

Explaining Employee Engagement with Strategic Change Implementation: A Meaning-Making Approach*

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ABSTRACT

Using a framework of meaning-making derived from social psychological research on how individuals manage adverse life events and research on sensemaking, we develop and test theory about how frontline employees overcome the challenges of implementing strategic change. We find certain types of meaning-making (strategy worldview and benefits finding) can create the requisite psychological resources that facilitates employees engaging in change implementation behaviors. The “Meaning-Making Change Adaptation Model” (MCAM) we develop helps explain when and how employees adapt to change, thereby opening the “black box” of how to facilitate more effective strategic change implementation. We develop and empirically test the MCAM using qualitative and quantitative data from a Fortune 500 retailer.

Organizations of all stripes routinely attempt strategic change, but many implementation efforts fail. Change implementation is considered a game of high stakes, where success can reinvigorate a business, but failure often delivers catastrophic consequences, including the firm's demise (Hofer and Schendel 1978). While scholars have amassed an impressive base of knowledge regarding how firms, through the actions of top managers (Ginsberg 1988; Hinings and Greenwood 1988), attempt strategic change, they know surprisingly little about the ways in which employees contribute to the achievement of a new strategic direction. Several factors may help explain this blind spot. First, strategic change research traditionally privileges formulation of change strategy over its implementation (Hambrick 2004). In doing so, it emphasizes the actions of top managers that influence strategy formulation while overlooking the crucial role played by other managers (Balogun and Johnson 2004) and employees in implementing new strategies (Bartunek, Rousseau, Rudolph, and DePalma 2006; Maitlis and Sonenshein 2010). Second, change research often takes a top-management perspective (Gioia and Chittipeddi 1991; Gioia and Thomas 1996; Rajagopalan and Spreitzer 1997), and with scant research examining employees' roles in strategic change, it is often assumed the dominant response to change from employees is resistance (Dent and Goldberg, 1999; Ford, Ford, and D'Amelio 2008). In the words of Armenakis and Fredenberger (1997, p. 151): "Change creates uncertainty and the general reaction of people is to react cautiously, translated as resistance. So expect it!"

While the preponderance of research emphasizes this "resistance lens," a growing chorus of scholars has called for broader research regarding how employees respond to change. For example, scholars have examined how organizational members can adapt to change (e.g., Fugate, Kinicki, and Scheck 2002; Judge, Thoresen, Pucik, and Welbourne 1999; Kelman 2005; Self, Armenakis, and Schraeder 2007; Smollan 2006) and are capable of being open to, or ready for,

change (e.g., Armenakis and Fredenberger 1997; Herold, Fedor and Caldwell 2007; Morrison and Phelps 1999; Wanberg and Banas 2000). To a large extent, this research focuses on a set of dispositional and contextual antecedents that can facilitate employee engagement with change, and not the interpretive variety in reactions to change. For example, Judge et al. (1999) examined seven dispositional traits that predict coping with change and Wanberg and Banas (2000) studied both individual differences and contextual variables, finding that personal resilience (self-esteem, optimism and perceived control) predicted acceptance of change. This research offers an important departure from the resistance paradigm by broadening dependent variables beyond resistance. But this research largely overlooks explaining how employees who face the same "objective" circumstances can develop very different interpretations about change (e.g., Eby, Adams, Russell, and Gaby 2000; Sonenshein 2009, 2010). Put another way, because scholars have often emphasized resistance to change or examined the more objective properties of change, they have missed opportunities to discover how, despite the hardships of change, some employees can construct surprisingly positive interpretations of change. These interpretations, in turn, are an important window into explaining why some employees contribute to change implementation, even as others are more apt to resist that same change.

To unpack how employees' interpretations affect change, we turned to social psychological meaning-making research as it seeks to explain how individuals overcome objectively adverse events (such as a serious illness) by creating interpretations of those events using psychological resources (Davis, Nolen-Hoeksema, and Larson 1998; Taylor 1983). Strategic change is often viewed to create high levels of stress requiring adaptation (Ashford 1988), albeit usually in a manner less severe than cases examined by social psychologists. Nevertheless, the basic model of meaning-making by social psychologists—that, regardless of

objective circumstances, individuals are more likely to positively adapt to major life changes by explaining those changes within a dominant worldview (understanding), and finding more benefits versus downsides to these changes (benefits finding)—provides a foundation to explain the conditions under which employees can overcome difficulties in implementing change and work to make change successful. In applying this view of meaning-making to strategic change, we also integrate related research in sensemaking, which emphasizes communication (as opposed to dispositions) as a facilitator of meaning-making (Gioia and Chittipeddi 1991; Weick 1995), thereby emphasizing aspects of the change process itself (and the interpretations they enable) as a key factor in explaining employee engagement with strategic change.

We develop and test a theoretical framework called the “Meaning-Making Change Adaptation Model” (MCAM), which makes three core claims. First, we posit that the core meaning-making constructs—understanding and benefits finding—lead to key psychological resources needed for important change implementation behaviors. Second, we unpack three psychological resources (Hobfoll 1989; Hobfoll 2002)—commitment (Herscovitch and Meyer 2002), identification (Cheney 1983), and efficacy (Wanberg and Banas 2000)—and explain how they activate employees’ engagement with strategic change (Macey and Schneider 2008; Park 2010). Third, we focus on how communication affects the meaning-making process. Whereas sensemaking research emphasizes the importance of communication for influencing meanings (e.g., Putnam and Sorenson 1982), social psychological research on meaning-making emphasizes individual differences and dispositional variables (Davis et al. 1998; Shiota 2006). As one of the important, if not the most important, aspects of change (Cheney, Christensen Thøger, Zorn Jr., and Ganesh 2004; Lewis and Seibold 1998; Schweiger and DeNisi 1991), we sought to broaden psychological models of meaning-making to include the role of communication. To address

these research objectives, we use qualitative and quantitative data from a Fortune 500 retailer undergoing strategic change to test our proposed theoretical framework and examine its potential antecedents and mechanisms. Using structural equation modeling, we also compare the MCAM with two plausible rival explanations: a model in which meaning-making is a consequence of rather than antecedent to commitment, identification and efficacy, and a model in which perceptions of change efficacy serve as the major determinant of change behaviors (Bandura 1977; Bandura 1997; Gist 1987; Gist and Mitchell 1992). A comparison of the three models shows that the MCAM outperforms the two rival models. To preview, we find that managerial and collegial views of communication have contrasting effects on meaning-making, with the former facilitating it and the latter thwarting it. Additionally, we find strong empirical support for the role of meaning-making in explaining focal and discretionary change implementation behaviors, which are mediated by psychological resources. Accordingly, this paper addresses the pressing research questions that seek explanations of processes by which employees can be engaged in change in ways that can lead to favorable organizational outcomes, something Hodgkinson and Healy (2008, p. 400) characterize for cognitive perspectives on change as “arguably the most pressing research issue”.

MEANING-MAKING DIMENSIONS OF STRATEGIC CHANGE IMPLEMENTATION

Review of Meaning-Making Literature

Social psychologists find individuals to be surprisingly adaptive when facing negative life events when they construct meaning of those events in a particular way (e.g., Taylor 1983). While social psychologists rely on several different models of meaning-making, most approaches coalesce around two core themes (Baumeister and Vohs 2002; Bower, Kemeny, Taylor, and

Fahey 1998; Davis et al. 1998; McIntosh, Silver, and Wortman 1993; Tedeschi and Calhoun 1996). First, researchers find it is important for individuals to develop an explanation for the event and may do so by making attributions (Park and Folkman 1997), connecting the event to a worldview/values system (Davis et al. 1998; Park 2005), or by just simply trying to understand it (Martin, Jones, and Callan 2005). Second, research has shown it is important for individuals to identify more benefits than downsides of the event (Affleck and Tennen 1996; Davis et al. 1998; Park and Folkman 1997). The premise is that, even for an event as adverse as a terminal illness, individuals can construct beneficial meanings about their predicament. These constructions do not suggest these events are not objectively difficult or adverse. Rather, they suggest individuals have the discretionary capacity to interpret events differently and that these differences have a profound impact on successful adaptation. Below, we elaborate on the two dimensions of meaning-making in the context of strategic change.

Meaning-making as understanding. Meaning-making involves constructing an explanation for *why* an event happened. Taylor (1983, p. 1161) notes, “meaning is exemplified by, but not exclusively determined by, the results of an attributional search that answers the question, what caused the event to happen?” When adversity strikes an individual, they want to make sense of it by explaining its occurrence. One way individuals execute this attributional search is to point to some type of worldview, such as by attributing it to “G-d’s will” or by attributing it to lifestyle choices (Janoff-Bulman 1992; McIntosh et al. 1993). More generally, most individuals explain the occurrence through a broader system of meaning, whether it is a religion, ideology or folk psychology (Bruner 1990)—something often called global meaning (Park and Folkman 1997).

In the organizational studies literature, sensemaking research can be used to help apply a social psychological meaning-making approach to change implementation. Sensemaking scholars claim that individuals cope with equivocal events by constructing plausible stories about those events (Weick 1995), stories that help them manage the ambiguities of change (Brown 1998). Prior research has not connected this work to that of social psychologists studying adverse events. Yet, such a connection is important because, as suggested above, individuals are likely to have different interpretations about change. In understanding which types of interpretations are likely to be more adaptive for employees, social psychological research provides support for theorizing an equivalent type of “worldview” for change to enable the attribution process in an adaptive way (Davis et al. 1998; Park and Folkman 1997; Schwarzer, Luszczynska, Boehmer, Taubert, and Knoll 2006). One possibility is what we call a “strategy worldview,” which explains the occurrence of an event, such as a change, as being part of a larger plan supported by managers. Whereas psychologists find that, when facing an adverse event, more adaptive individuals may attribute their circumstances to some higher-order being or master-plan (Davis et al. 1998; Park 2005), in strategic change, individuals attribute their circumstances (such as having to adjust their jobs, a lost identity, etc.) to management, and specifically, to a strategy management created. This allows employees to construct meaning as emanating from not only a “higher power”, but also a master plan or overall strategy. Consistent with this idea, Barry and Elmes (1997) argue for understanding strategy as a narrative managers tell, whereby they convince employees of a new worldview of the organization. Along these lines, we propose a “strategy worldview” to be a set of beliefs around managers creating an overall plan for the organization that helps lend coherence to change for employees and allows employees, allowing them to understand why they must make adjustments.

Meaning-making as benefits finding. A second component of meaning-making is benefits finding. Prior research suggests that individuals manage potentially adverse events by constructing those events as having more benefits than downsides (Davis and Nolen-Hoeksema 2001; Taylor 1983) as well as by imbuing them with positive emotions (Jim, Richardson, Golden-Kreutz, and Andersen 2006; Tugade and Fredrickson 2004; Tugade, Fredrickson, and Barrett 2004). Note that this research does not claim how *objectively* negative or positive events are, but rather examines the discursive claims (i.e., meaning-making) of individuals trying to manage these events. Put another way, a change may "objectively" impose costs on employees but these employees may nevertheless construct the change as predominately creating benefits. The meaning-making literature in social psychology uses the example of individuals, who having suffered the death of a loved one, claim as a result of the death a greater appreciation for life and higher value of existing relationships (Lehman et al. 1993). Similar findings exist in research on individuals coping with disease (Affleck and Tennen 1996). While change is not often a matter of life or death, it creates similar (but clearly, not as severe) types of uncertainty and anxiety (Ashford 1988). In examining benefits finding, scholars are also interested in positive emotions as constructing meaning with positive emotions is often needed to reappraise negative events as positive (McGrath, Jordens, Montgomery, and Kerridge 2006; Taylor, Kemeny, Reed, Bower, and Gruenewald 2000; Thompson 1985; Tugade and Fredrickson 2004), a construction facilitated by thoughtful reappraisals (Tugade et al. 2004), the broadening of thought-action repertoires (Fredrickson 2004; Tugade and Fredrickson 2004), and the positive illusions effect (Taylor 1989).

In organizational studies, the benefits finding construct most closely relates to research on sensemaking of issues as threats or opportunities (Dutton and Jackson 1987; Staw, Sandelands, and Dutton 1981). Dutton (1993) argues that top managers have the discretion to make sense of issues as either threats or opportunities. Through interpreting organizational events, managers can come to view potentially adverse issues as positive and beneficial—a perspective which creates more adaptive responses (Chattopadhyay, Glick, and Huber 2001; Dutton and Jackson 1987; Jackson and Dutton 1988). Similar to social psychologists, organizational researchers also couple constructing issues as opportunities with positive emotions. For example, Dutton (1993, p. 200) argues “issues that are wrapped in opportunity frames are almost irresistible because of the positive ‘charge’ or emotion...that such issues invoke.” In other words, under difficult circumstances—including change—individuals can find benefits to the (adverse) situation and can construct the experience as positive, regardless of objective circumstances. Note that this research does not claim *all* individuals imbue negative events as positive, or that those individuals that do will *always* construct benefits to adverse events. Rather, this research claims there is variance in the degree to which individuals construct events as positive and relates this to more adaptive outcomes, whether that be health in the case of psychological research (Taylor 1983; Taylor et al. 2000) or effective issue management in the case of strategy research (Dutton 1993; Dutton and Jackson 1987; Jackson and Dutton 1988; Staw et al. 1981). To apply extant knowledge on benefits finding to strategic change implementation research, we define “benefits finding” as the extent to which individuals construct change as having more benefits relative to downsides while constructing change with positive emotions (Dutton, 1993; Taylor, 1983; Taylor et al., 2000). For positive emotions, we focus on energy, optimism and confidence as they are high activation positive emotions that

mobilize action (Feldman Barrett & Russell, 1999; Tellegen, Watson, & Clark, 1999) and aid individuals in being resourceful when meeting challenges (Luthans, Avolio, Avey, & Norman, 2007; Stajkovic, 2006), including change.

