RUNNING HEAD: Change readiness: A multilevel review

CHANGE READINESS: A MULTILEVEL REVIEW

ALANNAH E. RAFFERTY

School of Management, Australian School of Business

The University of New South Wales

Sydney, Australia

Ph: +61 2 9385 9710

E-mail: a.rafferty@unsw.edu.au

NERINA L. JIMMIESON

School of Psychology

The University of Queensland

St Lucia, Australia, Ph: +61 7 3365 6409

E-mail: n.jimmieson@psy.uq.edu.au

ACHILLES A. ARMENAKIS

Department of Management

Auburn University

Alabama, USA, Ph: 334 844 6506

E-mail: armenac@auburn.edu

ACCEPTED FOR PUBLICATION IN THE JOURNAL OF MANAGEMENT.

KEYWORDS: Readiness for change, multilevel framework, antecedents of change readiness, outcomes of change readiness.

Authors' note: We are grateful to Steven Caldwell and Shaul Oreg for their comments on an earlier version of this manuscript.

CHANGE READINESS: A MULTILEVEL REVIEW

ABSTRACT

We conducted a theoretical review of the change readiness literature and identified two major limitations with this work. First, while there is substantial agreement about the key cognitions that underlie change readiness, researchers have not examined the affective element of this attitude. Second, researchers have not adopted a multilevel perspective when considering change readiness. We address these limitations and argue that it is important to incorporate affect into definitions of the change readiness construct and also when measuring this construct. We then develop a multilevel framework that identifies the antecedents and consequences of individual, work group and organizational change readiness. Next, we outline the theoretical processes that lead to the development of individual and collective readiness for change. We then review theoretical and empirical evidence to identify the antecedents of change readiness at the three levels of analysis. Finally, we identify a number of suggestions to guide future research seeking to adopt a multilevel approach to change readiness.

CHANGE READINESS: A MULTILEVEL REVIEW

The study of change and development is one of the great themes in the social sciences (Ford & Ford, 1994; Pettigrew, Woodman, & Cameron, 2001; Van de Ven & Poole, 1995) and interest in this topic continues to grow as organizations struggle to cope with technological advances, a global marketplace, and the denationalization and deregulation of marketplaces, which have resulted in accelerating environmental complexity (De Meuse, Marks, & Dai, 2010; Gordon, Stewart, Sweo, & Luker, 2000). This complexity requires organizations to rapidly change themselves in order to survive (Gordon et al., 2000). As a result, companies now make moderate to major changes at least every four to five years (Lewis, 2000). The prevalence of large-scale organizational changes can be seen in the 1,353 mass layoff actions involving 116,689 workers that occurred in October 2011 in the United States (Bureau of Labor Statistics, 2011). In addition, a 2011 survey of over 800 executives from around the world indicated that half of the respondents expected their organizations to engage in more merger and acquisition deals in the next twelve months than they had in the previous twelve months (Uhlener & West, 2011).

Although large-scale organizational change efforts occur with increasing regularity, all too frequently these efforts fail to achieve their intended aims (Beer & Nohria, 2000). In a survey of over 3,000 executives, Meaney and Pung (2008) reported that two-thirds of respondents indicated that their company had failed to achieve a true “step change” in performance after implementing organizational changes. Academic researchers are perhaps even more pessimistic about the success of change efforts, concluding that organizational change efforts are often so poorly managed that they precipitate organizational crises (Probst & Raisch, 2005). In response

to the high rate of change failure, researchers have sought to identify factors which may increase the likelihood of successfully implementing organizational changes. Miller, Johnson, and Grau (1994) argue that, while the failure to successfully implement planned change may be attributed to many factors, few issues are as critical as employees' attitudes toward change. We agree with this conclusion and we focus on change readiness, which has been defined as an individual's "beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization's capacity to successfully undertake those changes" (Armenakis, Harris, & Mossholder, 1993: 681). Change readiness is the most prevalent positive attitude toward change that has been studied in the organizational change literature. Indeed, in a review of the literature, Bouckennooghe (2010) concluded that over 90% of conceptual work on change attitudes has been conducted on either change readiness or resistance to change.

Despite the degree of interest in change readiness, however, we identify two major limitations with research on the topic that currently limits our understanding of this construct. First, while there is agreement about the key cognitions or beliefs that underlie change readiness (cf. Armenakis, Bernerth, Pitts, & Walker, 2007; Armenakis et al., 1993), researchers have paid considerably less attention to the affective element of this change attitude. The lack of attention directed toward affect is an important omission as social psychologists have defined an attitude as an "evaluative summary judgment that can be derived from qualitatively different types of information (e.g., affective and cognitive"; Crites, Fabringar, & Petty, 1994: 621). In this respect, affective and cognitive components of attitudes have been identified as proximal antecedents of the overall evaluative judgment that is an attitude (Weiss, 2002). We draw on attitude theory to argue that it is essential to consider both cognitive *and* affective aspects of change readiness when defining and measuring this construct. Both theoretical and empirical research supports the

distinctiveness of the cognitive and affective elements of an attitude and the overall evaluative judgment that is an attitude (Breckler & Wiggins, 1989; Trafimow & Sheeran, 1998; van den Berg, Manstead, Joop, & Wigboldus, 2005). In addition, researchers have reported that cognition and affect display differential relations with the overall attitude evaluation (e.g., Abelson, Kinder, Peters, & Fiske, 1982; Breckler & Wiggins, 1989), while also being differentially associated with behaviors (e.g., Breckler & Wiggins, 1989; Lawton, Conner, & McEachan, 2009).

The second major limitation of the change readiness literature is that researchers have not adopted a multilevel perspective, which we argue is essential for understanding the individual and organizational implications of change readiness. While a number of researchers have acknowledged that organizational change efforts inherently involve multilevel processes (Caldwell, Herold, & Fedor, 2004; Caldwell, Yi, Fedor, & Herold, 2009b; Pettigrew et al., 2001; Whelan-Barry, Gordon, & Hinings, 2003), these processes have not been reflected in our thinking about change readiness. While the level of theory and measurement when studying change readiness has overwhelmingly been at the individual level, researchers often use these data to make statements about an organization's readiness for change (Bouckennooghe, 2010). This is problematic because relationships that hold at one level of analysis may be stronger or weaker at a different level of analysis and may, in fact, even reverse (Ostroff, 1993). We develop a multilevel framework (see Figure 1) outlining the antecedents and consequences of individual, work group, and organizational change readiness. Adopting a multilevel perspective reveals a range of insights that have been overlooked. In particular, our analysis suggests that the processes that contribute to the emergence of change readiness at the individual level and collective levels differ at the individual, group, and organizational levels. In addition, our review

suggests that antecedents and consequences of change readiness are likely to differ at the three levels of analysis.

INSERT FIGURE 1 ABOUT HERE

A Multilevel Framework of Change Readiness

Our first task in developing a multilevel theory of change readiness is to define this construct at the individual level of analysis and outline the theoretical processes that contribute to the emergence of this construct. Next, we specify the nature and structure of the construct at the work group and organizational levels. We argue that change readiness is isomorphic. That is, all individuals perceive readiness along the same set of dimensions or that all work group or organizational members consider change readiness the same way (Kozlowski & Klein, 2000). We then outline how change readiness should be assessed at the collective level, arguing that a referent-shift consensus model is appropriate. Next, we review existing theoretical and empirical evidence exploring the antecedents of readiness for change at the three levels of analysis. The result of our review is a multilevel framework that outlines the antecedents and outcomes of readiness for change (see Figure 1).

Our focus on specifying the *outcomes* of change readiness at the three levels of analysis is important because “outcomes are perhaps the least theorized and least studied aspects of organizational change” (Weiner, 2009: 71). We identify change supportive behaviors (Kim, Hornung, & Rousseau, 2011) as one set of key outcomes likely to result from individual change readiness. Kim et al. define change supportive behaviors as “actions employees engage in to actively participate in, facilitate, and contribute to a planned change initiated by the

organization” (p. 1665). In addition, we also identify positive job attitudes including job satisfaction and organizational commitment as key outcomes of individual change readiness. At the work group level, we identify change supportive behavior of the work group and positive work group attitudes as outcomes of work group readiness for change. At the organizational level, however, we identify the development of dynamic capabilities concerned with change implementation, as potential outcomes resulting from organizational change readiness. Salvato and Rerup (2011: 473) suggest that dynamic capabilities “help a firm systematically and reliably adapt lower-level entities – mainly routines and standard capabilities – to dynamic environments”. These authors propose that dynamic capabilities involve the development of stable patterns of routines or collections of routines that generate and alter lower-level routines and capabilities within an organization.

