

LEADERS' IMPACT ON ORGANIZATIONAL CHANGE: BRIDGING THEORETICAL AND METHODOLOGICAL CHASMS

SHAUL OREG

The Hebrew University of Jerusalem

YAIR BERSON

Bar-Ilan University and New York University

The notions of leadership and organizational change have been closely linked and frequently discussed in tandem. Whereas we know much about leadership and change, we know relatively little about the integration of the two. Leadership is often discussed with respect to its impact on organizations in times of change, and the literature on organizational change frequently notes the roles that managers and change agents have, as change leaders. Yet, surprisingly, the impact of leaders on change has not been studied systematically. Through a comprehensive review of the literature on leadership and change we identified significant chasms across disciplines (e.g., strategy/organizational behavior), methodological approaches, and levels of analysis. We offer a conceptual framework to bridge these chasms and highlight the main processes through which leaders shape organizational change and influence its recipients. We identify key leadership functions and corresponding change processes through which leaders effectively implement changes. We also point to several directions for future investigation. In particular, we know very little about the role of leaders' strategic choices in shaping employees' responses to change and about the roles of context and time in moderating the effects of leaders' actions during change.

LEADERS' IMPACT ON ORGANIZATIONAL CHANGE: BRIDGING THEORETICAL AND METHODOLOGICAL CHASMS

Traditionally, the concepts of leadership and organizational change have been closely linked and frequently discussed in tandem. The practitioner literature in particular is replete with discussions of how to lead organizational change (Kotter, 2007; Nadler & Tushman, 1990) and the field of *change management* is devoted to linking leaders' actions with organizational change and its outcomes. Moreover, leadership is often discussed with respect to its impact on organizations in times of change, and, reciprocally, the literature on organizational change

frequently notes the roles that managers and change agents have, as change leaders. In fact, one cannot talk about leadership without, at least implicitly, referring to a process of change (Bass, 2008; Zaleznik, 1977). Yet, surprisingly, the relationships between leadership and change have not been studied systematically.

Although a considerable number of studies of leaders and change have accumulated over the years, the research in this field lacks a conceptual foundation to guide research and integrate extant findings. Reviews of the leadership literature (e.g., Avolio, Walumbwa, & Weber, 2009; House & Aditya, 1997) inform us about the attributes and behaviors of effective leaders, but do not sufficiently inform us about the particular relevance of these for the context of organizational change. Correspondingly, extant reviews of the change literature (e.g., Oreg, Vakola, & Armenakis, 2011; Rafferty, Jimmieson, & Armenakis, 2013) inform us about what instigates change and how change evolves in organizations, but do not focus on the specific role of leaders. Lacking integration, these distinct literatures have failed to provide a clear and broad understanding of leaders'

Both authors contributed equally to the preparation of this manuscript.

We thank Sharon Parker for her constructive and insightful guidance throughout the review process, Daan van Knippenberg for his feedback on the proposal, Sim Sitkin for his insights on the initial stages of this project, and Nir Milstein for his help in the article search process. This research was supported by the Israel Science Foundation (grant no. 659/14).

role in managing change. Based on our comprehensive review of the literature, we propose a conceptual integrative framework to highlight the main processes through which leaders shape organizational change and influence its recipients.

We distinguish between two key roles that leaders undertake and between two key paths through which leaders influence change. Specifically, with respect to leaders' key roles, we integrate the distinct literatures on leaders' strategic choices (Hambrick, 2007) and leaders' style of leadership (Bass, 2008; Graen & Uhl-Bien, 1995), and with respect to key paths of leaders' influence, we consider both the influence on unit and organizational outcomes (Rubin, Dierdorff, Bommer, & Baldwin, 2009; see paths 1 and 3 in Figure 1) and the influence on change recipients (Oreg & Berson, 2011; see paths 2 and 4 in Figure 1). Furthermore, both psychological and sociological approaches, involving quantitative and qualitative methodologies, have been used for uncovering the impact that leaders have on organizational change and are at present disparate and siloed. We bridge these approaches and provide a more comprehensive understanding of the relationship between leadership and organizational change.

WHAT WE MEAN BY LEADERSHIP AND BY ORGANIZATIONAL CHANGE

Leadership

Common to many definitions of leadership is an emphasis on the social influence process it involves, whereby leaders facilitate individual and collective efforts to accomplish common goals (Bass, 2008; Eberly, Johnson, Hernandez, & Avolio, 2013; Finkelstein, Hambrick, & Cannella, 2008; Yukl, 1998). Within the leadership literature, leadership constructs typically pertain to relatively stable *attributes*, such as personality or demographic characteristics of the leader, and the various *actions* in which leaders engage. With respect to leaders' attributes, whereas OB scholars tend to study leaders' psychographic variables (e.g., personality), strategy scholars who study leaders (Hambrick & Mason, 1984) mostly focus on executives' demographic characteristics, as proxies of psychographic variables (Priem, Lyon, & Dess, 1999). These scholars link variables such as executives' age, tenure, and education with organizational outcomes.

Beyond leaders' attributes, a large body of leadership research has focused on leaders' *actions*, including the two broad categories of *leaders' strategic*

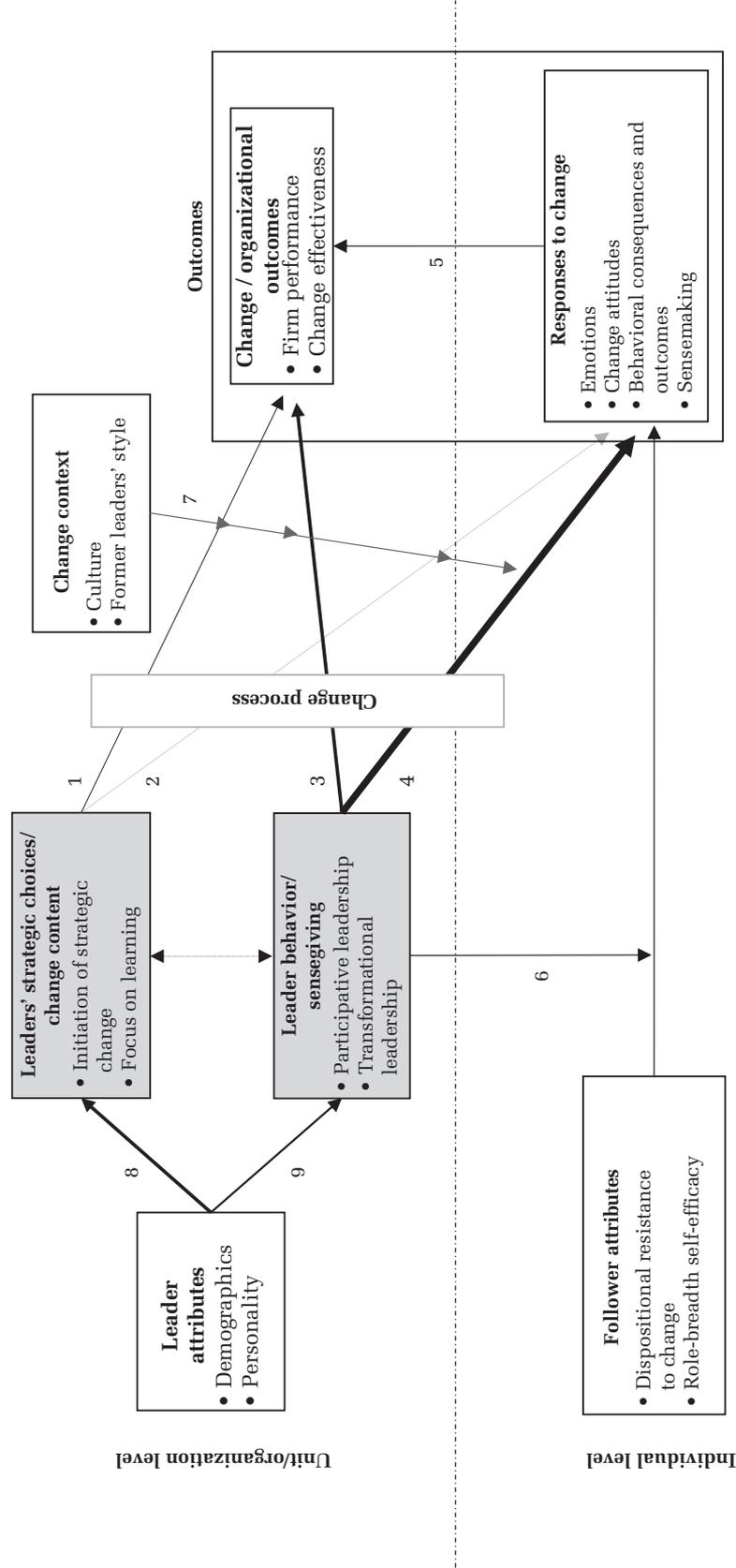
choices, and *leaders' behaviors* (see Figure 1). The study of leaders' strategic choices originated in upper echelons theory (Hambrick & Mason, 1984), according to which, leader characteristics are said to manifest in leaders' strategic choices, which in turn shape organizational outcomes. Strategic choices include formal and informal administrative choices, such as those concerning reward systems and competitive choices associated with organizational planning. Strategic choices also refer to key executive decisions about firms' focus of investment, such as in innovation, diversification, or renewal (Hambrick & Mason, 1984). More recent research has looked at a variety of other choices and decisions, such as those associated with mergers and acquisitions (M&A) and globalization (Crossland & Hambrick, 2011). Much of this literature, however, addresses *organizational* strategic choices, disregarding the explicit role of the leader. For the purpose of this review, we will include only those studies that explicitly address *leaders' strategic* choices.

In addition to leaders' strategic choices, leaders' actions are reflected in their *leadership behaviors*. We refer in these behaviors to the variety of leadership styles that have been studied (e.g., supportive leadership, authentic leadership, and transformational leadership) as well as to the concept of sensegiving, which concerns leaders' role in shaping how followers make sense of their organization's reality (Gioia & Chittipeddi, 1991). Contrary to strategic choices, which are situation (e.g., change)-specific, leader behaviors refer to a more stable leadership style that transcends a given organizational context. Some of these styles are inherently linked with the notion of change. These include the concepts of charismatic and transformational leadership, which emphasize the transformative nature of leaders' actions, guided by an inspiring vision (Bass, 1985; Conger & Kanungo, 1998; House, 1977; Shamir, House, & Arthur, 1993). We will include in our review both these leadership behaviors, which are inherently related to change, and other behaviors that have been studied in change contexts. In addition, in our evaluation of the findings, we will also address concerns that have been raised about the conceptualizations and measurement and charismatic and transformational leadership (van Knippenberg & Sitkin, 2013; Yukl, 1999).

Organizational Change

Organizational change refers to the transition of the organization from one state to another (Lewin, 1951).

FIGURE 1
Integrative Model of Leadership and Organizational Change Processes and Outcomes



Notes: Arrow thickness and darkness represent the number of articles that examined the given link; thicker and darker arrows representing a greater number of studies; items in bullet points represent examples of the variables in each box.

Whereas some research focuses generically on organizational change, other research focuses on specific types of changes, such as M&A, downsizing, or the incorporation of new technology. In the present review, we cover all of these changes, as far as these are linked with leaders or leadership.

Overall, the research of organizational change (for reviews see, Oreg et al., 2011; Weick & Quinn, 1999) can be classified into two streams. The first involves the processes through which organizational change develops and the second involves the outcomes of change. Studies within the first stream aim to uncover the evolution of change and the macro-level factors that shape organizational change and its outcomes (Burke & Litwin, 1992; Hannan & Freeman, 1984). Accordingly, research within this stream tends to be sociologically based, conducted by macro-OB scholars and researchers in the field of strategy. The outcomes at focus in this research involve both the degree to which the change has succeeded (i.e., *change outcomes*) and the particular impact that the change has had on the organization (i.e., *organizational outcomes*).

A second, somewhat newer, stream of research about change considers change from the perspective of the change recipient (Bartunek, Rousseau, Rudolph, & DePalma, 2006; Oreg, Michel, & By, 2013). Research within this stream, typically conducted by micro-OB scholars, addresses the impact that organizational change has on the change recipient, focusing mainly on the psychological processes and recipients' experiences during change, known as *responses to change*, and on more distal individual consequences of change, such as recipients' job attitudes and personal outcomes. The literature in this stream refers to the emotions that emerge among change recipients, the change attitudes, in which the emphasis has typically been on cognitive aspects, and behavioral consequences (for a review see Oreg et al., 2011). Also involving cognitive aspects of the response to change, other research has focused on the manner in which change recipients construe change, through a sensemaking process (Gioia & Chittipeddi, 1991).

Although most of the research we include in this review involves the impact that leaders have on the development and outcomes of change once it has been initiated, we were also interested in research that investigates how leaders' characteristics and actions are related to the type of change that is initiated. In the strategy literature, decisions about the type of change to initiate are an aspect of *strategic choices*, whereas in the fields of organizational change and organizational development, decisions

are referred to as the *change content* (see Figure 1; Armenakis & Bedeian, 1999; Oreg et al., 2011).

Two additional, central, subjects of interest in research of organizational change include the roles of the *change process* and *change context* (Armenakis & Bedeian, 1999). The former pertains to the manner in which change is managed, involving the procedures that change agents use for driving and managing change. The change process is distinct from leader behaviors, which generally pertain to the cross-situational style of the leader, whereas the change process involves the manner in which a given change is introduced and implemented. Moreover, the change process is not necessarily managed by a given leader, and may involve a variety of organizational members who take part in the diffusion of the change. Alongside the change process, the change context involves the organizational conditions that preceded the change and their role in influencing the change and its outcomes. We include in our model all of these concepts and link the three leadership components (i.e., attributes, strategic actions, and behaviors) with the outcomes of change, at the individual and organizational levels (see Figure 1), while considering the mediating role of the change process and the moderating role of the change context.

ANALYTIC APPROACH TO THE REVIEW

Article Selection

Our emphasis in our review was primarily on empirical articles, although we also included a few key conceptual articles. Among empirical articles, we were interested in articles in which participants experienced an actual organizational change and in which aspects of leadership or management were assessed. We gathered the articles for the review through Google Scholar and an elaborate search of the PsychInfo, PsychArticles, and ABI/Inform databases, which cover the main domains for our review. We provide detailed descriptions of the search process in the Appendix.

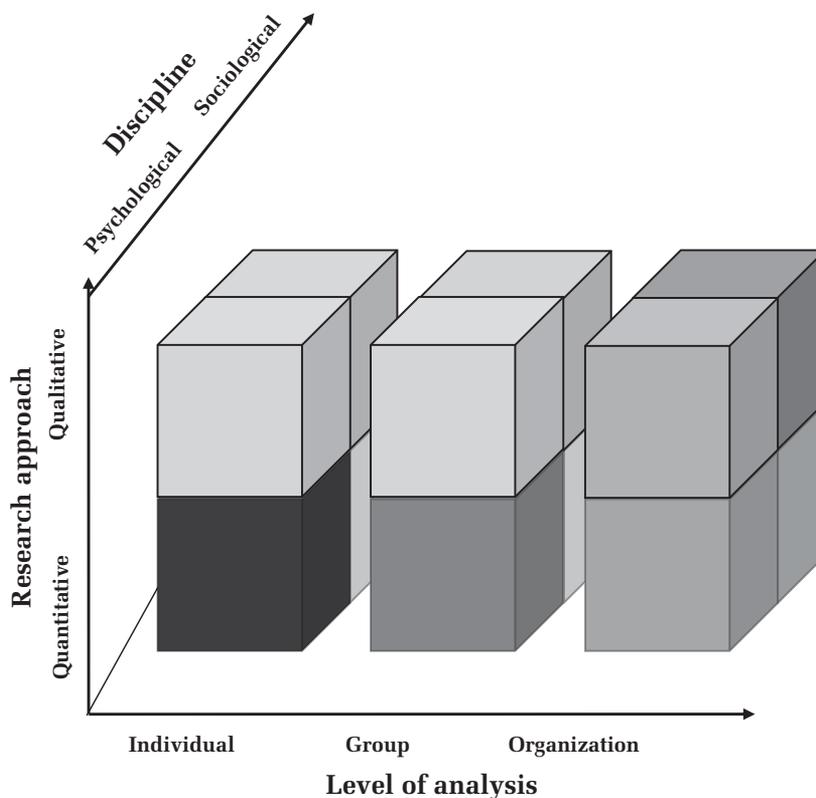
Coding Scheme

We devised a coding scheme whereby each of the articles identified in the search process was coded on the basis of its underlying discipline (i.e., psychology/sociology), research approach (i.e., quantitative/qualitative), research design (e.g., case analysis, longitudinal study), nature of the sample, and level of analysis (see Table 1). The classifications of articles to discipline, research approach, and level of analysis are depicted in Figure 2. We also coded the variables that

TABLE 1
Sample of Coded Article

Reference	Herrmann and Nadkarni (2014)
Organizational context	Ecuadorian small and medium-sized enterprises
Change content	Environmental (economic) fluctuations
Research approach	Quantitative
Research design (longitudinal, cross-sectional, etc.)	Longitudinal
Type of data (self-report, interview, archival, etc.)	Self-report and archival
Sample (managers/executives, operative change recipients, etc.)	120 CEOs
Leadership variables (attributes/style)	CEO Big-Five traits; leaders' strategic choice
Levels of analysis	Organization
Key disciplinary underpinnings	Psychological
Links tested	CEO Big-Five predicting strategic choice; Strategic choice predicting organizational performance; Big Five moderates the relationship between strategic choice and performance

FIGURE 2
Empirical Studies on Leadership and Change in the Management Literature



Notes: 1. Cube shade represents the number of articles that fit within the particular combination of discipline, level of analysis, and methodological approach. Darker shades represent a larger number of articles. 2. A given study could be classified into more than a single category. 3. Articles were classified into discipline on the basis of the theoretical frameworks that were used in the article. In several cases, articles were coded as both psychological and sociological, and in a few cases as neither.

