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**CHANGE RECIPIENTS' ATTITUDES TOWARD CHANGE: A REVIEW
STUDY**

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ABSTRACT

This paper reviewed the literature on attitudes toward change. Despite the increased interest into this topic, our review of 64 journal articles (1993-2007) indicates that the field is lacking robust theoretical frameworks. The shortage of meta-theories entailed the current situation where scholars are continuously mixing up meanings, labels and definitions of related but basically different constructs. To avoid further contributing to this conceptual fuzziness, we advocate that the boundaries of research into people's attitudes toward change should be clearly delineated. Therefore, we highlight how the umbrella concept 'attitudes toward change,' is positioned in the OC literature. This is done by looking at four major theoretical perspectives on change: (1) the nature of change, (2) the level of change, (3) the underlying view of human function, and (4) the research perspective. By means of facet analysis we analyzed nine attitude related concepts along the four theoretical lenses used to describe the boundaries of *attitudes toward change*. We hope that the observations and conclusions drawn from this study will incite other scholars to do research that deals with the shortcomings that were identified.

POSITIONING CHANGE RECIPIENTS' ATTITUDES TOWARD CHANGE IN THE ORGANIZATIONAL CHANGE LITERATURE

The study of change is one of the major topics in management science. Basically, research into organizational change has been grappling with two themes: (1) exploring the antecedents and consequences of change; (2) and the way how organizational change develops, grows and terminates over time (Van de Ven & Huber, 1990). Pertaining to the first theme several management best sellers (e.g. Beer & Nohria, 2000; Kotter, 1995; Goldratt, 1999) addressed two topics: (1) ways to persuade people to buy into changes; and (2) and the manageability of people's attitudes toward change. Despite the surging interest in people's attitudes toward change, the field is characterized as lacking robust conceptual frameworks, is based on a few bits of homey advice being reiterated with proof or disproof, and includes a limited number of inquiries with sturdy empirical observations.

This lack of strong theorizing contributed to the current conceptual muddle where meanings, labels and definitions of constructs referring to attitudes toward change (i.e., readiness for change, resistance to change, cynicism about organizational change, commitment to change, openness to change, acceptance of change, coping with change, adjustment to change) are used interchangeably. Such conceptual ambiguity prevents clear and transparent communication about change, and weighs against the further maturation of the field. Therefore, the purpose of this paper is to create more clarity in this conceptual minefield by offering a framework that positions the concept in the broader change management literature.

ATTITUDES TOWARD CHANGE

According to Elizur and Guttman (1976), attitudes toward change in general consist of a person's cognitions about change, affective reactions to change, and behavioral tendencies toward change. Furthermore, the concept is described as a continuum ranging from strong positive (e.g., readiness for change, openness to change) to strong negative attitudes (e.g., cynicism about organizational change, resistance to change). Despite the early interest in the topic among practitioners, it was not until the late 1940's that the negative attitude *resistance to change* drew the attention of OC scholars (Coch & French, 1948).

About a decade later the more positive attitude *readiness for change* was introduced (Jacobson, 1957), however we had to wait until the beginning of the 1990's for a comprehensive and theoretically sound conceptualization of the concept (Armenakis, Harris, & Mossholder, 1993). A review of this literature indicated two things; (1) the number of studies published before the 1990's focusing on resistance to change clearly outweighed the number of inquiries that examined readiness for change; and (2) in addition to both concepts, several other attitude related constructs have entered the stage (e.g. cynicism about organizational change, openness to change, coping with change, acceptance of change, commitment to change, and adjustment to change).

THE PRESENT REVIEW

To make the present effort manageable, a couple of decisions were made. The first one dealt with the literature base to be surveyed. Given the breadth of research since the Coch and French (1948) inquiry into resistance to change, we primarily considered recently published theory and research into attitudes toward change (1993 – 2007). Literally hundreds of models and definitions of attitudes toward change have appeared in the literature since the Coch and French study. Many overlap and include similar features, but very few are as comprehensive and founded in theory as the seminal work by Armenakis et al. (1993). This work encouraged many other OC and OB scholars to unravel the mysteries of change recipients' reactions toward organizational change. The strong theoretical undergirding of the proposed framework was crucial, as the field's knowledge or conventional wisdom about employees' attitudes toward change had not been significantly altered since the groundbreaking work by Coch and French (Dent & Goldberg, 1999).