Defining Individual Readiness for Change

The most commonly cited discussion of change readiness was provided by Armenakis et al. (1993: 681) who defined this construct as an individual’s “beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization’s capacity to successfully undertake those changes”. While a range of other definitions have been developed (see Table 1), it is clear that subsequent definitions of change readiness are largely derived from Armenakis et al.’s original work. However, an attitude is an “evaluative summary judgment[s] that can be derived from qualitatively different types of information (e.g., affective and cognitive”; Crites et al., 1994: 621). Thus, beliefs about an attitude object and affective responses to an attitude object are distinct antecedents or causes of the overall evaluative judgment that is an attitude. While Armenakis et al.’s definition emphasizes beliefs it does not examine the *affective* component of change readiness. In addition, Armenakis et al.’s definition encompasses behavioral intentions.

However, *intentions* are concerned with the motivational factors that influence a behavior and are indicators of how hard a person is willing to try and of how much effort he/she is willing to exert in order to perform the behavior (Ajzen, 1991). We propose that it is not appropriate to include intentions as a component of change readiness. Below, we examine research to identify the cognitive and affective elements that have been identified as influencing the overall evaluation of change readiness.

INSERT TABLE 1 ABOUT HERE

Cognitive components of change readiness. Armenakis et al. (1993) identified two beliefs as key components of change readiness including the belief that change is needed and the belief that the individual and organization has the capacity to undertake change. Armenakis and Harris (2002) expanded this discussion and identified five beliefs underlying an individual's change readiness. First, Armenakis and Harris argue that a change message must create a sense of *discrepancy* – or a belief that change is needed. In addition, an individual must believe that a proposed change is an *appropriate* response to a situation. Both of these cognitions can be subsumed under the category of 'need for change'. Armenakis and Harris also argue that a change message must create a sense of *efficacy*, which refers to an individual's perceived capability to implement a change initiative (Armenakis et al., 2007). This is a malleable (state-like) form of self-efficacy that is particularly change-related (Oreg, Vokola, & Armenakis, 2011). The fourth belief - *principal support* - assesses an individual's belief that their organization (i.e., superiors and peers) will provide tangible support for change in the form of resources and information. This belief contributes to an individual's sense of efficacy about their

capability to implement change. The final change belief - *valence* - is concerned with an individual's evaluation of the benefits or costs of a change for their job and role. If an individual does not believe that change has benefits, then it is not likely that he/she will have a positive overall evaluation of his/her readiness for change.

Affective components of change readiness. Crites et al. (1994) state that *affect* consists of discrete, qualitatively different *emotions* such as love, hate, delight, sadness, happiness, annoyance, calmness, excitement, boredom, relaxation, anger, acceptance, annoyance, disgust, joy, and sorrow. While Armenakis et al.'s (1993) definition does not address the affective components of change readiness, more recent discussions have broadly acknowledged that affect is an important component of the change readiness construct. For example, Holt, Armenakis, Feild, and Harris (2007: 235) define change readiness as "the extent to which an individual or individuals are cognitively and *emotionally* inclined to accept, embrace, and adopt a particular plan to purposefully alter the status quo". Bouckennooghe (2010: 561) suggests that "readiness for change is a multifaceted concept that comprises an *emotional* dimension of change, a cognitive dimension of change, and an intentional dimension of change".

An examination of other change attitudes suggests that a number of authors have identified affective elements of these attitudes. For example, Miller et al. (1994: 60) defined openness to change as encompassing "positive affect about the positive consequences of change". Wanberg and Banas (2000) identified two aspects of openness to change, one of which is positive affect about the potential consequences of change. However, an examination of items measuring openness to change in Wanberg and Banas' study suggests a measurement focus on employees' *cognitive* evaluation of change rather than on their affective responses to change. For

instance, items assessing openness to change included “Overall, proposed changes are for the better” and “I think that the change will have a negative effect on the clients we serve”.

We propose that affective change readiness should be assessed by discrete emotion items that capture an individual’s or a group’s positive emotions concerning a specific change event. Affective reactions to change may result from *currently* experiencing an emotion (such as hope) due to the prospect of a desirable or undesirable future event (Baumgartner, Pieters, & Bagozzi, 2008). Hope reflects pleasure about the prospect of a desired event and specific emotional facets include anticipatory excitement and feelings of optimism, confidence, or relaxation. In addition, positive emotions may result from *imagining* experiencing certain emotions in the future once certain events have occurred (Baumgartner et al., 2008). For example, an individual may imagine that he/she will obtain a promotion after an organizational restructure and imagine the happiness that he/she would feel having achieved this outcome.

In summary, we propose that an individual’s overall evaluative judgment that he/she is ready for organizational change is influenced by (1) his/her beliefs that: (a) change is needed, (b) that he/she has the capacity to successfully undertake change, (c) that change will have positive outcomes for his/her job/role and (2) his/her current and future-oriented positive affective emotional responses to a specific change event.

Collective Readiness for Change

Recently, a number of theorists have acknowledged that organizational change initiatives involve the implementation and adoption of change initiatives at multiple organizational levels. Whelan-Barry et al. (2003: 187) argued that “organizational-level change process[es] inherently involve[s] group and individual change process[es]”. Subsequently, we propose that a work group’s change readiness and an organization’s change readiness attitude emerge from the

cognitions and affect of individuals that become shared because of social interaction processes, and which manifest as higher-level collective phenomena: work group and organizational readiness for change. We propose that a *work group's* change readiness and an *organization's* change readiness are influenced by: (1) shared cognitive beliefs among work group members/organizational members that: a) change is needed; b) the work group/organization has the capability to successfully undertake change; c) change will have positive outcomes for the work group/organization; and, (2) the occurrence of current and future-oriented positive group/organizational emotional responses to an organizational change. Below, we outline the processes that contribute to the emergence of work group and organizational readiness for change.

Work group change readiness: Cognitive beliefs. Individuals in teams are exposed to a range of top-down processes that produce a common set of stimuli, such as leaders, organizational events, and processes, that all group members experience. When work group members interact with each other, over time, each individual in that group converges on a consensual view of events and key features of the workplace (Kozlowski & Klein, 2000). In a change context, theorizing acknowledges this, suggesting that organizational change involves "...an individual and group sensemaking process taking place in a social context that is a product of constant and ongoing human production and interaction in organizational settings" (George & Jones, 2001: 421). As a result, it is increasingly clear that the meaning of any change event is negotiated and ultimately determined by individual and group sensemaking efforts. Isabella (1990) argued that, in the first stage of any change process - the anticipation stage - employees use speculation in the form of rumors to develop an understanding of impending changes. Work

group members arrive at shared beliefs regarding change events through communicating with each other using rumors in order to make sense of their changing workplace.

Other empirical work also indirectly suggests that work groups develop collective beliefs that: (a) change will have positive outcomes, and, (b) there is a need for change, and that these shared beliefs increase the likelihood of successfully implementing change. For example, Mohrman (1999) compared work groups (i.e., “accelerated learning units”) that were successfully implementing organizational change with those that were doing so unsuccessfully. Mohrman found that the members of successful work groups were more positive about the outcomes they were experiencing as a result of changes and felt the changes were in their best interests and in the best interests of the company.

Work Group Change Readiness: Affective responses. Sanchez-Burks and Huy (2009) suggest that collective emotional reactions – which capture “the composition of various shared emotions of the group’s members” (p. 24) - can develop in response to change events. A number of theoretical processes are likely to contribute to the development of shared affective responses to change events, including emotional comparison and contagion (Barsade, 2002; Bartel & Saavedra, 2000; Sanchez-Burks & Huy, 2009). Both of these processes suggest that individuals use two types of cues to synchronize their moods with others: self-produced cues and situational cues. Self-produced cues focus on an individual’s perceptions of his/her own expressive behaviors, whereas situational cues are based on perceptions regarding what others’ expressive behaviors mean in a given situation. In particular, emotional comparison occurs when individuals in ambiguous and physiologically arousing situations – such as during periods of large-scale organizational change - seek out and use cues from similar others to label their aroused state. Work group members are often selected as an appropriate comparison as they are seen as

providing an accurate measure for evaluating the intensity, nature, or appropriateness of one's emotional state. These social comparisons determine the specific emotion that is felt, and one's level of physiological arousal can help determine how intensely the emotion is felt (Bartel & Saavedra, 2000).

Barsade (2002) discussed the role of emotional contagion, which he describes as a process in which a person or group influences the emotions or behavior of another person or group through the conscious or unconscious induction of emotional states. Bartel and Saavedra (2000) suggest that emotional contagion occurs through behavioral mimicry and synchrony, which can lead individuals to become emotionally in tune with others in two ways. First, individuals tend to feel emotions consistent with the facial, postural, and vocal expressions they mimic. These expressions are generated unconsciously and promote emotional contagion in social settings. Second, a conscious self-perception process also may occur, such that people make inferences about their own emotional states based on their own expressive behavior. When internal physiological cues about one's emotions and feelings are weak or ambiguous, an individual relies on behavioral cues to infer mood.