THEORY DEVELOPMENT AND HYPOTHESES

Having theorized the application of meaning-making dimensions to strategic change, we turn to potential antecedents, mechanisms and outcomes of the MCAM. We anchor our model in the core meaning-making dimensions theorized above (understanding as strategy worldview and benefits finding) and address potential antecedents (communication) and outcomes (change implementation behaviors), mediated by a set of mechanisms (psychological resources). This approach follows social psychological research on meaning-making which identifies important antecedents of meaning-making and the types of resources it creates that lead to adaptive behaviors. The hypothesized MCAM is graphically summarized in Figure 1.

INSERT FIGURE 1 ABOUT HERE

Antecedents of MCAM: Communication during Change

We focus on communication as, perhaps more than any other construct, it has been implicated by researchers and practitioners alike to play a vital (if not the most essential) role in change implementation (Bartunek, Krim, Necochea, and Humphries 1999; Cheney et al. 2004; Fairhurst 1993; Lewis and Seibold 1998). Employees that receive information from managers during change are more certain and adapt better (Ellis and Shockley-Zalabak 2001; Kramer, Dougherty, and Pierce 2004). One explanation for this is that managerial communication provides a template for understanding the change, thereby strongly shaping individuals' sensemaking through sensegiving (Gioia and Chittipeddi 1991). These templates help individuals both interpret

stressors in personally meaningful ways as well as reconstruct threatening events into non-threatening ones (Lepore, Ragan, and Jones 2000). When managers communicate a new strategic direction for the organization, employees also have a broader understanding of how and why the organization is changing (Barry and Elmes 1997). This facilitates employees' constructing change as a part of a broader, coherent plan and not some ad hoc move by top managers. It thus helps employees interpret the strategic direction as part of a broader narrative about how the organization will adapt (Barry and Elmes 1997).

H-1a: The greater an employee's exposure to managerial communication, the higher an employee's level of meaning-making as understanding (a strategy worldview).

In addition to influencing the development of a strategy worldview, managerial communication may also impact benefits finding. One managerial goal during change is to "sell" the change to employees (Pfeffer 1981), a particularly important goal considering some employees may have ingrained schemas rendering them resistant to change (Labianca, Gray, and Brass 2000; Reger, Gustafson, Demarie, and Mullane 1994). Accordingly, managers do not usually construct change impartially but instead put a positive spin on their communication (Fairhurst 1993; Vaara 2002). At the same time, a hallmark of successful managers is their ability to infuse purpose and meaning into the lives of employees (Barnard 1938). To do so, managers use language to provide upbeat cognitive representations of the change and to positively alter employees' emotional states (George 2000). For example, managers can create energy during change (Quinn and Dutton 2005), present optimistic takes on change (Vaara 2002) and instill confidence (Gioia and Thomas 1996), all of which help employees interpret benefits of the change despite the extra work, challenges and stress they face.

H-1b: The greater an employee's exposure to managerial communication, the higher an employee's level of benefits finding about change.

Earlier models of communications during change followed a conduit model which assumes employees share the interpretations of top managers (Axley 1984). Yet, other key communicators provide information to employees and influence how they construct meaning (Kramer et al. 2004). For example, when employees (i.e., colleagues) communicate amongst one another, they are likely to construct different meanings than their managers (Balogun and Johnson 2004; Wager 1962), thereby undermining managerial sensegiving. To illustrate, Brown and Humphries (2003) found that, while managers construct narratives about change predicated on successfully overcoming difficulties with a viable strategy, employees shared narratives in which they were victims subject to strategies with disastrous consequences. Usually motivated by uncertainty during major change, employees propagate rumors that portray the change in a negative light (DiFonzo and Bordia 1998). Rumors alleviate what Allport and Postman (1965) term the “intellectual pressure” to provide meaning in situations of uncertainty (Rosnow 1988). Rumors almost always focus on spreading negative information disruptive to the implementation of change (e.g., Zhu et al. 2004). For example, Smeltzer (1991) examined the role of communication in change implementation and found that ineffective change implementation was a function of rumors and learning about the change from a source other than management. The competing meanings of management and colleagues cast the change as arbitrary or not part of a coherent plan (such as through subversive stories) (Brown and Humphreys 2003). Additionally, we propose that greater collegial communication will decrease benefits finding as these competing meanings likely emphasize negative aspects of change, such as the costs imposed on employees (Kotter and Schlesinger 1979). Put another way, the additional interpretive variety that employees will introduce to change will have a tendency to focus on what employees have to lose during change (costs), versus what they have to gain (benefits).

H-2a: The greater an employee's collegial communication, the lower an employee's level of a strategy worldview.

H-2b: The greater an employee's collegial communication, the lower an employee's level of benefits finding.

The Role of Psychological Resources in the MCAM

We now move to theorizing how meaning-making as understanding (i.e., strategy worldview) and benefits finding leads to greater employee engagement with change. More specifically, we focus on change implementation behaviors using focal (e.g., in-role [Katz and Kahn 1978]) and discretionary (e.g., extra-role [Organ 1988]) behaviors. When individuals engage in focal change implementation behaviors, they are meeting the minimal behavioral requirements, such as adjusting one's job, as required by the change. Discretionary behavior involves behaviors beyond the explicit requirements of change to make change successful (Herscovitch and Meyer 2002).

We argue that three core psychological resources mediate the effect of meaning-making variables onto change implementation behaviors in the MCAM: affective commitment to change, unit identification, and perceived change efficacy. Following other scholars, we define psychological resources broadly as something either valued as its own end or something that facilitates obtaining other (desirable) ends (Hobfoll 2002). We select the imagery of psychological resources as it portrays psychological states to facilitate adaptive behaviors. While the three psychological resources chosen are not exhaustive, they have been emphasized by previous scholars as critical for explaining change (Dutton and Dukerich 2001; Herscovitch and Meyer 2002; Wanberg and Banas 2000). Each resource also explains a unique activator for employees to perform change behaviors, such as fostering a desire for performance (affective commitment to change), creating a need for performance due to attachment (unit identification) and instilling a belief of performance (perceived change efficacy).

Affective commitment to change. Commitment to change is “a force (mindset) that binds an individual to a course of action deemed necessary for the successful implementation of a change initiative” (Herscovitch and Meyer 2002, p. 475). Change commitment, similar to organizational commitment (Meyer, Allen, and Smith 1993), includes affective (due to desire), continuance (due to perceived costs) and normative (due to perceived duty) types of commitment (Herscovitch and Meyer 2002). Affective commitment focuses on individuals’ commitment based on the perceived inherent value of something—tapping into commitment arising from a desire to engage with change as opposed to constraints based on rational calculations (continuance) or perceived obligations (normative) (Meyer et al. 1993). As affective commitment to change is based on an internal desire, it is more likely to endure than other commitment types and buffers employees from the challenges of change (Cunningham 2006; Herscovitch and Meyer 2002). As a result, affective commitment to change is likely the most vital form of commitment in overcoming adversity.

We hypothesize that employees who construct meaning using a strategy worldview and benefits finding are more likely to be affectively committed to the change, which, in turn, leads to higher levels of change implementation behaviors. Employees using a strategy worldview construct meaning about why things are changing and thus “self-mitigate” the uncertainties which challenge commitment during change (Armenakis and Fredenberger 1997). This prediction is also consistent with previous research which has found that forming a strategic vision and sharing it with employees increases affective commitment through the ownership it creates among employees (Dvir, Kass, & Shamir, 2004). Scholars have found that when a change fits within a strategic vision as construed by employees, employees are more likely to be

supportive of change, as it provides guidance and direction to them (Noble & Mokwa, 1999; Parish, Cadwallader, & Busch, 2008).

We also hypothesize that benefits finding facilitates affective commitment to change. Recall that affective commitment to change is based on the perceived inherent value of the change (Herscovitch & Meyer, 2002). As the constructed (versus the objective) benefits of the change increase, employees are likely to interpret a perceived value of that change increase.

H-3a: The greater the employee's level of strategy worldview, the greater the employee's level of affective commitment to change.

H-3b: The greater the employee's level of benefits finding about change, the greater the employee's level of affective commitment to change.

Having suggested how meaning-making increases affective commitment, we now theorize how this commitment likely increases change implementation behaviors. Affective commitment serves as a binding force that increases employees' support of change (Meyer and Herscovitch 2001) and supportive behaviors (Meyer, Becker, and Vandenberghe 2004). Scholars have found that affective commitment can fortify employees and help them maintain pro-change behaviors even when faced with the challenges of change (Cunningham 2006). Affective commitment to change can be an important means to achieving desirable ends as it guides individuals to particular situations (Hilton 1989) and grounds a persistence often needed to overcome adversity. Commitment to a course of action, as a resource that leads to more persistent behaviors, is vital to survival when facing threatening events (Lazarus and Folkman 1984). In psychologically strengthening individuals in the face of challenges, we expect affective commitment to lead to a greater likelihood of engaging in the focal change behaviors needed for change implementation.

We also theorize that affective commitment will lead to a greater use of discretionary change implementation behavior. Affective commitment is autonomously regulated and can

foster intrinsic motivation (Meyer, Becker, and Vandenberghe 2004). In this sense, affective commitment to change can provide employees with an inherent reason to pursue change, something that can encourage them to do what it takes to make change effective. At the same time, affective commitment leads to a broadened sense of a job (Morrison 1994). In doing so, it facilitates discretionary behavior as employees interpret “ the discretionary behavior” as part of their formal job responsibilities.

H-4a: The greater the employee’s affective commitment to change, the greater their level of focal change implementation behaviors.

H-4b: The greater the employee’s affective commitment to change, the greater their level of discretionary change implementation behaviors.

Unit identification. Unit identification refers to the degree to which individuals self-define in terms of a referent (Ashforth and Mael 1989). It captures the extent to which an individual self-defines by the same attributes believed to define a relevant referent (Dutton et al. 1994) and can psychologically strengthen individuals (Dutton, Roberts and Bednar 2010). For example, researchers consider unit identification, which lends coherence via identification with an entity, to satisfy individual needs including the need for meaning (Pratt 1998). While there are multiple social identities employees may have (Haslam, Egghins, and Reynolds 2003), we specifically focus on unit identification as it is the site where employees work and spend most of their time, thereby making it the most proximate context for change. Moreover, unit identification is especially important during strategic change as the names, structures and meanings of units may change from one part of the organization to another (Corley and Gioia 2004).

Social psychologists have found that, despite adverse situations, individuals who engage in meaning-making can construct positive identifications by taking on new roles to support a changing identity (Gillies and Neimeyer 2006). More specifically, both aspects of meaning-making, a strategy worldview and benefits finding, increase identification by strengthening the

attractiveness of the referent of identification (i.e. unit) (Ashforth and Mael 1989; Dutton et al. 1994). Employees that engage in a strategy worldview attribute change to a larger plan (as opposed to it being arbitrary) meant to improve the unit and benefits finding suggests that employees explicitly believe the change will make their workplace more desirable through the additional benefits the change will bring.

H-5a: The greater the employee's level of strategy worldview, the greater the employee's unit identification.

H-5b: The greater the employee's level of benefits finding about change, the greater the employee's unit identification.

While social psychological theories help link meaning-making to unit identification, organizational research provides an important link between unit identification and change behaviors. More specifically, organizational scholars find that individuals that identify with a specific referent engage in referent-supportive behaviors (Dutton and Dukerich 1991) and are therefore more likely to cooperate with directives (Tompkins and Cheney 1983), something important for facilitating focal behaviors. At the same time, organizational scholars also find that individuals that identify with a specific referent are likely to engage in more discretionary activities, such as supporting the group even absent scrutiny from others (Barreto and Ellemers 2003), internalizing a collective's goals (Ellemers, De Gilder, and Haslam 2004) and engaging in discretionary behaviors (Ashford and Barton 2007). This occurs because individuals invest their sense of self within the entity, thus blurring the distinction between self and organization (Pratt 1998).

Alternatively, if an individual perceives the behaviors needed during change as undermining to the essence of their referent, individuals may resist change in an effort to thwart the alteration of their referent (Bridges 1986; Chreim 2002; Reger et al. 1994). Despite this, it is important to keep in mind we have previously theorized that meaning-making increases a

strategy worldview and benefits finding resulting in the generation of unit identification. Consequently, the establishment of unit identification allows for constructing change as part of a broader plan which benefits the unit, something that will likely mitigate the chances of employee resistance to change due to identification. Put another way, meaning-making facilitates a particular type of identification that will help employees engage in behaviors to support change as they will see it as strengthening (Dutton and Dukerich 1991), and not destroying, the referent of identification (Reger et al. 1994). In this sense, we propose that unit identification works to the extent that employees have already constructed the change in a particular way, i.e., through a strategy worldview and benefits finding. This suggests an important boundary condition for the MCAM, namely that unit identification comes from positive meaning constructions about the change—that is, employees who have engaged in understanding and benefits finding.

H-6a: The greater the employee's unit identification, the greater the level of focal change implementation behaviors.

H-6b: The greater the employee's unit identification, the greater the level of discretionary change implementation behaviors.

Perceived change efficacy. Perceived efficacy refers to individuals' assessments of their abilities to perform tasks (Gist and Mitchell 1992). It helps individuals cope with adverse events, such as diseases (Lee, Cohen, Edgar, Laizner, and Gagnon 2006) or educational problems (McKinney et al 1999), by instilling the belief of performance. Researchers have applied this concept in the domain of change, proposing “perceived change efficacy” to be an individual's view of his or her ability to mobilize the cognitive resources necessary to handle organizational change and, despite the difficulties involved, function effectively (Wanberg and Banas 2000). Additionally, it captures individuals' perception of their ability to undertake potentially physically onerous or novel tasks, including taxing changes to practices, routines and behaviors common to strategic change (Ashford 1988). We propose that, through the creation of perceived change efficacy,

meaning-making as a strategy worldview and benefits finding will increase change implementation behaviors.