A second decision includes the choice of framework used to explore research into people's attitudes toward change. We elected to focus on four theoretical lenses that represent four dualities in the organizational change literature.

These four perspectives are: (1) the nature of change (i.e., planned or episodic change versus emergent or continuous change) (Porras & Silvers, 1991; Weick & Quinn, 1999), (2) the level of change (i.e., person-centered or organization-centered) (Aktouf, 1992; Bray, 1994; Pettigrew, Woodman, & Cameron, 2001), (3) the underlying view of human function (i.e., positive psychology or negative psychology) (Abrahamson, 2004a, 2004b; Seligman & Csikszentmihalyi, 2000), and (4) the research method (i.e., variance or process methods) (Mohr, 1982; Van de Ven & Poole, 2005). By means of content analysis (McGrath, 1968) nine change attitude related concepts were analyzed: 1) attitude toward change, 2) readiness for change, 3) resistance to change, 4) cynicism about organizational change, 5) commitment to change, 6) openness to change, 7) acceptance of change, 8) coping with change, and 9) adjustment to change. Before discussing the results of this analysis, the paper first describes the four dualities used to position the key concept attitudes toward change in the broader change literature.

FOUR THEORETICAL LENSES

Nature of change

One of the most important dualities that arise from change research involves the nature of change or how change emerges and evolves over time (Porras & Silvers, 1991). Weick and Quinn (1999) distinguish between change that is episodic, planned discontinuous and intermittent, and change that is continuous, emergent, evolving and incremental. Episodic change or planned change is an intentional intervention method for bringing change to an organization and is best characterized as deliberate, purposeful and systemic (Lippitt, Watson, & Westley, 1958; Tenkasi & Chesmore, 2003). Continuous or emergent change, however, is used to group together organizational changes that tend to be ongoing, evolving and cumulative. To put it differently, continuous change is emergent—in contrast with episodic change, which is the product of deliberate action (Orlikowski, 1996).

In terms of motors of change, planned change reflects the teleological approach, whereas emergent change invokes an evolutionary approach (Van de Ven & Poole, 1995).

According to the teleological approach, organizations are driven by a purpose or goal, and their main motivation is to accomplish this goal. Organizations are viewed as purposeful and adaptive, and change agents have a key role in planning and implementing the change process (Kezar, 2001). The teleological approach incorporates all theories of organizational development and planned change (Golembiewski, 1989). Most of these models follow a typical programmatic step-by-step sequence.

In contrast to planned change, evolutionary change is described as a bundle of incremental adjustments or improvements occurring in one part of the system (Brown & Eisenhardt, 1998).

Level of change

In their review, Quinn, Kahn and Mandl (1994) posited that organizational change has evolved from four theoretical perspectives: organizational development, strategic choice, resource dependence-institutional theory, and population ecology. Both organizational development and strategic choice are theories that refer to the teleological paradigm, and resource dependence-institutional theory and population ecology are examples of the evolutionary change paradigm. Although these theories have significantly contributed to the field, they all consider change at the organizational level. As a result, research dealing with organizational change has been largely dominated by a macro- or systems-oriented focus (Judge, Thoresen, Pucik, & Welbourne, 1999). This macro-oriented focus often incorporates only one context level of change (i.e., the organization), whereas in reality the change context resides at multiple levels (individual, team, organization, industry level, etc.). As change cascades down through the organization, it is believed to hold different implications at different levels. Furthermore, at each level, change is perceived differently (Caldwell, Herold, & Fedor, 2004). In response to this tendency to analyze changes at the organizational level alone, several researchers have called for a more micro-level or person-centered focus in the analysis of change (Bray, 1994; Judge et al., 1999).

Underlying view on human function

The field of OC and organizational sciences is bifurcated into two streams: (1) the negative psychology view and (2) positive psychology view. The negative psychology perspective emphasizes on overcoming problems, weaknesses and threats, whereas the positive psychology approach examines the factors that enable, motivate, and change along with the positive phenomena – including how they are facilitated, why they work, how they can be identified, and how researchers and managers can capitalize on them (Cameron, Dutton, & Quinn, 2003; Luthans, 2002). Although the importance of positive constructs has been recognized from the beginning of organization development and change research (Abrahamson, 2004a, b; Avey, Wernsing, & Luthans, 2008; Cameron, 2008), only recently has the positive approach received focused attention as is shown by a special issue that appeared in the *Journal of Applied Behavioral Science* (2008).