A number of empirical studies indicate that collective emotions can be reliably distinguished by both external raters and by group members (e.g., Mackie, Devos, & Smith, 2000; Totterdell, Kellett, Briner, & Teuchmann, 1998). Researchers have identified a number of antecedents of collective emotions, including task and social interdependence, the frequency and continuity of contact, mood regulation norms (Bartel & Saavedra, 2000), identification with the work group (Mackie et al., 2000), commitment to the group and work group climate (Totterdell et al., 1998). Research also indicates that collective emotions influence a range of individual and work group outcomes. For example, Barsade (2002) studied 94 undergraduate students who were

randomly assigned to 29 groups that participated in a leaderless group discussion. Results demonstrated that group contagion does occur, with support for this conclusion coming from both independent video-coders' ratings and participants' self-reported mood. In addition, the positive emotional contagion group members experienced improved cooperation, decreased conflict, and increased task performance.

Organizational readiness for change: Cognitive beliefs. A number of top-down processes are likely to result in employees in an organization as a whole developing shared beliefs about change. In particular, processes such as attraction, selection, attrition (ASA; Schneider, 1987) and organizational socialization (Van Maanen & Schein, 1979) act to reduce the variability in perceptions in an organization and facilitate common interpretations of the workplace and of events. The ASA framework (Schneider, 1987; Schneider, Goldstein, & Smith, 1995) suggests that these processes determine the kinds of employees recruited and retained in an organization and, consequently, the nature of an organization's structures, processes, and culture. This model argues that people are attracted to organizations based on their estimation of their own personal characteristics and the attributes of the organization. In addition, people are selected into organizations based on judgments about fit between their characteristics and those of the organization.

The attrition aspect of the model argues that employees who do not fit an organization tend to leave, and this aspect of the model is supported by empirical work conducted by Harrison and Carroll (1991). These authors demonstrated that rapid organizational growth and high turnover paradoxically enhanced organizational cultural stability. Rapid growth meant the addition of new employees to the organization who were susceptible to socialization, whereas turnover meant that more alienated people left the organization. These results suggest that, over

time, an organization's employees are likely to become more similar in terms of their beliefs. Overall, the ASA model suggests that attraction, selection, and attrition processes result in organizations consisting of employees with similar characteristics and personalities, which means that they are likely to develop similar beliefs (Schneider, 1987).

Organizational socialization processes also assist in the likelihood that organizational members will develop common interpretations of events in their workplace. Organizational socialization refers to the process through which a new employee moves from being an outsider to an integrated and effective insider (Van Maanen & Schein, 1979). In particular, Van Maanen and Schein state that "in its most general sense, organizational socialization is the process by which an individual acquires the social knowledge and skills necessary to assume an organizational role" (p. 211). Van Maanen and Schein identified a range of tactics that are organized around six different continuums that are used by organizations to socialize employees. Specifically, these authors suggest that socialization tactics may be collective versus individual, formal versus informal, sequential versus random, fixed versus variable, serial versus disjunctive, and use investiture versus divestiture. In summary, we argue that ASA and socialization processes will contribute to a shared understanding regarding key beliefs about change events and these beliefs act as proximal antecedents of employees' collective evaluative judgment that an organization is ready for change.

Organizational readiness for change: Affective responses. Sanchez-Burks and Huy (2009) identify a number of factors that influence the likelihood that organizational members will develop similar emotions when confronted with organizational change events. In particular, shared affective responses are likely to develop if employees have similar interpretations about the impetus for strategic change, or if they have had similar experiences regarding the ensuing

costs and benefits of the change for their work units. Research in the change field has emphasized the role of transformational and charismatic leadership in periods of change (e.g., Herold, Caldwell, & Liu, 2008; Oreg & Berson, 2011). Such research suggests that leaders who establish a clear vision of the future create similar interpretations or beliefs about change events. In addition to beliefs, research by Connelly, Gaddis, and Helton-Fauth (2002) suggests that transformational leaders create shared organizational positive affective responses to change when they convey an organizational vision in such a way as to inspire hope and optimism.

Other research by Dutton and Dukerich (1991) suggests that employees who strongly identify with their organization are likely to experience emotions similar to one another when faced with changes that enhance or threaten the organization's identity. In particular, Dutton and Dukerich conducted research in the Port Authority of New Jersey to explore how this agency dealt with the issue of homelessness. The Port Authority's identity resulted in positive emotions when organizational actions in relation to homelessness interventions were identity-consistent, especially in cases where employees did not expect action, such as when two drop-in centers for homeless people were opened.

Collective organizational emotions also are influenced by organizational culture, as culture is an influence device that informs, guides, and disciplines the emotions of employees within an organization (Van Maanen & Kunda, 1989). Ashforth and Humphrey (1995) outline four mechanisms by which organizations regulate the experience and expression of emotion in the workplace including: 1) neutralizing emotions through norms which prevent the emergence of emotions; 2) buffering emotions through procedures that seek to compartmentalize emotional and rational activities (e.g., clear demarcations between "service" personnel and "backstage" staff); 3) prescribing which emotions should be experienced through "feeling rules" or norms;

and, 4) suppressing emotion through socializing employees to hide emotions that may disrupt task performance. In summary, we argue that an organization's leadership, and its identity and culture are likely to contribute to the development of consistent collective affective responses to organizational change events.

Nature and Structure of Work Group and Organizational Readiness for Change

Chen, Bliese, and Mathieu (2005) argue that, when developing multilevel constructs, theorists must outline how a construct should be assessed at the aggregate levels. In this respect, researchers must specify the composition model underlying their approach. A composition model outlines how work group/organizational change readiness refers to the same content (cognitions and affect) and shares the same meaning as individual readiness, yet represents the construct at the group/organizational level. We argue that a referent-shift consensus model (Chan, 1998) is appropriate when theorizing about and operationalizing change readiness at the group and organizational levels. The referent-shift model suggests that within-group consensus is needed to justify aggregation of beliefs and affective responses to change and the global evaluation of individual change readiness to the higher level construct(s) (Chan, 1998; Klein & Kozlowski, 2000). Importantly, however, there is a shift in the referent prior to assessment of consensus and it is the *new* referent that is actually being combined to represent the higher-level construct. In the case of change readiness, there is a shift, for example, from “*I* can see the potential advantages of this change” (individual cognitive belief), “*I* feel hopeful about this change” (individual affective response to change), and “*I* am ready for this organizational change” (global evaluation of individual change readiness) to “*My work group* can see the potential benefit of this change” (cognitive work group collective change readiness), “*My work group* feels hopeful

about this change” (affective work group collective change readiness), and “My *work group* is ready for this organizational change” (global work group collective change readiness).

The referent-shift acknowledges that, although work group members are likely to differ in their individual readiness for change (for example, due to personality characteristics, such as dispositional resistance to change; see (Oreg, 2003), they may develop shared perceptions of their *work group's cognitive and affective and global change readiness* due to the processes that we outlined earlier. The referent shift captures how an individual believes that others in the work group/organization perceive the construct. Within-group consensus, as computed by an index such as $rwg_{(j)}$ (e.g., James, Demaree, & Wolf, 1993), is necessary to justify the aggregation of individuals' collective readiness or organizational collective readiness to a higher level(s).

Antecedents of Change Readiness

Next, we review theoretical and empirical research examining the antecedents of change readiness. However, due to the relatively small number of studies that have focused on the change readiness construct, we also draw on studies assessing other change-related attitudes, such as support for change, openness toward change, commitment to change, and negative change-related attitudes, such as resistance and cynicism about change. Our review indicates that the antecedents of change readiness can be classified into three broad categories. The first category of antecedents are *external organizational pressures*, such as industry changes, technological changes, and government regulation modifications that drive organizational change. This category of antecedents has primarily been studied when considering organizational-level change readiness. However, it also is possible to identify other external organizational factors, such as professional group memberships, that may act to influence individual and work group change readiness. The second category of antecedents that we identify

are *internal context enablers*, such as change participation and communication processes, leadership processes, and so on. Finally, we identify a third category of antecedent factors. At the individual level of analysis, we label these characteristics *personal characteristics*. While at the collective level, we label this category of antecedents as *group composition characteristics*. Most research on change readiness (or other change-related attitudes) has focused on antecedents that can be described as internal context enablers and personal characteristics.

Individual level of analysis. We identified a wide variety of antecedents of a range of change-related attitudes at the individual level of analysis. However, only a relatively small set of these studies has specifically focused on the antecedents of change readiness (Caldwell, Roby-Williams, Rush, & Ricke-Kiely, 2009a; Cunningham et al., 2002; Eby, Adams, Russell, & Gaby, 2000; Fox, Ellison, & Keith, 1988; Jones, Jimmieson, & Griffiths, 2005; Lyons, Swindler, & Offner, 2009; Neves, 2009; Rafferty & Simons, 2006; Walinga, 2008). These studies have used a variety of different measures of change readiness. In particular, some authors have used measures that focus on one or more the cognitive beliefs about change outlined by Armenakis and his colleagues (Caldwell et al., 2009a; Neves, 2009), while some researchers have developed change readiness measures specific to their study (Lyons et al., 2009). Other researchers have applied clinical models of change readiness (Prochaska, Redding, & Evers, 2002) to the organizational area (Cunningham et al., 2002). As a result of the limited data and the lack of consistent measurement of change readiness, it is currently difficult to draw firm conclusions concerning the antecedents of change readiness based on the change readiness literature alone. As such, we also draw on research studying other change-related attitudes in order to consider the potential antecedents of change readiness and when developing our arguments regarding the differential antecedents of individual, work group and organizational change readiness.

