee the change and special projects, rules, or trials that can be used to modify and expand the change as needed. It is not unusual for an organization to have multiple transition structures at the same time, seeking to reach the entire organization and build knowledge and change capability at all levels (Westerlund et al., 2015). Moreover, experimenting with new routines and practices can allow for greater flexibility and opportunity to practice new skills and roles (Feldman & Pentland, 2003).

Promote Micro-Processes and Experimentation

Small-scale or micro-processes are central to effective change, as indicated in the review of "meso-level" research on emerging processes previously, allowing change recipients to provide feedback and make local adjustments to broader change plans based on their own experience (Reay et al., 2006). These processes entail the use of multiple small interventions to support learning by doing and to create test beds for identifying effective interventions, experimenting to see which change elements bring the best results. Small-scale interventions also allow adjustment to local elements in the organization or industry.

By contrast, to the prescriptive models' focus on short-term wins, the empirical literature highlights the notion of "small wins," where change recipients, often at lower levels in the organization, make improvements that inform them about the changes' potential and provide proof of concept with respect to possible benefits. In this context, the prescriptive focus on managerial interests may be at odds with the change recipients' need for first hand experiences and opportunities to demonstrate locally meaningful results (Golden-Biddle, 2013). At the same time, change proposals often can emerge bottom/up from employees themselves (see also Kellogg, 2012). A key aspect of effective change implementation may well be leader responsiveness to egalitarian change processes (Piderit, 2000). In experimentation, failure is possible and even needed to adapt and come up with better solutions.

Assess Change Progress and Outcomes over Time

Periodic assessment is needed to determine whether the planned change is producing anticipated activities, experiences, and outcomes, consistent the support we found for Beer's (1980) change prescription (managerial prescription #9 previously; e.g., Cummings & Worley, 2009; Kluger & DeNisi, 1996). It provides feedback to gain understanding of the change's effects and make improvements (Wiedner et al., 2017). It involves collecting reliable metrics from multiple stakeholders. Yet, the metrics to assess progress may need to differ depending on the stakeholders involved, for example, measuring the information sharing or learning employees demonstrate and change-supporting activities executed by managers. For tracking change success, attention can be paid to changes in change commitment, competency, and efficacy over time as well as whether implementation of new practices has increased. These assessments provide feedback important to support learning and change implementation.

Institutionalize the Change to Sustain Its Effectiveness

Sustaining change means integrating it into the larger systems of the organization, including its culture and management systems (e.g., HR practices, power structure, and governance), consistent with the literature cited earlier for management prescription #10 (N.B. this departs from the emphasis most prescriptive models place on *culture* because we note that many changes do not require fundamental

shifts in values or beliefs). A committed board can help make change sustainable by providing critical resources as needed and by following a process of replacing chief executives that ensures the continuity of the change (Alänge & Steiber, 2009). Incorporating the change into the firm's standard practices promotes uptake by later adopters: Employees committed to the organization are very likely to follow through on practices once they have become routine, even if they were not supportive initially (Kim et al., 2011). Institutionalization also can involve continuing to deploy the enabling structures (step # 7). Enabling structures help to maintain new practices as well improving their efficiency and effectiveness. For example, continuing to socialize and train newcomers regarding the change makes it robust in the face of turnover and staff mobility. And as new practices are applied, they can be used to enhance learning as their focus may shift from solving reactive problems to addressing more proactive, forward looking opportunities (Goodman et al., 2004).

RESEARCH IMPLICATIONS

Our review also identifies several important issues for future research. First and foremost is the opportunity to apply the TPB (Ajzen, 1991) to researching the multilevel factors contributing to change acceptance and implementation (Jimmieson, Peach, & White, 2008). As Hardeman et al. (2002) have pointed out, the TPB has produced replicable findings with regard to individual behavioral change; and it has been useful in understanding organizational changes such as the adoption and implementation of evidence-based practice (Rousseau & Gunia, 2016). Key issues to test include the factors contributing to the multilevel capability to implement the change including requisite skills and supports, the underlying motivational mechanisms operating on individuals, work groups and the larger organization during change, and the opportunities to implement new behaviors and practices in organizations more effectively while removing barriers to their use. At the same time, given the managerial nature of much of the prescriptive literature, greater attention to employees and other stakeholders is important to provide balance in understanding change's richness and complexity. For example, to date, little systematic attention has been given to how change recipients understand and interpret the process of identifying the problems motivating organizational change, let alone how organizations go about identifying their potential solutions.

As we indicated earlier, little research exists to inform understanding of the potential role of a governing coalition whom practitioners devise to oversee and support the change. We know little regarding how large that coalition might need to be, the bases on which that selection should be done, whether top management should be involved, or how the coalitions should be trained. Importantly, the issue of change acceptance at the level of top and middle management also merits attention because much of the focus to date has been on lower level employees. Moreover, some evidence suggests that employees may respond more favorably to change initiated by their immediate managers than they do to top or more distant managers (Heyden et al., 2017); thus, the role of middle managers as change leaders may be particularly important. The different stakeholders of a planned change raise issues regarding appropriate representation on the guiding coalition and in the change management process. What information from various stakeholders is retained and what is lost in the process of change planning and representation?

Further questions include what should be communicated by whom (top management, the coalition?) and how to integrate different stakeholder groups and interests in the formulation of a change vision and implementation plan. As we noted previously, little research has directly examined the factors that contribute to an effective change vision, a topic scholars and practitioners agree to be of paramount importance. In addition, research has tended to focus on change preparation while giving far less empirical attention to how to keep people motivated and working to solve ongoing change problems over time (for a practical treatment, see Goodman et al., 2004).