TABLE 2
Sample of Articles Reviewed, with Key Leadership Variables, Change Content, and Organizational Context

Key Leadership Variables	Change Content	Organizational Context	Reference
Number and kinds of leadership initiatives initiated	The fall of the socialist regime in 1990	Eastern European symphony orchestras	Allmendinger and Hackman (1996)
Leaders' sensemaking	Major restructuring initiative in utility core business division	Recently privatized utility in the United Kingdom	Balogun and Johnson (2004)
Leaders' sensemaking	Organizational restructuring	Five U.S. districts of the international women's Roman Catholic religious order	Bartunek (1984)
Shared leadership	Plan to rebuild hospital on a new site; development of a new prototype organizational structure	Large hospital trust in England	Bate et al. (2000)
Managers' person-oriented and task-oriented behaviors	Ten-year modernization effort aimed at improving the quality, reliability, effectiveness, and value of the health-care services delivered to society	UK National Health Service	Battilana et al. (2010)
Transformational leadership	Growth in companies	Three Midwestern U.S. companies	Bommer et al. (2005)
CEO origin (insider vs. outsider)	Type of divestiture	Divestiture programs in the United States between 1986 and 2009	Chiu et al. (2016)
Perceptions of leaders' ethical behaviors	Corruption recovery	Insurance company (four divisions and 19 business units)	Cotton et al. (2017)
Results-oriented vs. professional value-based leadership	Modernization process of public services (shift to results-oriented policy)	Public secondary schools in England	Currie et al. (2009)
Leader demographics (as proxy for openness to change)	CEO successions	One hundred eighteen firms in the U.S. manufacturing sector	Datta et al. (2003)
Leaders' actions on their political positions	Five change situations in five separate organizations (case studies), involving mergers, implementation of new missions, and/or new CEOs	Three hospitals, a "metropolitan merger," and a "capital merger"	Denis et al. (2001)
Leaders' issue-selling approach	No actual change was studied; study was conducted in the context of a severe budget crunch and construction of new facility that served as pressures for change	Large hospital	Dutton et al. (2001)
LMX and leaders' influence tactics	Implementation of new project-based software program	Leading marketer, distributor, and producer of automotive and industrial products and services, and a rapidly growing financial services company	Furst and Cable (2008)
CEO narcissism	Emergence of biotechnology between 1980 and 2008	Research-based pharmaceutical companies	Gerstner et al. (2013)
Leader sensemaking and sensegiving	New university president who initiated a new strategic change effort	Large public university	Gioia and Chittipeddi (1991)
Leaders' "mobilizing actions" and "mitigating actions"	Acquisitions	Eight acquisitions of privately held technology ventures	Graebner (2004)

TABLE 2
(Continued)

Key Leadership Variables	Change Content	Organizational Context	Reference
Leader vision strength	Transformational change involving restructuring, units created and others closed, and job redesign	Large public sector organization in Australia	Griffin et al. (2010)
Leaders' social control, emotional expressivity, and emotional control; leaders' charismatic leadership	Changes experienced at the various organizations sampled over the past year	Sixty-four organizations from a variety of industries (e.g., higher education, community development, and government)	Groves (2005)
Distributed leadership	There is no particular organizational change studied. These researchers follow longitudinal changes in schools' "improvement capacity"	Elementary schools	Heck and Hallinger (2010)
Leaders' "need deficiency"; succession from inside/outside the organization; task/employee focus	Replacement of employees	Corporations in the United States	Helmich (1975)
Succession from inside/outside; leadership style (task/employee focus)	Replacement of employees	Chemical and allied product corporations	Helmich and Brown (1972)
Transformational leadership	A variety of changes, depending on the organization	Thirty different organizations, from the Southeastern United States from a variety of industries	Herold et al. (2008)
Leaders' Big-Five traits	Environmental (economic) fluctuations	One hundred twenty small and medium-sized Ecuadorian enterprises	Herrmann and Nadkarni (2014)
Leaders' "framing," "creating," "shaping," "facilitating," and "engaging" behaviors	Change initiatives provided by leaders from 33 organizations	Thirty-three organizations	Higgs and Rowland (2011)
Leader emotions and behaviors (e.g., emotional commitment, providing positive experiences)	Deregulation	Large service organization employing more than 50,000	Huy (2002)
Communication of newness attitudes and providing resources; violating recipients' expectations	Deregulation and changes in the tech environment	Large IT employing more than 50,000	Huy et al. (2014)
Supportive leadership	Mergers and acquisitions	U.S. health-care services organization	Jones and Van de Ven (2016)
Trust in top management team	Merger	Civil service organizations in Finland	Kalttinen et al. (2017)
Charisma	Changes in field (internal medicine and anesthesiology) and implications for structure of units	Hospital	Levay (2010)
Paradoxical leadership, delegation, and other managerial roles	Structural change	Lego production facility	Lüscher and Lewis (2008)
Leaders' cognitive style/mental model	Changes in the proportion of salaries spent on the different positions of NFL players in the team	Twenty-eight NFL teams	Ndofor et al. (2009)
Charisma	Companywide restructuring	Large German company	Nohe and Michaelis (2016)

TABLE 2
(Continued)

Key Leadership Variables	Change Content	Organizational Context	Reference
Leaders' change-promoting; charisma	Companywide restructuring	Large German company	Nohe et al. (2013)
Leaders' dispositional resistance to change and personal values; Transformational leadership	Large-scale organizational reform	Seventy-five public schools	Oreg and Berson (2011)
LMX; followers trust in the leader	Internationalization, change in strategic orientation	Large agricultural equipment seller	Sackmann et al. (2009)
Transformational leadership	Fundamental change to the organizational structure	Headquarters of a large government agency	Seo et al. (2012)
Leaders' meaning making	Conversion of stores, involving renaming divisions, remodeling, and rebranding stores, updating product assortment and work routines	Fortune 500 entertainment and leisure products retailer	Sonenshein (2010)
Managerial communication	Strategic change involving better company integration (e.g., renaming divisions, remodeling stores, revising the branding strategy, expanding product assortment, and updating technology and work routines)	Fortune 500 specialty retailer	Sonenshein and Dholakia (2012)
Senior and middle managers' communication styles	Culture change	Telecommunications company	Thomas et al. (2011)
Directive/considerate leadership	Changes that had taken place over the time period studied (1981–1991 and 1987–1993)	GE and Eisai	Välíkangas and Okumura (1997)
LMX	Merger	Large housing corporation in the Netherlands	van Dam et al. (2008)
Visionary leadership	Quality Improvement	Manufacturing plant, hospital, and national police force	Waldman et al. (1998)
Leader demographics	Change in diversification strategy	Largest manufacturing firms for 1980 (listed in Fortune)	Wiersema and Bantel (1992)
Transformational leadership	Implementation of radical, discontinuous, intentional change (change of customer base)	Large Chinese hospitality company	Zhao et al. (2016)

pertained to leaders, the nature of the change and the organization studied, the change content, and the key relationships sought in each study. As could be expected, whereas the quantitative articles lent themselves more naturally to this form of analysis, it was more challenging to classify and code the qualitative studies. The effort to provide an overarching comparative and integrative perspective of the field required us to set aside some of the unique and rich attributes of each study. We provide in Table 2 a sample of the articles in our review, with information about the key leadership variables and

information about the content and context of the changes studied.

A MODEL OF LEADERSHIP AND ORGANIZATIONAL CHANGE

Based on our analysis of the literature, we propose the model presented in Figure 1. In what follows, we describe the various model paths. We begin by describing the main effects pertaining to the impacts of leaders' actions (Figure 1, paths 1–4) and the relationships between leaders' attributes and actions

(Figure 1, paths 8–9; and Table 3). We then describe the evidence about the mechanisms that mediate the main effects (Table 4) and the moderated and moderating effects of leaders' actions (Figure 1, paths 6–7, and Table 5).

Leader Actions and Outcomes

As noted earlier, leader actions include senior leaders' strategic choices and both senior leaders' and middle managers' typical behavioral style. Both sets of actions have been linked with outcomes of organizational change, although the effects of senior leaders' strategic choices on change outcomes have received far less research attention than the effects of leaders' behaviors, which have been studied primarily among middle managers.

Leaders' strategic choices. To begin with, relative to research on leadership, it is harder to distinguish in strategy research between studies that pertain to organizational change and those that do not because the notion of change is embedded within the discussion of the purpose and effects of strategic choices. Furthermore, whereas the leadership literature clearly identifies the leader being studied, the strategy literature focuses on the organization as the decision-making entity, typically without explicitly referring to individual leaders, and only occasionally referring to the organization's CEO. When discussing the effects of leaders' strategic choices on change, we therefore focus specifically on the subset of studies that refers explicitly to both the notion of change and the leader (i.e., CEO).

This left us with a narrow set of studies in this category, which was the least covered set of relationships in our review (see paths 1 and 2 in Figure 1), despite their conceptual significance. There were only four articles that explicitly focused on organizational change and referred to the strategic choices of leaders (i.e., CEOs; see section below), and no articles that considered the impact on change recipients. The rationale underlying this research is that through their decisions, senior leaders set organizational goals and procedures, which ultimately determine organizational outcomes (Hambrick, 2007).

Leaders' strategic choices and organizational outcomes. The studies in this section demonstrate the impact of leaders' change-related strategic choices on the organization (Figure 1, path 1). For example, in a qualitative study of newly appointed company presidents, strategic decisions such as an emphasis on communicating new agendas, implementing timetables and targets, and a focus on learning were shown to increase the chances of successful implementation of strategic changes (Simons, 1994). In another study,

strategic changes introduced by new CEOs of Fortune 500 firms were linked to turnover and a disruptive organizational climate in their organizations (Friedman & Saul, 1991). More recently, Herrmann and Nadkarni (2014) used theories of strategic change (Zajac & Kraatz, 1993) to hypothesize about leaders' impact on the initiation and implementation of strategic change. Using survey data from 155 firms, they linked indexes of strategic change with executives' reports of firms' performance, six months later.

As noted earlier, in only a limited amount of research in this field, are the outcomes of strategic choices explicitly attributed to leaders. This is likely because of strategy researchers' focus on macro phenomena that extend beyond the individual leader. It is therefore useful to integrate insights from OB research with those of strategy, in this context. In a step toward bridging the divide between OB and strategy in this field, Waldman and Javidan (2009) propose a conceptual model about the process of M&A. They propose that leaders' strategic choices, in the form of decisions about how to align organizations following a merger, will predict the mergers' success, as a function of acquired firms' premerger performance. They further trace back leaders' strategic choices to leaders' behavior and attributes.

Leaders' strategic choices and recipients' reactions to change. All of the above relationships involve the direct effects of leaders' choices on organizational outcomes. Interestingly, strategy researchers have yet to consider how strategic decisions impact recipients of the change (Figure 1, path 2), although such an impact is likely substantial. Learning about the impact of leaders' strategic choices on change recipients is important not only for understanding how change influences the well-being and job attitudes of organization members but also because of the influence change recipients' responses have on the long-term success of the change and the organization (see, e.g., Bartunek et al., 2006; Oreg et al., 2013).

Leaders' behaviors. More than 50 studies in our review demonstrated the effects of leaders' behaviors on the effectiveness of change and on recipients' reactions to the change (Herold, Fedor, Caldwell, & Liu, 2008; Oreg & Berson, 2011). The theories on which this research is based use concepts that focus on the change-related aspects of leaders' behaviors, such as "issue-selling" (Dutton, Ashford, O'Neill, & Lawrence, 2001), transformational leadership (Bass, 1985), and, most explicitly, change-related leadership (Brockner, Konovsky, Cooper Schneider, & Folger, 1994). These behaviors differ from strategic choices in two respects. First, as noted earlier, whereas strategic choices are situation-specific, leader behaviors refer to a relatively stable leadership style that

TABLE 3
Sample of the Key Main Effects Depicted in our Model

Predictor	Outcome	Example of Theories/ Approaches Used	Methodology and Data Used	Sample	Reference
Strategic Choices and Organizational Outcomes					
Initiation and implementation of strategic change	Firm performance (e.g., sales' growth, ROA)	Strategic change (Zajac & Kraatz, 1993)	Quantitative; surveys and archival data	One hundred twenty CEOs of small and medium-sized enterprises	Herrmann and Nadkarni (2014)
Strategic decisions (e.g., emphasis on communicating new agendas, a focus on learning)	Successful implementation of strategic changes	Management control theory (Schendel & Hofer, 1979)	Qualitative; semi-structured interviews, company documents	Ten newly appointed company presidents	Simons (1994)
Leader Behaviors and Organizational Outcomes					
Leaders' "interpretive schemas"	The nature of an organizational restructuring	Organizations as interpretation systems (Daft & Weick, 1984)	Qualitative; organizational documents and interviews, participant observation	Members of a religious order	Bartunek (1984)
Leaders' "mobilizing actions" and "mitigating actions"	Effective transition following the acquisition and the achievement of expected and unexpected business value	Knowledge-based theory of the firm (Grant, 1996); the human side of M&A (Buono & Bowditch, 1989)	Qualitative; interviews, emails and phone calls, archival data (e.g., company websites, and business publications)	Company leaders and investors (more than 60 interviews)	Græbner (2004)
CEOs' change-oriented leadership	Firm performance	Flexible leadership theory (Yukl & Lepsinger, 2004)	Quantitative; surveys using self and other reports	Two hundred seventeen direct reports of CEOs	Sirén et al. (2016)
CEOs' transformational leadership	Change effectiveness	Transformational leadership theory (Bass, 1985)	Quantitative; surveys	Thirty-eight CEOs, 76 TMT members, and 76 key persons	Stoker et al. (2012)
Leader Behaviors and Recipient Responses					
Leaders' transformational leadership	Employees' cynicism toward change and organizational commitment	Organizational cynicism (Dean, Brandes, & Dharwadkar, 1998)	Quantitative; surveys using self and other reports (leaders and subordinates)	Six hundred eighty-seven correctional officers	DeCelles et al. (2013)
Leaders' influence tactics	Employees' resistance to change	Attribution theory (Heider, 1958); leader-member exchange (Dansereau, Graen, & Haga, 1975)	Quantitative; surveys using employees' self-reports and reports of their managers	One hundred one employees and 25 managers (sample 1) + 66 employees and 27 managers (sample 2)	Furst and Cable (2008)
Change leadership and transformational leadership	Commitment to change	Transformational leadership (Bass, 1985); change-related behaviors (Brockner et al., 1994)	Quantitative; surveys using employees' self-reports and reports of their managers	Three hundred forty-three employees from 30 organizations	Herold et al. (2008)
Leader emotions and behaviors (e.g., emotional commitment, providing positive experiences)	Change recipients' anxieties and fears about the change	Work-group moods of people (Bartel & Saavedra, 2000)	Qualitative; interviews, observations, archival data	Approximately 500 employees, focusing on 148 people, including 10 executives and managers	Huy (2002)

TABLE 3
(Continued)

Predictor	Outcome	Example of Theories/ Approaches Used	Methodology and Data Used	Sample	Reference
Senior leaders' transformational leadership	Employees' behavioral intentions to resist change	Transformational leadership (Bass, 1985)	Quantitative; surveys using employees' self-reports and reports of their managers	Seventy-five principals and 586 teachers	Oreg and Berson (2011)
Leaders' transformational leadership	Behavioral response to change	Affective events theory (Weiss & Cropanzano, 1996)	Quantitative; surveys using employees' self-reports and reports of their managers	Nine hundred six employees (reporting to 217 managers) in Time 1 + 430 employees in Time 2	Seo et al. (2012)
Managers' sensegiving actions (narratives about change)	Change acceptance or resistance	Three-stage theory of organizational change (Lewin, 1951)	Qualitative; open-ended survey questions, interviews, and company documents	Forty-two interviews with employees and managers, 159 employees completed open-ended survey questions	Sonenshein (2010)
LMX	Employees' resistance to change	Leader-member exchange theory (Graen, 2004); readiness for organizational change (Armenakis et al., 1993)	Quantitative; surveys using employees' self-reports	Two hundred thirty-five employees	van Dam et al. (2008)
New leaders' transformational leadership	Employees' behavioral resistance and support for change	Leader succession (Ballinger & Schoorman, 2007)	Quantitative; surveys using employees' and leaders' self and other reports	Two hundred three employees and 22 leaders	Zhao et al. (2016)
Leader Attributes and Strategic Choices					
CEO narcissism	Adoption of discontinuous technology	Upper echelons theory (Chatterjee & Hambrick, 2007; Hambrick & Mason, 1984)	Quantitative; archival data	Seventy-eight CEOs from 33 companies	Gerstner et al. (2013)
CEO prior managerial experience	Firms' strategic changes	The dynamics of CEO tenure (Hambrick & Fukutomi, 1991)	Quantitative; archival data	One hundred thirty-nine firms	Weng and Lin (2014)
Top Management team demographics (e.g., tenure, age, and education)	Change in corporate strategy	Upper echelons theory (Hambrick & Mason, 1984)	Quantitative; archival data	Eighty-seven firms	Wiersema and Bantel (1992)
Leader Attributes and Leader Behaviors					
Positive self-concept and risk tolerance	Managers' coping with organizational change	Coping (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986)	Quantitative; surveys using managers' and other organization members' reports	Five hundred fourteen matched sets of leader-follower surveys	Judge et al. (1999)
Cynicism about organizational change	Leaders' transformational leadership	Cynicism about organizational change (Bommer et al., 2005)	Quantitative; surveys using managers' self-reports and employees' reports of their managers	One hundred six managers and their 933 responding employees	Rubin et al. (2009)

transcends a specific context. Second, whereas strategic choices pertain to actions undertaken by senior leaders (e.g., CEOs), leader behaviors refer to leaders at all levels of the organization. As our review revealed, leaders' behavior during change has been linked with both organizational outcomes and recipients' responses.