We could not identify any studies that examined external organizational factors as antecedents of individual's change readiness. In contrast, numerous internal context enablers have been shown to act as antecedents of change readiness and other change-related attitudes. In particular, research suggests that change management processes designed to enhance participation in change are associated with positive attitudinal responses to change (e.g., Gopinath & Becker, 2000; Rafferty & Restubog, 2010). Empirical studies indicate that, when employees participate in decisions related to the change, feelings of empowerment are created, providing them with a sense of agency and control (Armenakis et al., 1993; Gagné, Koestner, & Zuckerman, 2000). For example, some research has focused on the importance of employee participation and, in particular, providing opportunities for voice and self-discovery as a predictor of one aspect of employee openness toward change - employee acceptance of change (e.g., Wanberg & Banas, 2000).

In addition, researchers have focused on the importance of effective communication with employees during change (e.g., Bordia, Hobman, Jones, Gallois, & Callan, 2004; Schweiger & DeNisi, 1991). Empirical research has demonstrated that high-quality change communication increases acceptance, openness, and commitment to change. Furthermore, the failure to provide sufficient information or poor quality information can result in a number of problems including cynicism about change (Reichers, Wanous, & Austin, 1997; Wanous, Reichers, & Austin, 2000) and widespread rumors, which often exaggerate the negative aspects of change (Bordia et al., 2004). In addition, research on transformational leadership in changing workplaces suggests that leaders influence employees' change attitudes including employee support for change (e.g., Herold et al., 2008) and cynicism about change (Bommer, Rich, & Rubin, 2005). Overall,

research suggests that implementing effective change management processes are associated with positive change attitudes.

Other internal context enablers that have been examined include an individual's perceptions of their change history in a firm (Devos, Buelens, & Bouckennooghe, 2007; Rafferty & Restubog, 2010), an individual's exposure to change (Axtell et al., 2002), perceived organizational support (Eby et al., 2000; Self, Armenakis, & Schraeder, 2007), the perceived congruence of values between change agents and change recipients (Kirkman, Jones, & Shapiro, 2000), and employees' perceptions of an organization's values (Jones et al., 2005). For instance, Jones et al. conducted an empirical study in a public-sector organization and reported that employees who perceived strong human relations values (an emphasis on cohesion and morale through fostering training and development, open communication, and participative decision-making) in their division reported higher levels of change readiness prior to the implementation of a new computing system which, in turn, predicted system usage at a later date. Overall, researchers have argued that a supportive internal context is associated with more positive change attitudes among employees (Armenakis & Bedeian, 1999).

Researchers also have identified the content of change as an important internal context enabler that influences employees' change attitudes (e.g., Bartunek, Rousseau, Rudolph, & DePalma, 2006; Self et al., 2007). The content of change captures individuals' perceptions of *what* has changed in their workplace and has been operationalized in a number of different ways including whether change is "transformational" versus "incremental" (e.g., Rafferty & Griffin, 2006) or "helpful" versus "problematic" (Caldwell et al., 2004). Research has indicated that, as the scale of change increases, individuals' responses to change become more negative (Rafferty & Griffin, 2006).

A wide range of personal characteristics, attitudes, and individual difference variables also have been identified as antecedents of individuals' change attitudes (cf. Holt et al., 2007). Examples of personal characteristics that have been studied include individuals' needs (Miller et al., 1994), values (Kirkman et al., 2000), and personality traits, such as dispositional resistance to change (Hon, Bloom, & Crant, in press; Oreg, 2003) and generalized self-efficacy (Neves, 2009). Judge, Thoresen, Pucik, and Wellbourne (1999) identified seven personality traits that have been associated with attitudes toward change although results of their study indicated that these traits could be reduced to two factors: positive self-concept and risk tolerance.

Work group level of analysis. With a limited number of exceptions (e.g., Mohrman & Mohrman, 1997), very few studies have examined change readiness at the work group level, with our review suggesting that the focus of such research has been on internal context enablers as antecedents of broader change-related attitudes. An example is the research of Whelan-Barry et al. (2003) who conducted a case study investigating how to motivate and sustain momentum for change in a corporate audit department of a large bank undergoing a major change. These authors reported that, at the group level, maintaining change momentum involved explicitly communicating: 1) a group level change vision that addressed what the change meant for the *work group*; and, 2) a *work group level* implementation plan that reflected the particular contingencies that were in operation in that group. Ness and Cucuzza (1995) also argue that effective work group change leadership efforts involve developing a *tailored* change vision for the group, identifying the implications of the change for the group, and engaging in efforts to develop the capability of the group to deal with any pending changes.

Sanchez-Burks and Huy (2009) argue that the ability to accurately recognize *collective emotions* contributes to a leader's ability to manage emotionally turbulent situations that are

characteristic of strategic change. These authors discuss emotional aperture, which refers to the “the perceptual ability to adjust one’s focus from a single individual’s emotional cues to the broader patterns of shared emotional cues that comprise the emotional composition of a collective” (p. 22). Sanchez-Burks and Huy suggest that an ability to bring into focus patterns of shared emotions of different valence, as well as specific emotions, may be particularly important in the context of large-scale, strategic changes.

Some initial evidence suggests that group level change processes, including participation and communication, are likely to be antecedents of work group change readiness. In particular, Rafferty and Jimmieson (2010) found, in an Australian police department, that work groups developed shared perceptions about change processes which were associated with group level outcomes including role ambiguity, role overload, and group distress and quality of work life. Rafferty and Jimmieson argued that these shared perceptions of change processes contribute to the development of a positive work group change climate, which may contribute to work group change readiness.

A number of group composition characteristics also are likely to be associated with work group change readiness. Edmondson (1999) argued that work group psychological safety describes a group climate characterized by interpersonal trust and mutual respect in which people are comfortable being themselves. We suggest that such a group climate may be positively associated with work group readiness for change. Finally, we suggest that the characteristic levels of personality traits within groups also may influence work groups’ change readiness. George (1990) argued that characteristic levels of the personality traits positive affectivity and negative affectivity within groups influence the positive and negative affective tone of the groups. George (p. 108) defined group affective tone as “consistent or homogeneous affective

reactions within a group”. Consistent affective reactions are likely to develop in a work group through attraction-selection-attrition processes (Schneider et al., 1995). In a study of 26 work groups, George reported that characteristics levels of positive affectivity and negative affectivity within work groups were positively associated with positive and negative affective tone of the groups, respectively. In addition, the negative affective tone of a group negatively related to the extent to which a group engaged in prosocial behavior while positive affective tone reduced group absenteeism. We suggest that work group affective tone is likely to influence work group affective change readiness.

Organizational level of analysis. To date, there has been some research on identifying a range of external pressures and internal context enablers as antecedents of organizational change readiness. For example, researchers have identified strategic and structural characteristics as antecedents of companies’ capabilities to implement change or innovation (cf. Damanpour, 1991). Worley and Lawler’s (2009) analysis of elements that promote organizational responsiveness to change provides a good overview of many of the themes in this area. In particular, these authors argue that change ready organizations have a strong future focus and give more weight to possible future scenarios when making strategic decisions. In addition, these organizations have a robust strategy and a flexible organizational design and have the ability to change routinely. Marshak (2004) argued that, in dynamic environments, there is a need for organizations to develop and maintain the capability to be morphogenic, which means building fluid organizational structures, developing ongoing organizational learning, and selecting and retaining managers with morphing mindsets, rather than arriving at a planned end state and halting change efforts. One aspect of a “morphing” mindset is likely to be senior leaders who are high in change readiness.

Empirical evidence indirectly supports this argument. Musteen, Barker, and Baeter (2006) conducted a study in affiliates of a non-profit organization and explored characteristics of CEOs and their openness toward change. Results indicated that a CEO's attitude toward change became more conservative with increased tenure in the organization. The increase in CEO conservatism was used to explain why CEOs are less likely to implement strategic change in their firm as their tenure increases. An underlying argument that can be derived from this study is that when a CEO has a more conservative attitude toward change, then this will be reflected in the organization's culture resulting in organizational members having a less positive attitude toward change as a whole, reducing the likelihood of successful change.

A number of other authors have identified factors, such as an organization's culture, as influencing the likelihood of successful implementation of change efforts. For example, Zammuto and O'Connor (1992) conducted a theoretical analysis of the role of organizational design and culture in the implementation of advanced manufacturing technologies. Their analysis supported the importance of flexibility-oriented values in determining the likelihood of successful change implementation. Flexibility-oriented value systems emphasize decentralization and differentiation. This research suggests that organizations that value adaptability and development embrace change more than stability oriented cultures.