By providing a cogent explanation for change, a strategy worldview can ameliorate uncertainty and make employees feel efficacious (Gist 1987). Additionally, it may provide employees with a better understanding of their role during the process of change and the actions they have to perform. Finally, a strategy worldview also provides contextual knowledge about the purpose of the change and infuses individuals with the sense that their efforts will contribute to a concrete plan. This purpose provides “external cues” about the task such as its importance (contributing to a larger strategy) and environment (part of a plan designed by leaders) which increases perceptions of abilities to perform (Gist and Mitchell 1992).

Benefits finding involves employees looking at the change through “rose colored glasses”, whereby they emphasize positive aspects of the change. Such a perspective strengthens assessments of one’s own abilities to contribute to the change (Stone 1994). Moreover, the positive valence of benefits finding creates positive arousal that individuals interpret as enabling performance—something consistent with the mood-as-information hypothesis (Schwarz and Clore 1983). The broaden-and-build theory of positive emotions also supports this point by finding that positive emotions build individuals’ enduring psychological resources that enhance the capacity to act (Fredrickson 2001).

H-7a: The greater the employee’s level of strategy worldview, the greater the employee’s level of perceived change efficacy.

H-7b: The greater the employee’s level of benefits finding about change, the greater the employee’s level of perceived change efficacy.

Higher levels of perceived change efficacy instill in individuals the sense that they can perform, thereby leading to a higher likelihood of attempting to perform both focal and

discretionary behaviors (Bandura 1977). Moreover, higher levels of perceived change efficacy have been found to be linked to more effectively handling job responsibilities, something which can include focal change implementation behaviors.

Also, for discretionary change behaviors, individuals with higher perceived change efficacy engage in increased self-initiating behaviors and are more persistent (Bandura 1977). As individuals increasingly believe in their ability to perform, they positively deviate from prescribed role requirements (Spreitzer and Sonenshein 2004) and take discretionary actions to implement change.

H-8a: The greater the employee's perceived change efficacy, the greater the level of focal change implementation behaviors.

H-8b: The greater the employee's perceived change efficacy, the greater the level of discretionary change implementation behaviors.

Rival models. While we have theorized the MCAM, we recognize that such an approach contrasts with at least two other competing perspectives on change. The first alternative model is a reverse causation model between meaning-making and psychological resources (see Figure 2A), which proposes that in contrast to the MCAM, those with more psychological resources are more likely to engage in meaning-making. By having commitment (Herscovitch & Meyer, 2002), efficacy (Bandura, 1977) and identification (Tompkins and Cheney, 1983), employees are already pre-disposed to support the change, and therefore are likely to interpret the change in positive ways, e.g., it is part of a larger management plan and it has benefits.

INSERT FIGURE 2 ABOUT HERE

The second model (see Figure 2B), one grounded in self-efficacy theory (Bandura, 1977; Bandura, 1997), suggests that perceived change efficacy has a large

impact on employees' change implementation behaviors (Armenakis, Harris, & Mossholder, 1993; Conner, 1992)¹. Employees' meaning-making of change, and their interpretation of both managerial and collegial communications, are colored by this baseline level of efficacy (Gist & Mitchell, 1992). For example, individuals with high efficacy perceptions might embrace change messages, regardless of their source, and see these messages as leading to changes that make sense (strategy worldview) and have benefits (benefits finding). In this model, unit identification, unlike in the MCAM, serves as an influence on meaning-making—individuals with high identification are likely to engage in more positive meaning-making (e.g., Pratt, 2000), such as by seeing benefits in the change and understanding how the change fits into management's larger plans. Moreover, this model recasts affective commitment as a dependent variable that varies as a function of employees' efficacy levels because individuals that feel that they can accomplish something are more likely to be committed to it (Locke, Frederick, Lee, & Bobko, 1984). This commitment then serves as one mechanism that explains change implementation behavior, alongside the two meaning-making constructs.

METHODS

Case Selection and Empirical Setting

Given that we were interested in developing the MCAM and offering an initial test, we conducted our research at a single corporation: Retail, Inc. (all names are pseudonyms). Retail, Inc. is a Fortune 500 specialty retailer consisting of two divisions: MallCo (operating smaller stores located in malls) and BigBoxCo (operating larger, freestanding stores). Aside from controlling for contextual variables, a single site facilitated the extensive data collection needed

¹ We thank an anonymous reviewer for suggesting this rival model.

for the study. In selecting the site, we were guided by theoretical sampling (Eisenhardt 1989; Glaser and Strauss 1967). At the industry level, retailing is part of the growing service economy and has undergone significant changes in the last decade. Retail, Inc., as a large retailer, has many geographically dispersed units (i.e., stores) that necessitate extensive communication between stores and headquarters, a feature that lends itself well to examining meaning construction.

In the early 1990s, MallCo achieved profits that allowed Retail, Inc. to fund growth at BigBoxCo. Due to the size of BigBoxCo stores, opening new locations required significant capital expenditures. BigBoxCo stores started to achieve steady profits in the mid-1990s just as sales at the MallCo division floundered. MallCo stores—many without renovation for twenty years—were outdated. Retail, Inc. responded by closing underperforming MallCo stores. However, with little investment returned to MallCo, the remaining stores experienced continued declines. To address these performance declines, Retail, Inc. managers initiated “Project Convert”, one of six strategic priorities for 2004 and 2005. This strategic change involved better integration of MallCo and BigBoxCo through renaming MallCos as “BigBoxCo Light,” remodeling stores, revising the branding strategy, expanding product assortment and updating technology and work routines.

Research Design and Data

Data for the study was gathered through a paper-and-pencil questionnaire sent to all store employees implementing Project Convert from May 2005 until November 2005, within a month after the store had changed from MallCo to BigBoxCo Light. To increase responses, we sent a reminder to participants several weeks after the initial invitation. Participants returned surveys

anonymously via Retail Inc.'s mail system. Surveys were then delivered, unopened, to us. The instrument contained a number of open- and closed-ended questions. We attempted to engage all 90 converting MallCo stores to solicit participation. Of the 90 stores, 50% responded to our inquiry and we collected 159 of 414 possible responses (38.4%).²

Content Analysis

Strategy worldview and benefits finding were constructed by analyzing via content analysis four open-ended questions. These questions asked employees to describe their feelings about the change, their understanding of the reasons for the change, the nature and effects of the changes. Scholars have used similarly broad, open-ended questions in change research to elicit employees' meanings about a change (e.g., Balogun and Johnson 2004). Following the principles of content analysis (Berelson 1952), two research assistants, blind to the research purpose, analyzed text data received from participants. Coding proceeded in four steps. First, we read a random sample of 10% of responses to create a starting list for coding (Miles and Huberman 1994). We were guided by our theory, particularly the strategy worldview and benefits finding constructs, but were also open to disconfirming evidence (Miles and Huberman 1994). Second, working independent of one another, research assistants used these codes and added new codes of their own as they inferred meanings from the text to classify the data. Third, one author met with the research assistants and, based on their reading of all data and the theorized meaning-making constructs, we finalized the coding system. We eliminated codes inconsistent with the theorized meaning-making dimensions. Fourth, each research assistant independently re-

² Retail Inc., provided the number of store employees on payroll at each given store. We calculated response rate as the fraction of these employees returning the completed survey. We note that such a method provides a conservative estimate of the response rate due to the high turnover at the retailer and its typical overestimation of the number of working employees. Specifically, field research revealed that approximately 3 employees fulfill 75% of all staffing needs at a typical MallCo store, yet each store has an average of 10 employees on payroll. This suggests that many employees listed as active on payroll records either work very few hours or no longer work there.

examined and, as needed, reclassified all data based on the revisions. Table 1 provides illustrative examples of the content dimensions and agreement rates across the coders.

Meaning-making measures. These findings were transformed into multiple indicators for use in subsequent structural equation modeling analysis. *Strategy worldview* includes the number of reasons employees include in their meaning-making tied to a larger strategic plan (see Table 1 for the codes and illustrative examples). This construct includes two variables, each one representing one independent coder's assessment of the number of statements consistent with a unique strategy worldview code. Note that they are reflective indicators of the construct, appropriate for structural equation modeling methodology used for the analysis.

INSERT TABLE 1 ABOUT HERE

Benefits finding includes two sets of indicators based on the theory developed above which posited two dimensions: (1) Benefits finding claims includes the average count of the relative benefits of the change assessed by the two coders (e.g., number of benefits claims subtracted by the number of downside claims.); and (2) Positive affective claims includes the average count of claims (for the two coders) about energy, optimism and confidence, which are high activation, positive emotions that mobilize action (Feldman Barrett and Russell 1999; Tellegen et al. 1999) and make individuals resourceful in meeting challenges (Luthans et al. 2007; Stajkovic 2006).

Other Study Measures

The survey instrument also contained a set of closed-ended measurement items to assess the remaining constructs in the MCAM. The measures are provided in Appendix A and summarized below.

Communication measures. *Managerial communication* is “official” communication such as written communications within documents (Johnson, Donohue, Atkin, and Johnson 1994). We used Hage et al’s (1971) approach to determine the frequency of formal, managerial communications by measuring the amount of key a priori interactions determined to be managerial. *Collegial communication* was assessed using a similar method, emphasizing unscheduled interactions among employees (Hage et al. 1971).

Psychological resources measures. To measure affective commitment to change, we used a slightly modified version (for clarity) of Allen and Meyer’s (1990) affective commitment scale specific to change projects validated by Herscovitch and Meyer (2002). We measured unit identification (in this case, the store) using a six-item scale developed by Mael and Ashforth (1992), which we modified to apply to a retail versus school context. We measured perceived change efficacy using a modified scale (for clarity) from Wanberg and Banas (2000) taken from work by Ashford (1988). Following Bandura (1977), we measured self-efficacy with respect to a specific referent, in this case, Project Convert.

Change implementation behaviors measures. To measure employees’ focal change implementation behavior, we used Herscovitch and Meyer’s (2002) change implementation behaviors scale, modified for clarity. We used three-items of their championing behaviors scale

to measure discretionary change behaviors. We shortened this measure to emphasize behavioral versus perceptual measures and modified for retailing.

Data Analysis

Our proposed MCAM was estimated using Structural Equation Modeling (SEM) methodology with the sample of MallCo employees who completed the survey (N = 159). We used the conventional two-step approach of first estimating the measurement model, followed by the structural model (Anderson and Gerbing 1988). In this approach, the measurement model, which specifies the relationship between the latent constructs and the observed measures, and the structural model, which specifies the relationships among the latent constructs, were analyzed separately. All models described subsequently were estimated using the LISREL 8.50 program (Jöreskog and Sörböm 1999). We assessed goodness-of-fit of the models with χ^2 per degree of freedom, the Root Mean Square Error of Approximation (RMSEA), the Standardized Root Mean Square Residual (SRMR), the Non-Normed Fit Index (NNFI), and the Comparative Fit Index (CFI). Further details regarding these indices can be found in Bentler (1990), and Marsh, Balla, and Hau (1996). Satisfactory model fits are indicated by non-significant χ^2 -tests, SRMR and RMSEA values $\leq .08$, and NNFI and CFI values $\geq .90$. The analyses utilized a covariance matrix as input and used maximum likelihood estimation.

Many constructs in the model had more than two measures (see Table 2). For these constructs, we first assessed dimensionality of underlying factor structure by conducting an Exploratory Factor Analysis (EFA). Each construct yielded a single-factor solution indicating that these constructs are unidimensional. Consequently, we employed the “partial disaggregation” approach (Bagozzi and Edwards 1998), combining indicators randomly to

produce two manifest variables for each construct. This procedure is also known as “item parceling” (Bandalos and Finney 2001). There is considerable precedent for this approach in organizational research (e.g., DeRue and Wellman 2009). When compared to models in which each item is a separate indicator, the partial disaggregation approach results in models having fewer parameters to estimate and more favorable ratios of cases to parameters. Additionally, it smoothes out measurement error significantly. In our study, the higher ratio of cases to parameters is an especially useful benefit given our relatively small sample size of 159 (Little et al. 2002).

One problem with parceling with a multidimensional underlying construct is item parcels can conceal structure and produce biased structural parameter estimates (Bandalos and Finney 2001; Little et al. 2002). However, as revealed by the EFA, all our constructs are unidimensional, and thus an unlikely issue in for us. For Collegial Communication, Managerial Communication, Benefits Finding and Strategy Worldview, only two indicators were available for each, and were used to operationalize the respective constructs.

RESULTS

Table 1 reports the findings from the content analysis and includes agreement rates and illustrative examples for all strategy worldview and benefits finding codes.

INSERT TABLES 1 AND 2 ABOUT HERE

Measurement Model Evaluation

Internal Consistency. We used two measures to evaluate internal consistency of constructs. The first, *composite reliability* (ρ_c) is a measure analogous to coefficient α (Bagozzi and Yi 1988, Fornell and Larcker 1981, Equation 10). The second, *average variance extracted* (AVE; $\rho_{VC(\xi)}$)

estimates the amount of variance captured by a construct's measures relative to random measurement error (Fornell and Larcker 1981, Equation 11). Estimates of ρ_ε above .60 and $\rho_{VC(\xi)}$ above .50 are viewed to indicate good internal consistency (Bagozzi and Yi 1988; Fornell and Larcker 1981). As Table 2 shows, the values of both measures for all constructs are significantly greater than these stipulated criteria thus indicative of good internal consistency.

Confirmatory Factor Analysis. The quality of the measurement model was tested via Confirmatory Factor Analysis (CFA). We built a CFA model with nine latent constructs and 18 measures. Results showed the measurement model fit the data well. The goodness-of-fit statistics for the model were as follows: $\chi^2(99) = 153.04$, $\chi^2/df = 1.55$, RMSEA = .05, SRMR = .05, NNFI = .93, CFI = .95. The t-values for the items were high, suggesting the items reflect their respective underlying constructs. Completely standardized loadings ranged from .68 to .95, and t-values ranged from 7.01 to 13.21 (see Table 3).