Leaders' behavior and organizational outcomes.

Early on, research has linked leaders' behaviors with change-related outcomes (Figure 1, path 3). For example, in a study of 108 company presidents, changes in the form of executive turnover were more likely in companies led by presidents who perceived themselves as task-oriented versus person-oriented (Helmich, 1975). Resembling task-oriented leadership, a result-oriented approach to leadership was expected to be more effective in implementing a modernization process in secondary schools in England (Currie, Lockett, & Suhomlinova, 2009). A mixed-method study of 197 schools, however, did not find support for the advantages of the result-oriented approach over one that is considered more traditional in the English school system. An analysis of the qualitative data in that study, however, suggested that the lack of support for the hypothesis resulted from the fact that the result-oriented approach was not actually implemented.

In a quantitative study of 89 clinical, middle, and top managers from the UK National Health Service, both task and person behaviors were found necessary for the effective implementation of organizational change (Battilana, Gilmartin, Sengul, Pache, & Alexander, 2010). Person (but not task)-oriented behaviors were important for communicating the need for change, whereas task (but not person)-oriented behaviors were important for evaluating the implementation of the change.

Other research considered other types of leader behaviors and their role in driving organizational change outcomes. For example, through interviews of vice presidents and department directors of a hospital, leaders' efforts to promote change were demonstrated through a process of issue-selling, whereby leaders' drew organization members' attention to, and shaped their understanding of, key organizational events (Dutton et al., 2001). In another qualitative study, through interviews with leaders from 33 organizations undergoing change, "facilitating" and "engaging" leader behaviors were found to be most effective, and those that are "shaping" least effective (Higgs & Rowland, 2011). Effective behaviors included "ensuring that people are challenged to find their own answers" (i.e., facilitating, p. 312) and involving others in the process of change (i.e., engaging). In contrast, shaping behaviors, characterized as holding a leader-centric

perspective, with a controlling and dominating approach, had a negative impact on the successful implementation of change.

The benefits of involving others in the change implementation process are also demonstrated in research of distributed (Heck & Hallinger, 2010), shared (Bate, Khan, & Pye, 2000), and collective (Denis, Lamothe, & Langley, 2001) leadership, all of which highlight the shared nature of leadership. For example, in a study of 197 schools, positive changes in subjective and objective measures of school performance were more likely to take place among schools in which multiple members, rather than a single leader, were involved in implementing the change (Heck & Hallinger, 2010).

Several of the studies we identified in our review focus on the concept of transformational leadership, linking it to the effective management of organizational change (Beatty & Lee, 1992; Rubin & Brockner, 1975; Stoker, Grutterink, & Kolk, 2012; Waldman, Lituchy, Gopalakrishnan, Laframboise, Galperin, & Kaltsounakis, 1998; Woodman, 1989). By its very nature, the focus of transformational leadership is on promoting a change among employees, which can then drive change in the organization at large (Bass, 1985). Accordingly, several of the studies we reviewed use this logic to hypothesize about the relationship between transformational leadership and change-related outcomes.

Studies of transformational leadership have used a variety of approaches for investigating these relationships. Whereas some of them use typical survey measures (Rubin & Brockner, 1975; Stoker et al., 2012), others have adopted a qualitative approach, mostly through interviews, and some have used both (Kan & Parry, 2004). Findings from this research include positive effects of transformational leadership on the implementation of change and its outcomes. For example, using data from 106 manufacturing managers, transformational leadership was significantly correlated with unit performance, as assessed through leaders' job performance ratings (provided by their direct supervisors; Rubin et al., 2009). Similarly, in a study of 38 CEOs in a variety of for-profit and not-for-profit organizations implementing change, transformational leadership was linked with ratings of the change's effectiveness (Stoker et al., 2012).

Further supporting this link are the qualitative studies of transformational leadership in the context of change (Beatty & Lee, 1992; Waldman et al., 1998). These include in-depth descriptions of leaders' behaviors and provide insight into the separate effects of the various aspects of transformational leadership. In one study, the concepts of transactional and transformational leaderships guided the investigation of the implementation of quality improvement programs in three organizations (Waldman

et al., 1998). Using observations and interviews with employees, junior managers, and senior managers from the three organizations, the authors distinguish among the effects of transactional and transformational leadership. Whereas both transactional and transformational leaderships were effective in the promotion of organizational change, only transformational leadership determined whether quality improvement was sought to begin with, and transactional leadership contributed to activities that ensured the operational quality of the improvement programs. Similarly, using a different conceptualization of transformational leadership, researchers interviewed managers and employees in aerospace firms during the introduction of new technology and linked descriptions of specific leadership behaviors with effective change management (Beatty & Lee, 1992).

More recently, some research focused on a component of transformational leadership that more directly captures change-oriented behaviors (Sirén, Patel, & Wincent, 2016). As hypothesized, change-related leadership was positively associated with firms' financial performance. By drawing attention to specific leadership behaviors, the studies above contribute to the differentiation among the various aspects of transformational leadership. They do so by linking each to a different aspect of the organizational change process, thus addressing some of the concerns raised about the meaningfulness and validity of the transformational leadership concept (van Knippenberg & Sitkin, 2013).

In both the quantitative and qualitative studies above, vision is highlighted as one of the key mechanisms through which transformational leaders successfully implement change. Countering the one-sided, positive view of vision, one study demonstrated that vision can be both enabling and disabling for change (Landau, Drori, & Porras, 2006). Using data from a participant observation and 91 interviews with employees and managers at multiple levels of the organizational hierarchy, leaders' vision was beneficial for the implementation of change as long as it was up to date and consistent with the realities of the changing environment.

A few of the studies linking leadership behaviors to change and organizational outcomes suggest that the mechanism through which leaders drive change involves organization members' understandings and reactions to the change. This literature uses concepts such as schemas (Bartunek, 1984), sensemaking (Gioia & Chittipeddi, 1991), and interpretation systems (Daft & Weick, 1984), to explain how leaders bring about change among their followers and in their organizations. For example, based on interviews with company members and analyses of CEOs' annual reports the effects of CEOs

on changes in an organization's identity were achieved through the process of shaping organization members' "logics" about the organization (Bayle-Cordier, Mirvis, & Moingeon, 2015). In another study, leaders' effects on the nature of an organizational restructuring in a church order were established through leaders' influence on organization members' interpretations of the change, by using "interpretive schemas" (Bartunek, 1984). This process creates a shared understanding of the change and its context, which in turn shapes organization members' responses to change and the evolution of the change.

Alongside research about the cognitive aspects of the response to change, other research addressed the role of members' emotional responses. In one study, leaders' actions contributed to an effective transition, after being acquired, and to the achievement of expected and unexpected business value, by reducing employees' negative emotions about the change (Graebner, 2004). This was achieved by determining the pace of change (i.e., "mobilizing actions") and by addressing employees' concerns (i.e., "mitigating actions"). These latter studies therefore highlight the well-established understanding that the effective implementation of change requires careful attention to and consideration of change recipients (Bartunek et al., 2006). Accordingly, the largest group of studies we came across in our review (see Figure 2) involves research on change recipients' responses and the role of leaders' behaviors in shaping them.

Leaders' behavior and recipients' responses to change. Of the links in our model, the relationship between leaders' behaviors and change recipients' responses (Figure 1, path 4) is the most frequently studied. Much of this research is based on the rationale that leaders promote change by engaging followers and shaping their emotional and attitudinal responses (Bartunek, Krim, Necochea, & Humphries, 1999; Shamir et al., 1993). Some of the research refers to the mechanisms through which this process of engagement and shaping takes place, such as the organizational climate (Schneider & Reichers, 1983) and the personal relationship between leaders and followers (Graen, 2004). Most of the studies have been quantitative, with a large portion focusing specifically on transformational leadership. Moreover, most of these studies focus on unit leaders, rather than leaders of organizations.

We separate our discussion of studies into those that predict emotions, change attitudes, and behavioral consequences and job attitudes (Oreg, 2006; Piderit, 2000).

Effects on emotions. One of the primary means through which leaders impact followers is by influencing

followers' emotions (Huy, 2002; Shamir et al., 1993), through processes of contagion (Sy, Côté, & Saavedra, 2005) or by influencing followers' self-concept (Shamir et al., 1993). Correspondingly, a central aspect of how change recipients respond to change involves their affective experiences and expressions (Oreg, Bartunek, Lee, & Do, 2018). Both transformational and authentic leadership have been linked with greater likelihood of experiencing positive emotions and lower likelihood of experiencing negative ones in the context of an organizational change (Agote, Aramburu, & Lines, 2016; Seo, Taylor, Hill, Zhang, Tesluk, & Lorinkova, 2012). Both authentic and transformational leadership elicit trust among subordinates, which alleviates negative emotions, such as anxiety and threat, and enhance positive ones, such as hope and enthusiasm. Authentic leadership is said to achieve this through the exhibition of integrity and involving subordinates in the decision-making process (Agote et al., 2016). Similarly, conceptualizations of transformational leadership emphasize the relational aspects of leadership, through which leaders influence followers (Howell & Shamir, 2005).

Tests of these conceptual mechanisms, however, are limited in both of the above studies because of how leadership was measured. In the study of authentic leadership (Agote et al., 2016), the authors focused on perceptions of leadership behaviors at the individual level, rather than aggregating to the leader level, thus providing only limited insights about the impact of authentic leaders' actual behaviors. In the study of transformational leadership (Seo et al., 2012), like in many quantitative assessments of leaders' effects, the conceptual mechanisms through which leadership was said to influence followers' emotions was not directly assessed.

Findings of qualitative research that addressed similar relationships provide additional insights. For example, in a study of a large-service organization, interviews with hundreds of mid-level managers and executives uncovered the emphasis that mid-level managers' place on subordinates' emotional needs and concerns, and on encouraging subordinates to express a wider range of emotions (Huy, 2002). This, in turn, reduced change recipients' anxieties and fears about the change. In another study, top managers' actions were linked with their subordinates' (i.e., middle managers') judgments and emotional responses (Huy, Corley, & Kraatz, 2014). Actions, such as involving middle managers in defining the content of the change, were associated with positive emotional reactions, and

actions such as failing to follow through on promises were associated with negative emotions, such as anxiety.

Effects on change attitudes. Another central variable in the context of organizational change involves recipients' attitudes toward change (Rafferty et al., 2013). As discussed in reviews of the change-reactions literature, several terms have been used for conceptualizing and measuring these attitudes, including change commitment, resistance to change, support for change, and cynicism toward change. Although each of the terms highlights a specific aspect of the attitude toward change, there appears to be significant overlap, both in definition and measurement (see further discussion of this point below).

The largest body of research linking leader behaviors to change attitudes focused on commitment to change or to the organization in the context of change. These studies vary in the leadership style of focus and in the mediating and moderating mechanisms considered. Overall, however, transformational (Herold, Fedor, & Caldwell, 2007; Hill, Seo, Kang, & Taylor, 2012; Shin, Taylor, & Seo, 2012; Zhao, Taylor, Lee, & Lam, 2016), ethical (Cotton, Stevenson, & Bartunek, 2017), LMX (Lee, Scandura, & Sharif, 2014; Sackmann, Eggenhofer-Rehart, & Friesl, 2009), change-related (Herold et al., 2007; Nohe, Michaelis, Menges, Zhang, & Sonntag, 2013), and communication (Helpap, 2016; Sonenshein & Dholakia, 2012) behaviors are positively linked with followers' reports of their commitment to the change or to the changing organization.

Together, these studies demonstrate the impact that leaders can have on followers' commitment to change. By examining different leadership styles, each of these studies highlights a different mechanism through which leaders achieve this effect. For example, whereas change-related leadership increases followers' commitment to change by emphasizing the value of change (Herold et al., 2008), LMX achieves this effect by emphasizing the mutual commitment between the leader and follower (Lee et al., 2014; van Dam, Oreg, & Schyns, 2008), and change communication by reducing the ambiguity of change and increasing followers' involvement in the change process (Helpap, 2016). As we review below, some of the research in this field explicitly tested the roles of such mediating mechanisms.

A second group of studies focused on predicting recipients' support for or openness to change, versus resistance to it. In Waldman and Javidan's (2009) conceptual model of leadership in the context of M&A, both leaders' strategic choices and behaviors, such as emphasizing vision communication and the selective sharing of information, are said to ultimately

shape organization members' attitudes toward the M&A, decreasing members' resistance. A few of the studies considered commitment to change as a mediator of the relationship between leadership and support or resistance to change (Helpap, 2016; Zhao et al., 2016). In other studies, transformational (Nemanich & Keller, 2007; Oreg & Berson, 2011), LMX (Furst & Cable, 2008; van Dam et al., 2008), and supportive (Jones & Van de Ven, 2016) leadership were similarly linked with recipients' greater support for, and lesser resistance to, change. Similarly, in a study of 108 senior organizational leaders, charismatic leadership was linked with followers' openness to an organizational change, which was in turn associated with perceptions of these leaders' effectiveness (Groves, 2005). The evidence seems to be consistent across studies. Both in those in which leadership is assessed on the basis of subordinates' individual-level perceptions (Jones & Van de Ven, 2016; Nemanich & Keller, 2007), and those in which it was aggregated to the leader level (Groves, 2005; Oreg & Berson, 2011).

The third group of studies on leadership and change attitudes focused on the concept of cynicism toward change, defined as "an attitude consisting of the futility of change along with a loss of faith in those who are responsible for the changes" (Bommer, Rich, & Rubin, 2005: 736). These studies demonstrate the negative effect of transformational leadership on change recipients' cynicism toward organizational change (Bommer et al., 2005; DeCelles, Tesluk, & Taxman, 2013; Rubin et al., 2009; Wu, Neubert, & Yi, 2007). In one of these studies, cynicism toward change was assessed both at the individual and organizational levels, thus addressing not only individuals' attitudes but also organizational climates, which were further shown to predict recipients' organizational commitment (DeCelles et al., 2013).

Alongside the value of considering different types of attitudes toward change and the overarching finding that leaders have a significant impact on followers' attitude toward change, the lack of integration across studies and insufficient examination of the particular content that is shared versus unique across these constructs, leads to some redundancy in the research conducted on the one hand, and makes it difficult to compare and contrast results on the other. Similar criticisms can be given about the leadership behaviors studied, which also present a significant overlap, both in conceptualizations and measurement. We propose below directions for further investigation to address this and other limitations of extant research.

Effects on behavioral consequences and job attitudes. A few of the studies demonstrated effects of leaders' behaviors on outcomes such as job performance or job attitudes (Carter, Armenakis, Feild, & Mossholder, 2013; Jones & Van de Ven, 2016; Nohe & Michaelis, 2016). These studies build on the more general, and well-established, link between leadership and job outcomes (Judge & Piccolo, 2004). For example, in one study, team leaders' charisma was positively associated with teams' OCB in the context of an organizational change (Nohe & Michaelis, 2016). In a qualitative analysis of a U.S. and a Japanese firm, the effectiveness of leaders' behavioral approaches (e.g., emphasizing goals and emphasizing rewards) in driving change was contingent on followers' work motives (Välilikangas & Okumura, 1997). Specifically, a high congruence between leaders' approach and followers' motives, as in when both the leader and follower value the utility of goals, was associated with a greater likelihood of shifting followers' organizational behavior in line with the organizational change.