Huy (1999) identified a number of antecedents of receptivity to change at the organizational level. This analysis is interesting because Huy identifies a range of organizational procedures and change management processes that enable individuals and work groups to deal with the *emotions* aroused by organizational change. For example, Huy argued that an organization that is receptive to change engages in efforts to identify the variety of emotions

aroused during radical change, and to accept and internalize these emotions, and to act on a deep level of understanding.

In summary, our review of the change attitudes literature has resulted in the identification of a number of potential antecedents of cognitive and affective change readiness (and the subsequent overall evaluation of change readiness) at the individual, work group, and organizational levels of analysis. At the individual level of analysis, our review suggests that the effective use of change management processes including communication, participation, and leadership will be positively associated with positive beliefs about change and with positive affect about change, which will contribute to a positive overall evaluative judgment that one is ready for change. In addition, there is evidence that, as the scale of change increases, employees will report less positive beliefs about change and less positive affective responses to change, which will contribute to a lower positive overall evaluative judgment that an individual is ready for change. Our review also indicates that employees who display positive psychological traits (e.g., positive self-concept and risk tolerance) will report more positive beliefs and affective responses to change, which will contribute to a positive overall evaluative judgment that an individual is ready for change.

At the work group level, our review suggested that work group leaders who articulate a group-level vision and who display emotional aperture will develop positive group beliefs about change and positive group affective responses to change, thereby contributing to a positive overall evaluative judgment that the group is ready for change. In addition, we also argue that groups who have a positive work group change climate also may report greater affective and cognitive readiness for change and, therefore, a more positive evaluative judgment concerning the groups' change readiness. Our review also indicates that work group psychological safety

will be positively associated with group change readiness, such that, groups characterized by high levels of trust and respect will promote open discussion about change events which will enhance beliefs that change is needed while also increasing the likelihood of experiencing positive emotions associated with the change event. Finally, we propose that when groups have a negative affective tone, work group affective change readiness will decline. In contrast, when groups develop a positive affective tone then work group affective readiness for change will increase.

At the organizational level, we propose that CEO readiness for change will be positively associated with collective beliefs that change is needed while also increasing the likelihood of experiencing positive collective emotions associated with a change event, which will contribute to a positive overall evaluative judgment that the organization is ready for change. Previous research also suggests that organizational cultures characterized by acceptance of adaptability and development will be positively associated with positive collective beliefs about change and positive collective affective responses to change and, therefore, a positive evaluative judgment concerning the organization's readiness for change. Finally, we propose that the existence and utilization of organizational policies and procedures that deal with the emotions aroused by change will be positively associated with positive collective beliefs about change and positive collective affective responses to change, which will contribute to a positive collective evaluative judgment that the organization is ready for change.

DIRECTIONS FOR FUTURE RESEARCH

We identified two major limitations of research on change readiness and we organize our discussion around these themes. First, we argued that researchers have omitted the affective element of change readiness attitudes when defining this attitude. This has meant that we

currently have a limited knowledge of the antecedents of the affective component of change readiness. However, our examination of the antecedents of change readiness suggested that it is likely that individual, group and organizational change readiness have distinct antecedents. For example, our review suggested that at the work group level affective readiness for change is likely to be influenced by work group affective tone. In contrast, organizational affective readiness for change may be influenced by organizational policies and practices that specifically provide opportunities for employees to deal with the emotions generated by change. The idea that different antecedents of change readiness will emerge at different levels of analysis is supported by a study of resistance to change conducted by Oreg (2006) who found unique antecedents and outcomes of affective, cognitive, and behavioral resistance to change at the individual level. Thus, future research questions that may be examined include: *Are the cognitive and affective components of change readiness predicted by distinct antecedents? Do the antecedents of affective change readiness for change differ at the individual, work group, and organizational level?*

Another question that arises when we consider the affective aspect of change readiness is whether this component of change readiness attitudes may, in some circumstances, display stronger relationships with the overall evaluation of change readiness and with change outcomes than the cognitive component of change readiness. Researchers have demonstrated that the affective and cognitive components of attitudes are differentially associated with behaviors (e.g., Breckler & Wiggins, 1989; Lawton et al., 2009; Trafimow & Sheeran, 1998). For example, Lawton et al. examined the role of affective and cognitive components of attitudes in predicting 14 health-promoting (e.g., brushing teeth and exercising) or health-risk behaviors (e.g., binge drinking and speeding). Results revealed differential relationships between the affective and

cognitive components of attitudes and behaviors. In particular, affective attitudes were a significantly stronger predictor of all but one of the health behaviors. Other research suggests that, when strong emotions are aroused, there also may be a direct effect of affective attitudes on behavior irrespective of behavioral intentions (Lawton et al., 2009). Overall, this research suggests that affective change readiness may be a more powerful predictor of change outcomes when intense individual or collective emotions develop in response to organizational change events.

Additional research evidence indicates that employees' emotions go through four sequential and distinct stages during organizational change (Liu & Perrewé, 2005). In the initial stages of any change, individuals are likely to experience intense mixed emotions that are anticipatory in nature, such as, excitement and fear. At this stage, there is a great deal of uncertainty regarding change and as such, it is likely that affective reactions to change may be particularly powerful drivers of change outcomes. Thus, future research questions that may be examined include: *Is the affective component of change readiness a stronger predictor of change outcomes, especially in the early stages of change, when individuals and groups are likely to experience intense emotional reactions? Does the cognitive component of change readiness become a stronger predictor of change outcomes in the later stages of change when individuals and groups have a clearer understanding of change?*

Another direction for future research that emerges from our focus on the affective aspect of change readiness concerns the measurement of the construct. Theorists have argued that, while cognitions are relatively stable over time (Fisher, 2002; Niklas & Dormann, 2005), affective reactions are dynamic or shift over time in response to immediate events, so different methodologies are required to assess cognitions and affect (Weiss, 2002). For example,

researchers have used experience sampling methodologies, which ask individuals to report on their momentary feelings or their subjective feeling states, in order to capture the affective component of job satisfaction (Niklas & Dormann, 2005). Experience sampling is appropriate for assessing the affective component of change readiness because it provides a real-time assessment of what people are feeling at a particular point on time. This type of methodology is essential because, when assessing affect using retrospective reports, there is a tendency of these reports to be biased (Armenakis, Buckley, & Bedeian, 1986). For example, people tend to overestimate both the intensity and frequency of positive and negative emotions in retrospective measures (Fisher, 2002), and also tend to recall negative emotions better than positive emotions (Frijda, 1987). As such, affective responses to change are best assessed as they occur in real time.

Overall, we suggest that future researchers should consider capturing the affective component of change attitudes using a range of methodologies that allow them to assess affect as it occurs, as well as, using retrospective measures. This will enable comparison of the influence of the measurement approach on affective responses to change. Thus, future research questions that may be examined include: *What is the relationship between affective responses to change when measured retrospectively and affect when measured using experience sampling methods? What is the relationship between positive affective responses to change when assessed using experience sampling methodologies and the cognitive component of change readiness and the overall evaluation of change readiness? Which measure of affective responses to change (experience sampling or retrospective measures) display the strongest relationships with change outcomes?*

The second major limitation of the change readiness literature is that researchers have not adopted a multilevel perspective. Multilevel theory suggests that an important first step in

examining our framework is to explicitly test our theoretical arguments that change readiness is isomorphic across levels. In this respect, we argued that all individuals perceive readiness along the same set of dimensions and that all work group/organizational members consider readiness the same way (Kozlowski & Klein, 2000). As such, future research on change readiness should address the following issues: *Is change readiness isomorphic across levels of analysis? In other words, do individuals, work groups and organizational members consider readiness in terms of affective change readiness, cognitive change readiness, and a global evaluation of change readiness?*

Another important implication that emerges from our multilevel approach to change readiness is the need to examine relationships among change readiness and its antecedents and outcomes at two or more levels. Multilevel models postulate that relationships among variables apply at two or more levels (Rousseau, 1985). Chen et al. (2005) argued that one of the first steps when developing a multilevel theory is to explicitly test the assumption of homology, which suggests that similar relationships exist between parallel constructs across levels of analysis. Thus, it is essential to examine whether similar relationships exist between change readiness and its antecedents and outcomes across levels. Such an analysis will allow us to determine whether the same antecedents are equally influential across levels or whether distinct sets of antecedents drive change readiness at the three levels of analysis. Thus, future research questions that should be addressed when considering change readiness should include: *Do affective change readiness and cognitive change readiness predict the overall evaluation of change readiness at all three levels of analysis? Do the antecedents that predict an individual's change readiness predict a work group's or an organization's change readiness?*

A third direction for future research that emerges from our focus on developing a multilevel framework of change readiness is the need to conduct studies examining cross-level relationships. A number of authors have conducted studies examining cross-level interactions that suggest that variables at two levels of analysis interact to predict individual change attitudes (e.g., Caldwell et al., 2004; Caldwell et al., 2009a; Fedor, Caldwell, & Herold, 2006; Herold et al., 2008; Herold, Fedor, & Caldwell, 2007). For example, Fedor et al. conducted a study with 806 employees in 32 organizations and found, when considering commitment to change (an individual level construct), that the highest level of commitment occurred when there was a considerable amount of change at the group level that was judged to have favorable outcomes for the group, but the demands placed on individuals were low. Conversely, commitment to change was low when the change was judged to be unfavorable for group members, regardless of the extent of work group or individual change required.