Research method

Research into change distinguishes two research strategies: (1) the variance strategy and (2) the process strategy (Mohr, 1982; Poole, Van de Ven, Dooley, & Holmes, 2000). The variance strategy concentrates on variables that represent the important aspects or attributes of the subject under study. Variance research supports predictive models capable of explaining the variation in such outcome measures as resistance to change, project success, and user satisfaction. Using the variance approach, the researcher identifies the independent variables with the implicit purpose of establishing the conditions necessary to bring about change. A major assumption underlying the variance method approach is that outcomes will occur invariably when necessary and sufficient conditions are present. Furthermore, variance approaches tend to focus on the antecedents and consequences of organizational change and rely mainly on survey-based and experimental research designs that are grounded in the statistical general linear model (Van de Ven & Poole, 2005).

Whereas the variance strategy is clearly the most effective research approach for studies that conceptualize change as an observed difference over time with regard to a selected set of variables, the process strategy is more appropriate for research that conceives of change as a narrative description of a sequence of events that unfold over time.

Rather than ‘explaining variation’ in outcome variables by identifying significant predictor variables, process research seeks to explain outcome states as the result of a preceding sequence of actions (Mohr, 1982; Saberwhal & Robey, 1995; Van de Ven & Poole, 2005). While variance strategies focus on cause-effect relationships, process strategies examine the sequence of events over time as change unfolds within an organizational entity. Since process methodology conceptualizes change as a progression of events, stages, cycles, or states in the development or growth of an organization, the time-ordering of events is critical. Basically, process methods are more complex than variance explanations, as they account for temporal connections among events, different time scales in the same process, and the dynamic nature of processes (Van de Ven & Poole, 2005). As a result, process research designs have a more eclectic character.

METHOD

Facet analysis

Facet analysis is a useful method for integrating and comparing research information on a specific theme. By using this method, one can systematically classify and describe the concepts that have been used to represent ‘attitudes toward change’ and identify trends and highlight areas where potential improvements can be made. For example, Holt, Armenakis, Harris and Feild (2007) used facet analysis to review and compare instruments that measure readiness for change.

For this inquiry, we distinguished seven facets according to which the concepts around attitudes toward change were analyzed. These seven facets are indicators of the four lenses that help us to position research on attitudes toward change in the change literature. The facet *type of change* refers to the character of the change under which the attitude emerges. The type of change distinguishes between top-down driven, planned and transformational change against bottom-up driven, emergent and incremental change. Basically this facet encapsulates the *nature of change*. Two facets *conceptual level* and *level of analysis* provide insight into the *level of change*. In this paper the level of analysis describes the level at which the data are analyzed, whereas the conceptual level involves the level at which generalizations are made.

The facet *view on human function* refers to the discussion regarding whether attitudes toward change are examined from a negative or positive psychology perspective. To conclude, the cluster of facets that encompasses measurement (i.e., *measurement focus, measurement type, measurement perspective*) is an important indicator for determining the type of *research method* adopted by studies. First, *measurement focus* refers to the place of the ‘attitude toward change’ in the cause-effect chain. In other words, the key concept of interest is examined as a dependent, independent or mediator/moderator variable. Second, *measurement type* involves the measurement approach used to examine ‘attitude toward change’. Were the data collected by survey questionnaires and experimental designs (a quantitative approach), or by means of interviews, case studies, or other qualitative research strategies? Finally, the term *measurement perspective* describes the action role in the change process taken on by the participants who provide the data on attitude toward change. These seven facets and their elements are displayed in Figure 1.

Insert Figure 1 About Here

Selection criteria for facet analysis

Because of the abundance of popular and academic publications since the Coch and French (1948) inquiry into employees’ attitudes toward change, we formulated the following criteria for the selection of manuscripts to be included in the facet analysis. Only studies published after 1993 were incorporated because our interest is in the field’s evolution since the contribution of Armenakis et al. (1993).

The second criterion was that the manuscripts be academic and peer-reviewed journal contributions. Papers were to be theoretical/conceptual or empirical in nature. Periodicals, book chapters, book reviews, editorial notes, short notes, and brief research updates were omitted from the analysis. These publication outlets were excluded from our selection because these manuscripts often undergo a less rigorous review process compared to academic journal publications.

To put it differently, in peer-reviewed journals, a review board of experts assesses whether submissions can be considered for publication on the basis of their scientific quality and value added to the practice.