In some of the studies, change attitudes mediated the effects of leadership on performance (Carter et al., 2013; Jones & Van de Ven, 2016; Nohe et al., 2013). For example, in Nohe et al.'s (2013) study, recipients' commitment to change mediated the effects of leaders' change-promoting behaviors (which were also mediated through follower's perceptions of the leader's charisma) on their teams' performance following the change. In other studies, change attitudes mediated the effects of leadership on job attitudes such as organizational commitment (DeCelles et al., 2013; Jones, Reynolds, Weun, & Beatty, 2003). Yet other research linked ethical (Sharif & Scandura, 2014) and transformational (Carter et al., 2013) leaderships with organization members' performance during change.

Interestingly, although charismatic leadership is typically linked with positive responses to change (Groves, 2005), in a qualitative study, based on two case studies of hospital departments undergoing change, department managers' charismatic leadership (based on Weber's 1968/1922 conceptualization and assessed through interviews with managers' subordinates) was actually linked with increases in employees' behavioral resistance to the externally imposed changes (Levay, 2010). The mechanisms through which these managers influenced change resistors included their extraordinary and exceptional behavior and the articulation of a clear mission. Yet the fact that the change was initiated from outside their departments and that they identified

with their subordinates, who resisted the change early on, drove them to use their influence toward the increase, rather than alleviation of their subordinates' resistance. Clearly, whether change leaders are also the initiators of the change, or merely its implementers, is a key factor that determines both the process and outcomes of the change. As we discuss below, however, studies of leadership and change give little attention to this distinction.

Overall, despite the importance of performance as an outcome and the strong emphasis in leadership research on the importance of leaders' behaviors for performance, we remain with very rudimentary evidence for these links in the context of organizational change. Although the success or failure of an organization following change is to a great degree attributed to its leader, much more research that explicitly links leaders' behavior with hard independent performance outcomes over time is necessary to empirically demonstrate the validity of this attribution.

Effects on change recipients' sensemaking. As described in the previous section, a subfield that explicitly addresses leaders' behavior in managing change discusses leaders' role in shaping the meanings that change recipients form about change (i.e., sensemaking) through a process of sensegiving (Gioia & Chittipeddi, 1991). All of the studies in this subfield have been qualitative, focusing on the cognitive processes through which organization members interpret and respond to change. Studies of leaders' sensegiving and organizational change outcomes are based on the understanding that leaders influence change recipients' sensemaking. The underlying rationale is that a prerequisite to dealing with change is that organization members need to first understand the meanings of the change and its ramifications for the organization, through a process of *sensemaking* (Balogun, Bartunek, & Do, 2015; Gioia & Thomas, 1996). As noted, one of the key roles that leaders have in managing change is in developing their own change interpretations (Isabella, 1990) and schemas (Balogun & Johnson, 2004), and in turn shaping change recipients' understandings of the change "toward a preferred redefinition of organizational reality (Gioia & Chittipeddi, 1991: 442). In an ethnographic study of a strategic change at a large public university, organization members' sensemaking processes were tied to a series of the university president's actions, including announcing the change and making personnel changes and other key decisions that were communicated to important stakeholders. The authors describe these actions as aimed at providing "a viable interpretation of a new

reality and to influence stakeholders and constituents to adopt it as their own" (p. 443).

In another study, open-ended survey questions, interviews, and company documents from Fortune 500 retail stores were used to uncover the sensegiving and sensemaking processes in stores undergoing change (Sonenshein, 2010). Store employees' sensemaking was manifested in change acceptance or resistance and was shaped by store managers' sensegiving actions. These sensegiving actions took on the form of narratives about the change, such as framing the degree of significance that employees should attribute to the change. Furthermore, managers were said to deliberately provide ambiguous narratives to enable a sense of agreement between managers and employees despite the adoption of multiple, possibly diverging, interpretations of the change. This sense of agreement makes it easier for employees to accept change.

Closely related to the notion of sensegiving, some research highlights leaders' role in *prompting cognitive shifts*, by communicating one's understanding and reframing it as a means of engaging change constituents (Ospina & Foldy, 2009). Similarly, in one of the studies described above, CEOs' influence on the organizational identity was achieved through the *logics* they emphasized for shaping organization members' understanding of the change (Bayle-Cordier et al., 2015). In yet other research, leaders' and followers' formation of meanings during change results from a negotiation process among organization members (Thomas, Sargent, & Hardy, 2011). One finding from this research is that senior and middle managers tend to use distinct communication patterns in the negotiation process. The researchers also identified two possible dynamics that unfold when change meanings are negotiated. First, communications by senior managers who exhibit behaviors such as inviting, proposing, and clarifying are involved in a generative dialogue that results in innovative and synergistic change. By contrast, when senior managers' communication involves dismissing, reiterating, and invoking hierarchy, the dialogue tends to be degenerative, resulting in the imposition of change, which reproduces existing knowledge.

The Mediated Effects of Leaders' Actions

When considering the processes through which leaders' actions shape change outcomes, we identify from our review two main mediating paths: one, which follows directly from the previous section, involves the role of the change process in mediating the effects of leaders' behaviors on recipients' responses

to change (i.e., change process as a mediator of paths 1–4 in Figure 1; see also Table 4). The second involves the role that recipients' responses have in mediating the effects of both leaders' strategic choices and behaviors on the organization-level outcomes (paths 2 and 4 linked with path 5 in Figure 1; see also Table 4).

The mediating role of the change process. A variety of conceptual arguments have been made for establishing the role of the change process in mediating the relationships between leadership behavior and responses to change. As noted earlier, the change process pertains to the manner in which a given change is managed (Armenakis & Bedeian, 1999; Oreg et al., 2011). Several studies demonstrated that factors such as effective communication (i.e., involving change recipients in the change process) mediated the effects of leadership on recipients' response to change (Hill et al., 2012; Lee et al., 2014; van Dam et al., 2008) and on the success of the change (Battilana et al., 2010). In other studies, the effects of leadership were mediated by eliciting trust (Agote et al., 2016; Nohe & Michaelis, 2016; Sackmann et al., 2009), fairness (Wu et al., 2007), empowerment (DeCelles et al., 2013) or a climate that supports creative thinking and emphasizes goal clarity (Nemanich & Keller, 2007). Each of the mediating variables in these studies pertains to the manner in which the change is implemented.

Some research addressed interrelationships among components of the change process, such as the interplay of process justice and trust over time (Kaltainen, Lipponen, & Holtz, 2017), or the impact of leaders' communication transparency on the trust in the leader in the context of change (Norman, Avolio, & Luthans, 2010). In other research, perceptions of leaders' legitimacy mediated the effects of justice perceptions on change recipients' acceptance of an organizational merger (Tyler & De Cremer, 2005). Overall, variables within the change process are more specific to the change than leaders' behavior or style, and all have to do with the manner and atmosphere with which the change is implemented. The leadership literature correspondingly highlights the value of such process variables for better understanding the effects of leadership on outcomes (Berson, Da'as, & Waldman, 2015; Waldman, Ramirez, House, & Puranam, 2001).

Although the change process has been considered mostly in research that links leaders' behaviors with recipients' responses, one could similarly consider its role in mediating the effects of leaders' behavior on change and organization outcomes. Moreover, the change process may also mediate the effects

of leaders' strategic choices on both recipients' responses and organizational outcomes. For example, it is clear that leaders' strategic choices have their effects on the organization and its members through numerous mechanisms and processes. Yet to date, these mechanisms have yet to be studied explicitly.

The mediating role of the change recipients' responses. As mentioned above, the relationship between leaders' behaviors, such as sensegiving, and organizational outcomes is often achieved through the impact that leaders have on change recipients (Bayle-Cordier et al., 2015). Recipient responses similarly mediate the effect of other leader behaviors on change and organizational outcomes. In other words, the impact on organization-level outcomes (e.g., performance) runs through the aggregation of employees' responses to change (e.g., the organizational change-related climate; see Figure 1, path 5). In several of the studies reviewed above, leaders' influence on change is explained through leaders' impact on change recipients' change schemas, logics, or sensemaking (Bartunek, 1984; Bayle-Cordier et al., 2015; Huy, 2002; Huy et al., 2014). Similarly, in other research, the impact of leaders' actions on the success of the change is explained through their influence on recipients' emotions (Graebner, 2004).

In another study, employees' attitudinal resistance to change mediated the relationship between supportive leadership and perceived organizational effectiveness (Jones & Van de Ven, 2016). All of the variables in this study, however, were assessed at the individual level. In DeCelles et al.'s (2013) study of cynicism toward change, an organizational cynicism climate, comprising an aggregation of employees' individual-level cynicism toward change, mediated the effects of transformational leadership on organizational insubordination. Similarly, in Groves' (2005) study, an aggregate of change recipients' openness to change significantly mediated the relationship between leaders' charisma ratings and leaders' effectiveness. In yet another study, team leaders' change-promoting behavior was linked with team performance through an aggregation (using latent group means) of change recipients' commitment to change (Nohe et al., 2013).

Recipients' responses to change comprise several distinct components (e.g., emotions, attitudes, and behaviors). In several of the studies we reviewed, a given component of recipients' responses mediated the effects of leaders' behaviors on other components of recipients' responses (Helpap, 2016; Seo et al., 2012; Zhao et al., 2016). Commitment to change, for example, mediated the effects of leaders' behaviors

TABLE 4
Mediation Effects Tested in the Literature on Leadership and Change

Predictor	Mediator	Criterion	Reference
<u>Leader Attributes and Strategic Choices</u>			
Origin of new CEO (from inside or outside the organization)	Successor-induced changes	Disruption and turnover	Friedman and Saul (1991)
Big-Five personality traits	Strategic change initiation and implementation	Firm performance	Herrmann and Nadkarni (2014)
<u>Leaders' behaviors as mediator</u>			
Leaders' social control, emotional expressivity, and emotional control	Follower ratings of charismatic behavior	Followers' openness to change	Groves (2005) ^a
Leaders' cynicism about organizational change	Leaders' transformational leadership	Leader performance, leader OCB, employee commitment, and employee cynicism about organizational change	Rubin et al. (2009)
<u>Change process as mediator</u>			
Authentic leadership perceptions	Trust in leader	Positive and negative emotions	Agote et al. (2016)
Transformational leadership	Quality of relationship between leaders and followers	Task performance and OCB	Carter et al. (2013)
Transformational leadership	Cynicism toward change climate	Organizational insubordination and organizational commitment	DeCelles et al. (2013) ^a
Hierarchical distance	Perceived top-management communication effectiveness	Commitment to change	Hill et al. (2012)
LMX	Consultation with employees	Affective commitment to organizational change	Lee et al. (2014)
Transformational leadership	Climate involving support for creative thinking and emphasis on goal clarity	Acquisition acceptance, performance, and job satisfaction	Nemanich and Keller (2007)
Leader charisma	Trust in leader	Team OCB	Nohe and Michaelis (2016)
LMX and perceived development climate	Change process characteristics (information, participation, and trust in management)	Resistance to change	van Dam et al. (2008)
Transformational leadership	Informational and interpersonal justice	Cynicism about organizational change	Wu et al. (2007)
<u>Recipient responses as mediator</u>			
Supportive leadership and organization fairness	Change resistance	Organizational commitment and perceived organizational effectiveness	Jones and Van de Ven (2016)
Transformational leadership	Employee cynicism toward change	Organizational commitment	DeCelles et al. (2013) ^a
Follower ratings of leaders' charismatic behavior	Followers' openness to change	Ratings of leader effectiveness	Groves (2005) ^a
New leaders' transformational leadership	Commitment to change	Employees' behavioral resistance and support for change	Zhao et al. (2016)
Managers change communication strategy	Change recipients' change commitment	Resistance intentions	Helpap (2016)
Transformational leadership	Change recipients' positive and negative affect	Recipients' commitment to change	Seo et al. (2012)
Managerial change communication (through strategy worldview and benefits finding)	Commitment to change	Change implementation behavior	Sonenshein and Dholakia (2012)
Follower's perceived leader charisma	Follower's commitment to change	Team performance	Nohe et al. (2013)

^a For articles that included two mediators that could be classified into different sections of this table, we mention the article twice, once in each of the relevant sections.

TABLE 5
Moderation Effects Tested in the Literature on Leadership and Change

Predictor	Criterion	Moderator	Reference
Moderating effects of leaders' behaviors			
Employees' openness to work role change and role breadth self-efficacy	Adaptivity and proactivity	Employees' perceptions of leader's vision	Griffin et al. (2010)
Followers' dispositional resistance to change	Creative performance	Empowering leadership	Hon et al. (2014)
Organizational justice	Experienced threat during change	Supervisory justice	Koivisto et al. (2013)
Followers' dispositional resistance to change	Followers' resistance to an organizational reform	Transformational leadership	Oreg and Berson (2011)
Context's role in moderating leaders' effects			
LMX	Task performance and OCB	Change frequency	Carter et al. (2013)
Charismatic leadership	Leadership effectiveness	Organizational change magnitude	Groves (2005)
Leaders' change communication strategy	Change commitment	Followers' power distance orientation	Helpap (2016)
Supportive leadership	Change resistance	Time (the duration of the change)	Jones and Van de Ven (2016)
LMX and consultation influence tactics (mediator)	Affective commitment to organizational change	Country (United States vs. Korea), followers' values of collectivism and power distance	Lee et al. (2014)
Leader charisma	Trust in leader	Change impact (magnitude of change)	Nohe and Michaelis (2016)
Leaders' behavioral approach	Effective change leadership	Follower motives and culture (three-way interaction)	Välíkangas and Okumura (1997)
Transformational leadership	Cynicism toward change	Perceptions of cohesion in the organization	Wu et al. (2007)
New leaders' transformational leadership	Employees' behavioral resistance and support for change	Former leaders' transformational leadership	Zhao et al. (2016)

and change recipients' behavioral response to change (e.g., resistance, change implementation behaviors; Helpap, 2016; Sonenshein & Dholakia, 2012; Zhao et al., 2016). In other research, recipients' affective response to the change mediated the effect of leaders' behavior on recipients' commitment to change (Seo et al., 2012).

Comparable with the role that recipients' responses have in mediating the effects of leaders' behaviors, recipients' responses are also likely to mediate the effects of leaders' strategic choices. Clearly, leaders' strategic choices often directly concern employees and their experiences. Given, however, the sharp divide that exists between research of strategic choices and research of individual-level outcomes, such a possibility has yet to be considered, neither conceptually nor empirically. We elaborate on this issue in our discussion.

Moderating Effects of Leaders' Behaviors and Change Contexts

We distinguish between two types of moderating effects that have been studied: moderating effects of leader behaviors on relationships between follower

attributes and followers' reactions to change, and moderating effects of the organizational context on the effects of leader behaviors.

The moderating effect of leaders' behaviors. In addition to the role that leaders' behaviors have in shaping recipient and organizational outcomes, a few studies demonstrated how these behaviors moderate other effects on responses to change (Figure 1, path 6; see also Table 5). In one set of studies, leaders' fair treatment of followers (i.e., supervisory justice) moderated the effects of the organizational justice on recipients' experience of threat during change (Koivisto, Lipponen, & Platow, 2013). In another study, of a transformational change involving an organizational restructuring and job redesign, employees' perceptions of their leaders' vision moderated the relationships between employees' personal attributes and change-related behaviors (Griffin, Parker, & Mason, 2010). By providing situational cues, leaders' vision is said to enhance the relationships between employees' personal characteristics and manner of responding to organizational change. Specifically, the relationships between openness to work-role change and adaptivity,

and between role-breadth self-efficacy and proactivity were positive and significant only when employees perceived their leader as having a strong vision for the organization.

Two other studies tested the role that leaders' behaviors can have in ameliorating their subordinates' dispositional inclination to resist changes (Hon, Bloom, & Crant, 2014; Oreg & Berson, 2011). In one study, transformational leadership moderated the effect of dispositional resistance to change on employees' intentions to resist a large-scale organizational reform, such that the relationship was weaker among subordinates of transformational leaders (Oreg & Berson, 2011). Similarly, empowering leadership, which involves communicating a compelling vision and coaching subordinates, moderated the relationship between dispositional resistance to change and employees' creative performance, such that the relationship was weaker under empowering leaders (Hon et al., 2014). Thus, although only few studies considered the moderating effects of leaders' behaviors in the context of change, at least some research suggests that beyond their main effects on employee reactions to change, leadership behavior may also enhance or attenuate the effects of followers' orientations or of the organizational context (e.g., organizational justice) on responses to organizational change.

The moderating role of context on leader effects.