We also strongly advise the development of systematic reviews and meta-analyses to inform evidence-based change management. By and large, the empirical literature tends to test fairly small segments of broader change phenomena, one reason for the need to integrate change-related knowledge and assess its state. On the upside, however, despite the conclusion of a recent systematic review of organizational development, namely, that few well-controlled studies exist to evaluate effective organizational change (Barends, Janssen, ten Have, & ten Have, 2013), we found several relevant systematic reviews in the context of planned change in healthcare organizations (Greenhalgh et al., 2004; Wensing et al., 2006). The latter offers considerable insight into change management practice. These informative reviews suggest considerable future benefit can

be obtained from additional systematic reviews (see Rousseau, Manning, & Denyer, 2008) on specific questions related to change management. So, a key recommendation is for additional systematic reviews on change management–related topics, including specific change interventions (e.g., coaching) or change management tactics (e.g., use of social networks in change and developing change agent competency). We next identify some pertinent topics for review.

The sheer variety of the changes implemented implies an array of potentially relevant change features (its type(s), time frame, scope, levels, etc.). Yet, the literature often focuses on general behavioral constructs (e.g., change fairness and leadership) while ignoring potentially consequential change features. Such features might form the basis of a synthesis of multiple studies to identify how change type, time frame, scope, etc., relate to change processes and outcomes. Moreover, several change processes can take place concurrently and potentially interact, suggesting that synthesis can be more useful than any single study might be to identify effects associated with change features.

The presence of systematic reviews on specific kinds of change suggests us that there is value in paying attention to the *nature* of the planned change. First, there is the *temporal* nature of the change, whether it is ongoing as in the case of ongoing adaptations or prolonged transformations versus a one-time stand-alone adjustment. Second, there is the issue of *scope*, where the change affects many aspects of the organization or unit (decision-making, reporting structures, reward systems, etc.) or only one. Changes of broad scope are more likely to be disruptive of the status quo and require more careful management of the change process, whereas narrow change may be applied in a more accommodative fashion that limits disturbances to the status quo (Rousseau, 1995). Third, changes vary in *scale* from organization-wide interventions to more localized ones in a single department or work unit. The prescriptive literature largely ignores the kinds of change involved, but we suspect that there are opportunities for systematically reviewing studies according to their temporal, scope, or scale dimensions to identify patterns that can inform change practice and theory.

Last, we note that less recognized alternative change models also may merit attention in subsequent reviews, including Tichy and DeVanna's (1986) Three-Act-Drama, Tushman and Romanelli's (1985) punctuated equilibrium, and Lippitt, Watson, and Westley's (1958) planned change. More recently, a promising alternative to change management practice is the iterative change process described by Reay et al. (2006).

Implications for Practice

The present article affirms what others have recognized (Appelbaum et al., 2012), the need for further translation of scientific and practitioner-based models of change implementation to help change managers more effectively implement planned change. Regardless of the strength of the evidence behind the principles we identify, change practitioners still need to adapt the advice to the situations they face. What constitutes a compelling vision for one organization or group of people may be irrelevant to others. Having top management as key change agents may be appropriate in small local organizations in a stable environment and difficult in a large multinational organization in a turbulent environment. As such, we urge practitioners to take time for deliberation, reflection, and experimentation as they approach planned change, recognizing that all evidence-based principles are likely to require some local adaptation and adjustment. Pilot testing and experimentation can be essential to identifying how best to apply evidence-based change principles, taking into account the capabilities of the organization's leaders and employees and needs of its clients and other stakeholders.

We call attention to the centrality of goals in explaining human behavior and in understanding change implementation. Ultimately, change practitioners should seek to align *individual*, *work group*, and *organizational* goals in the context of change. As we noted previously, the most widely used prescriptive change advice often gives short shrift to the web of behavioral processes involved at the micro, meso, and macro levels. Research findings underscore that effective change serves the goals of multiple stakeholders and is particularly likely to arise when it helps them meet important needs they hold in common (e.g., opportunity, security, growth, and financial well-being). Organizational change is likely to be more readily implemented when it targets multiple stakeholder needs in its goals and interventions. It is widely noted that organizational changes are often at odds with psychological contracts, that is, employee beliefs regarding what they owe and are owed in return by the organization, giving rise to the common employee experience of violation in the implementation of change (Bellou, 2007; Kickul, Lester, & Finkl, 2002). In this regard, attention to the goals of employees and the employer

offers a fresh perspective on ways to engender acceptance and support for change—and may make it possible for the psychological contract to remain intact (Rousseau, Hansen, & Tomprou, 2018).

Last, but not the least, there is little evidence regarding the appropriate speed with which change should be implemented—and even prescriptive models do not agree. Practitioners should not make assumptions about "the right speed." Instead, we advise that you pay attention to how well the necessary processes of change are being implemented.

CONCLUSION

At present, practicing managers appear to make little use of available scientific evidence in making decisions or changing their organizational practices (Barends et al., 2017), despite concurrent evidence of their interest in doing so—if findings and their implications are clear. Our goal in writing this article has been to promote the ability of practitioners, educators, and scholars to better appreciate and access the available knowledge base regarding organizational change—and to recognize what remains unknown or untested. In doing so, we have highlighted well-supported change practices that can help enhance both organizational and employee well-being in a world where change is commonplace.

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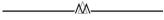
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