For example, according to this criterion, we omitted an article by Philip Atkinson in *Management Services* (periodical) on ‘Managing resistance to change’ and a short research update by Karen Jansen entitled ‘The emerging dynamics of change: resistance, readiness and momentum’ in *Human Resource Planning*, as well as a book chapter by Danny Holt et al. (2007) that appeared in ‘Research in Organizational Change and Development’. These are just a few of the sources that were not included in the facet analysis. Although this criterion could be seen as responsible for creating a possible selection bias, it should be noted that publications in scholarly journals are probably the best documented source available for determining how our knowledge of change recipients’ attitudes toward change has evolved.

The third criterion omitted all papers that did not involve organizational change. For instance, all papers on readiness for change and resistance to change embedded in the trans-theoretical model of change (DiClemente & Prochaska, 1998) were disqualified, as they reflected changes in health behavior instead of attitudes toward organizational change.

The fourth and final criterion is that a paper was only included when at least one of the following phrases was present in the title of the manuscript: readiness for change, resistance to change, cynicism about organizational change, openness to change, coping with change, acceptance of change, commitment to change, adjustment to change, and attitude toward change. We limited our search query to title hits in order to ensure that attitude toward change was the central theme of the contribution.

In total, 64 articles published between 1993 and 2007 (see Appendix) were included for facet analysis. About half of them dealt with readiness for change (n = 21) and resistance to change (n = 15). Cynicism about organizational change (n = 9) and commitment to change (n = 7) also received increased interest from the OC research community. Finally, a limited number of papers were devoted to concepts like openness to change (n = 4), attitude toward change (n = 4), coping with change (n = 2), adjustment to change (n = 3), and acceptance of change (n = 2).

The number of theoretical and conceptual papers (n = 13) in this sample was limited. Throughout the following paragraphs, we discuss in detail the major findings of the facet analysis.

RESULTS AND DISCUSSION

A planned change perspective

Based upon the analyzed studies, we found that 83 per cent of the cases involved top-down driven or planned change (39/47). A separate analysis of the nine constructs entailed a similar pattern, with planned change as the prevailing type of change in studies on readiness for change (10/14), resistance to change (7/8), commitment to change (6/6), openness to change (4/5), acceptance of change (2/2), coping with change (2/2), adjustment to change (3/3), and cynicism about organizational change (4/6). These findings suggest that research on employees' attitudes toward change is heavily dominated by the planned change perspective. Also, this focus on planned intentional change is consonant with many popular change models (e.g., Kotter, 1995; Lewin, 1951) suggesting that employees' feelings, intentions and thoughts about change (i.e. attitude) should be determined before one can move further with the planning and implementation of change.

Insert Table 1 About Here

Within this planned change tradition, Lewin's three stage model of change – entailing the stages unfreeze, change, and refreeze – has been a popular recipe for many organizational development and change practices. The first phase of unfreezing has drawn special attention as it refers to the attitude of members regarding change and is the stage at which motivation and readiness for change is created. More recently, Armenakis, Harris and Feild (1999) introduced a similar model in which the first stage aims at ensuring readiness followed by phases of adaptation and institutionalization. In short, for some time, research has posited that employees' positive attitudes toward a change are a “necessary, initial condition for successful planned change” (Miller, Johnson, & Grau, 1994, p. 60).

Although the experience has taught us that most change management initiatives are top-down or pushed through by management, it has been suggested that those undertaking planned change programs (i.e. change strategists and change recipients) may learn much from those undergoing change (i.e. change recipients) (Clegg & Walsh, 2004). Therefore the topic of how change emerges incrementally and unintentionally from within the organization is pivotal to research on attitudes toward change (Pettigrew, Woodman, & Cameron, 2001). For instance, Eby et al. (2000) and By (2007) referred to chaos and complexity theories as frameworks of “unintentional, continuous and growing from within change thinking” that can be applied to organizational change readiness. According to these theories, the context consists of an infinite number of systems and sub-systems that are in a constant state of flux. Organizations operating within such an environment lack power to influence the future course of events. Since it is only through this state of constant flux that success is realized, organizations need to be continuously change ready and not only focus on planning positive attitudes towards specific changes.