A number of the studies we reviewed tested differences in leaders' influence on change and its outcomes across contexts (Figure 1, path 7; see Table 5, e.g., Allmendinger & Hackman, 1996; Groves, 2005; Välikangas & Okumura, 1997; Waldman et al., 1998). In a few studies, the impact of leadership behavior on recipients' responses to change varied across cultural settings (Lee et al., 2014; Välikangas & Okumura, 1997). For example, to test the relationship between LMX and organization members' commitment to change, Lee et al. (2014) used data from U.S. and Korean companies and found that the effects were significantly stronger in the United States. In Välikangas and Okumura's (1997) study, the patterns of relationships among leaders' behavioral approach, follower motives, and the evolution of change varied across U.S. and Japanese companies. National culture thus seems to play an important role in moderating the change-related effects of leaders' actions, although the empirical evidence for this is still very limited. Additional cross-cultural research should consider a larger variety of cultures and additional cultural dimensions, preferably those that more directly pertain to the notion of change (e.g., uncertainty avoidance, Hofstede, 2001).

Other studies considered aspects related to the organizational culture. For example, in Waldman et al.'s (1998) qualitative study of changes in different types of organizations the authors point to different leadership effects in a police organization versus a hospital, and suggest that these differences may result from differences in the organizations' cultures. In Wu et al.'s (2007) study, perceptions of cohesion in the organization moderated the effects of transformational leadership on recipients' cynicism toward change. In other studies, followers' values served as the moderating context of leaders' behaviors (Helpap, 2016; Lee et al., 2014). In one of these studies, followers' power distance orientation moderated the effects of leaders' change communication strategy such that a participatory change communication style yielded greater change commitment than a programmatic communication style, in particular among followers with lower power distance orientations (Helpap, 2016). Similarly, beyond the moderating effect of country (U.S. vs. Korea), U.S. followers' power distance values moderated the effects of LMX on followers' affective commitment to the organizational change such that the effect was stronger among followers with lower power distance values (Lee et al., 2014). Likely because of the methodological difficulties of assessing and comparing multiple cultures, however, the rigor of the evidence for the role of culture in moderating the effects of leaders on change is limited.

In a few studies, the history of the organization and of its leadership explained differences in the change-related effects of the organization's current leadership. In a qualitative historical study of Eastern European symphony orchestras following the fall of the socialist regime in 1990, the effectiveness of orchestra leaders' actions for the adaptation of the orchestra depended on the orchestra's prior strength as an organization (Allmendinger & Hackman, 1996). In Zhao et al.'s (2016) study of leader succession, former leaders' transformational leadership served as a context for new leaders' behaviors, forming a contrast effect. Specifically, former leaders' transformational leadership moderated the effects of new leaders' transformational leadership on resistance to change, such that the relationship was negative only when the former leader was low on transformational leadership.

Other moderators were the magnitude (Groves, 2005; Nohe & Michaelis, 2016), frequency (Carter et al., 2013), or duration (Jones & Van de Ven, 2016) of change. In two studies about change magnitude, the effects of charismatic leadership on outcomes

(i.e., trust in the leader, or leadership effectiveness) were hypothesized to be stronger under changes of a greater magnitude, given the particular relevance of charismatic leadership in times of turbulence and ambiguity (Pawar & Eastman, 1997). The hypothesis was only supported in Nohe and Michaelis' (2016) study. In Carter et al.'s (2013) study, the quality of the relationship between leaders and followers (LMX) contributed to followers' task performance and OCB, especially in work teams in which changes have been frequently introduced. Finally, in a longitudinal study in which the moderator was *time*, the effects of supportive leadership perceptions in reducing resistance to change grew stronger over the duration of the change (Jones & Van de Ven, 2016).

These moderated effects were demonstrated in predictions of outcomes at both individual and organizational levels, but only with respect to the impact of leader behaviors. None of the studies we reviewed tested moderation for the effects of leaders' strategic choices. This is likely a function of the limited amount of research on strategic choices that explicitly considers the role of leaders, as well as the divide between the literatures on strategic choices and recipients' responses to change. Furthermore, as can be seen in Table 5, very little research overall has looked into the moderators of leaders' effects on change. Researchers should consider both additional factors that moderate leaders' effects (e.g., the duration of the relationship between leaders and followers, the hierarchical level of the leader) and additional paths of moderation (e.g., of leaders' strategic choices).

Leader Attributes and Outcomes

Beyond the relationships established between the two leader actions (i.e., strategic actions and behaviors) and outcomes, a mostly separate line of research focused on effects of leaders' attributes, rather than actions (the indirect effects that follow paths 8 and 9 in Figure 1 on change outcomes). The main argument in these studies is that leaders' characteristics come to be reflected in attributes of the organization and in followers' attitudes (for a review see Oreg & Berson, 2018), including those related to organizational change. We found a couple of studies in which the outcome was at the organizational level and one in which it was recipients' responses to the change. With respect to predictions of organizational outcomes, we found one qualitative and one quantitative study, both of which linked attributes related to leaders' mindset with indexes of organizational post-change performance (Bowen & Inkpen, 2009; Ndofor, Priem, Rathburn, &

Dhir, 2009). In the qualitative study, through interviews with senior managers at Johnson & Johnson, Brazil, the researchers concluded that managers' psychological (e.g., self-confidence and risk-taking), social (e.g., empathy and extensive external networks), and intellectual (e.g., cognitive complexity) capital contributed to managers' mindsets, which were responsible for the company's positive change in financial performance (Bowen & Inkpen, 2009). Similar conclusions were reached in a quantitative study with data from the U.S. National Football League (Ndofor et al., 2009), in which head coaches' mindset was conceptualized on the basis of the training and apprenticeship background of each head coach (termed "cognitive community"). Changes in new coaches' cognitive community were related to the degree to which coaches implemented changes on the field. Coaches with training and apprenticeship background that differed from their current team were more likely to implement a greater number of changes.

In one of the studies mentioned above, leaders' personal attributes were linked with change recipients' responses to the organizational changes (Oreg & Berson, 2011). Specifically, school leaders' (i.e., principals') dispositional resistance to change was positively, and openness to change values were negatively, related to change recipients' (i.e., teachers') intentions to resist a large-scale organizational reform in the school system. The rationale presented for this relationship was that leaders who are generally inclined to shy away from change and who tend to devalue autonomy and stimulation make decisions that contribute to a more conservative organizational culture, which in turn elicits change recipients' resistance organizational change. Yet neither this nor other underlying mechanisms that could explain the effects of leaders' attributes on responses to change have been tested empirically. Thus, although it may not be surprising that leaders' attributes are reflected in their followers' responses to change and, more broadly, in organizational change-related outcomes, the mechanisms that mediate these effects have rarely been studied. Findings about relationships between leaders' attributes and leaders' actions in the context of change offer at least preliminary evidence for the mediating role that leaders' actions play.

Leader Attributes and Leaders' Actions

Outside the realm of organizational change, leader attributes have been linked with both leaders' strategic choices (Hambrick, 2007; Oreg & Berson, 2018)

and behaviors and styles of leadership (Judge & Bono, 2000; Zaccaro, 2007). When predicting strategic choices, the attributes on which research has focused are leaders' demographics. By contrast, when predicting leaders' behaviors, most research has focused on leaders' personality traits (e.g., extraversion and narcissism), and some research considered leaders' personal values (Berson & Oreg, 2016; Berson, Oreg, & Dvir, 2008). Overall, the studies within these domains demonstrate relationships between who leaders are and what they do.

Leader attributes and leaders' strategic choices.

When considering factors that concern leaders' strategic choices and the types of changes initiated (i.e., change content), most of the research has focused on relationships between top leaders' (e.g., CEOs) demographics and the likelihood of initiating changes in their organizations and the types of changes initiated. For example, CEO age, tenure, and level of education were linked with the degree of change in firms' strategy over time (Datta, Rajagopalan, & Zhang, 2003; Weng & Lin, 2014); the initiation of changes in company diversification (Bigley & Wiersema, 2002; Boeker, 1997; Song, 1982); an emphasis on innovation (Musteen, Barker III, & Baeten, 2010); or the initiation of international acquisitions (Matta & Beamish, 2008). In other research, CEO tenure was linked with changes in the composition of firms' executive team (Keck & Tushman, 1993). Similarly, top management teams' demographics, such as the average and dispersion of members' age, tenure, and levels of education, predicted changes in firms' corporate strategy (Wiersema & Bantel, 1992). In other studies, managers' social position within and outside the organization was linked with the types and degree of changes initiated (Battilana, 2011; Fitzgerald, Ferlie, McGivern, & Buchanan, 2013). Yet another factor that was linked with the types of changes initiated by new leaders was whether these leaders came to lead the organization from within or outside the organization (Chiu, Johnson, Hoskisson, & Pathak, 2016; Friedman & Saul, 1991; Helmich, 1975; Helmich & Brown, 1972). Overall, leaders who came from outside the organization were more likely to initiate changes that were more disruptive and broader in scope.

More recently, a few studies considered aspects of top leaders' personality and strategic changes in firms. For example, given their emphasis on divergent thinking and enjoyment of novelty, CEOs' extraversion and openness to experience were positively associated with strategic change initiation (Herrmann & Nadkarni, 2014). In another study, CEOs' narcissism, which is associated with individuals'

boldness, was linked with firms' adoption of discontinuous technologies (Gerstner, König, Enders, & Hambrick, 2013). Similarly, a small subset of studies within a meta-analysis of research on CEOs and their strategic decisions points to a positive relationship between CEOs self-concept (e.g., positive affectivity and risk orientation) and the occurrence of changes in firms' performance (Wang, Holmes, Oh, & Zhu, 2016). It should be noted, however, that the initiation of change in these studies was assessed only indirectly, by monitoring firms' performance over time and inferring that a change had occurred.

A few of the studies about top leader attributes and strategic choices also proceed to demonstrate the indirect effect of leaders' attributes on organizational change-related outcomes. Such an indirect effect was also proposed in a theoretical article of managerial capabilities in the context of strategic change, in which the strategic changes initiated in the organization were said to mediate the effects of top leader capabilities, such as their social and human capital, and firm change performance (Helfat & Martin, 2015). Similarly, in Friedman and Saul's (1991) study, the origin (i.e., from inside or outside the organization) of new CEOs was indirectly linked with the degree of disruption and turnover in the organization, through the type of strategic changes they initiated. In Herrmann and Nadkarni's (2014) study, following the link between CEO personality and the initiation and implementation of strategic change, strategic change was linked with firm performance. In other words, CEOs' strategic choices mediated the relationships between their personality and firm outcomes.

Overall, most of what we know about who leaders are and the change-related strategic decisions that they make is about leaders' demographics. In most cases, researchers try to infer from these demographics about leaders' psychological characteristics. Yet demographics serve as only weak proxies for the psychographic variables they presume to capture (Hambrick, 2007; Priem et al., 1999). As such, most of the information we have is relatively superficial and provides a very limited understanding of the psychological mechanisms that impact leaders' choices and the frequency and nature of the changes they initiate. The budding research that more directly assesses leaders' attributes corresponds with the emerging line of research that links leaders' psychological characteristics with strategic choices beyond the specific context of change (Chatterjee & Hambrick, 2007; Gamache, McNamara, Mannor, & Johnson, 2015; Nadkarni & Herrmann, 2010).

Leader attributes and leaders' behaviors. In a number of studies, leaders' attributes were directly linked with their change-related behaviors. For example, early on, Helmich (1975) linked corporate presidents' achievement orientations and their use of a task-oriented versus an employee-oriented leadership style. Leadership style was in turn linked with a higher rate of personnel change in these presidents' organizations. In a qualitative study of 14 South African organizations, leaders' personal life stories were linked with how these leaders perceived, interpreted, and responded to organizational changes (Nkomo & Kriek, 2011). Some of the research focused specifically on leaders' self-concept as an important factor that determines their change-related behaviors. For example, Akrivou and Bradbury-Huang (2011) proposed a theoretical model of leaders as catalysts of change, whereby leaders' "self-system ego variables," consisting of factors such as self-complexity and self-ideal congruence, are considered a prerequisite of leaders' capacity to translate meaning-making into sensegiving. This translation process is achieved by communicating respect for multiple stakeholders' interests, providing a pragmatic plan of action, and providing a future oriented vision. In turn, these sensegiving activities are expected to elicit high levels of organizational performance. Empirical studies similarly point to the role of leaders' self-views in driving their change-related behaviors. In one study, leaders' self-esteem was linked with followers' reports of their leaders' change-promoting behaviors, as assessed through questions about the degree to which the leader "push[es] change within the unit" and "quickly chang[es] work processes that are not effective (Paglis & Green, 2002). Similarly, managers' positive self-views and dispositional risk tolerance predicted several aspects of their coping with change, including the degree to which they promote change and respond positively and proactively to changes (Judge, Thoresen, Pucik, & Welbourne, 1999).

Other research shows relationships between leaders' attributes and their charismatic or transformational leadership styles. Although the degree to which these leadership styles involve leaders' actual behaviors has been questioned (van Knippenberg & Sitkin, 2013), findings of this research correspond with evidence from other research about leaders' attributes and change-related behaviors. For example, in one of the studies mentioned above, which linked charisma to followers' openness to change, leaders' social and emotional skills predicted perceptions of these leaders' charismatic leadership (Groves, 2005). Thus, perceptions of these leaders' charisma mediated the relationship

between leaders' skills and followers' openness to change. In another study, leaders' overall cynicism about organizational change was associated with followers' perceptions of these leaders' transformational leadership, which was in turn related to outcomes such as employees' organizational citizenship behaviors and employees' own cynicism about change (Rubin et al., 2009). Leaders' attributes thus predict leadership styles that are linked with change-related outcomes.

Although most of the research linking leader attributes and change-related behaviors tends to be quantitative, we found one qualitative study that yielded similar insights. In a case study based on an in-depth analysis and independent coding of interviews with 70 IT executives, leaders' "competency potential," which includes attributes such as empathy and hardiness, was associated with behavioral skills, including "transformational leadership skills" and "political skills," as well as a change-related leadership style (Krummacker & Vogel, 2013).

Sufficient evidence within the organizational change literature thus exists to support the relationships between leaders' attributes and the types of leader actions that ultimately shape organizational change and the responses to it. Combined with what we know about the relationship between leaders' actions and change outcomes, this evidence establishes the indirect effect that leaders' attributes have on change outcomes. Two of the studies we reviewed above more directly demonstrate this indirect effect through tests of the role that leaders' behaviors have in mediating the relationships between leaders' attributes and change recipients' responses to change (Groves, 2005; Rubin et al., 2009). Leaders' charisma ratings mediated the relationship between leaders' skills and performance ratings in the context of change. Similarly, in Rubin et al.'s (2009) study, transformational leadership mediated the relationship between leaders' cynicism about change and employees' cynicism about change. Future research should consider additional forms of leadership, which more explicitly capture leader behaviors, or which focus on narrower and more specific behaviors. Furthermore, unlike the two studies mentioned above, future research of this indirect effect should aim to measure the mediator and outcome from different sources to provide for a more rigorous test of the effect.

WHAT DOES THE EVIDENCE TELL US AND WHERE DO WE GO FROM HERE?

As can be seen in Figure 1, the largest body of evidence for the influence of leaders on organizational

change points to the impact of leaders' behaviors and styles on change recipients' responses to change. This evidence is based primarily on quantitative, psychologically based research, most of which is multilevel, focusing on the individual and group levels (see Figure 2). Beyond the particular styles that have been studied, we identify three key functions of leaders' behaviors through which leaders shape recipients' response to change: 1) effective communication (e.g., visionary leadership), 2) being supportive and attentive to recipients' concerns (e.g., supportive leadership), and 3) involving followers (e.g., participative leadership). Although leadership styles that subsume effective communication, supportiveness, and involvement may be effective in many contexts, they appear to be singled out and particularly important in the context of leading change. Accordingly, these leadership style categories directly map on to the key factors that comprise the change process, often labeled *change information*, *change support*, and *change participation* (Oreg et al., 2011). Indeed, findings of the mediation studies we reviewed point to these three factors as important mechanisms that explain how leader behaviors shape recipients' responses to change (see Table 4).

Despite the correspondence between leadership styles and change process variables, each style may influence more than a single change process variable, in particular given that some of the styles are broad and include many distinct components, all lumped into a single leadership construct (see a similar point by van Knippenberg & Sitkin, 2013). Articulating a change vision, for example, serves both to effectively communicate the goals of the change and to involve and engage recipients through the change process. Nevertheless, a few of the studies we reviewed have been very helpful for disentangling the distinct leadership components that seem to be key in facilitating change. For example, in Furst and Cable's (2008) study, whereas leaders' hard tactics, such as legitimation, were associated with greater employee resistance to change, softer tactics, such as consultation, which is a form of involving followers, were negatively associated with resistance.