Other research conducted by Lam and Schaubroeck (2000) suggests that an individual's change attitude can shape the attitudes and reactions of their work group or the organization as a whole. These authors explored the influence of opinion leaders - individuals who are able to influence others' attitudes and behaviors – on service outcomes. In a quasi-experimental study in a major commercial bank in Hong Kong, Lam and Schaubroeck found, in units where opinion leaders served as service-quality leaders, that customers rated these units as highest in service delivery. In addition, changes in specific attitudes toward service quality delivery explained the effects of opinion leaders on rated service quality. This study provides support for the idea that the attitudes of influential employees in a work group can influence individual and group attitudes to change in the workplace. These studies reveal a variety of research questions for the change readiness field including: *Does the change readiness of influential individuals influence*

work group change readiness? How does organizational change readiness influence readiness at the individual and work group levels? Are high levels of individual, group, and organizational change readiness necessary for effective change implementation?

IMPLICATIONS FOR PRACTICE

A number of implications for practice emerge from our multilevel model of change readiness. First, the lack of attention that has been directed toward the positive affective component of change readiness means that researchers have not considered how to manage an individual's or group's emotions during change. Fox and Amichai-Hamburger (2001) argue that, while leaders of change seem to perceive the emotional reactions of their employees to change as one of the burdens that they must endure, emotions are in fact a potential tool for securing the willingness and commitment of employees in change processes. This idea is supported by a study conducted by Huy (2002), which suggested that middle managers' efforts to pay attention to employees' emotions contributed to successful change efforts. Fox and Amichai-Hamburger suggest, however, that if change leaders are to influence both feelings (affect) and thinking (beliefs), then they need to use different forms of communication and influence. For example, the main forms of communication that should be used when seeking to influence beliefs include words, arguments, rationales, analysis, and numbers. In contrast, when seeking to influence individuals' emotional responses, change leaders need to consider using different means of communication including pictures, colors, music, and atmosphere. As a result, there needs to be a recognition that different forms of communication need to be utilized so as to influence individuals' and collectives' beliefs and emotions during change so as to enhance our ability to take advantage of the positive emotions during change.

In addition, a number of practical issues become evident when we consider change readiness as a multilevel construct. In particular, our review has indicated that existing research has been focused on individual change readiness and has ignored work group and organizational change readiness. However, it is possible to imagine a situation where a particular individual has a high level of change readiness but is located in a work group with low change readiness and who works in an organization that also is characterized by low change readiness. In this situation, assessing individual readiness prior to change implementation is likely to result in an inaccurate understanding of the likelihood of change success. As such, there is a need to develop and implement efforts to build collective change readiness through implementing group-based interventions to develop positive beliefs and affect about change. As this example demonstrates, there is a real need to consider and measure individual, group, and organization readiness prior to large-scale change implementation to develop an accurate understanding of the likelihood of effective change implementation.

Finally, an implication that arises from our review concerns the importance of considering what high and low readiness for change actually means in an organizational setting. For instance, is low readiness for change necessarily a *bad* condition? Ford, Ford, and D'Amelio (2008) and Ford and Ford (2010) argue that resistance to change may actually be an opportunity for an organization to identify weaknesses in the execution of organizational change strategies and plans. Specifically, a low level of individual, group, or organizational change readiness may present important diagnostic information that an organization can use to develop and improve its approach to change. It is in this situation that adopting the definitions of change readiness proposed in this paper can be especially useful. That is, change agents can identify which cognitive and/or affective components of change readiness are weak. Then, by referring to

models designed to enhance change readiness (cf. Armenakis et al., 1993), change agents can determine whether a more intense execution of one or more influence strategies (e.g., persuasive communication, active participation, and management of external information) is needed to improve the cognitive and/or affective components. Therefore, assessing readiness and then subsequently increasing efforts to create individual, group, and organizational change readiness may be the necessary ingredient to increase the likelihood of successful organizational change.

CONCLUSION

Few topics have been the subject of so much attention as employee attitudes toward change in the organizational change literature. Despite this, we have argued that we have a limited understanding of change readiness. First, we explained the importance of incorporating affect into the definition and measurement of change readiness. We identified a number of directions for future research that arise when we incorporate affect into definitions of change readiness. In particular, we outlined the importance of developing measures of affective change readiness that capture the dynamic nature of emotions during change. In addition, future researchers also should explore whether affective and cognitive change readiness have distinct antecedents and consider whether the importance of affective and cognitive change readiness shifts over time by conducting longitudinal research. Second, we outlined how adopting a multilevel perspective of change readiness offers a range of insights that are as yet unexplored. We identified a number of directions for future research including the need to examine whether the antecedents and consequences of change readiness differ at the individual, group, and organizational levels. In addition, future research adopting a multilevel perspective should explicitly test whether individuals, work groups and organizational members consider change readiness in terms of affective change readiness, cognitive change readiness, and a global

evaluation of change readiness. Researchers also should examine whether the same antecedents are equally influential across levels or whether distinct sets of antecedents drive change readiness at the three levels of analysis. Finally, we proposed that there is a need to devote additional attention to examine cross-level relationships, which explore whether variables at two levels of analysis interact to predict change readiness. By integrating the findings from the literatures related to attitude theory and multilevel methodology, we hope to encourage change researchers and practitioners to incorporate affect and multilevel approaches in their future efforts to plan, implement, and assess organizational changes. We hope this research will provide further impetus to continue the journey of advancing our understanding of organizational change.

REFERENCES

- Abelson, R. P., Kinder, D. R., Peters, M. D., & Fiske, S. T. 1982. Affective and semantic components in political person perception. *Journal of Personality and Social Psychology*, 42: 619-630.
- Ajzen, I. 1991. The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50: 179-211.
- Armenakis, A. A., & Bedeian, A. G. 1999. Organizational change: A review of theory and research in the 1990s. *Journal of Management*, 25: 293-315.
- Armenakis, A. A., Bernerth, J. B., Pitts, J. P., & Walker, J. 2007. Organizational change recipients' beliefs scale: Development of an assessment instrument. *The Journal of Applied Behavioral Science*, 43: 481-505.
- Armenakis, A. A., Buckley, M. R., & Bedeian, A. G. 1986. Survey research measurement issues in evaluating change: A laboratory investigation. *Applied Psychological Measurement*, 10: 147-157.
- Armenakis, A. A., & Harris, S. G. 2002. Crafting a change message to create transformational readiness. *Journal of Organizational Change Management*, 15: 169-183.
- Armenakis, A. A., Harris, S. G., & Mossholder, K. W. 1993. Creating readiness for organizational change. *Human Relations*, 46: 681-703.
- Ashforth, B. E., & Humphrey, R. H. 1995. Emotion in the workplace: A reappraisal. *Human Relations*, 48: 97-125.
- Axtell, C., Wall, T., Stride, C., Pepper, K., Clegg, C., Gardner, P., & Bolden, R. 2002. Familiarity breeds contempt: The impact of exposure to change on employee openness and well-being. *Journal of Occupational and Organizational Psychology*, 75: 217-231.

Barsade, S. G. 2002. The ripple effect: Emotional contagion and its influence on group behavior.

Administrative Science Quarterly, 47: 644-675.

Bartel, C. A., & Saavedra, R. 2000. The collective construction of work group moods.

Administrative Science Quarterly, 45: 197-231.

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. *The Journal of Applied Behavioral Science*, 42: 182-206.

Baumgartner, H., Pieters, R., & Bagozzi, R. P. 2008. Future-oriented emotions: Conceptualization

and behavioral effects. *European Journal of Social Psychology*, 38: 685-696.

Beer, M., & Nohria, N. 2000. *Breaking the code of change*. Boston: Harvard Business School

Press.

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: 733-753.

Bordia, P., Hobman, E., Jones, E., Gallois, C., & Callan, V. J. 2004. Uncertainty during

organizational change: Types, consequences, and management strategies. *Journal of Business and Psychology*, 18: 507-532.

Bouckennooghe, D. 2010. Positioning change recipients' attitudes toward change in the

organizational change literature. *Journal of Applied Behavioral Science*, 46: 500-531.

Breckler, S. J., & Wiggins, E. C. 1989. Affect versus evaluation in the structure of attitudes.

Journal of Experimental Social Psychology, 25: 253-271.

Bureau of Labor Statistics. 2011. Mass Layoffs October 2011, Vol. October 2011: Bureau of Labor

Statistics U.S. Department of Labor.