Rooted in single level, person-centered model thinking

Since research into people’s attitudes is rooted in psychology, it is not surprising that the majority of studies adopted a micro-level or person-centered level of analysis (85 per cent 47/55). A separate analysis of each of the nine concepts indicated that the individual level was the prevailing level of analysis. In addition, the conceptual level of these concepts was also individual, with exception of readiness for change, which has been frequently conceived of at both the person-centered and organizational levels. Another interesting finding is that the level of analysis did not always match the conceptual level. This was the case for some studies into organizational readiness for change. Although the conceptual level was organizational, data in several inquiries were analyzed at the individual level (e.g., Fuller et al., 2007; Ingersoll, Kirsch, Merk, & Lightfoot, 2000; Rampazzo, De Angeli, Serpelloni, Simpson, & Flynn, 2006; Weeks, Roberts, Chonko, Lawrence, & Jones, 2004). In other words, if the analyst is not careful in the interpretation of the results, (s)he may commit the fallacy of the wrong level, which consists of analyzing the data at one level, and drawing conclusions at another level (i.e., ecological and atomistic fallacies).

Within the person-centered emphasis on change, there is a growing awareness among OC scholars about the importance of the cognitive perspective in furthering our understanding of the change process (Bartunek, Rousseau, Rudolph, & DePalma, 2006; Ford, Ford, & D'Amelio, 2008; George & Jones, 2001; Lau & Woodman, 1995).

This cognitive approach is interested in processes such as perception, interpretation and examines mental models. In essence, the cognitive perspective describes a difference between new and old settings. This difference requires interpretation by the individual, which, in turn shapes his/her attitude toward change (Weber & Manning, 2001). Despite the many new interesting insights that the cognitive perspective brings to the study of organizational change and attitudes toward change, it has been guilty of neglecting higher order contextual mechanisms. However, like many other organizational phenomena, we believe that readiness is a multilevel construct that comes from the hierarchical nature of organizations themselves (Hitt, Beamish, Jackson, & Mathieu, 2007), and therefore should account for factors that reside at those different levels.

In conclusion, an important observation culled from this review is that the majority of studies on people's attitudes toward change are rooted in single micro-level thinking. This finding is in accord with management research in general, which has tended to examine organizational phenomena at single levels of analysis (Hitt et al., 2007). Although this single level, person-centered thinking entailed valuable insights, it has ignored contextual factors that may be meaningful in explaining people's attitudes toward change (Klein & Kozlowski, 2000). In a recent theoretical paper Ford et al. (2008) advocated that the attitude resistance to change should be conceived of as a socially constructed phenomenon shaped by its context. Change recipients make sense of change and develop a certain attitude toward change not only through a process of individual reflection but also through collective sense-making that comes from a series of interactions with colleagues and change agents. To neglect this contextual level in the conceptualization and development of research would lead to incomplete and misdirected modeling (Klein & Kozlowski, 2000). Therefore, we propose that research on attitudes toward change will benefit from adopting a multilevel perspective.

Whatever the number of levels or the combination of levels of context brought into an analysis are, one of the potential payoffs from a multilevel approach lays in the kinds of new questions about attitudes toward change that can be posed and answered. For example, in a study by Herold, Fedor and Caldwell (2007) it was examined, by means of a multilevel design, to which extent attitudes toward organizational changes were affected by contextual (other changes going on) and personal (self-efficacy) factors.

Need for a stronger positive psychology focus?

Based upon a content analysis of definitions and construct labeling, we identified readiness for change (e.g., Armenakis et al. 1993; Holt et al., 2007, Holt, Armenakis, Feild, & Harris, 2007), openness to change (e.g., Datta, Rajagopalan, & Zhang, 2003; Devos, Buelens, & Bouckennooghe, 2007; Miller, Johnson, & Grau, 1994; Wanberg & Banas, 2000), commitment to change (e.g., Chen & Wang, 2007; Coetsee, 1999; Cunningham, 2006; Fedor, Caldwell, & Herold, 2006; Herold, Fedor, & Caldwell, 2007; Hersovitch & Meyer, 2002; Meyer, Srinivas, Lal, & Topolnytsky, 2007), adjustment to change (e.g., Callan et al., 2007; Martin, Jones, & Callan, 2005; Jimmieson, Terry, & Callan, 2004), and acceptance of change (e.g., Iverson, 1996; Kavanagh, & Ashkanasy, 2006) as positive attitudes toward change. In addition, we identified resistance to change (e.g., Ford et al., 2008; Msweli-Mbanga & Potwana, 2006; Nord & Jermier, 1999; Piderit, 2000), cynicism about organizational change (e.g., Reichers, Wanous, Austin 1997; Wanous, Reichers, & Austin, 2000), and coping with change (e.g., Judge et al., 1999; Cunningham, 2006) as attitudes rooted in the negative psychology tradition. Only a few studies published between 1993 and 2007 referred to the term 'attitude towards change' encapsulating both the negative and positive psychology view (Vakola & Nikolaou, 2005, Vakola, Tsaousis, & Nikolaou, 2004; Yousef, 2000a, b).