INSERT TABLE 3 ABOUT HERE

We evaluated discriminant validity of the model constructs using three approaches. The first approach, a procedure suggested by Fornell and Larcker (1981) and widely used by other researchers (e.g., Ramani and Kumar 2008), examines discriminant validity. The AVE ($\rho_{VC(\xi)}$) for each of the nine factors was compared to the highest variance that the factor shared with other factors in the model. These results are provided in Table 2. As can be seen, the AVE extracted for each factor was always greater than the highest shared variance. It is worth noting that Fornell and Larcker's procedure is viewed as a demanding test for discriminant validity

(Grewal, Cote, and Baumgartner 2004; Ramani and Kumar 2008). As this criterion is satisfied in our study, an inference error due to multicollinearity is also unlikely (Ramani and Kumar 2008).

As a second test of discriminant validity, we checked whether the correlations among the latent constructs in the CFA were significantly less than one. Since none of the confidence intervals (+/- two standard errors) included the value of one (Bagozzi and Yi 1988), this test provides further evidence of discriminant validity. Table 4 provides the set of ϕ -values between the latent constructs in the CFA. It is useful to note here that, because the ϕ -values provided in Table 4 have been corrected for attenuation, the corresponding product-moment correlations are actually lower than these values.

Within the third test, for each pair of factors, we compared the χ^2 -value for a measurement model constraining their correlation to equal one to a baseline measurement model without this constraint (Anderson and Gerbing 1988). A χ^2 -difference test was performed for each pair of factors (a total of 36 tests in all) and in every case resulted in a significant difference suggesting all measures of constructs in the measurement model achieve discriminant validity. Overall, the results described suggest the measurement model is of sufficient quality to continue an examination of the structured model.

INSERT TABLES 4 AND 5 ABOUT HERE

Common method variance. As all the survey measures were collected with a single instrument, the potential for common method variance to bias results exists. We used Harmon's one-factor test to assess whether a single latent factor could account for all manifest variables thus indicating that common method variance posed a serious threat to the interpretation of findings from this study (Podsakoff et al. 2003). The single-factor model had a $\chi^2(135) = 1126.26$. We performed a χ^2 -difference test against the 9-factor measurement model to assess the impact of

common method variance. A significant difference between the χ^2 values of the two models ($\Delta\chi^2 = 973.22$, $\Delta df = 36$, $p < .001$) indicated that the fit of the one-factor model was significantly worse than it was for the measurement model. This provides some evidence that our measurement model was robust to common method variance. Additionally, to confirm these results through a more rigorous approach, we also employed the latent methods factor modeling approach suggested by Podsakoff et al. (2003). A discussion of the results of this approach follows.

Structural model estimation

The fit statistics for the full model hypothesized in Figure 1 [$\chi^2 (117) = 254.57$, $\chi^2/df = 2.18$, RMSEA = .078, SRMR = .083, NNFI = .91, and CFI = .91] are well within their respective acceptable ranges, indicating a good model fit. Table 5 provides the standardized coefficients for the paths in the structural model.

H1a-b examined the effects of managerial communication on strategy worldview and benefits finding. Results revealed that both paths from managerial communication to strategy worldview ($\gamma = .37$, $p < .001$) and benefits finding ($\gamma = .28$, $p < .001$) were positive and significant, therefore supporting H1a and H1b. Furthermore, the paths from collegial communication to strategy worldview ($\gamma = -.24$, $p < .01$) and benefits finding ($\gamma = -.20$, $p < .01$) were negative, thus supporting H2a and H2b respectively. 27% of the variance in strategy worldview and 20% of the variance in benefits finding was explained by the antecedents.

The remaining hypotheses (H3-H8) concerned the psychological resource variables. Considering affective commitment to change first, the results revealed the path from benefits finding to affective commitment was significant ($\beta = .38$, $p < .001$) but the relationship between

strategy worldview and affective commitment was not. Thus H3a is not supported, but H3b receives support. Affective commitment, in turn, had significant positive effects on both focal ($\beta = .20, p < .01$) and discretionary implementation behaviors ($\beta = .40, p < .001$), supporting both H4a and H4b. H5a-b and H6a-b concerned the roles of unit identification. The results showed that again, strategy worldview did not affect unit identification, but benefits finding had a significant positive effect ($\beta = .22, p < .01$). Thus H5a was unsupported, but H5b received support. Unit identification had a significant positive effect on discretionary change behaviors ($\beta = .49, p < .001$) supporting H6b, but not on focal change behaviors. Thus, H6a was not supported.

The final set of hypotheses concerned the roles of perceived change efficacy. Unlike the other two psychological resources, in this case, strategy worldview had a positive effect ($\beta = .22, p < .01$), supporting H7a. However, the link from benefits finding to perceived change efficacy did not emerge as significant. H7b was not supported. Supporting both H8a and H8b, perceived change efficacy significantly affected both focal ($\beta = .39, p < .001$) and discretionary change behaviors ($\beta = .36, p < .001$). The amounts of explained variance for the constructs were; 25% for affective commitment to change, 33% for unit identification, 36% for perceived change efficacy, 23% for focal change behavior, and 60% for discretionary change behavior.

Latent Methods Factor Model. Additionally, to further rule out the effects of common method bias, we employed Podsakoff and colleagues' (2003) latent methods factor approach (see MacKenzie, Podsakoff and Paine [1999] for an application). Using this approach, all measures in the structural model hypothesized in Figure 1 were loaded onto a single latent factor in addition to their respective factors. This additional factor is the common methods factor and allows us to

explicitly control for the portion of the variance that is attributable to obtaining all measures using the same method. The results of this re-estimation are provided in the right column of Table 5. Note that in this new model, equality constraints were imposed on the loadings from the methods factor to its indicators in order to obtain model convergence. This method is consistent with the approach of other researchers (e.g., MacKenzie et al. 1999; McKay et al. 2007). As seen in Table 5, with the latent factor included in the structural model, the results are substantively similar. Some paths are slightly less significant than before (e.g., the path from benefits finding to unit identification), but the pattern of results replicates. This analysis lends additional confidence to our structural model estimates by indicating that the pattern of relationships was not significantly affected by common method bias.

Mediation analysis. We also conducted mediation analysis to further examine the mediating roles of the psychological resource variables in the effects of the meaning-making variables—strategy worldview and benefits finding—on focal and discretionary change implementation behaviors. In all, we conducted a total of 12 tests, the results of which are summarized in Table 6, by comparing two nested models—the one which we theorized as well as a model with the theorized mediated paths removed. As these two models are nested, a χ^2 difference test can be used to determine whether there is significant mediation, i.e., whether the second model is a significant improvement over the first one. As detailed in Table 6, there is statistically significant mediation by the psychological resource variables in 10 of the 12 paths tested. Only one combination was found to have no mediating effect: unit identification in mediating the effect of strategy worldview onto focal change behaviors. Based on these results, we concluded the

psychological resource variables play mediating roles in the effects of the meaning-making variables onto the change implementation behaviors.

Comparison of the MCAM to Rival Models

One important criterion of a model's success is its comparison to, and performance against, rival models (Bagozzi and Yi 1988). Our proposed model is based on an elaborate theory that hypothesizes a specific nomological network of constructs. Earlier, we discussed two rival models, one based on reverse causation and a second which views baseline perceived change efficacy as the key driver (see Figure 2 for rival models).

Note that, because the rival models are not nested within our proposed model, we cannot directly compare the models using chi-square difference tests. Therefore, we compared the MCAM to rival models using the following criteria: overall fit, percentage of statistically significant parameters within the structural model, and the theoretical interpretation of paths. We considered the reverse causation model first. The overall fit for this rival model was much worse than our proposed model: [$\chi^2(119) = 341.10$, $\chi^2/df = 2.87$, RMSEA = .10, SRMR = .13, NNFI = .77, and CFI = .82]. Figures 3A and 3B provide parameter estimates (unstandardized coefficients with standard error in parentheses) from the LISREL estimation of the reverse causation and perceived change efficacy-driven models, respectively.

INSERT FIGURE 3 ABOUT HERE

75% (or 12 of 16) of MCAM paths were significant, compared to a significance rating of only 43.8% (7 of 16) of the hypothesized paths of the first rival model. Interestingly, collegial communication had a negative effect on perceived change efficacy, but impacted neither unit identification nor affective commitment to change. Similarly, managerial communication

affected only unit identification. Thus, neither managerial nor collegial communication had significant impact on affective commitment to change. Furthermore, benefits finding was affected by only one of the three psychological resources, affective commitment, and had no effect on either change implementation behaviors.

Considering the baseline change efficacy-driven model, we found this model to also have a much worse fit than the MCAM: [$\chi^2(122) = 356.67$, $\chi^2/df = 2.92$, RMSEA = .10, SRMR = .15, NNFI = .77, and CFI = .81]. In this case, and in comparison to MCAMs 75% significant paths, only 53.8% (7 of 13) of hypothesized paths were significant. In examining significant paths, perceived change efficacy was surprisingly found to have a negative impact on affective commitment to change—a result which is hard to explain theoretically. Perceived change efficacy did not have an impact on either benefits finding or strategy worldview, a central hypothesis of this model. Based on these results, we concluded the MCAM compares favorably to both the reverse causation and perceived change efficacy-driven models.

DISCUSSION

The findings from this study support a Meaning-Making Change Adaptation Model (MCAM), in which employees' interpretations of strategic change play an essential role in determining how they ultimately implement such change. Whereas strategic change research has tended to treat employees as obstacles to change (Ford et al. 2008), we show that employees' varied interpretations of change explain key psychological resources—resources that can activate employees to implement change. In doing so, we sought to overcome challenges in the literature presenting a narrowly theorized role for employees implementing strategic change as well as a lack of understanding of how interpretations of change impact the psychological processes that

explain employee engagement with (versus resistance of) strategic change. We also helped integrate sensemaking and meaning-making research and tested the MCAM versus two rival alternative explanations.

Implications for Theory

Strategic change is vital to the long-term viability of business organizations. While scholars have dedicated substantial resources to explain strategic change formulation, they have given surprisingly scant attention to implementation (Hambrick 2004). Perhaps even more surprising, when scholars have examined key questions of strategic change implementation, they have largely done so through the narrow lens of top managers viewing employees as change resisters (Dent and Goldberg 1999; Ford et al. 2008). Subsequently, scholars have failed to more systematically examine the role of employees in implementing change. Even though change is often replete with stress and anxiety (Ashford 1988), employees can nevertheless engage in behaviors helpful to change implementation. By shifting the lens through which we view employees' roles during strategic change away from one of purely resistance to one of adaptability, we shed light on how employees make meaning of strategic change in a way that facilitates their engagement.

Drawing from social psychological research on meaning-making and related sensemaking research, we first unpacked managerial and collegial communication processes and the roles of both in influencing employees' meaning constructions of change. Existing theories have suggested managerial communication provides individuals with details about the strategy, thus satisfying employee information adequacy needs (Tourish et al. 2004; Zhu et al. 2004). Yet, while research has focused on the influence of top managers on employees (e.g., Gioia and

Chittipeddi 1991), we find that both managers *and* colleagues influence employees, albeit in contrasting ways. This suggests scholars should examine not only the way top managers affect strategic change implementation, but also how employees give sense and influence one another, a phenomena scholars have only recently recognized among middle managers (Balogun and Johnson 2005).

Next, we built on the role of sensemaking processes in explaining strategic change (e.g., Gioia and Chittipeddi 1991) through meaning-making. Meaning-making as understanding (strategy worldview) captures scholars' view of strategy implementation as a credible set of meanings around why an organization is changing (Barry and Elmes 1997). In the same way social psychology emphasize the importance of an attributional search to manage adverse life events, we find that employees make attributions to explain major organizational events, such as change. Moreover, benefits finding—another key meaning-making process deemed necessary by social psychologists for coping with major life events—plays an important role in helping employees construct change in ways that facilitate their adaptation. While all changes present both costs and benefits, we found employees imbue them with different meanings that affect their response.

We then unpacked three critical psychological resources: affective commitment to change, unit identification and perceived change efficacy. These resources suggest employees engage with change because of, respectively, a desire for performance, a need for performance and an instilled belief of performance. Collectively, these states allow employees to solve problems and persevere despite difficult circumstances (Hobfoll 2002). This image of meaning-making leading to psychological resources contrasts with existing views of strategic change in which the change process is thought to deplete resources (Fairhurst 1993; Kramer et al. 2004;

Zhu et al. 2004). While change involves costs and hardships, we find that, depending on how they construct meaning of change, employees can be surprisingly adaptive in the face of such challenges.

While we proposed a theoretical framework hypothesizing the association of both meaning-making types with all three psychological resources, the data revealed a more complex picture. Benefits finding was linked with an attachment set of resources (affective commitment and unit identification) and strategy worldview was associated with perceived change efficacy. This suggests the *content* of meaning-making is essential in understanding employees' response to change and contrasts with the tendency of prior research to focus on *how* meaning is made (e.g., Ford and Baucus 1987; George and Jones 2001; Gioia and Chittipeddi 1991; Isabella 1990). One explanation for the differential effects of content dimensions could be that the benefits finding construct produces a valence needed for attachment resources, whereas strategy worldview produces resources around perceived-controllability and therefore self-efficacy (Folkman and Moskowitz 2000).

We also integrated psychological theories of meaning-making with organizational sensemaking theories. While both literatures emphasize the importance of interpretations, psychological theories have largely focused on dispositional antecedents of meaning-making, and sensemaking research has often failed to consider how sensemaking can be adaptive through its content (Maitlis and Sonenshein 2010). Our integration of theories expands sensemaking research by helping specify meaning content formed by individuals during sensemaking and connecting meaning content to important antecedents (communication), mechanisms (psychological resources) and outcomes (change implementation behaviors). Similarly, we contributed to psychological meaning-making research, which has largely theorized the search

for meaning as an individual endeavor. Instead, we showed communications significantly impact how individuals construct meaning. This study also compared the MCAM to two rival models—one based on a reverse causation of the meaning-making and psychological resources variables, and another that strongly featured self-efficacy. We found solid support for the MCAM, suggesting that traditional models of change behavior be supplemented with meaning-making approaches.