There is also significant overlap in the outcomes of the three leadership style categories. All three have been linked with a variety of response types, comprising recipients' affective, cognitive, and behavioral response to change. In other words, effective communication, being supportive, and involving recipients have each been shown to influence how recipients feel about the change (more positive

emotions and less negative ones), how they understand it, and the degree to which their actions (e.g., OCB) and performance correspond with the defined goals of the change. This difficulty in distinguishing among the effects of leader behaviors is to a great degree because of the frequent reliance on broad leadership concepts instead of more specific change-related behaviors, as well as lack of a clear distinction among several of these broad leadership concepts (e.g., transformational, authentic, ethical, and servant; Hoch, Bommer, Dulebohn, & Wu, 2016).

Another relatively large section of the studies on leadership and change was that linking leader behaviors to job-related and organizational outcomes in the context of change (see Figure 1). There was somewhat more variety in the types of leadership behaviors considered for this path, including a greater portion of qualitative studies. Many of the studies that contributed to this body of evidence were qualitative, sociologically based, with a focus on the organizational level (see top-right-back corner of Figure 2). Overall, these studies demonstrate the effects that leader behaviors, such as task behaviors, distributed leadership, and sensegiving, as well as transformational leadership, have on the nature and success of change. The qualitative nature of many of these studies makes it harder to generalize findings and make inferences about a given set of leader behaviors. They nevertheless point to the overall positive effect that leaders have on change and to interesting patterns and nuances that may emerge in specific organizational contexts. These nuances include, for example, the bidirectional effects that vision can have when not effectively linked with the goals of the organizational change (Landau et al., 2006). Beyond these somewhat sporadic effects, a consistent finding was about the mediating role that recipients' attitudes toward change have in the effect of leaders' behaviors on job-related outcomes, and to a lesser degree on organizational outcomes.

Another interesting insight is that whereas the quantitative research of leadership and change tends to adopt a one-sided path of influence, whereby change leaders influence change recipients, the qualitative investigations in this field often reveal the notion that agents are similarly influenced by recipients. One direction for future research could be to quantitatively assess the nature of this relationship, including its mediating and moderating processes.

Quite distinct from the research about the effects of leader behaviors, the last significant body of studies in our review involved the link between leader personal attributes and their change-related strategic

choices. The most frequent outcome in these studies was the initiation of change. These studies were mostly quantitative, both sociological and psychological, with a focus on the organizational level (bottom right cubes in Figure 2). Among the common predictors of these various change outcomes are leaders' age, tenure, and level of education, which were rather consistently positively linked with a greater likelihood of initiating change. Similarly, individuals who came to lead the organization from outside it were more likely to initiate changes, in particular changes that are disruptive and broader in scope. Findings in the studies that considered leaders' personality demonstrate that being bold, self-confident, and excitement-seeking, as represented in attributes such as extraversion and narcissism, is associated with a higher likelihood of initiating change. Yet the initiation of change in these studies was only inferred from observing changes in organizations' performance over time, rather than by explicitly capturing a deliberate decision to initiate change.

Overall, we know how leader behaviors influence change recipients and change outcomes, and we know how leader attributes are related to leaders' strategic change-related choices. But we know very little about how the latter effects of attributes on strategic choices may come to influence change recipients and outcomes. Broadly stated, one of the things that was clear from our review was the significant chasm between research of leaders' strategic choices and research of recipients' responses to change. Although executives regularly take into account the implications of their choices for organization members, and realize the strategic importance of organization members' responses, research has yet to directly examine this link.

Another direction for future investigation involves a more complex conceptualization of recipients' responses. All in all, across leadership styles and study designs, it is clear that one path through which leaders influence organizational change is by eliciting more positive and less negative responses to the organizational change. These effects have been demonstrated on change recipients' emotions, attitudes, and behaviors. Yet recent criticisms of the research on reactions to change (Oreg et al., 2018) suggests that conceptualizations of these reactions have been too simplistic, ranging from negative to positive (Oreg et al., 2018). Such an approach overlooks the complexity that characterizes responses to change. First, beyond the valence of individuals' responses to change, responses also vary in their level of activation (Oreg et al., 2018). Thus, both

positive and negative responses to change subsume responses that vary significantly in their nature and in their antecedents and outcomes. For example, although both stress and melancholy are negative emotions, and both enthusiasm and contentment are positive emotions, the leadership behaviors that elicit each emotion, and the change-related consequences of these emotions may differ significantly.

Second, although the notion of ambivalent responses to change was highlighted almost 20 years ago (Piderit, 2000), very little research of reactions to change has been devoted to studying the possibility that individuals may simultaneously exhibit positive and negative responses (for exceptions see Oreg & Sverdlik, 2011; Randall & Procter, 2008). None of the studies we came across in our review considered the impact that leadership has on the experience of ambivalence toward change. As such, an important direction for future research is to consider a much broader range of possible responses to change.

In addition, whereas resistance to change is generally seen as an obstacle, attention has long been drawn to the benefits it holds through the information it includes about possible problems with the change (Nord & Jermier, 1994). To benefit from this information, leaders should remain open to adaptations in their change initiatives and rework the change together with those employees' who maintain an active voice about it (Oreg et al., 2018). Leadership styles that embody such openness to feedback from followers, such as servant leadership (Van Dierendonck, 2011), may therefore be particularly effective in handling and benefiting from such negative responses to change. Furthermore, such openness to recipients' feedback about the change draws attention to the need to consider not only leaders' influence on recipients' responses to change but also the reciprocal impact of change recipients' on change leaders. Although calls for such research have been made (Ford, Ford, & D'Amelio, 2008; Oreg et al., 2018), no systematic investigation of this route has yet to be conducted. We further address this point below.

BEYOND COMPARTMENTALIZED RESEARCH: DISCIPLINES, METHODOLOGIES, AND LEVELS OF ANALYSIS

Throughout our review, we discussed the various divides that exist across the studies of leadership and change. As portrayed in Figure 2, we consider three specific divides, pertaining to the various disciplinary underpinnings, methodological approaches, and

different levels at which the topic has been studied. Overall, as reflected in the generally darker shades of the bottom cubes in Figure 2, about two-thirds of the research we reviewed was quantitative. Correspondingly, about two-thirds of the studies were based on psychological frameworks (although several of the articles in the review used both psychological and sociological theories). Moreover, whereas psychological research tends to be more at the individual and group levels, we could also find in our review a substantial amount of psychological research at the organizational level, which corresponds with the growing interest of macro, strategy, researchers in psychological constructs. Not surprisingly, the two least-studied combinations were sociologically based quantitative studies at the individual and group levels.

Also not surprising is the fact that only a few psychological studies have been conducted *via* qualitative methods. Further qualitative studies of leaders' actions in times of change could provide important information about the particular mechanisms through which leaders influence organization members and outcomes. Similarly, although many of the studies we reviewed involved two levels of analysis, research has yet to be conducted at three levels of analysis, incorporating both leaders of organizations (e.g., CEOs) and leaders of organization units (i.e., middle managers), alongside individual-level factors. Such research can demonstrate *trickle down* mechanisms (Liu, Liao, & Loi, 2012) that run from senior change leaders to middle managers, and on to employees.

Related to these divides, qualitative and quantitative studies of leadership and change have been disparate, lacking the exchange of ideas across approaches. Through our review, we draw meaningful links between the notion of sensemaking, which has been studied with qualitative approaches, and other aspects of recipients' responses which have been studied mainly quantitatively. Specifically, both sensemaking on the one hand, and change appraisal and attitudes on the other involve cognitive content and processes. Scholars who address sensemaking use concepts such as change schemas (Balogun & Johnson, 2004; Bartunek, 1984) and describe the cognitive processes through which change recipients form meaning about change. Similarly, quantitative investigations of recipients' responses have focused on change appraisals and change attitudes as key variables, which also include a cognitive component, pertaining to individuals' evaluation of the change (Fugate, Prussia, & Kinicki, 2012; Oreg et al., 2018). Yet insights have yet to be incorporated across

the two approaches, and the degree to which these concepts overlap remains unclear.

Correspondingly, as indicated above, sensegiving refers to leaders' actions in the aim of shaping change recipients' understandings of the change and its context. This is comparable with many leadership behaviors which are similarly aimed at influencing recipients' interpretations of the change. Yet the two fields in which these concepts have been also remain entirely separate. Comparisons that could uncover both the shared and unique contents of each concept could be made through the inclusion of multiple concepts within the same study, which could be either qualitative or quantitative. Qualitative scholars may wish to incorporate concepts such as change appraisals and leadership styles into their investigations alongside the already established concepts of sensemaking and sensegiving. Similarly, quantitative researchers may wish to incorporate the notions of sensemaking and sensegiving into their conceptualizations and measures, and assess their incremental validity beyond extant leadership behaviors.

Additional Routes of Leaders' Influence on Change

As noted earlier, much remains to be uncovered with respect to how leaders' strategic choices during change influence the organization and its members. Given, for example, that the initiation and effective implementation of change involve distinct processes, and distinct antecedents, future research should explicitly link strategic choices with the change implementation process, and leader behaviors with the initiation of change. Specifically, with respect to the former link, research should consider how change leaders follow through on their strategic decisions and what type of change process (e.g., participatory and supportive) they adopt. With respect to the latter link, research should consider the relationship between a given leadership style (e.g., visionary) and the likelihood that change will be initiated, as well as the content of the change initiated.

In addition, whereas most of the research we identified about leaders' strategic choices focused on the prediction of organization-level outcomes, the large majority of studies on leader behaviors focused on predicting individual-level outcomes. Thus, cross-fertilization between these approaches should yield research of the relationships between leaders' behaviors and organization-level change outcomes, on the relationships between leaders' strategic choices and individual-level outcomes. Beyond the consideration of direct relationships between leaders' strategic

choices and their implications for individuals, this line of research should look into the chain of factors and processes that likely mediate these effects. For example, many of the change process variables that have been considered as mediators of the effects of leaders' behaviors may similarly mediate the effects of leaders' strategic choices. Furthermore, other mechanisms may further mediate the impact of the change process, such as the degree to which change recipients' perceive the change as personally beneficial or detrimental (Armenakis, Harris, & Mossholder, 1993; Oreg & Goldenberg, 2015). In addition, most of the research on the implications of leaders' strategic choices does not take into account change recipients' attitudes, despite the fact that a given strategic decision can unfold differently as a function of change recipients' responses. Accordingly, future research should consider the interaction between strategic choices and recipients' responses for predicting change outcomes.

Correspondingly, additional research should be devoted to examining how leader behaviors ultimately translate into the organization-level outcomes of change. One of the obvious mechanisms through which these effects may be achieved, as suggested in a few of the studies we reviewed, involves the aggregation of recipients' individual responses to the change. Yet even with respect to this mechanism, only a handful of studies exist. Furthermore, more specific and nuanced leader behaviors should be considered, beyond the common styles that have been used in change research. In particular, visionary leadership, which has only infrequently been studied in the context of change (Landau et al., 2006), explicitly concerning a future orientation, and involving both strategic goals and inspiring content, is a likely predictor of both individual and organizational change outcomes. Overall, we found very little research that captured antecedents of both individual and organizational level outcomes. In addition, similar to the interactions we proposed above between strategic choices and recipients' responses, it may also be useful to further consider how leader behaviors interact with change recipients' responses in predicting organizational outcomes. In line with a leadership contingency approach (Fiedler, 1967), a given leadership style may yield different change outcomes for different sets of followers.

Moreover, the distinction between leaders' strategic decisions and leaders' behaviors also highlights an important difference between leaders of change who are also the initiators of the change versus those who implement changes initiated by others. Whereas

the strategy literature focuses on the former, the OB literature on leadership and change tends to focus on the latter, or to disregard this distinction altogether. Thus, in many cases, change leaders are also recipients of the change. This issue has been addressed in several qualitative studies (Balogun & Johnson, 2004; Lüscher & Lewis, 2008), in which the focus was on understanding the process through which middle managers make sense of the change. Studies have not, however, explicitly examined the differences that likely exist in the implementation of change by those who initiate it versus those who do not. Even studies of senior change leaders sometimes involve changes that were dictated by external boards (Oreg & Berson, 2011). Most of the studies we reviewed about the implementation of change are undertaken with the implicit assumption that change leaders fully understand and entirely buy into the change they are implementing, although in reality this is clearly not always the case. This further reflects the chasm between the strategy and OB literatures and points to several directions of research that should be pursued.

Beyond the separate influences of strategic choices and leader behaviors, one can also consider the reciprocal effects that these two leader actions may have on one another. This connection has received very little attention even outside the context of organizational change (for exceptions, see Berson & Avolio, 2004; Colbert, Kristof-Brown, Bradley, & Barrick, 2008). The meaning of this link is that the strategic choices that leaders make may impact the leadership style that they adopt (e.g., a leader may choose to emphasize a considerate approach for some strategic choices more than others) and, reciprocally, leaders' overall style may correspond with certain types of strategic choices. These possibilities have received no attention in research of organizational change and may open up an important direction for clarifying and explicitly portraying the dual role of leaders. Furthermore, research should consider how these two leader roles may interact in their effects on change outcomes.

Greater Focus on Bottom-Up Influences during Change

As noted earlier, most of the attention in the research of leadership and change is on the influence that leaders have over their followers. Yet even when change is imposed by the leader, reciprocal paths of influence take place among leaders and followers. Accordingly, leaders are both sensegivers and sensemakers, in particular when a leader

implements a change initiated by others. Correspondingly, change recipients are not only sense-makers but also sensegivers. Although the idea that change agents are also recipients has been discussed (e.g., Oreg et al., 2018), it has yet to receive much research attention. Furthermore, the predominant view of organizational change focuses on changes that are initiated from above. As informative as this view may be, it provides only a partial depiction of what transpires during change, and overlooks those cases in which lower level members of the organizations initiate changes (Livne-Tarandach & Bartunek, 2009). This mirrors the literature on employee proactivity (Grant & Parker, 2009), which has similarly advocated research on the bottom-up effects of employee proactivity on organizational outcomes.

When change is initiated from below, employees are the change agents and managers the recipients. Both parties' sensemaking and sensegiving during bottom-up change may be quite distinct from those that take place during top-down changes. For one, the change schemas that leaders and followers use for bottom-up change may be very different from those acquired for top-down change. In addition, followers and leaders may have different reasons for concerns about change. Whereas employees may be more susceptible to the detrimental effects of uncertainty, given their lower spans of control in the organization, leaders may experience greater threat to their authority, in particular if they tend to hold an autocratic leadership style (see parallel arguments in the proactivity literature, e.g., Grant, Parker, & Collins, 2009).

Related to this point, with few exceptions (Bate et al., 2000; Heck & Hallinger, 2010), studies of leadership and organizational change focus on the role of a single leader. Given what we know about the roles of involvement and participation during change, and what we know about shared leadership outside the context of change, we expect shared leadership to be particularly effective in managing change and eliciting favorable responses among recipients.

Practical Implications

First, the divide between OB and strategy with respect to research on leading change may also have implications for practice. Effective management of change efforts should involve consideration of both strategic and behavioral factors that either impede or facilitate organizational change. For instance, consultants who advise organizations may rely on knowledge from strategy about the role of leader attributes on the initiation of change and types of

changes proposed, and on knowledge from OB about the positive effects that authentic and visionary leaderships, for example, have on change recipients and outcomes. Unfortunately, change consultants tend to specialize in either the psychological/organizational field, or in strategy, rather than both. One implication of our review is that organizations launching change interventions should remain informed in both fields. More specifically, senior leaders should realize that their strategic decisions bear implications not only for the organizational outcomes but also for organization members. Correspondingly, their behaviors and personal style of leadership influence not only their subordinates but also broader organizational consequences.

Second, the rich information obtained through qualitative data often counterpoints findings obtained by quantitative measures and sets doubts about their validity (Jick, 1979). In one of the studies we reviewed, for example, qualitative interviews proved to be more informative than quantitative measures of leadership for predicting the success of nurse leaders in managing change (Kan & Parry, 2004). It may therefore be particularly important for practitioners to rely on both quantitative and qualitative methods in their assessments of leader effectiveness. Such integration of approaches reflects one of the main themes from our review, with respect to the need to bridge extant chasms between disciplines, methods, and levels of analysis for improving our understanding of the impact of leaders on organizational change.

REFERENCES

- Agote, L., Aramburu, N., & Lines, R. 2016. Authentic leadership perception, trust in the leader, and followers' emotions in organizational change processes. *Journal of Applied Behavioral Science*, 52(1): 35–63.
- Akrivou, K., & Bradbury-Huang, H. 2011. Executive catalysts: Predicting sustainable organizational performance amid complex demands. *The Leadership Quarterly*, 22(5): 995–1009.
- Allmendinger, J., & Hackman, J. R. 1996. Organizations in changing environments: The case of East German symphony orchestras. *Administrative Science Quarterly*, 41(3): 337–369.
- Armenakis, A. A., & Bedeian, A. G. 1999. Organizational change: A review of theory and research in the 1990s. *Journal of Management*, 25(3): 293–315.
- Armenakis, A. A., Harris, S. G., & Mossholder, K. W. 1993. Creating readiness for organizational change. *Human Relations*, 46: 681–703.

- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. 2009. Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, 60: 421–449.
- Ballinger, G. A., & Schoorman, F. D. 2007. Individual reactions to leadership succession in workgroups. *Academy of Management Review*, 32(1): 118–136.
- Balogun, J., Bartunek, J. M., & Do, B. 2015. Senior managers' sensemaking and responses to strategic change. *Organization Science*, 26(4): 960–979.
- Balogun, J., & Johnson, G. 2004. Organizational restructuring and middle manager sensemaking. *Academy of Management Journal*, 47(4): 523–549.
- Bartel, C. A., & Saavedra, R. 2000. The collective construction of work group moods. *Administrative Science Quarterly*, 45(2): 197–231.
- Bartunek, J. M. 1984. Changing interpretive schemes and organizational restructuring: The example of a religious order. *Administrative Science Quarterly*, 29(3): 355–372.
- Bartunek, J. M., Krim, R., Necochea, R., & Humphries, M. 1999. Sensemaking, sensegiving, and leadership in strategic organizational development. *Advances in qualitative organizational research*, 2: 37–71.
- Bartunek, J. M., Rousseau, D. M., Rudolph, J. W., & DePalma, J. A. 2006. On the receiving end: Sensemaking, emotion, and assessments of an organizational change initiated by others. *Journal of Applied Behavioral Science*, 42(2): 182–206.
- Bass, B. M. 1985. *Leadership and performance beyond expectations*. New York; London: Free Press; Collier Macmillan.
- Bass, B. M. 2008. *The Bass handbook of leadership: Theory, research, and managerial applications* (4th ed.). New York: The Free Press.
- Bate, P., Khan, R., & Pye, A. 2000. Towards a culturally sensitive approach to organization structuring: Where organization design meets organization development. *Organization Science*, 11(2): 197–211.
- Battilana, J. 2011. The enabling role of social position in diverging from the institutional status quo: Evidence from the UK National Health Service. *Organization Science*, 22(4): 817–834.
- Battilana, J., Gilmartin, M., Sengul, M., Pache, A.-C., & Alexander, J. A. 2010. Leadership competencies for implementing planned organizational change. *The Leadership Quarterly*, 21(3): 422–438.
- Bayle-Cordier, J., Mirvis, P., & Moingeon, B. 2015. Projecting different identities: A longitudinal study of the “whipsaw” effects of changing leadership discourse about the triple bottom line. *The Journal of Applied Behavioral Science*, 51(3): 336–374.
- Beatty, C. A., & Lee, G. L. 1992. Leadership among middle managers—An exploration in the context of technological change. *Human Relations*, 45(9): 957–989.
- Berson, Y., & Avolio, B. J. 2004. Transformational leadership and the dissemination of organizational goals: A case study of a telecommunication firm. *Leadership Quarterly*, 15(5): 625–646.
- Berson, Y., Da'as, R. a., & Waldman, D. A. 2015. How do leaders and their teams bring about organizational learning outcomes? *Personnel Psychology*, 68: 79–108.
- Berson, Y., & Oreg, S. 2016. The role of school principals in shaping children's values. *Psychological Science*, 27(12): 1539–1549.
- Berson, Y., Oreg, S., & Dvir, T. 2008. CEO values, organizational culture and firm outcomes. *Journal of Organizational Behavior*, 29: 615–633.
- Bigley, G. A., & Wiersema, M. F. 2002. New CEOs and corporate strategic refocusing: How experience as heir apparent influences the use of power. *Administrative Science Quarterly*, 47(4): 707–727.
- Boeker, W. 1997. Strategic change: The influence of managerial characteristics and organizational growth. *Academy of Management Journal*, 40(1): 152–170.
- Bommer, W. H., Rich, G. A., & Rubin, R. S. 2005. Changing attitudes about change: longitudinal effects of transformational leader behavior on employee cynicism about organizational change. *Journal of Organizational Behavior*, 26(7): 733–753.
- Bowen, D. E., & Inkpen, A. C. 2009. Exploring the role of “global mindset” in leading change in international contexts. *The Journal of Applied Behavioral Science*, 45(2): 239–260.
- Brockner, J., Konovsky, M., Cooper Schneider, R., & Folger, R. 1994. Interactive effects of procedural justice and outcome negativity on victims and survivors of job loss. *Academy of Management Journal*, 37(2): 397–409.
- Buono, A., & Bowditch, J. 1989. *The human side of mergers and acquisitions. Managing collisions between people, cultures, and organizations*. Washington, DC: Jossey-Bass, Inc. Publishers.
- Burke, W. W., & Litwin, G. H. 1992. A causal model of organizational performance and change. *Journal of Management*, 18(3): 523–545.
- Carter, M. Z., Armenakis, A. A., Feild, H. S., & Mossholder, K. W. 2013. Transformational leadership, relationship quality, and employee performance during continuous incremental organizational change. *Journal of Organizational Behavior*, 34: 942–958.
- Chatterjee, A., & Hambrick, D. C. 2007. It's all about me: Narcissistic chief executive officers and their effects on company strategy and performance. *Administrative Science Quarterly*, 52(3): 351–386.

- Chiu, S.-c., Johnson, R. A., Hoskisson, R. E., & Pathak, S. 2016. The impact of CEO successor origin on corporate divestiture scale and scope change. *The Leadership Quarterly*, 27(4): 617–633.
- Colbert, A. E., Kristof-Brown, A. L., Bradley, B. H., & Barrick, M. R. 2008. CEO transformational leadership: The role of goal importance congruence in top management teams. *Academy of Management Journal*, 51(1): 81–96.
- Conger, J. A., & Kanungo, R. N. 1998. *Charismatic leadership in organizations*. Thousand Oaks, CA: Sage Publications.
- Cotton, R. D., Stevenson, W. B., & Bartunek, J. M. 2017. A way forward: Cascading ethical and change leadership, values enactment, and group-level effects on commitment in corruption recovery. *The Journal of Applied Behavioral Science*, 53(1): 89–116.
- Crossland, C., & Hambrick, D. C. 2011. Differences in managerial discretion across countries: how nation-level institutions affect the degree to which CEOs matter. *Strategic management journal*, 32(8): 797–819.
- Currie, G., Lockett, A., & Suhomlinova, O. 2009. Leadership and institutional change in the public sector: The case of secondary schools in England. *The Leadership Quarterly*, 20(5): 664–679.
- Daft, R. L., & Weick, K. E. 1984. Toward a model of organizations as interpretation systems. *Academy of Management Review*, 9(2): 284–295.
- Dansereau, F., Graen, G., & Haga, W. J. 1975. A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational Behavior and Human Performance*, 13(1): 46–78.
- Datta, D. K., Rajagopalan, N., & Zhang, Y. 2003. New CEO openness to change and strategic persistence: The moderating role of industry characteristics. *British Journal of Management*, 14(2): 101–114.
- Dean, J. W., Brandes, P., & Dharwadkar, R. 1998. Organizational cynicism. *Academy of Management Review*, 23(2): 341–352.
- DeCelles, K. A., Tesluk, P. E., & Taxman, F. S. 2013. A field investigation of multilevel cynicism toward change. *Organization Science*, 24(1): 154–171.
- Denis, J.-L., Lamothe, L., & Langley, A. 2001. The dynamics of collective leadership and strategic change in pluralistic organizations. *Academy of Management Journal*, 44(4): 809–837.
- Dutton, J. E., Ashford, S. J., O'Neill, R. M., & Lawrence, K. A. 2001. Moves that matter: Issue selling and organizational change. *Academy of Management Journal*, 44(4): 716–736.
- Eberly, M. B., Johnson, M. D., Hernandez, M., & Avolio, B. J. 2013. An integrative process model of leadership: Examining loci, mechanisms, and event cycles. *American psychologist*, 68(6): 427.
- Fiedler, F. E. 1967. *A theory of leadership effectiveness*. New York: McGraw-Hill.
- Finkelstein, S., Hambrick, D., & Cannella, A. 2008. *Strategic leadership: Theory and research on executives, top management teams, and boards*. New York: Oxford University Press.
- Fitzgerald, L., Ferlie, E., McGivern, G., & Buchanan, D. 2013. Distributed leadership patterns and service improvement: Evidence and argument from English health-care. *The Leadership Quarterly*, 24(1): 227–239.
- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J. 1986. Dynamics of a stressful encounter: cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology*, 50(5): 992.
- Ford, J. D., Ford, L. W., & D'Amelio, A. 2008. Resistance to change: The rest of the story. *Academy of Management Review*, 33(2): 362–377.
- Friedman, S. D., & Saul, K. 1991. A leader's wake: Organization member reactions to CEO succession. *Journal of Management*, 17(3): 619–642.
- Fugate, M., Prussia, G. E., & Kinicki, A. J. 2012. Managing employee withdrawal during organizational change: The role of threat appraisal. *Journal of Management*, 38(3): 890–914.
- Furst, S. A., & Cable, D. M. 2008. Employee resistance to organizational change: Managerial influence tactics and leader-member exchange. *Journal of Applied Psychology*, 93(2): 453–461.
- Gamache, D. L., McNamara, G., Mannor, M. J., & Johnson, R. E. 2015. Motivated to acquire? The impact of CEO regulatory focus on firm acquisitions. *Academy of Management Journal*, 58(4): 1261–1282.
- Gerstner, W.-C., König, A., Enders, A., & Hambrick, D. C. 2013. CEO narcissism, audience engagement, and organizational adoption of technological discontinuities. *Administrative Science Quarterly*, 58(2): 257–291.
- Gioia, D. A., & Chittipeddi, K. 1991. Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal*, 12(6): 433–448.
- Gioia, D. A., & Thomas, J. B. 1996. Identity, image, and issue interpretation: Sensemaking during strategic change in academia. *Administrative Science Quarterly*, 41(3): 370–403.
- Graebner, M. E. 2004. Momentum and serendipity: How acquired leaders create value in the integration of technology firms. *Strategic Management Journal*, 25(8-9): 751–777.
- Graen, G. B. 2004. *New frontiers of leadership, LMX leadership: The series*. Greenwich, CT: Information Age.
- Graen, G. B., & Uhl-Bien, M. 1995. Relationship-based approach to leadership: Development of leader-member

- exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2): 219–247.
- Grant, R. M. 1996. Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2): 109–122.
- Grant, A. M., & Parker, S. K. 2009. Redesigning work design theories: The rise of relational and proactive perspectives. *The Academy of Management Annals*, 3(1): 317–375.
- Grant, A. M., Parker, S., & Collins, C. 2009. Getting credit for proactive behavior: Supervisor reactions depend on what you value and how you feel. *Personnel Psychology*, 62(1): 31–55.
- Griffin, M. A., Parker, S. K., & Mason, C. M. 2010. Leader vision and the development of adaptive and proactive performance: a longitudinal study. *Journal of Applied Psychology*, 95(1): 174.
- Groves, K. S. 2005. Linking leader skills, follower attitudes, and contextual variables via an integrated model of charismatic leadership. *Journal of Management*, 31(2): 255–277.
- Hambrick, D. C. 2007. Upper echelons theory: An update. *The Academy of Management Review Archive*, 32(2): 334–343.
- Hambrick, D. C., & Fukutomi, G. D. 1991. The seasons of a CEO's tenure. *Academy of Management Review*, 16(4): 719–742.
- Hambrick, D. C., & Mason, P. A. 1984. Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9(2): 193–206.
- Hannan, M., & Freeman, J. 1984. Structural inertia and organizational change. *American Sociological Review*, 49: 149–164.
- Heck, R. H., & Hallinger, P. 2010. Testing a longitudinal model of distributed leadership effects on school improvement. *The Leadership Quarterly*, 21(5): 867–885.
- Heider, F. 1958. *The psychology of interpersonal relations*. New York: Wiley.
- Helfat, C. E., & Martin, J. A. 2015. Dynamic managerial capabilities: Review and assessment of managerial impact on strategic change. *Journal of Management*, 41(5): 1281–1312.
- Helmich, D. L. 1975. Corporate succession: An examination. *Academy of Management Journal*, 18(3): 429–441.
- Helmich, D. L., & Brown, W. B. 1972. Successor type and organizational change in the corporate enterprise. *Administrative Science Quarterly*, 17(3): 371–381.
- Helpap, S. 2016. The impact of power distance orientation on recipients' reactions to participatory versus programmatic change communication. *The Journal of Applied Behavioral Science*, 52(1): 5–34.
- Herold, D. M., Fedor, D. B., & Caldwell, S. D. 2007. Beyond change management: A multilevel investigation of contextual and personal influences on employees' commitment to change. *Journal of Applied Psychology*, 92(4): 942–951.
- Herold, D. M., Fedor, D. B., Caldwell, S. D., & Liu, Y. 2008. The effects of transformational and change leadership on employees' commitment to a change: A multilevel study. *Journal of Applied Psychology*, 93(2): 346–357.
- Herrmann, P., & Nadkarni, S. 2014. Managing strategic change: The duality of CEO personality. *Strategic Management Journal*, 35(9): 1318–1342.
- Higgs, M., & Rowland, D. 2011. What does it take to implement change successfully? A study of the behaviors of successful change leaders. *The Journal of Applied Behavioral Science*, 47(3): 309–335.
- Hill, N. S., Seo, M.-G., Kang, J. H., & Taylor, M. S. 2012. Building employee commitment to change across organizational levels: The influence of hierarchical distance and direct managers' transformational leadership. *Organization Science*, 23(3): 758–777.
- Hoch, J. E., Bommer, W. H., Dulebohn, J. H., & Wu, D. 2016. Do ethical, authentic, and servant leadership explain variance above and beyond transformational leadership? A meta-analysis. *Journal of Management*, 44(2): 501–529.
- Hofstede, G. 2001. *Culture's consequences : comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Hon, A. H., Bloom, M., & Crant, J. M. 2014. Overcoming resistance to change and enhancing creative performance. *Journal of Management*, 40(3): 919–941.
- House, R. J., & Aditya, R. N. 1997. The social scientific study of leadership: Quo Vadis? *Journal of Management*, 23(3): 409–473.
- House, R. J. 1977. A 1976 theory of charismatic leadership. In J. G. Hunt & L. L. Larson (Eds.), *Leadership: The cutting edge*: 189–207. Carbondale, IL: Southern Illinois University Press.
- Howell, J. M., & Shamir, B. 2005. The role of followers in the charismatic leadership process: Relationships and their consequences. *Academy of Management Review*, 30(1): 96–112.
- Huy, Q. N. 2002. Emotional balancing of organizational continuity and radical change: The contribution of middle managers. *Administrative Science Quarterly*, 47(1): 31–69.
- Huy, Q. N., Corley, K. G., & Kraatz, M. S. 2014. From support to mutiny: Shifting legitimacy judgments and emotional reactions impacting the implementation of radical change. *Academy of Management Journal*, 57(6): 1650–1680.