An important ascertainment regarding the above constructs is the paucity of conceptual and theoretical work conducted, except for the positive attitude readiness for change and the negative attitude resistance to change (Ford et al., 2008). Despite the broad literature available on both attitudes, the literature lacks consensus about their conceptual content. Several salient queries have remained unanswered.

For instance, some of these questions are: should both attitudes be conceived as unifacted or multifaceted concepts (Authors, 2009), or by how many facets should these constructs be represented (Piderit, 2000), and finally should these attitudes have a more generic or change specific character?

As for the other constructs (i.e., coping with change, adjustment to change, cynicism about organizational change, commitment to change, openness to change, and acceptance to change), scholars should concentrate on doing more conceptual work by clearly defining and embedding these concepts into rigorous theoretical frameworks. Secondly they should explore how these similar but also distinct constructs are related to one another.

To our knowledge there are few studies that have made such attempts (e.g., Cunningham, 2006; Elias, 2009; Stanley et al., 2005). For example in a first study that was included in our analysis, Stanley et al. (2005) examined how change-specific cynicism accounted for variance in employees' intention to resist change, whereas in another study by Cunningham (2006) the relationship between commitment to change and coping with change was studied.

Despite the increased interest for a positive psychology approach over the past two decades (Journal of Applied Behavioral Science, 2008), it is clear that before the 90's that the majority of research on attitudes towards change originated from a negative psychology view. The idea that change recipients automatically resist change and that one should overcome cynicism about organizational change has grown out of a change agent centric view (Dent & Goldberg, 1999; Ford et al., 2008; King & Anderson, 1995). This view presumes that negative attitudes are an accurate report by unbiased observers (i.e. change agents) of an objective reality (i.e. resistance by change recipients). Furthermore, this negative psychology approach has been partly responsible for the limited advancement research has made over the past fifty years. Therefore, we advocate an alternative avenue of research with a stronger focus on positive attitudes (i.e. readiness for change, commitment to change, openness to change, etc.). Despite the need for a stronger emphasis on positive attitudes, we also contend that for the advancement of the field it is crucial to keep in mind that both negative and positive elements may be functional for the perpetuation of positive change (Bagozzi, 2003). Basically, we warn for evolutions where one approach tends to dominate the alternative approach, because then the field won't gain any longer from the debates that may emerge from the contrasting perspectives.

What we are suggesting is that future scholarship into people's attitudes toward change would benefit significantly from studies that look at the relationships between concepts that are embedded in the positive and negative psychology approach.

The variance strategy as prevailing research method

Having discussed the essence of attitudes toward change in terms of nature of change, level of change and views on human function, the final step is identifying how these attitudes can be positioned in terms of measurement type, measurement focus, and measurement perspective.

From the facet analysis, we learn that most studies that refer to attitudes toward change have adopted a variance research strategy (Mohr, 1982; Van de Ven & Poole, 2005). The variance method approach (Mohr, 1982) is well suited for research questions examining the causes or correlates of change in organizations. Because variance research implicitly strives to establish the conditions necessary to bring about an outcome, this type of research on change employs experimental and survey research designs grounded in the general linear model. Many papers included in the review adopted this linear cause-effect thinking and tended to emphasize the antecedents and consequences of attitudes toward change. In consequence, it is not surprising that approximately 90 per cent of the empirical papers relied on quantitative data collection methods (52/58). Furthermore, we noted that the majority of those studies used cross-sectional designs, which implies that very few provided evidence for robust causality testing. However, a few exceptions adopted longitudinal designs, and therefore are much better at testing cause-effect relationships (e.g. Bommer et al., 2005; Cunningham et al., 2002; Jimmieson, et al., 2004; Jones et al., 2005; Kavanagh & Ashkanasy, 2006, Meyer et al., 2007; Reichers et al., 1997).

Research into 'attitudes toward change' is not only embedded in the quantitative research tradition, another interesting observation is that the majority of data have been acquired from change recipients (70 per cent, 38/54). Only a limited number of studies collected data from change agents (17 per cent, 9/54) or change strategists (13 per cent, 7/54).