Finally, this study addresses the call of scholars to blend ‘hot’ and ‘cold’ aspects of cognition (Fiol and O'Connor 2002; Hodgkinson and Healy 2008). For example, we explained change implementation using broader views of meaning-making (including cognitions like strategy worldview and cognitive/affective constructs such as benefits finding) and psychological resources beyond purely cognitive models of efficacy (including attachment and identification) (Seo, Barrett, and Bartunek 2004). This multi-faceted model of strategic change implementation allowed us to explain not only the focal behaviors (those not resisting change) other scholars address, but also discretionary behaviors pivotal to successful change implementation. The bottom of Figure 1 shows a primarily cognitive pathway explaining change implementation, focusing on the relationship between a strategy worldview and perceived change efficacy, while the top of Figure 1 incorporates a more affective approach for both meaning-making and the psychological resources. Both paths are vital in explaining employee behavior during strategic change implementation, but existing work has heretofore privileged the cognitive path (Poole 2004).

Implications for Managers

The findings from this study suggest that, contra many practitioner beliefs (Dent and Goldberg 1999), employees do not always resist change, and may in fact work to promote change. While existing prescriptions of change emphasize uncertainty reduction (e.g., Schweiger and DeNisi 1991), this study focuses on a specific method to reduce uncertainty. Through the mechanism of communication, managers can facilitate employees' meaning-making of change—their creation of a strategy worldview and initiation of benefits finding—both of which are essential in the broader process employees use to adapt to change. In fact, previous prescriptions to relieve the stress of change may not go far enough; managers need to view employees as assets, not obstacles, in strategic change (Kelman 2005). By facilitating meaning-making, employees can believe they are resourceful enough to implement change.

Limitations and Future Directions

All data for this study came from a single organization. This afforded a deep analysis of one organization suitable to develop and test of our initial theory. But this raises concerns about generalizability. By testing the MCAM in other settings, future research can build on this preliminary support. Additionally, this study used a cross-sectional design with the same methods to measure psychological resources and change implementation behaviors. While using accepted approaches to assess common method bias (Podsakoff, MacKenzie, Lee, and Podsakoff 2003), future research can employ longitudinal designs or supervisor ratings of outcomes to increase confidence in findings. Furthermore, we focused on identifying a broad set of relationships by examining the main effects of key constructs. Future research should examine potential interactions among model components. For example, benefits finding may be an even stronger predictor of psychological resources when employees also have a strategy worldview.

Future research can also examine the interaction between collegial and managerial communication and test more concretely their opposing influences during change. Additionally, different levels of communication skills or the use of sensegiving tactics (Maitlis and Lawrence 2007) may alter the influence of managerial and collegial communications on employees' meaning-making. By pursuing this more social perspective on meaning-making, scholars can help unlock the deeper effects of interactions during change and the hand they play in shaping employees' meaning-making.

Future research should untangle the role of affect versus cognition in explaining change implementation behaviors. While there are potential complications of such an approach (Hodgkinson and Healy 2008), it offers hope of sorting out key relationships, including the relationship between managerial communications (which can affect both employee cognitions and affective states) and core meaning-making dimensions. Also, while the focus of our antecedents was, due to its large role in change efforts, on communication, future research should examine other antecedents, particularly personality which plays an important role in the meaning-making models of social psychology (Affleck and Tennen 1996). Finally, our research focused on the subjective reality of meaning constructions, yet employees are embedded in contexts with material realities, such as access to objective resources and power structures. Future research should investigate how these material realities impact the subjective realities of meaning-making.

Conclusion

We developed and tested theory about how meaning-making allows employees to engage with a strategic change. We explained how communications influence meaning-making and, in turn,

lead to psychological resources helpful for change implementation behaviors. Applying social psychological research of meaning-making of major life events to change and sensemaking research, we provided insights in understanding how frontline employees can come to play a vital role in helping organizations implement major change.

References

- Affleck, G., H. Tennen. 1996. Construing benefits from adversity: Adaptational significance and dispositional underpinnings. *J. Personality* **64**(4) 899-922.
- Allen, N.J., J.P. Meyer. 1990. The measurement and antecedents of affective, continuance and normative commitment to the organization. *J. Occupational Psych.* **63** 1-18.
- Allport, G.W., L. Postman. 1965. *The Psychology of Rumor*. Russell and Russell, New York.
- Anderson, J.C., D.W. Gerbing. 1988. Structural equation modeling in practice: A review and recommended two-step approach. *Psych. Bull.* **103** 411-423.
- Armenakis, A.A., W.B. Fredenberger. 1997. Organizational change readiness practices of business turnaround change agents. *Knowledge Process Management* **4**(3) 143-152.
- Armenakis, A.A., S. G. Harris, K.W. Mossholder. 1993. Creating readiness for organizational change. *Human Relations* **46**(6) 681-704.
- Ashford, S.J. 1988. Individual strategies for coping with stress during organizational transition. *Acad. Management Rev.* **24** 19-36.
- Ashford, S.J., M.A. Barton. 2007. Identity-based issue selling. C. Bartel, S. Blader, A. Wrzesniewski, eds. *Identity and the Modern Organization*. Lawrence Erlbaum, Mahwah, NJ.
- Ashforth, B.E., F. Mael. 1989. Social identity theory and the organization. *Acad. Management Rev.* **14**(1) 20-39.
- Axley, S.R. 1984. Managerial and organizational communication in terms of the conduit metaphor. *Acad. Management Rev.* **9**(3) 428-437.
- Bagozzi, R.P., J.R. Edwards. 1998. A general approach for representing constructs in organizational research. *Organ. Res. Methods* **1**(1) 45-87.
- Bagozzi, R.P., Y. Yi. 1988. On the evaluation of structural equation models. *J. Acad. Marketing Sci.* **16**(1) 74-94.
- Balogun, J., G. Johnson. 2004. Organizational restructuring and middle manager sensemaking. *Acad. Management J.* **47**(4) 523-549.
- Balogun, J., G. Johnson. 2005. From intended strategies to unintended outcomes: The impact of change recipient sensemaking. *Organ. Stud.* **26**(11) 1573-1601.
- Bandalos, D.L., S.J. Finney. 2001. Item parceling issues in structural equation modeling. G.A. Marcoulides, R.E. Schumacker, eds. *New Developments and Techniques in Structural Equation Modeling*. LEA, Mahwah, NJ, 269-296.
- Bandura, A. 1977. Self-efficacy: Toward a unifying theory of behavioral change. *Psych. Rev.* **34**(2) 191-215.
- Bandura, A. 1997. *Self-Efficacy: The Exercise of Control*. W.H. Freeman, New York.

- Barnard, C. 1938. *Functions of the Executive*. Harvard University Press, Cambridge, MA.
- Barreto, M., N. Ellemers. 2003. The effects of being categorised: The interplay between internal and external social identities. *Eur. Rev. Soc. Psych.* **14**(1) 139-170.
- Barry, D., M. Elmes. 1997. Strategy retold: Toward a narrative view of strategic discourse. *Acad. Management Rev.* **22**(2) 429-452.
- Bartunek, J.M., R.M. Krim, R. Necochea, M. Humphries. 1999. Sensemaking, sensegiving, and leadership in strategic organizational development. J.A. Wagner, ed. *Advances in Qualitative Organizational Research*, vol. 2. JAI Press, Stamford, CT.
- Bartunek, J.M., D.M. Rousseau, J. Rudolph, J. DePalma. 2006. On the receiving end: Sensemaking, emotion, and assessments of an organizational change initiated by others. *Acad. Management Rev.* **42**(2) 182-206.
- Baumeister, R.F., K.D. Vohs. 2002. The pursuit of meaningfulness in life. C.R. Snyder, S.J. Lopez, eds. *Handbook of Positive Psychology*. Oxford University Press, Oxford, 608-618.
- Bentler, P.M. 1990. Comparative fit indexes in structural models. *Psych. Bull.* **107**(2) 238-46.
- Berelson, B. 1952. *Content Analysis in Communication Research*. The Free Press Publishers, Glencoe, IL.
- Bower, J.E., M.E. Kemeny, S.E. Taylor, J.L. Fahey. 1998. Cognitive processing, discovery of meaning, CD4 decline, and AIDS-related mortality among bereaved HIV-seropositive men. *J. Consulting Clinical Psych.* **66**(6) 979-986.
- Bridges, W. 1986. Managing organizational transitions. *Organ. Dynam.* **15**(1) 24-33.
- Brown, A.D. 1998. Narrative, politics and legitimacy in an IT implementation *J. Management Stud.* **35**(1) 35-68.
- Brown, A.D., M. Humphreys. 2003. Epic and tragic tales: Making sense of change. *Acad. Management Rev.* **39**(2) 121-144.
- Bruner, J.S. 1990. *Acts of Meaning*. Harvard University Press, Cambridge, MA.
- Chattopadhyay, P., W.H. Glick, G.T. Huber. 2001. Organizational actions in response to threats and opportunities. *Acad. Management J.* **44**(5) 937-955.
- Cheney, G. 1983. The rhetoric of identification and the study of organizational communication. *Quart. J. Speech* **69** 143-158.
- Cheney, G., L. Christensen Thøger, T.E. Zorn Jr., S. Ganesh. 2004. *Organizational Communication in an Age of Globalization*. Waveland Press, Long Grove, IL.
- Chreim, S. 2002. Influencing organizational identification during major change: A communication-based perspective. *Human Relations* **55**(9) 1117-1137.

- Conner, D.R. 1992. *Managing at the Speed of Change: How Resilient Managers Succeed and Prosper Where Others Fail*. Villard Books, New York.
- Corley, K.G., D.A. Gioia. 2004. Identity ambiguity and change in the wake of a corporate spin-off. *Admin. Sci. Quart.* **49** 173-208.
- Cunningham, G.B. 2006. The relationships among commitment to change, coping with change, and turnover intentions. *Eur. J. Work Organ. Psych.* **15**(1) 29-45.
- Davis, C.G., S. Nolen-Hoeksema. 2001. Loss and meaning. How do people make sense of loss? *Amer. Behavioral Scientist* **44**(5) 726-741.
- Davis, C.G., S. Nolen-Hoeksema, J. Larson. 1998. Making sense of loss and benefiting from the experience: Two construals of meaning. *J. Personality Soc. Psych.* **75**(2) 561-574.
- Dent, E.B., S.G. Goldberg. 1999. Challenging "resistance to change". *Acad. Management Rev.* **35**(1) 25-41.
- DeRue, D.S., N. Wellman. 2009. Developing leaders via experience: The role of developmental challenge, learning orientation, and feedback availability. *J. Appl. Psych.* **94**(4) 859-875.
- DiFonzo, N., P. Bordia. 1998. A tale of two corporations: Managing uncertainty during organizational change. *Human Resource Management* **37**(3-4) 295-303.
- Dutton, J.E. 1993. The making of organizational opportunities: An interpretive pathway to organizational change. *Res. Organ. Behavior* **15** 195-226.
- Dutton, J.E., J.M. Dukerich. 1991. Keeping an eye on the mirror: Image and identity in organizational adaptation. *Acad. Management J.* **34**(3) 517-554.
- Dutton, J.E., J.M. Dukerich, C.V. Harquail. 1994. Organizational images and member identification. *Admin. Sci. Quart.* **39** 239-263.
- Dutton, J.E., S.E. Jackson. 1987. Categorizing strategic issues: Links to organizational action. *Acad. Management Rev.* **12**(1) 76-81.
- Dutton, J. E., Roberts, L. M., & Bednar, J. 2001. Pathways for positive identity construction at work: Four types of positive identity and the building of social resources. *Acad. Management Rev.* **35**(2) 265-293.
- Dvir, T., N. Kass, B. Shamir. 2004. The emotional bond: Vision and organizational commitment among high-tech employees. *J. Organ. Change Management* **17**(2) 126-143.
- Eby, L.T., D.M. Adams, J.E.A. Russell, S.H. Gaby. 2000. Perceptions of organizational readiness for change: Factors related to employees' reactions to the implementation of team-based selling. *Human Relations* **53**(3) 419.
- Eisenhardt, K.M. 1989. Building theories from case study research. *Acad. Management Rev.* **14**(4) 532-550.