- Caldwell, S. D., Herold, D. M., & Fedor, D. B. 2004. Toward an understanding of the relationships among organizational change, individual differences, and changes in person-environment fit: A cross-level study. *Journal of Applied Psychology*, 89: 868-882.
- Caldwell, S. D., Roby-Williams, C., Rush, K., & Ricke-Kiely, T. 2009a. Influences of context, process and individual differences on nurses' readiness for change to Magnet status. *Journal of Advanced Nursing*, 65: 1412-1422.
- Caldwell, S. D., Yi, L., Fedor, D. B., & Herold, D. M. 2009b. Why are perceptions of change in the "eye of the beholder"? The role of age, sex, and tenure in procedural justice judgements. *Journal of Applied Behavioral Science*, 45: 437-459.
- Chan, D. 1998. Functional relations among constructs in the same construct domain at different levels of analysis: A typology of composition models. *Journal of Applied Psychology*, 83: 234-246.
- Chen, G., Bliese, P. D., & Mathieu, J. E. 2005. Conceptual framework and statistical procedures for delineating and testing multilevel theories of homology. *Organizational Research Methods*, 8: 375-409.
- Connelly, S., Gaddis, B., & Helton-Fauth, W. 2002. A closer look at the role of emotions in transformational and charismatic leadership. *Transformational and Charismatic Leadership*, 2: 255-283.
- Crites, S. L., Fabringar, L. R., & Petty, R. E. 1994. Measuring the affective and cognitive properties of attitudes: Conceptual and methodological issues. *Personality and Social Psychology Bulletin*, 20: 619-634.
- Cunningham, C. E., Woodward, C. A., Shannon, H. S., MacIntosh, J., Lendrum, B., Rosenbloom, D., & Brown, J. 2002. Readiness for organizational change: A longitudinal study of

- workplace, psychological and behavioral correlates. *Journal of Occupational and Organizational Psychology*, 75: 377-392.
- Damanpour, F. 1991. Organizational innovation: A meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, 34: 555-590.
- De Meuse, K. P., Marks, L., & Dai, G. 2010. Organizational downsizing, mergers and acquisitions, and strategic alliances: Using theory and research to enhance practice. In S. Zedeck (Ed.), *APA Handbook of Industrial and Organizational Psychology*: 729–768. Washington, DC: American Psychological Association.
- Devos, G., Buelens, M., & Bouckennooghe, D. 2007. Contribution of content, context, and process to understanding openness to organizational change: Two experimental simulation studies. *Journal of Social Psychology*, 147: 607-630.
- Dutton, J. E., & Dukerich, J. M. 1991. Keeping an eye on the mirror: Image and identity in organizational adaptation. *Academy of Management Journal*, 34: 517-554.
- Eby, L. T., Adams, D., M., Russell, J. E. A., & Gaby, S. H. 2000. Perceptions of organizational readiness for change: Factors related to employees' reactions to the implementation of team-based selling. *Human Relations*, 53: 419-442.
- Edmondson, A. C. 1999. Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44: 350-383.
- Fedor, D. B., Caldwell, S., & Herold, D. M. 2006. The effects of organizational changes on employee commitment: A multilevel investigation. *Personnel Psychology*, 59: 1-29.
- Fisher, C. D. 2002. Antecedents and consequences of real-time affective reactions at work. *Motivation & Emotion*, 26: 3-30.

Ford, J. D., & Ford, L. W. 1994. Logics of identity, contradiction, and attraction in change.

Academy of Management Review, 19: 756-785.

Ford, J. D., & Ford, L. W. 2010. Stop blaming resistance to change and start using it.

Organizational Dynamics, 39: 24-36.

Ford, J. D., Ford, L. W., & D'Amelio, A. 2008. Resistance to change: The rest of the story.

Academy of Management Review, 33: 362-377.

Fox, D. G., Ellison, R. L., & Keith, K. L. 1988. Human resource management: an index and its relationship to readiness for change. *Public Personnel Management*, 17(3): 297-302.

Fox, S., & Amichai-Hamburger, Y. 2001. The power of emotional appeals in promoting organizational change programs. *Academy of Management Executive*, 15(4): 84-94.

Frijda, N. H. 1987. Emotion, cognitive structure, and action tendency. *Cognition & Emotion*, 1: 115-143.

Gagné, M., Koestner, R., & Zuckerman, M. 2000. Facilitating acceptance of organizational change: The importance of self-determination. *Journal of Applied Social Psychology*, 30: 1843-1852.

George, J. M. 1990. Personality, affect, and behavior in groups. *Journal of Applied Psychology*, 75: 107-116.

George, J. M., & Jones, G. R. 2001. Towards a process model of individual change in organizations. *Human Relations*, 54: 419-444.

Gopinath, C., & Becker, T. E. 2000. Communication, procedural justice, and employee attitudes: Relationships under conditions of divestiture. *Journal of Management*, 26: 63-83.

- Gordon, S. S., Stewart, W. H., Sweo, R., & Luker, W. A. 2000. Convergence versus strategic reorientation: The antecedents of fast-paced organizational change. *Journal of Management*, 26: 911-945.
- Harrison, J. R., & Carroll, G. R. 1991. Keeping the faith: A model of cultural transmission in formal organizations. *Administrative Science Quarterly*, 36: 552-582.
- Herold, D. M., Caldwell, S., & Liu, Y. 2008. The effects of transformational and change leadership on employees' commitment to a change: A multilevel study. *Journal of Applied Psychology*, 93: 346-357.
- 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: 942-951.
- Holt, D. T., Armenakis, A. A., Feild, H. S., & Harris, S. G. 2007. Readiness for organizational change: The systematic development of a scale. *The Journal of Applied Behavioral Science*, 43: 232-255.
- Hon, A. H. Y., Bloom, M., & Crant, M. in press. Overcoming resistance to change and enhancing creative performance. *Journal of Management*. DOI: 10.1177/0149206311415418.
- Huy, Q. N. 1999. Emotional capability, emotional intelligence, and radical change. *Academy of Management Review*, 24: 325-345.
- Huy, Q. N. 2002. Emotional balancing of organizational continuity and radical change: The contribution of middle managers. *Administrative Science Quarterly*, 47: 31-69.
- Isabella, L. A. 1990. Evolving interpretations as a change unfolds: How managers construe key organizational events. *Academy of Management Journal*, 33: 7-41.

- James, L. R., Demaree, R. G., & Wolf, G. 1993. r_{wg} : An assessment of within-group interrater agreement. *Journal of Applied Psychology*, 78: 306-309.
- Jones, R. A., Jimmieson, N. L., & Griffiths, A. 2005. The impact of organizational culture and reshaping capabilities on change implementation success: The mediating role of readiness for change. *Journal of Management Studies*, 42: 361-386.
- Judge, T. A., Thoresen, C. I. J., Pucik, V., & Welbourne, T. M. 1999. Managerial coping with organizational change: A dispositional perspective. *Journal of Applied Psychology*, 84: 107-122.
- Kim, T.-G., Hornung, S., & Rousseau, D. M. 2011. Change-supportive behavior: Antecedents and the moderating role of time. *Journal of Management*, 37: 1664-1693.
- Kirkman, B. L., Jones, R. J., & Shapiro, D. L. 2000. Why do employees resist teams? Examining the "resistance barrier" to work team effectiveness. *The International Journal of Conflict Management*, 11: 74-92.
- Klein, K. J., & Kozlowski, S. W. J. 2000. From micro to meso: Critical steps in conceptualizing and conducting multilevel research. *Organizational Research Methods*, 3: 211-236.
- Kozlowski, S. W. J., & Klein, K. J. 2000. A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. In K. J. Klein, & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations*: 3-90. San Francisco, CA: Jossey-Bass.
- Lam, S. S. K., & Schaubroeck, J. 2000. A field experiment testing frontline opinion leaders as change agents. *Journal of Applied Psychology*, 85: 987-995.
- Lawton, R., Conner, M., & McEachan, R. 2009. Desire or reason: Predicting health behaviors from affective and cognitive attitudes. *Health Psychology*, 28: 56-65.

- Lewis, L. K. 2000. Disseminating information and soliciting input during planned change: Implementors' targets, sources, and channels for communicating. *Management Communication Quarterly*, 13: 43-75.
- Liu, Y., & Perrewe, P. L. 2005. Another look at the role of emotions in the organizational change: A process model. *Human Resource Management Review*, 15: 263-280.
- Lyons, J. B., Swindler, S. D., & Offner, A. 2009. The impact of leadership on change readiness in the US military. *Journal of Change Management*, 9: 459-475.
- Mackie, D. M., Devos, T., & Smith, E. R. 2000. Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *Journal of Personality and Social Psychology*, 79: 602-616.
- Marshak, R. J. 2004. Morphing: The leading edge of organizational change in the Twenty-first Century. *Organization Development Journal*, 22(3): 8-21.
- Meaney, M., & Pung, C. 2008. McKinsey global results: Creating organizational transformations. *The McKinsey Quarterly*, August: 1-7.
- Miller, V. D., Johnson, J. R., & Grau, J. G. 1994. Antecedents to willingness to participate in a planned organizational change. *Journal of Applied Communication Research*, 22: 59-80.
- Mohrman, S. A. 1999. Top management viewed from below. In J. A. Conger, G. M. Spreitzer, & E. E. L. III (Eds.), *Leader's Change Handbook: An Essential Guide to Setting Direction and Taking Action*: 271-300. San Francisco: Jossey Bass.
- Mohrman, S. A., & Mohrman Jr, A. M. 1997. Fundamental organizational change as organizational learning: Creating team-based organizations. *Research in Organizational Change and Development*, 10: 197-228.