Also interesting to know is that some inquiries collected simultaneously data from different groups of stakeholders (e.g., Armenakis & Harris, 2002; By, 2007; Connell & Waring, 2002, del Val & Fuentes, 2003; Meyer et al., 2007; Oreg, 2006). Based upon that finding, we can only call for more research that fosters a multi-source data collection method, because not only it provides insight into how the sensemaking and perception may differ between stakeholder groups, but also because it contributes to the external validity of the study's findings, and can be a useful way to reduce the common-method bias threat.

Another important finding is that the bulk of studies included for this facet analysis viewed attitude toward change as a dependent variable (64 per cent or 36/56). Thus, many OC scholars attempted to unravel the underlying drivers and determinants of resistance to change (8/9), cynicism about organizational change (7/10), acceptance of change (2/2), adjustment to change (3/3), and attitude toward change (4/4). All these antecedents of attitudes toward change can be classified under three major categories: (1) what's the work environment under which change occurs (i.e., context), (2) how is the change being dealt with (i.e., process), and (3) what type of change does it involve (i.e. content)?

This dominant emphasis on the variance research strategy is also consonant with 'the planned change research tradition', a view that reflects the teleological approach and relies heavily on control and complete mastery over the environment, objective measurement, data analysis, and careful crafting of the change process (Kezar, 2001; Golembiewski & Billingsley, 1980). That of course also contributes to the explanation why the variance method or postpositivist research perspective has been so popular in research on attitudes toward change.

To conclude, we believe a future challenge will be to overcome the differences in the assumptions of researchers who adhere to traditional quantitative methodologies, as opposed to those who apply nontraditional qualitative methodologies (Pettigrew et al., 2001). At the root of this dilemma is the clash between positivist (i.e., variance research strategies) and constructivist theoretical paradigms (i.e., process method strategies). Until now, researchers in the field of attitudes toward change have predominantly followed the "scientific" positivist school, thereby compromising the triangulation of designs necessary to avoid the flaws inherent in making trade-offs in research. Researchers continue to specialize in a limited number of quantitative methodological approaches such as questionnaires.

It appears that they are highly successful in this specialization, but one should be aware that such practice could have serious repercussions. For instance, it can be argued that cumulative advances in change analysis have more often come through widely shared understanding of the change process, which in turn are seldom derived from variance research strategies. Given the rather preliminary stage in the development of attitudes toward change theory, more works inspired by constructivist or process method approaches are necessary.

Moreover, many different methods embedded in constructivist approaches (i.e., process method approach) are appropriate for theory creation and testing, and therefore one could wonder whether the study of attitudes toward change is not too strongly dependent on one method.

CONCLUSION

Over the past decades, the concept of attitudes toward change emerged as a major construct in the literature on organizational development and change. Despite the increased interest into the topic, theoretical and conceptual development remained scant and has been responsible for the conceptual muddle that reflects research on attitudes toward change. In this paper, an attempt was made to position research on attitudes toward change by looking at it through four lenses: (1) nature of change; (2) level of change; (3) the underlying view of human function, (4) and research method. By conducting this analysis we identified the core essence of attitudes toward change.

In summary, the concepts of readiness for change, commitment to change, openness to change, acceptance of change, and adjustment to change are embedded in positive psychology thinking, whereas several other concepts have their roots in negative psychology thinking (i.e., cynicism about organizational change, coping with change, and resistance to change). Furthermore, the bulk of studies into this topic adopted models based on single level person-centered thinking, and examined attitudes in a planned change context by means of quantitative variance research strategies. To conclude, our assessment of this first conceptual exploration of attitudes toward change is suggestive of bringing more pluralism (not only single level thinking but also multilevel thinking, not only variance research strategies but also process method strategies, and not only planned change but also continuous change perspective) into this field of research.

These elements of pluralism should entail some new interesting avenues for research on attitudes toward change, and should stimulate the research community to alter their traditional assumptions of doing quantitative planned change inspired single level research.