- Ellemers, N., D. De Gilder, S.A. Haslam. 2004. Motivating individuals and groups at work: A social identity perspective on leadership and group performance. *Acad. Management Rev.* **29**(3) 459-478.
- Ellis, K., P. Shockley-Zalabak. 2001. Trust in top management and immediate supervisor: The relationship to satisfaction, perceived organizational effectiveness, and information receiving. *Comm. Quart.* **49**(4) 382-398.
- Fairhurst, G.T. 1993. Echoes of the vision: When the rest of the organization talks total quality. *Management Comm. Quart.* **6**(4) 331-371.
- Feldman Barrett, L., J.A. Russell. 1999. The structure of current affect: Controversies and emerging consensus. *Current Directions Psych. Sci.* **8**(1) 10-14.
- Fiol, M.C., E.J. O'Connor. 2002. When hot and cold collide in radical change processes: Lessons from community development. *Organ. Sci.* **13** 532-546.
- Folkman, S., J.T. Moskowitz. 2000. Positive affect and the other side of coping. *Amer. Psychologist* **55**(6) 647-654.
- Ford, J.D., D.A. Baucus. 1987. Organizational adaptation to performance downturns: An interpretation-based perspective. *Acad. Management J.* **12**(2) 366-380.
- Ford, J.D., L.W. Ford, A. D'Amelio. 2008. Resistance to change: The rest of the story. *Acad. Management Rev.* **33**(2) 362-377.
- Fornell, C., D.F. Larcker. 1981. Evaluating structural equation models with unobservable variables and measurement error. *J. Marketing Res.* **18**(Feb) 39-50.
- Fredrickson, B.L. 2001. The role of positive emotions in positive psychology. *Amer. Psychologist* **56**(3) 218-226.
- Fredrickson, B.L. 2004. The broaden-and-build theory of positive emotions. *Philos. Trans. Roy. Soc. B: Biol. Sci.* **359**(1449) 1367-1377.
- Fugate, M., A.J. Kinicki, C.L. Scheck. 2002. Coping with an organizational merger over four stages. *Personnel Psych.* **55**(4) 905-928.
- George, J.M. 2000. Emotions and leadership: The role of emotional intelligence. *Human Relations* **53**(8) 1027-1055.
- George, J.M., G.R. Jones. 2001. Towards a process model of individual change in organizations. *Human Relations* **54**(4) 419-444.
- Gillies, J., R.A. Neimeyer. 2006. Loss, grief, and the search for significance: Toward a model of meaning reconstruction in bereavement. *J. Constructivist Psych.* **19**(1) 31-65.
- Ginsberg, A. 1988. Measuring and modelling changes in strategy: Theoretical foundations and empirical directions. *Strategic Management J.* **9** 559-575.

- Gioia, D.A., K. Chittipeddi. 1991. Sensemaking and sensegiving in strategic change initiation. *Strategic Management J.* **12**(6) 433-448.
- Gioia, D.A., J.B. Thomas. 1996. Identity, image, and issue interpretation: Sensemaking during strategic change in academia. *Admin. Sci. Quart.* **41**(3) 370-403.
- Gist, M.E. 1987. Self-efficacy: Implications for organizational behavior and human resource management. *Acad. Management Rev.* **12**(3) 472-485.
- Gist, M.E., T.R. Mitchell. 1992. Self-efficacy: A theoretical analysis of its determinants and malleability. *Acad. Management Rev.* **17** 183-211.
- Glaser, B.G., A.L. Strauss. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Aldine De Gruyter, New York.
- Grewal, R., J.A. Cote, H. Baumgartner. 2004. Multicollinearity and measurement error in structural equation models: Implications for theory testing. *Marketing Sci.* **23**(4) 519-529.
- Hage, J., M. Aiken, C. Marrett. 1971. Organizational structure and communications. *Amer. Sociological Rev.* **36** 860-871.
- Hambrick, D.C. 2004. The disintegration of strategic management: It's time to consolidate our gains. *Strategic Organ.* **2**(1) 91-98.
- Haslam, S.A., R.A. Egghins, K.J. Reynolds. 2003. The ASPIRe model: Actualizing social and personal identity resources to enhance organizational outcomes. *J. Occupational Organ. Psych.* **76**(1) 83-113.
- Herold, D.M., D.B. Fedor, S.D. Caldwell. 2007. Beyond change management: A multilevel investigation of contextual and personal influences on employees' commitment to change. *J. Appl. Psych.* **92**(4) 942-951.
- Herscovitch, L., J.P. Meyer. 2002. Commitment to organizational change: Extension of a three-component model. *J. Appl. Psych.* **87**(3) 464-487.
- Hilton, B.A. 1989. The relationship of uncertainty, control, commitment, and threat of recurrence to coping strategies used by women diagnosed with breast cancer. *J. Behavioral Medicine* **12**(1) 39-54.
- Hinings, C.R., R. Greenwood. 1988. *The Dynamics of Strategic Change*. Basil Blackwell, Oxford.
- Hobfoll, S.E. 1989. Conservation of resources. A new attempt at conceptualizing stress. *Amer. Psychologist* **44**(3) 513-524.
- Hobfoll, S.E. 2002. Social and psychological resources and adaptation. *Rev. General Psych.* **6**(4) 307-324.
- Hodgkinson, G.P., M.P. Healy. 2008. Cognition in organizations. *Annual Rev. Psych.* **59** 387-417.
- Hofer, C.W., D. Schendel. 1978. *Strategy Formulation: Analytical Concepts*. West, St. Paul, MN.

- Isabella, L.A. 1990. Evolving interpretations as change unfolds: How managers construe key organizational events. *Acad. Management J.* **33**(1) 7-41.
- Jackson, S.E., J.E. Dutton. 1988. Discerning threats and opportunities. *Admin. Sci. Quart.* **33** 370-378.
- Janoff-Bulman, R. 1992. *Shattered Assumptions: Towards a New Psychology of Trauma*. Free Press, NY.
- Jim, H.S., S.A. Richardson, D.M. Golden-Kreutz, B.L. Andersen. 2006. Strategies used in coping with a cancer diagnosis predict meaning in life for survivors. *Health Psych.* **25**(6) 753-761.
- Johnson, D.J., W.A. Donohue, C.A. Atkin, S. Johnson. 1994. Differences between formal and informal communication channels. *J. Bus. Comm.* **31**(2) 111-122.
- Jöreskog, K., D. Sörböm. 1999. *LISREL 8: User's Reference Guide*, 2nd ed. Scientific Software International, Chicago.
- Judge, T.A., C.J. Thoresen, V. Pucik, T.M. Welbourne. 1999. Managerial coping with organizational change: A dispositional perspective. *J. Appl. Psych.* **84** 107-122.
- Katz, D., R.L. Kahn. 1978. *The Social Psychology of Organizations*, 2nd ed. John Wiley, New York.
- Kelman, S. 2005. *Unleashing Change: A Study of Organizational Renewal in Government*. Brookings Institution Press, Washington DC.
- Kotter, J.P., L.A. Schlesinger. 1979. Choosing strategies for change. *Harvard Bus. Rev.* **57**(2) 106-114.
- Kramer, M.W., D.S. Dougherty, T.A. Pierce. 2004. Managing uncertainty during a corporate acquisition: A longitudinal study of communication during an airline acquisition. *Human Comm. Res.* **30**(1) 71-101.
- Labianca, G., B. Gray, D.J. Brass. 2000. A grounded model of organizational schema change during empowerment. *Organ. Sci.* **11**(2) 235-257.
- Lazarus, R.S., S. Folkman. 1984. Coping and adaptation. W.D. Gentry, ed. *Handbook of Behavioral Medicine*. Guilford Press, New York.
- Lehman, D.R., C.G. Davis, A. DeLongis, C.B. Wortman, S. Bluck, D.R. Mandel, J.H. Ellard. 1993. Positive and negative life changes following bereavement and their relations to adjustment. *J. Soc. Clinical Psych.* **12**(1) 90-112.
- Lepore, S.J., J.D. Ragan, S. Jones. 2000. Talking facilitates cognitive-emotional processes of adaptation to an acute stressor. *J. Personality Soc. Psych.* **78**(3) 499-508.
- Lewis, L.K., D.R. Seibold. 1998. Reconceptualizing organizational change implementation as a communication problem: A review of literature and research agenda. M.E. Roloff, ed. *Communication Yearbook 21*. Sage, Thousand Oaks, CA, 93-151.

- Little, T.D., W.A. Cunningham, G. Shahar, K.F. Widaman. 2002. To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling*. **9**(2) 151-173.
- Locke, E.A., E. Frederick, C. Lee, P. Bobko. 1984. Effect of self-efficacy, goals, and task strategies on task performance. *J. Appl. Psych.* **69**(2) 241-251.
- Luthans, F., B.J. Avolio, J.B. Avey, S.M. Norman. 2007. Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psych.* **60**(3) 541-572.
- Macey, W.H., B. Schneider. 2008. The meaning of employee engagement. *Indust. Organ. Psych.* **1**(1) 3-30.
- MacKenzie, S.B., P.M. Podsakoff, J.B. Paine. 1999. Do citizenship behaviors matter more for managers than for salespeople? *J. Acad. Marketing Sci.* **27**(4) 396-410.
- Mael, F., B.E. Ashforth. 1992. Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *J. Organ. Behavior* **13**(2) 103-123.
- Maitlis, S., T.B. Lawrence. 2007. Triggers and enablers of sensegiving in organizations. *Acad. Management J.* **50**(1) 57-84.
- Maitlis, S., S. Sonenshein. 2010. Sensemaking in crisis and change: Inspiration and insights from Weick 1988. *J. Management Stud.* **47**(3) 551-580.
- Marsh, H.W., J.R. Balla, K.T. Hau. 1996. An evaluation of incremental fit indices. A clarification of mathematical and empirical properties. G.A. Marcoulides, R.E. Schumacker, eds. *Advanced Structural Equation Modeling: Issues and Techniques*. Erlbaum, Mahwah, NJ, 315-353.
- Martin, A.J., E.S. Jones, V.J. Callan. 2005. The role of psychological climate in facilitating employee adjustment during organizational change. *Eur. J. Work Organ. Psych.* **14**(3) 263-289.
- McGrath, C., F.C. Jordens, K. Montgomery, I.H. Kerridge. 2006. 'Right' way to 'do' illness? Thinking critically about positive thinking. *Internal Medicine J.* **36**(10) 665-668.
- McIntosh, D.N., R.C. Silver, C.B. Wortman. 1993. Religion's role in adjustment to a negative life event: Coping with the loss of a child. *J. Personality Soc. Psych.* **65**(4) 812-821.
- McKay, P.F., D.R. Avery, S. Tonidandel, M.A. Morris, M. Hernandez, M.R. Hebl. 2007. Racial differences in employee retention: Are diversity climate perceptions the key? *Personnel Psych.* **60**(1) 35-62.
- McKinney, M., T. Sexton, M.J. Meyerson. 1999. Validating the efficacy-based change model. *Teaching and Teacher Education.* **15**(5) 471-485.
- Meyer, J.P., N.J. Allen, C.A. Smith. 1993. Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *J. Appl. Psych.* **78**(4) 538-551.

- Meyer, J.P., T. Becker, C. Vandenberghe. 2004. Employee commitment and motivation: A conceptual analysis and integrative model. *J. Appl. Psych.* **89**(1) 991-1007.
- Meyer, J.P., L. Herscovitch. 2001. Commitment in the workplace: Toward a general model. *Human Resource Management Rev.* **11** 299-326.
- Miles, M.B., A.M. Huberman. 1994. *Qualitative Data Analysis: An Expanded Sourcebook*, 2nd ed. Sage, Thousand Oaks, CA.
- Morrison, E.W. 1994. Role definitions and organizational citizenship behavior: The importance of the employee's perspective. *Acad. Management J.* **37**(6) 1543-1567.
- Morrison, E.W., C. Phelps. 1999. Taking Charge at Work: Extrarole Efforts to Initiate Workplace Change. *Acad. of Management J.* **42**(4) 403-419.
- Noble, C.H., M.P. Mokwa. 1999. Implementing marketing strategies: developing and testing a managerial theory. *J. Marketing* **63**(4) 57-73.
- Organ, D.W. 1988. *Organizational Citizenship Behavior: The Good Soldier Syndrome*. Lexington Books, Lexington, MA.
- Parish, J.T., S. Cadwallader, P. Busch. 2008. Want to, need to, ought to: Employee commitment to organizational change. *J. Organ. Change Management* **21**(1) 32.
- Park, C.L. 2005. Religion as a meaning-making framework in coping with life stress. *J. Soc. Issues* **61**(4) 707-729.
- Park, C.L. 2010. Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events. *Psych. Bull.* **136**(2) 257-301.
- Park, C.L., S. Folkman. 1997. Meaning in the context of stress and coping. *Rev. General Psych.* **1**(2) 115-144.
- Pfeffer, J. 1981. Management as symbolic action: The creation and maintenance of organizational paradigms. L.L. Cummings, B.M. Staw, eds. *Research in Organizational Behavior*, vol. 3. JAI Press, Greenwich, CT, 1-52.
- Podsakoff, P.M., S.B. MacKenzie, J.Y. Lee, N.P. Podsakoff. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *J. Appl. Psych.* **88**(5) 879-903.
- Poole, M.S. 2004. Central issues in the study of change and innovation. M.S. Poole, A.H. Van de Ven, eds. *Handbook of Organizational Change and Innovation*. Oxford University Press, Oxford, 3-31.
- Pratt, M.G. 1998. To be or not to be?: Central questions in organizational identification. D.A. Whetten, P.C. Godfrey, eds. *Identity in Organizations: Building Theory through Conversations*. Sage, Thousand Oaks, CA.

- Pratt, M.G. 2000. The good, the bad, and the ambivalent: Managing identification among Amway distributors. *Admin. Sci. Quart.* **45**(3) 456-493.
- Putnam, L.L., R.L. Sorenson. 1982. Equivocal messages in organizations. *Human Comm. Res.* **8**(2) 114-132.
- Quinn, R.W., J.E. Dutton. 2005. Coordination as energy-in-conversation. *Acad. Management Rev.* **30**(1) 36-57.
- Rajagopalan, N., G.M. Spreitzer. 1997. Toward a theory of strategic change: A multi-lens perspective and integrative framework. *Acad. Management Rev.* **22**(1) 48-79.
- Ramani, G., V. Kumar. 2008. Interaction orientation and firm performance. *J. Marketing* **72**(1) 27-45.
- Reger, R.K., L.T. Gustafson, S.M. Demarie, J.V. Mullane. 1994. Reframing the organization: Why implementing total quality is easier said than done. *Acad. Management Rev.* **19**(3) 565-584.
- Rosnow, R.L. 1988. Rumor as communication: A contextual approach. *J. Comm.* **38** 12-28.
- Schwarz, N., G.L. Clore. 1983. Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states. *J. Personality Soc. Psych.* **45** 513-523.
- Schwarzer, R., A. Luszczynska, S. Boehmer, S. Taubert, N. Knoll. 2006. Changes in finding benefit after cancer surgery and the prediction of well-being one year later. *Soc. Sci. Medicine* **63**(6) 1614-1624.
- Schweiger, D.M., A.S. DeNisi. 1991. Communication with employees following a merger: A longitudinal field experiment. *Acad. Management J.* **34**(1) 110-135.
- Self, D., A. Armenakis, M. Schraeder. 2007. Organizational change content, process, and context: A simultaneous analysis of employee reactions. *J. Change Management* **7**(2) 211-229.
- Seo, M.-G., L.F. Barrett, J.M. Bartunek. 2004. The role of affective experience in work motivation. *Acad. Management Rev.* **29**(3) 423-439.
- Shiota, M.N. 2006. Silver linings and candles in the dark: Differences among positive coping strategies in predicting subjective well-being. *Emotion* **6**(2) 335-339.
- Shrout, P.E., J.L. Fleiss. 1979. Intraclass Correlations: Uses in Assessing Rater Reliability. *Psych. Bulletin* **86**(2) 420-428.
- Smeltzer, L.R. 1991. An analysis of strategies for announcing organization-wide change. *Group Organ. Management.* **Mar**(16) 5-24.
- Smollan, K. 2006. Minds, hearts and deeds: Cognitive, affective and behavioural responses to change. *J. Change Management* **6**(2) 143-158.