- Musteen, M., Barker III, V. L., & Baeten, V. L. 2006. CEO attributes associated with attitude toward change: The direct and moderating effects of CEO tenure. *Journal of Business Research*, 59: 604-612.
- Ness, J., & Cucuzza, T. 1995. Tapping the full potential of ABC. *Harvard Business Review*, 73(4): 130-138.
- Neves, P. 2009. Readiness for change: Contributions for employee's level of individual change and turnover intentions. *Journal of Change Management*, 9: 215-231.
- Niklas, C. D., & Dormann, C. 2005. The impact of state affect on job satisfaction. *European Journal of Work and Organizational Psychology*, 14: 367-388.
- Oreg, S. 2003. Resistance to change: Developing an individual differences measure. *Journal of Applied Psychology*, 88: 680-693.
- Oreg, S. 2006. Personality, context and resistance to organizational change. *European Journal of Work and Organizational Psychology*, 15: 73-101.
- Oreg, S., & Berson, Y. 2011. Leadership and employees' reactions to change: The role of leaders' personal attributes and transformational leadership style. *Personnel Psychology*, 64: 627-654.
- Oreg, S., Vokola, M., & Armenakis, A. A. 2011. Change recipients' reactions to organizational change: A sixty-year review of quantitative studies. *Journal of Applied Behavioral Science*, 47: 461-524
- Ostroff, C. 1993. Comparing correlations based on individual-level and aggregated data. *Journal of Applied Psychology*, 78: 569-582.

- Pettigrew, A. M., Woodman, R. W., & Cameron, K. S. 2001. Studying organizational change and development: Challenges for future research. *Academy of Management Journal*, 44: 697-713.
- Probst, G., & Raisch, S. 2005. Organizational crisis: The logic of failure. *Academy of Management Review*, 19: 90-105.
- Prochaska, J. O., Redding, C. A., & Evers, K. E. 2002. The transtheoretical model and stages of change. In K. Glanz, B. K. Rimer, & F. M. Lewis (Eds.), *Health behavior and health education: Theory, research, and practice*, 3rd ed.: 99-121. San Francisco: Jossey Bass.
- Rafferty, A. E., & Griffin, M. A. 2006. Perceptions of organizational change: A stress and coping perspective. *The Journal of Applied Psychology*, 91: 1154-1162.
- Rafferty, A. E., & Jimmieson, N. L. 2010. Team change climate: A group-level analysis of the relationships among change information and change participation, role stressors, and well-being. *European Journal of Work and Organizational Psychology*, 19: 551-586.
- Rafferty, A. E., & Restubog, S. L. D. 2010. The impact of change process and context on change reactions and turnover during a merger. *Journal of Management*, 36: 1309-1338
- Rafferty, A. E., & Simons, R. H. 2006. An examination of the antecedents of readiness for fine-tuning and corporate transformation changes. *Journal of Business and Psychology*, 20: 325-350.
- Reichers, A. E., Wanous, J. P., & Austin, J. T. 1997. Understanding and managing cynicism about organizational change. *Academy of Management Executive*, 11(1): 48-59.
- Rousseau, D. M. 1985. Issues of level in organizational research: Multi-level and cross-level perspectives. *Research in Organizational Behavior*, 7: 1-37.

- Salvato, C., & Rerup, C. 2011. Beyond collective entities: multilevel research on organizational routines and capabilities. *Journal of Management*, 37: 468-490.
- Sanchez-Burks, J., & Huy, Q. N. 2009. Emotional aperture and strategic change: The accurate recognition of collective emotions. *Organization Science*, 20, 22-34..
- Schneider, B. 1987. The people make the place. *Personnel Psychology*, 40: 437-453.
- Schneider, B., Goldstein, H. W., & Smith, D. B. 1995. The ASA framework: An update. *Personnel Psychology*, 48: 747-773.
- Schweiger, D., & DeNisi, A. 1991. Communication with employees following a merger: A longitudinal field experiment. *Academy of Management Journal*, 34: 110-135.
- Self, D. R., Armenakis, A. A., & Schraeder, M. 2007. Organizational change content, process, and context: A simultaneous analysis of employee reactions. *Journal of Change Management*, 7: 211-229.
- Totterdell, P., Kellett, S., Briner, R. B., & Teuchmann, K. 1998. Evidence of mood linkage in work groups. *Journal of Personality and Social Psychology*, 74: 1504-1515.
- Trafimow, D., & Sheeran, P. 1998. Some tests of the distinction between cognitive and affective beliefs. *Journal of Experimental Social Psychology*, 34: 378-397.
- Uhlener, R., & West, A. 2011. McKinsey Global Survey Results: Organizing for M&A. *McKinsey Quarterly*, December: 1-8.
- Van de Ven, A. H., & Poole, M. S. 1995. Explaining development and change in organizations. *Academy of Management Review*, 20: 510-540.
- van den Berg, H., Manstead, A. S. R., Joop, v. d. P., & Wigboldus, D. H. J. 2005. The role of affect in attitudes toward organ donation and donor-relevant issues. *Psychology and Health*, 20: 789-802.

- Van Maanen, J., & Kunda, G. 1989. "Real feelings": Emotional expression and organizational culture. *Research in Organizational Behavior*, 11: 43-103.
- Van Maanen, J., & Schein, E. H. 1979. Toward a theory of organizational socialization. *Research in Organizational Behavior*, 1: 209-264.
- Walinga, J. 2008. Toward a theory of change readiness: The roles of appraisal, focus, and perceived control. *The Journal of Applied Behavioral Science*, 44: 315-347.
- Wanberg, C. R., & Banas, J. T. 2000. Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology*, 85: 132-142.
- Wanous, J. P., Reichers, A. E., & Austin, J. T. 2000. Cynicism about organizational change: Measurement, antecedents, and correlates. *Group and Organization Management*, 25: 132-153.
- Weiner, B. J. 2009. A theory of organizational readiness for change. *Implementation Science*, 4: 67-75.
- Weiss, H. M. 2002. Deconstructing job satisfaction: Separating evaluations, beliefs and affective experiences. *Human Resource Management Review*, 12: 173-194.
- Whelan-Barry, K. S., Gordon, J. R., & Hinings, C. R. 2003. Strengthening organizational change processes: Recommendations and implications from a multilevel analysis. *The Journal of Applied Behavioral Science*, 39: 186-207.
- Worley, C. G., & Lawler III, E. E. 2009. Building a change capability at Capital One Financial. *Organizational Dynamics*, 38: 245-251.
- Zammuto, R. F., & O'Connor, E. J. 1992. Gaining advanced manufacturing technologies' benefits: The roles of organization design and culture. *Academy of Management Review*, 17: 701-728.

TABLE 1
CHANGE READINESS DEFINITIONS

Author	Construct	Level of analysis	Definition
1. (Eby et al., 2000)	Readiness for change	Individual level	“Readiness for change is conceptualized in terms of an individual’s perception of a specific facet of his or her work environment – the extent to which the organization is perceived to be ready to take on large-scale change...Readiness for organizational change reflects an individual’s unique interpretive reality of the organization” (p. 422).
2. (Eby et al., 2000)	Readiness for change	Individual level	Readiness refers to “an individual’s perception of a specific facet of his or her work environment – the extent to which the organization is perceived to be ready for change” (p. 422).
3. (Cunningham et al., 2002)	Readiness for change	Individual level	Readiness involves “a demonstrable need for change, a sense of one’s ability to successfully accomplish change (self-efficacy) and an opportunity to participate in the change process” (p. 377).

4. (Jones et al., 2005)	Readiness for change	Individual level	“The notion of readiness for change can be defined as the extent to which employees hold positive views about the need for organizational change (i.e. change acceptance), as well as the extent to which employees believe that such changes are likely to have positive implications for themselves and the wider organization” (p. 362)
5. Holt et al.(2007)	Individual readiness for change	Individual level	Readiness for change is “the extent to which an individual or individuals are cognitively and emotionally inclined to accept, embrace, and adopt a particular plan to purposefully alter the status quo” (p. 235)
6. Bouckennooghe (2010)	Individual readiness for change	Individual level	“Readiness for change is conceived as a multifaceted concept that comprises an emotional dimension of change, a cognitive dimension of change, and an intentional dimension of change” (p. 561)
7. (Weiner, 2009)	Organizational readiness for change	Organizational level	“Organizational readiness for change refers to organizational members’ change commitment and self efficacy to implement organizational change” (p. 68).

FIGURE 1

MULTILEVEL FRAMEWORK OF THE ANTECEDENTS AND CONSEQUENCES OF READINESS FOR CHANGE

Note: Heavy dashed line displays the compositional processes through which lower level phenomena are compiled to result in higher level phenomena. Lightly dashed lines display potential cross-level relationships.