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TABLE 1
Summary results facet analysis

	<i>RFC</i>	<i>RSC</i>	<i>COM</i>	<i>CYN</i>	<i>OPEN</i>	<i>ACC</i>	<i>COP</i>	<i>ADJ</i>	<i>ATC</i>
I. Type of paper									
Conceptual paper	5	7	1	0	0	0	0	0	0
Empirical paper	16	8	6	9	4	2	2	3	4
II. View on human function^a									
Positive psychology view	21	0	7	0	4	2	0	3	4
Negative psychology view	0	15	0	9	0	0	2	0	4
III. Conceptual level									
Person-centered/Individual level	7	10	7	8	4	2	2	3	4
Organizational/Group level	11	5	0	1	0	0	0	0	0
Individual and group level	3	0	0	0	0	0	0	0	0
IV. Level of analysis^b									
Person-centered/Individual level	12	6	6	8	4	2	2	3	4
Organizational/Group level	5	2	0	1	0	0	0	0	0
Not mentioned/not applicable	5	7	1	0	0	0	0	0	0
V. Type of change^c									
Planned/episodic change	10	7	6	4	4	2	2	3	1
Emergent/continuous change	4	1	0	2	1	0	0	0	0
Not mentioned/not applicable	9	8	1	5	0	0	0	0	3
VI. Measurement focus^d									
Attitude as independent variable	3	0	3	3	1	0	0	0	0
Attitude as dependent variable	7	8	3	7	2	2	0	3	4
Attitude as mediator-moderator	4	1	0	2	1	0	2	0	0
Not mentioned/not applicable	7	7	1	0	0	0	0	0	0
VII. Measurement type^e									
Quantitative approach	14	8	6	9	4	2	2	3	4
Qualitative approach	3	1	0	1	0	1	0	0	0
Not mentioned/not applicable	5	7	1	0	0	0	0	0	0
VIII. Measurement perspective^f									
Data from change agents	3	3	1	2	0	0	0	0	0
Data from change recipients	10	6	7	6	3	1	2	3	0
Data from change strategists	2	2	1	1	1	0	0	0	0
Not mentioned/not applicable	7	8	1	3	0	1	0	0	4

Notes: a/b/c/d/e/f: The sum of observations for these dimensions is not necessary equal to N = 67 (number of times concepts were studied in 64 papers), for example some studies can use several approaches to measure the same construct (quantitative and qualitative), or analyze the data at multiple levels, acquire data from several stakeholders ...; RFC = readiness for change, RSC = resistance to change, COM = commitment to change, CYN = cynicism about organizational change, OPEN = openness to change, ACC = acceptance of change, COP = coping with change, ADJ = adjustment to change, ATC = Attitude toward change.

FIGURE 1
The four theoretical lenses and their indicators

Nature of change	Level of change	View on human function	Research method
<p><i>Type of change</i></p> <ol style="list-style-type: none"> 1. Bottom-up driven emergent change, change that has a continuous and evolutionary character 2. Top down driven planned change, change that has an episodic and revolutionary character 	<p><i>Conceptual level</i></p> <ol style="list-style-type: none"> 1. Individual level 2. Group level (i.e., team or organization) 3. Not mentioned 	<p><i>View of human function</i></p> <ol style="list-style-type: none"> 1. Positive psychology view: A view on human function that is characterized by a positive attitude toward change with an emphasis on the human strengths and opportunities as drivers of change 2. Negative psychology view: A view on human function that is characterized by a negative attitude toward change with an emphasis on the uncertainty, anxiety and threats that accompany the change 	<p><i>Measurement focus</i></p> <ol style="list-style-type: none"> 1. Attitude toward change as an independent variable (i.e., antecedent) 2. Attitude toward change as a dependent variable (i.e. outcome) 3. Attitude toward change as a mediator/moderator variable
	<p><i>Level of analysis</i></p> <ol style="list-style-type: none"> 1. Individual level 2. Group level (i.e. team or organization) 3. Not mentioned 4. Not applicable 		<p><i>Measurement type</i></p> <ol style="list-style-type: none"> 1. Quantitative approach 2. Qualitative approach 3. Not mentioned 4. Not applicable
			<p><i>Measurement perspective</i></p> <ol style="list-style-type: none"> 1. Data acquired from change strategists 2. Data acquired from change agents 3. Data acquired from change recipients 4. Not mentioned 5. Not applicable

APPENDIX

Acceptance to change

1. Iverson (1996). Employee acceptance of organizational change: The role of organizational commitment. *The International Journal of Human Resource Management*.
2. Kavanagh & Ashkanasy (2006). The impact of leadership and change management strategy on organizational culture and individual acceptance of change during a merger. *British Journal of Management*.

Adjustment to change

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Attitude toward change

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Openness to change

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Readiness for change

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