- Sonenshein, S. 2009. The Emergence of Ethical Issues During Strategic Change. *Organ. Sci.* **20**(1) 223-239.
- Sonenshein, S. 2010. We're Changing or Are We?: Untangling the Role of Progressive, Regressive and Stability Narratives during Strategic Change Implementation. *Acad of Man. J.* **53**(3) 477-512.
- Spreitzer, G.M., S. Sonenshein. 2004. Toward the construct definition of positive deviance. *Amer. Behavioral Sci.* **47**(6) 828-847.
- Stajkovic, A.D. 2006. Development of a core confidence-higher order construct. *J. Appl. Psych.* **91**(6) 1208.
- Staw, B.M., L.E. Sandelands, J.E. Dutton. 1981. Threat-rigidity effects in organizational behavior: A multilevel analysis. *Admin. Sci. Quart.* **26** 501-524.
- Stone, D.N. 1994. Overconfidence in initial self-efficacy judgments: Effects on decision processes and performance. *Organ. Behavior Human Decision Processes.* **59**(3) 452-474.
- Taylor, S.E. 1983. Adjustment to threatening events: A theory of cognitive adaptation. *Amer. Psychologist* **38**(11) 1161-1173.
- Taylor, S.E. 1989. *Positive Illusions: Creative Self-Deception and the Healthy Mind*. Basic Books, New York.
- Taylor, S.E., M.E. Kemeny, G.M. Reed, J.E. Bower, T.L. Gruenewald. 2000. Psychological resources, positive illusions, and health. *Amer. Psychologist* **55**(1) 99-109.
- Tedeschi, R.G., L.G. Calhoun. 1996. The posttraumatic growth inventory: Measuring the positive legacy of trauma. *J. Traumatic Stress* **9**(3) 455-471.
- Tellegen, A., D. Watson, L.A. Clark. 1999. On the dimensional and hierarchical structure of affect. *Psych. Sci.* **10**(4) 297-303.
- Thompson, S.C. 1985. Finding positive meaning in a stressful event and coping. *Basic Appl. Soc. Psych.* **6**(4) 279-295.
- Tompkins, P.K., G. Cheney. 1983. Account analysis of organizations: Decision making and identification. L. Punam, M.E. Pacanowsky, eds. *Communication and Organizations: An Interpretive Approach*. Sage, Thousand Oaks, CA, 123-146.
- Tourish, D., N. Paulsen, E. Hobman, B. Prashant. 2004. The downsides of downsizing: Communication processes and information needs in the aftermath of a workforce reduction strategy. *Management Comm. Quart.* **17**(4) 485-516.
- Tugade, M.M., B.L. Fredrickson. 2004. Resilient individuals use positive emotions to bounce back from negative emotional experiences. *J. Personality Soc. Psych.* **86**(2) 320-333.
- Tugade, M.M., B.L. Fredrickson, L.F. Barrett. 2004. Psychological resilience and positive emotional granularity: Examining the benefits of positive emotions on coping and health. *J. Personality* **72**(6) 1161-1190.

- Vaara, E. 2002. On the discursive construction of success/failure in narratives of post-merger integration. *Organ. Stud.* **23**(2) 211-248.
- Wager, L.W. 1962. Channels of interpersonal and mass communication in an organizational setting: Studying the diffusion of information about a unique organizational change. *Sociological Inquiry* **32** 88-107.
- Wanberg, C.R., J.T. Banas. 2000. Predictors and outcomes of openness to changes in reorganizing workplace. *J. Appl. Psych.* **85**(1) 132-142.
- Weick, K.E. 1995. *Sensemaking in Organizations*. Sage, Thousand Oaks, CA.
- Zhu, Y., S.K. May, L.B. Rosenfeld. 2004. Information adequacy and job satisfaction during merger and acquisition. *Management Comm. Quart.* **18**(2) 241-270.

Figure 1:
Hypothesized Paths in the MCAM

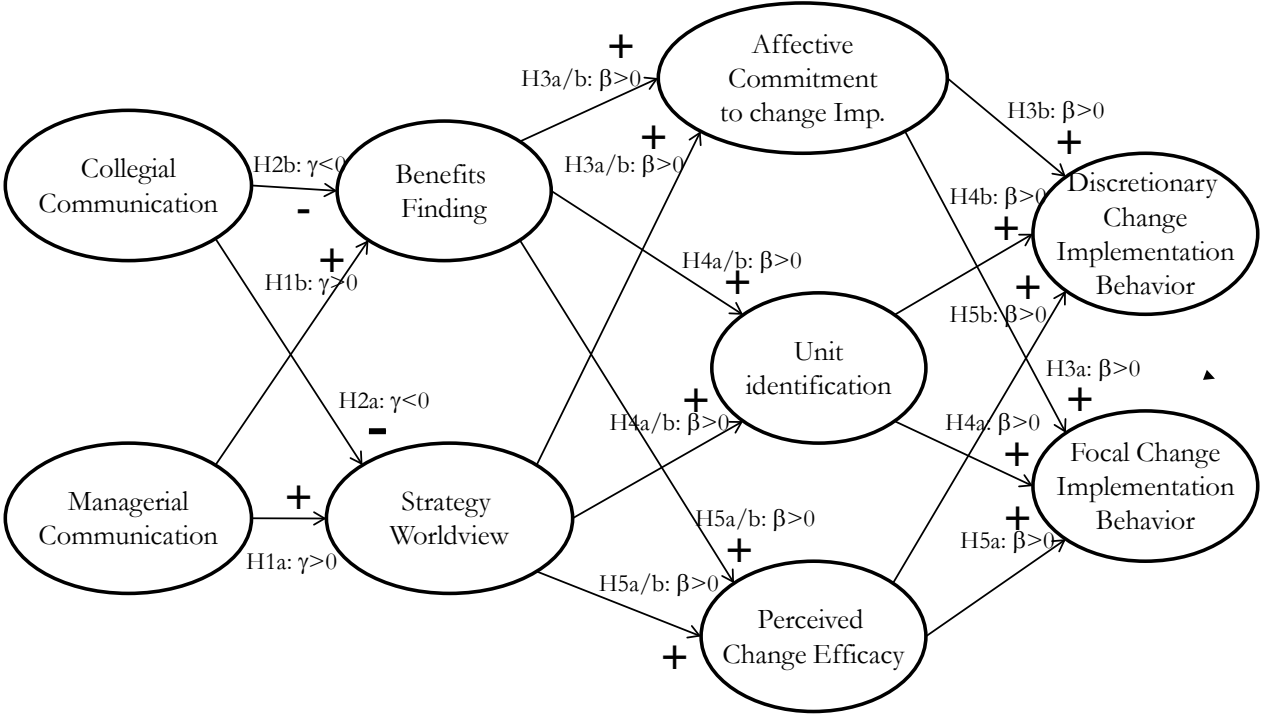
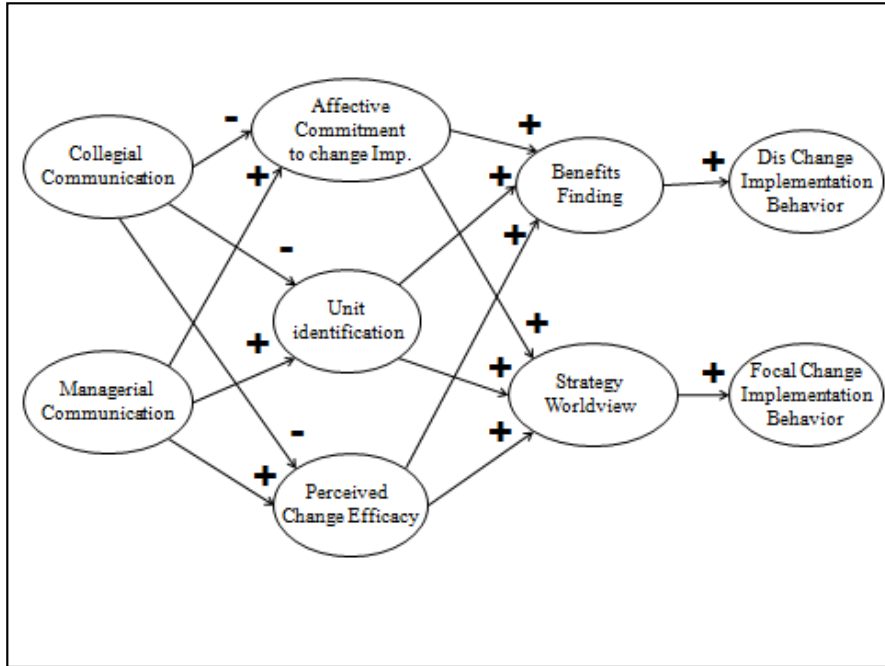


Figure 2:
Hypothesized Paths in the Rival Models

(A) Rival Model 1: Reverse Causation



(B) Rival Model 2: Perceived Change Efficacy

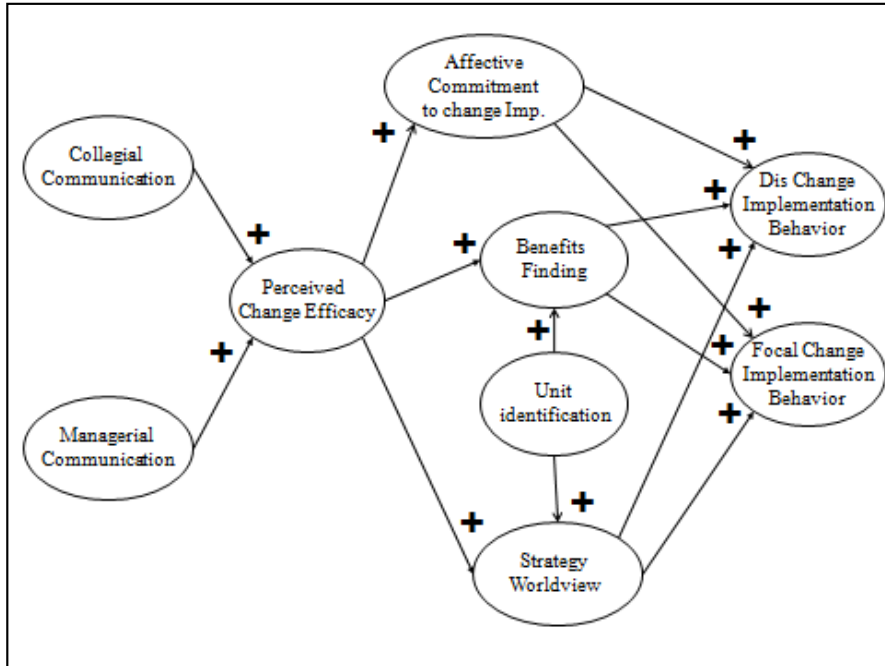
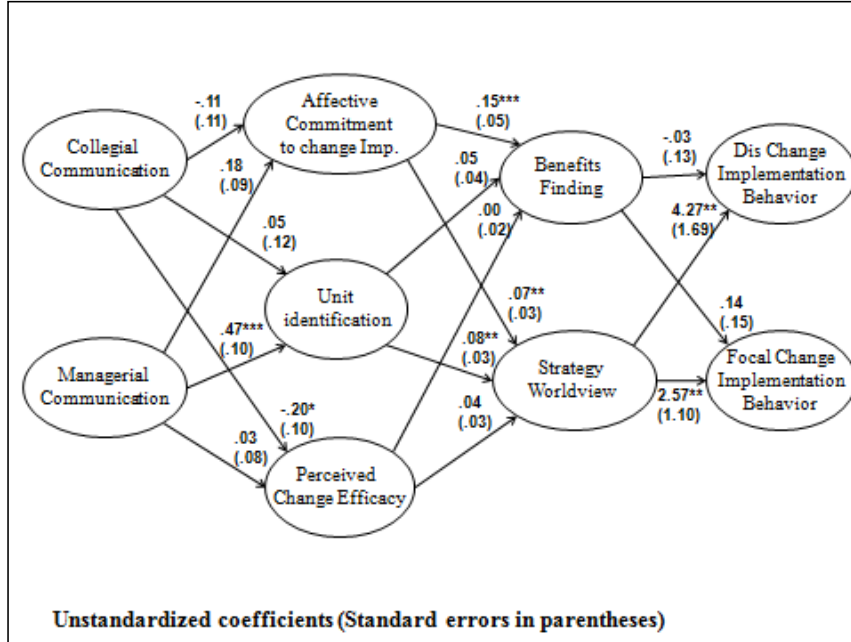