- Isabella, L. A. 1990. Evolving interpretations as a change unfolds: How managers construe key organizational events. *Academy of Management Journal*, 33(1): 7–41.
- Jick, T. D. 1979. Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24(4): 602–611.
- Jones, M. A., Reynolds, K. E., Weun, S., & Beatty, S. E. 2003. The product-specific nature of impulse buying tendency. *Journal of Business Research*, 56(7): 505–511.
- Jones, S. L., & Van de Ven, A. H. 2016. The changing nature of change resistance: An examination of the moderating impact of time. *The Journal of Applied Behavioral Science*, 52(4): 482–506.
- Judge, T. A., & Bono, J. E. 2000. Five-factor model of personality and transformational leadership. *Journal of Applied Psychology*, 85(5): 751–765.
- Judge, T. A., & Piccolo, R. F. 2004. Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89: 755–768.
- Judge, T. A., Thoresen, C. J., Pucik, V., & Welbourne, T. M. 1999. Managerial coping with organizational change: A dispositional perspective. *Journal of Applied Psychology*, 84(1): 107–122.
- Kalttinen, J., Lipponen, J., & Holtz, B. C. 2017. Dynamic interplay between merger process justice and cognitive trust in top management: A longitudinal study. *Journal of Applied Psychology*, 102(4): 636.
- Kan, M. M., & Parry, K. W. 2004. Identifying paradox: A grounded theory of leadership in overcoming resistance to change. *The Leadership Quarterly*, 15(4): 467–491.
- Keck, S. L., & Tushman, M. L. 1993. Environmental and organizational context and executive team structure. *Academy of Management Journal*, 36(6): 1314–1344.
- Koivisto, S., Lipponen, J., & Platow, M. J. 2013. Organizational and supervisory justice effects on experienced threat during change: The moderating role of leader in-group representativeness. *The Leadership Quarterly*, 24(4): 595–607.
- Kotter, J. R. 2007. Leading change: Why transformation efforts fail. *Harvard business review*, 85(1): 96–103.
- Krummaker, S., & Vogel, B. 2013. An in-depth view of the facets, antecedents, and effects of leaders' change competency: Lessons from a case study. *The Journal of Applied Behavioral Science*, 49(3): 279–307.
- Landau, D., Drori, I., & Porras, J. 2006. Vision change in a governmental R&D organization: The pioneering legacy as an enduring element. *The Journal of Applied Behavioral Science*, 42(2): 145–171.
- Lee, K., Scandura, T. A., & Sharif, M. M. 2014. Cultures have consequences: A configural approach to leadership across two cultures. *The Leadership Quarterly*, 25(4): 692–710.
- Levay, C. 2010. Charismatic leadership in resistance to change. *The Leadership Quarterly*, 21(1): 127–143.
- Lewin, K. 1951. *Field theory in social science*. New York: Harper.
- Liu, D., Liao, H., & Loi, R. 2012. The dark side of leadership: A three-level investigation of the cascading effect of abusive supervision on employee creativity. *Academy of Management Journal*, 55(5): 1187–1212.
- Livne-Tarandach, R., & Bartunek, J. M. 2009. A new horizon for organizational change and development scholarship: Connecting planned and emergent change research in organizational change and development. *Research in Organizational Change and Development*, 17: 1–35.
- Lüscher, L. S., & Lewis, M. W. 2008. Organizational change and managerial sensemaking: Working through paradox. *Academy of Management Journal*, 51(2): 221–240.
- Matta, E., & Beamish, P. W. 2008. The accentuated CEO career horizon problem: Evidence from international acquisitions. *Strategic Management Journal*, 29(7): 683–700.
- Musteen, M., Barker III, V. L., & Baeten, V. L. 2010. The influence of CEO tenure and attitude toward change on organizational approaches to innovation. *The Journal of Applied Behavioral Science*, 46(3): 360–387.
- Nadkarni, S., & Herrmann, P. 2010. CEO personality, strategic flexibility, and firm performance: The case of the Indian business process outsourcing industry. *Academy of Management Journal*, 53(5): 1050–1073.
- Nadler, D. A., & Tushman, M. L. 1990. Beyond the charismatic leader: Leadership and organizational change. *California management review*, 32(2): 77–97.
- Ndofor, H. A., Priem, R. L., Rathburn, J. A., & Dhir, A. K. 2009. What does the new boss think?: How new leaders' cognitive communities and recent "top-job" success affect organizational change and performance. *The Leadership Quarterly*, 20(5): 799–813.
- Nemanich, L. A., & Keller, R. T. 2007. Transformational leadership in an acquisition: A field study of employees. *The Leadership Quarterly*, 18(1): 49.
- Nkomo, S. M., & Kriek, D. 2011. Leading organizational change in the 'new' South Africa. *Journal of Occupational and Organizational Psychology*, 84(3): 453–470.
- Nohe, C., Michaelis, B., Menges, J. I., Zhang, Z., & Sonntag, K. 2013. Charisma and organizational change: A multilevel study of perceived charisma, commitment to change, and team performance. *The Leadership Quarterly*, 24(2): 378–389.

- Nohe, C., & Michaelis, B. 2016. Team OCB, leader charisma, and organizational change: A multilevel study. *The Leadership Quarterly*, 24(2): 378–389.
- Nord, W. R., & Jermier, J. M. 1994. Overcoming resistance to resistance: Insights from a study of the shadows. *Public Administration Quarterly*, 17(4): 396.
- Norman, S. M., Avolio, B. J., & Luthans, F. 2010. The impact of positivity and transparency on trust in leaders and their perceived effectiveness. *The Leadership Quarterly*, 21(3): 350–364.
- Oreg, S. 2006. Personality, context, and resistance to organizational change. *European Journal of Work and Organizational Psychology*, 15: 73–101.
- Oreg, S., Bartunek, J. M., Lee, G., & Do, B. 2018. An affect-based model of recipients' responses to organizational change events. *Academy of Management Review*, 43(1): 65–86.
- Oreg, S., & Berson, Y. 2011. Leadership and employees' reactions to change: The role of leaders' personal attributes and transformational leadership style. *Personnel Psychology*, 64: 627–659.
- Oreg, S., & Berson, Y. 2018. The impact of top leaders' personality: The processes through which organizations become reflections of their leaders. *Current Directions in Psychological Science*, 27(4): 1–8.
- Oreg, S., & Goldenberg, J. 2015. *Resistance to innovation: Its sources and manifestations*. Chicago and London: University of Chicago Press.
- Oreg, S., Michel, A., & By, R. T. (Eds.). 2013. *The psychology of organizational change: Viewing change from the employee's perspective*. Cambridge: Cambridge University Press.
- Oreg, S., & Sverdlik, N. 2011. Ambivalence toward imposed change: The conflict between dispositional resistance to change and the orientation toward the change agent. *Journal of Applied Psychology*, 96(2): 337–349.
- Oreg, S., Vakola, M., & Armenakis, A. A. 2011. Change recipients' reactions to organizational change: A sixty-year review of quantitative studies. *Journal of Applied Behavioral Science*, 47(4): 461–524.
- Ospina, S., & Foldy, E. 2009. A critical review of race and ethnicity in the leadership literature: Surfacing context, power and the collective dimensions of leadership. *The Leadership Quarterly*, 20(6): 876–896.
- Paglis, L. L., & Green, S. G. 2002. Leadership self-efficacy and managers' motivation for leading change. *Journal of Organizational Behavior*, 23(2): 215–235.
- Pawar, B. S., & Eastman, K. K. 1997. The nature and implications of contextual influences on transformational leadership: A conceptual examination. *Academy of Management Review*, 22(1): 80–109.
- Piderit, S. K. 2000. Rethinking resistance and recognizing ambivalence: A multidimensional view of attitudes toward an organizational change. *Academy of Management Review*, 25(4): 783–794.
- Priem, R. L., Lyon, D. W., & Dess, G. G. 1999. Inherent limitations of demographic proxies in top management team heterogeneity research. *Journal of Management*, 25(6): 935–953.
- Rafferty, A. E., Jimmieson, N. L., & Armenakis, A. A. 2013. Change readiness: A multilevel review. *Journal of Management*, 39(1): 110–135.
- Randall, J., & Procter, S. 2008. Ambiguity and ambivalence: Senior managers' accounts of organizational change in a restructured. *Journal of Organizational Change Management*, 21(6): 686–700.
- Rubin, J. Z., & Brockner, J. 1975. Factors affecting entrapment in waiting situations: The Rosencrantz and Guildenstern effect. *Journal of Personality and Social Psychology*, 31(6): 1054–1063.
- Rubin, R. S., Dierdorff, E. C., Bommer, W. H., & Baldwin, T. T. 2009. Do leaders reap what they sow? Leader and employee outcomes of leader organizational cynicism about change. *The Leadership Quarterly*, 20(5): 680–688.
- Sackmann, S. A., Eggenhofer-Rehart, P. M., & Friesl, M. 2009. Sustainable change: Long-term efforts toward developing a learning organization. *The Journal of Applied Behavioral Science*, 45(4): 521–549.
- Schendel, D., & Hofer, C. W. 1979. *Strategic management: A new view of business policy and planning*. Boston: Little, Brown & Company.
- Schneider, B., & Reichers, A. E. 1983. On the etiology of climates. *Personnel Psychology*, 36(1): 19–39.
- Seo, M.-G., Taylor, M. S., Hill, N. S., Zhang, X., Tesluk, P. E., & Lorinkova, N. M. 2012. The role of affect and leadership during organizational change. *Personnel Psychology*, 65(1): 121–165.
- Shamir, B., House, R. J., & Arthur, M. B. 1993. The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, 4(4): 577–594.
- Sharif, M. M., & Scandura, T. A. 2014. Do perceptions of ethical conduct matter during organizational change? Ethical leadership and employee involvement. *Journal of Business Ethics*, 124(2): 185–196.
- Shin, J., Taylor, M. S., & Seo, M. G. 2012. Resources for change: The relationships of organizational inducements and psychological resilience to employees' attitudes and behaviors toward organizational change. *Academy of Management Journal*, 55(3): 727–748.
- Simons, R. 1994. How new top managers use control systems as levers of strategic renewal. *Strategic Management Journal*, 15(3): 169–189.

- Sirén, C., Patel, P. C., & Wincent, J. 2016. How do harmonious passion and obsessive passion moderate the influence of a CEO's change-oriented leadership on company performance? *The Leadership Quarterly*, 27(4): 653–670.
- Sonenshein, S. 2010. We're Changing—Or are we? untangling the role of progressive, regressive, and stability narratives during strategic change implementation. *Academy of Management Journal*, 53(3): 477–512.
- Sonenshein, S., & Dholakia, U. 2012. Explaining employee engagement with strategic change implementation: A meaning-making approach. *Organization Science*, 23(1): 1–23.
- Song, J. H. 1982. Diversification strategies and the experience of top executives of large firms. *Strategic Management Journal*, 3(4): 377–380.
- Stoker, J. I., Grutterink, H., & Kolk, N. J. 2012. Do transformational CEOs always make the difference? The role of TMT feedback seeking behavior. *The Leadership Quarterly*, 23(3): 582–592.
- Sy, T., Côté, S., & Saavedra, R. 2005. The contagious leader: impact of the leader's mood on the mood of group members, group affective tone, and group processes. *Journal of Applied Psychology*, 90(2): 295–305.
- Thomas, R., Sargent, L. D., & Hardy, C. 2011. Managing organizational change: Negotiating meaning and power-resistance relations. *Organization Science*, 22(1): 22–41.
- Tyler, T. R., & De Cremer, D. 2005. Process-based leadership: Fair procedures and reactions to organizational change. *Leadership Quarterly*, 16(4): 529–545.
- Välikangas, L., & Okumura, A. 1997. Why do people follow leaders? A study of a US and a Japanese change program. *The Leadership Quarterly*, 8(3): 313–337.
- van Dam, K., Oreg, S., & Schyns, B. 2008. Daily work contexts and resistance to organizational change: The role of leader-member exchange, perceived development climate, and change process quality. *Applied Psychology: An International Review*, 57(2): 313–334.
- Van Dierendonck, D. 2011. Servant leadership: A review and synthesis. *Journal of Management*, 37(4): 1228–1261.
- van Knippenberg, D., & Sitkin, S. B. 2013. A critical assessment of charismatic—Transformational leadership research: Back to the drawing board? *Academy of Management Annals*, 7(1): 1–60.
- Waldman, D. A., & Javidan, M. 2009. Alternative forms of charismatic leadership in the integration of mergers and acquisitions. *The Leadership Quarterly*, 20(2): 130–142.
- Waldman, D. A., Lituchy, T., Gopalakrishnan, M., Laframboise, K., Galperin, B., & Kaltsounakis, Z. 1998. A qualitative analysis of leadership and quality improvement. *The Leadership Quarterly*, 9(2): 177–201.
- Waldman, D. A., Ramirez, G. G., House, R. J., & Puranam, P. 2001. Does leadership matter? CEO leadership attributes and profitability under conditions of perceived environmental uncertainty. *Academy of Management Journal*, 44(1): 134–143.
- Wang, G., Holmes, R. M., Oh, I. S., & Zhu, W. 2016. Do CEOs matter to firm strategic actions and firm performance? A meta-analytic investigation based on upper echelons theory. *Personnel Psychology*, 69: 775–862.
- Weber, M. 1968/1922. *Economy and society: An outline of interpretive sociology*. New York: Bedminster Press.
- Weick, K. E., & Quinn, R. E. 1999. Organizational change and development. *Annual Review of Psychology*, 50: 361–386.
- Weiss, H. M., & Cropanzano, R. 1996. Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior: An annual series of analytical essays and critical reviews*, vol. 18: 1–74. Elsevier Science/JAI Press.
- Weng, D. H., & Lin, Z. 2014. Beyond CEO tenure: The effect of CEO newness on strategic changes. *Journal of Management*, 40(7): 2009–2032.
- Wiersema, M. F., & Bantel, K. A. 1992. Top management team demography and corporate strategic change. *Academy of Management Journal*, 35(1): 91–121.
- Woodman, R. W. 1989. Organizational change and development: New arenas for inquiry and action. *Journal of Management*, 15(2): 205–228.
- Wu, C., Neubert, M. J., & Yi, X. 2007. Transformational leadership, cohesion perceptions, and employee cynicism about organizational change: The mediating role of justice perceptions. *Journal of Applied Behavioral Science*, 43(3): 327–351.
- Yukl, G. 1998. *Leadership in organizations* (4th ed.). Upper Saddle River, NJ: Prentice Hall.
- Yukl, G. 1999. An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *The Leadership Quarterly*, 10(2): 285–305.
- Yukl, G., & Lepsinger, R. 2004. *Flexible leadership*. San Francisco, CA: Jossey & Bass.
- Zaccaro, S. J. 2007. Trait-based perspectives of leadership. *American Psychologist*, 62(1): 6–16.
- Zajac, E. J., & Kraatz, M. S. 1993. A diametric forces model of strategic change: Assessing the antecedents and consequences of restructuring in the higher education industry. *Strategic Management Journal*, 14(S1): 83–102.
- Zaleznik, A. 1977. Managers and leaders: Are they different? *Harvard business review*, 55: 67–78.

Zhao, H. H., Taylor, M. S., Lee, C., & Lam, W. 2016. Not even the past: The joint influence of former leader and new leader in the midst of organizational change. *Journal of Applied Psychology*, 101(12): 1730–1738.



Shaul Oreg (oreg@huji.ac.il) is an Associate Professor of Organizational Behavior at the School of Business Administration of the Hebrew University of Jerusalem. In his

research he studies responses to organizational change and the predictors and outcomes of these responses. He is an associate editor of the *Journal of Organizational Behavior*.

Yair Berson (yberson@gmail.com) is an Associate Professor of Psychology at Bar-Ilan University and a Visiting Research Professor at New York University's Stern School of Business. Dr. Berson's research helps demonstrate the effects of leaders' characteristics and actions on processes such as organizational learning and change.



APPENDIX—DETAILED DESCRIPTION OF THE ARTICLE SELECTION PROCEDURES

We began by searching Google Scholar for articles that included the terms “organizational change” and “leader” or “leaders” (equivalent to the Boolean search: “organizational change” AND (leader OR leaders)) in their title, focusing primarily on high-ranked journals but including articles with titles that seemed directly relevant to the focus of the review. To these, we added articles with which we were familiar in advance that did not come up in this search. We also obtained articles by going through their lists of references and by finding articles that cited them (e.g., through Google Scholar’s “cited by” option). This preliminary search yielded approximately 150 articles. After removing articles that did not meet the criteria of including an actual organizational change and involving some form of leadership or management, we remained with 57 articles.

Because limiting search terms to article titles is too restrictive, and yet including these terms anywhere within the article would yield too many irrelevant articles, we conducted a second round of searches in the databases mentioned above, which allowed to search for key terms within the abstract, keywords, and subject. We searched for articles that include the combination of the terms “organizational change” (we also conducted a separate search with the term “organisational change,” for journals that use British English spelling) and either “leaders” or “leadership.” We also conducted additional searches, replacing the term “organizational change” with the terms “downsizing,” “mergers,” “organizational restructuring” and “work redesign.” To keep the review manageable, we restricted our search to the top-ranked management and applied psychology journals of the field, as well as a few second-tier journals that focus on either leadership, organizational change. The journals included were *Academy of Management Journal*, *Administrative Science Quarterly*, *Journal of Applied Psychology*, *Journal of Applied Behavioral Science*, *Journal of Management*, *Journal of Organizational Behavior*, *Journal of Occupational and Organizational Psychology*, *The Leadership Quarterly*, *Organizational Behavior and Human Decision Processes*, *Organizational Science*, *Personnel Psychology*, and *Strategic Management Journal*. We also included the *Academy of Management Review*, to cover key theoretical advancements or integrations that could inform our review. This round of searches yielded 181 articles, of which 35 overlapped with the search we conducted in the first step.

We then conducted another round of searches replacing the terms “leader(s)” with “manager(s),” “supervisor(s),” and “CEO(s).” We searched for articles that include one of these words, along with the word “change” in the abstract, and the terms “organizational change” or “strategic change” anywhere within the article: ((managers or supervisors) and change) in abstract and (“organizational change” or “strategic change”). We restricted this additional search to a subset of the above journals, retaining only those published in top-tier journals: *Academy of Management Journal*, *Academy of Management Review*, *Administrative Science Quarterly*, *Journal of Applied Psychology*, *Organizational Behavior and Human Decision Processes*, *Organizational Science*, *Personnel Psychology*, and *Strategic Management Journal*. Because this list of journals tends to be United States-centric, we also conducted this search in the highest-rated (with respect to the 2016 Impact Factor) European management journal, which is the *Journal of Occupational and Organizational Psychology*. This round yielded an additional 83 articles, leading to a total of 286 articles. After reviewing each of these articles and removing those that did not include an organizational change or an aspect of leadership we remained with 94 articles. Ten of these were theoretical or review articles that we used to inform our analysis and review. Although the articles we gathered constitute only a subset of the research linking leadership with organizational change, they represent the main conceptualizations, empirical approaches, and findings in this field.