Figure 2:
Parameter Estimates of the Rival Models

(A) Rival Model 1: Reverse Causation



(B) Rival Model 2: Perceived Change Efficacy

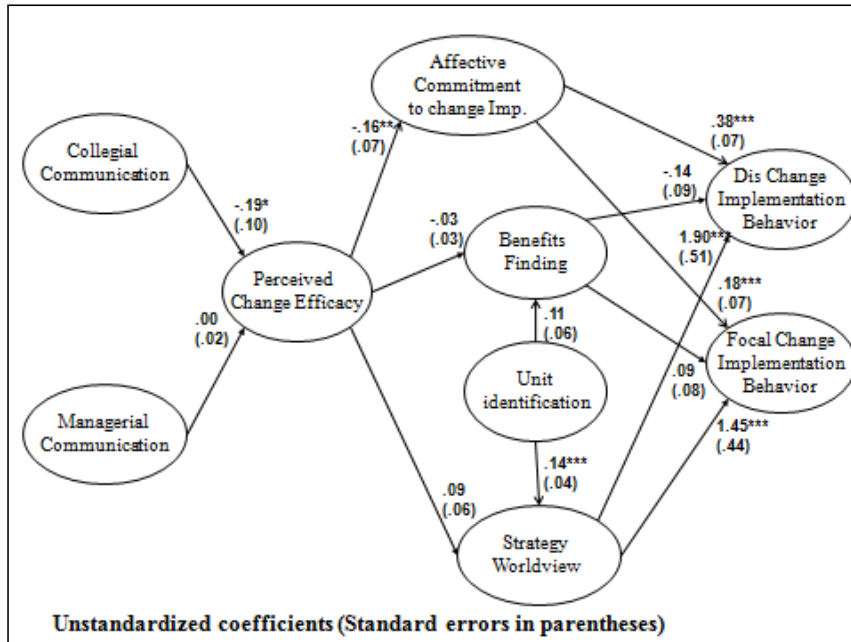


Table 1:
Meaning-Making Dimensions

Understanding (Strategy Worldview Meaning)	Agreement Rate	Illustrative Example
MallCo name is old, tired, outdated	87%	The name MallCo was considered old-fashioned.
BigBoxCo has better name recognition	75%	BigBoxCo is a name that is widely recognized by consumers.
Marketing research supports ideas of Project Convert	97%	Surveys stated that BigBoxCo was . . . better.
Project Convert will increase sales/revenues/profits	85%	Corporate level people feel it would boost sales.
Project Convert will increase marketing efficiencies (e.g., common advertising)	90%	It gets the BigBoxCo name out there on more locations. . . This also helps us with combing marketing for both chains which will help save money.
Retail Inc. is pursuing a single brand strategy	83%	Brand unification seems to be the biggest reason for the conversion of older stores under the MallCo name.
Project Convert will lead to a more expansive product/ product selection	91%	We now carry [specific types of products]; To provide a broader selection of items.
Project Convert will be better for customers	92%	It gives . . . the customers . . . a better idea of the concepts and practices behind the BigBoxCo name.
ICC^a	.70	

Benefits finding (Benefits Finding Meaning)	Agreement Rate	Illustrative Example
Benefit of more customers	84%	The store will hopefully begin to have increased traffic.
Benefit of more sales or revenue	88%	I hope this will increase sales.
Benefit of additional opportunities to work and make more money	90%	Hopefully it will bring more customers, which means more money and more hours for me.
Benefit of more satisfied customers	87%	There should be lots of positive feedback from customers.
Benefit of increased job security	88%	Hopefully it will make the store more money so we can keep my job.
Benefit of more prestigious workplace	96%	To make the store sexier and more inviting.
Downside of lost sales or revenue [Reverse]	98%	There is a possibility of losing business because BigBoxCo is known for their lack of customer service unlike our store which is a strong point of MallCo.
Downside that customers will be disappointed) [Reverse]	86%	Now customers will be offended and angry when we have to tell them that we can't [offer specific service].
Downside of less prestigious place to work [Reverse]	98%	BigBoxCo does not have a good rep[utation].
ICC^a	.76	

Benefits finding (Positive Affective Meaning)	Agreement Rate	Illustrative Example
Energy	90%	It has energized our staff to see the company invest the time and money to convert the store.
Optimism	84%	This will definitely be good for the store.
Confidence	86%	I think it was a good change [as] it certainly made us more known.
ICC^a	.90	

^a: Agreement rate refers to percentage of participants in which two independent coders agreed about a classification. ICC ratings were calculated from comparing the scales created from aggregating each item for each coder. The ICC is the two-way mixed model averaging over two raters approach (Shrout and Fleiss 1979).

Table 2:
Means, Standard Deviations, Reliabilities, and Internal Consistency Statistics for Construct Measures

Construct	Number of Measures	Mean	Std. Dev.	AVE (ρ_{vc}^2)	Composite Reliability (ρ_c)	Highest Shared Variance
Collegial Communication	2	11.55	3.43	.80	.88	.66
Managerial Communication	2	8.09	3.001	.69	.80	.53
Benefits Finding	2	1.3	1.66	.76	.84	.62
Strategy Worldview	2	2.48	1.44	.60	.75	.59
Affective Commitment to Change	6	30.36	7.95	.73	.84	.66
Unit identification	6	32.82	7.05	.62	.76	.52
Perceived Change Efficacy	4	23.80	4.20	.70	.83	.57
Discretionary Change Behaviors	3	16.53	3.56	.74	.85	.65
Focal Change Behaviors	3	17.65	3.49	.80	.89	.65

Table 3:
Measurement Model Results

Construct	Item	Standard Coefficient	t-value
Collegial Communication	CCM1	.89	9.56
	CCM2	.82	8.97
Managerial Communication	MCM1	.82	8.84
	MCM2	.78	8.79
Benefits Finding	BF1	.72	8.17
	BF2	.91	9.86
Strategy Worldview	SWV1	.78	8.35
	SWV2	.71	7.01
Affective Commitment to Change	ACM1	.75	9.72
	ACM2	.95	12.68
Unit Identification	UID1	.97	13.21
	UID2	.77	8.73
Perceived Change Efficacy	PEF1	.80	9.60
	PEF2	.68	7.53
Focal Change Implementation Behaviors	FCB1	.78	11.00
	FCB2	.86	12.54
Discretionary Change Implementation Behaviors	DCB1	.82	11.03
	DCB2	.95	13.19

Note: Fit indices: $\chi^2(99) = 153.04$, $\chi^2/df = 1.545$, Root mean squared error of approximation = .05, Standardized root mean squared residual = .05, Non-normed fit index = .93, Comparative fit index = .95.

Table 4:
Correlation matrix (φ -values) of constructs in theoretical framework for full sample ($N = 159$)

	CCM	MCM	BF	SWV	ACM	UID	PEF	DCB	FCB
CCM	1								
MCM	.39*	1							
BF	.00	.23*	1						
SWV	-.02	.12	.32*	1					
ACM	-.03	.29*	.39*	.08	1				
UID	.08	.41*	.07	.14	.33*	1			
PEF	-.07	.08	.19	.33*	.38*	.61*	1		
DCB	-.11	.34*	.26*	.30*	.60*	.67*	.66*	1	
FCB	-.02	-.09	.26*	.30*	.22*	.31*	.54*	.49*	1

*All coefficients are significant at $\alpha = .05$ level. Note: All correlations are significantly less than 1.00; CCM: Collegial Communication; MCM: Managerial Communication; BF: Benefits finding; SWV: Strategy Worldview, ACM: Affective Commitment to Change Implementation; UID: Unit Identification; PEF: Perceived Change Efficacy; DCB: Discretionary Change Implementation Behaviors; FCB: Focal Change Implementation Behaviors.

Table 5:
Results of the Hypotheses Testing (Standardized Structural Model Coefficients)

Path	Not controlling for common method variance	Controlling for common method variance
CCM → BF	-.20**	-.17**
CCM → SWV	-.24**	-.20**
MCM → BF	.28***	.24**
MCM → SWV	.37***	.30***
BF → ACM	.38***	.27***
BF → UID	.22**	.17*
BF → PEF	.11	.09
SWV → ACM	.02	-.03
SWV → UID	.09	.03
SWV → PEF	.22**	.26**
ACM → DCB	.40***	.46***
ACM → FCB	.20**	.13*
UID → DCB	.49***	.32***
UID → FCB	.14	.05
PEF → DCB	.36***	.34***
PEF → FCB	.39***	.23**

*p < .05; **p < .01; ***p < .001; CCM: Collegial Communication; MCM: Managerial Communication; BF: Benefits finding; SWV: Strategy Worldview, ACM: Affective Commitment to Change Implementation; UID: Unit Identification; PEF: Perceived Change Efficacy; DCB: Discretionary Change Implementation Behaviors; FCB: Focal Change Implementation Behaviors.

Table 6:
Results of Mediation Analysis

Path to be tested	Mediating Variable	Direct Path Without Mediation	Direct Path With Mediation	χ^2 difference test	Support for mediation?
SWV → FCB	ACM	.35*(.18) $\chi^2(118) = 256.35$	.33 (.17) $\chi^2(116) = 251.00$	$\chi_d^2(2) = 5.35$ $p < .07$	Marginally yes
SWV → DCB	ACM	.15**(.07) $\chi^2(118) = 281.52$	.21 (.14) $\chi^2(116) = 252.84$	$\chi_d^2(2) = 28.68$ $p < .001$	Yes
BF → FCB	ACM	.28*(.15) $\chi^2(118) = 275.46$	.20 (.16) $\chi^2(116) = 252.92$	$\chi_d^2(2) = 22.54$ $p < .001$	Yes
BF → DCB	ACM	.17*(.09) $\chi^2(118) = 301.85$	-.06 (.13) $\chi^2(116) = 254.37$	$\chi_d^2(2) = 47.48$ $p < .001$	Yes
SWV → FCB	UID	.35*(.17) $\chi^2(118) = 253.32$	.33 (.17) $\chi^2(116) = 251.00$	$\chi_d^2(2) = 2.32$ $p > .30$	No
SWV → DCB	UID	.29**(.11) $\chi^2(118) = 282.98$	.21 (.14) $\chi^2(116) = 252.84$	$\chi_d^2(2) = 30.14$ $p < .001$	Yes
BF → FCB	UID	.22 (.15) $\chi^2(118) = 259.09$	.20 (.16) $\chi^2(116) = 252.92$	$\chi_d^2(2) = 6.17$ $p < .05$	Yes
BF → DCB	UID	.06 (.13) $\chi^2(118) = 292.13$	-.06 (.13) $\chi^2(116) = 254.37$	$\chi_d^2(2) = 37.76$ $p < .001$	Yes
SWV → FCB	PEF	.46**(.19) $\chi^2(118) = 274.61$	.33 (.17) $\chi^2(116) = 251.00$	$\chi_d^2(2) = 23.61$ $p < .001$	Yes
SWV → DCB	PEF	.31*(.15) $\chi^2(118) = 280.20$	.21 (.14) $\chi^2(116) = 252.84$	$\chi_d^2(2) = 27.36$ $p < .001$	Yes
BF → FCB	PEF	.32**(.10) $\chi^2(118) = 276.56$	.20 (.16) $\chi^2(116) = 252.92$	$\chi_d^2(2) = 23.64$ $p < .001$	Yes
BF → DCB	PEF	.09 (.14) $\chi^2(118) = 278.67$	-.06 (.13) $\chi^2(116) = 254.37$	$\chi_d^2(2) = 24.3$ $p < .001$	Yes

BF: Benefits finding; SWV: Strategy Worldview, ACM: Affective Commitment to Change Implementation; UID: Unit Identification; PEF: Perceived Change Efficacy; DCB: Discretionary Change Implementation Behaviors; FCB: Focal Change Implementation Behaviors.

APPENDIX A—SURVEY ITEMS

COMMUNICATION MEASURES³

Collegial Communication ($\alpha = .67$)

- Informal conversations with store manager(s)/assistant manager(s)
- Informal conversations with retail clerk(s)

Managerial Communication ($\alpha = .78$)

- Reading documents/materials sent from the Home Office
- Technology such as the Intranet

PSYCHOLOGICAL RESOURCE MEASURES⁴

Affective Commitment to Change Implementation ($\alpha = .91$)

- These changes serve an important purpose
- These changes are not necessary (reverse)
- These changes are a good strategy for the company
- Things would be better without the changes (reverse)
- I think that management is making a mistake by introducing these changes (reverse)
- I believe in the value of the changes

Unit Identification ($\alpha = .86$)

- When someone criticizes the store, it feels like a personal insult
- I am very interested in what others think about the store
- When we talk about the store, we usually say "we" rather than "they"
- The store's successes are my successes
- When someone praises the store, it feels like a personal compliment
- If a story in the media criticized the store, we would feel embarrassed

Perceived Change Efficacy ($\alpha = .66$)

- I'm sure we can handle the changes coming
- I will not perform well in my job following the changes (reverse)
- I get nervous that we may not be able to do all that is demanded of me by the changes (reverse)
- Though we may need some training, we am confident we can perform well following the changes

CHANGE IMPLEMENTATION BEHAVIOR MEASURES⁵

Focal Change Behaviors ($\alpha = .89$)

- I comply with any directives regarding the changes
- I accept any modifications to my job because of the changes
- I adjust the way we do my job as required by the changes

Discretionary Change Behaviors ($\alpha = .84$)

- I try to overcome others' resistance to the changes
- I speak positively about the changes to customers
- I tell co-workers about the benefits of the changes

³ How often do/did you use the following methods of communication to get information about your store's conversion to a BigBoxCo Light? Circle the number that corresponds to your best judgment for each type of communication. (Scaled 1 to 7; less than once a month to once every hour or so)

⁴ Please indicate your agreement/disagreement with the following statements related to changes associated with your store's conversion to a BigBoxCo Light. (Scaled 1 to 7; Strongly Disagree to Strongly Agree)

⁵ Please indicate your agreement or disagreement with the following statements about the store you work at. (Scaled 1 to 7; Strongly Disagree to Strongly Agree)