Readiness for Change: Contributions for Employee's Level of Individual Change and Turnover Intentions

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ABSTRACT *External contextual factors, such as government regulations, have pushed organizations into change. As such, readiness for change rose as a key construct in order for organizations to respond quickly and successfully change. However, there is a lack of empirical evidence on how readiness for change promotes changes in employee's behaviors. The present study tests part of the readiness for change model during the implementation of a new performance appraisal system in a public institution. Employee's affective commitment to change fully mediated the relationship between change appropriateness and both their level of individual change and turnover intentions. Employee's self-efficacy also reduced turnover intentions. These results bring salience to the importance of crafting a readiness for change message and the role played by employee's affective commitment to change. Practical implications for managers are also highlighted.*

KEY WORDS: Readiness for change, commitment to change, individual change

Introduction

External events and crises trigger changes far more than planned events (Dyer, 1985), and as such organizations have to be prepared to react quickly. New safety regulations, environmental pollution control or human resource practices are among the most common regulations promoted by state bodies. These regulations require that organizations respond accordingly and that actions are taken to ensure that the behavior of employees changes so that the desired outcomes are achieved (Armenakis and Bedeian, 1999). In this way, new practices

become institutionalized by acquiring a normative character that is sustained by their legitimacy (Leblebici *et al.*, 1991). Most organizations have no control over these decisions and may not even agree with the policies they have to implement. If these policies are viewed as largely consistent with the values held within the organization, then the change is likely to be embraced. If not, their response will depend on the strength of the pressures that are being exerted. If these are sufficiently powerful (governmental policies), then the organization will likely change in the prescribed direction, even if there is opposition to the move (Oliver, 1991).

Still, while change may be initiated by external events, its outcome will be shaped by internal processes within the organization. It can be particularly difficult for these organizations to motivate their members to support and work toward the successful implementation of change. Employee's reactions to change can therefore differ: instead of recognizing the benefits of change, people might just change because they fear the costs of not doing so and as a consequence exhibit negative behaviors, such as turnover, or even boycott the change effort. We propose that the change message promotes different interpretations of change and ultimately influences its success. In particular, the goal of this study is to analyze how change-related self-efficacy and change appropriateness influence the impact of change on employee's work behaviors and turnover intentions, through its relationship with affective commitment to change (as a measure of personal valence). The proposed model is depicted in Figure 1. In this paper, we review the readiness for change literature, explore its relevance for organizational change success and finally provide empirical evidence and recommendations for both academics and practitioners working in the area of change management.
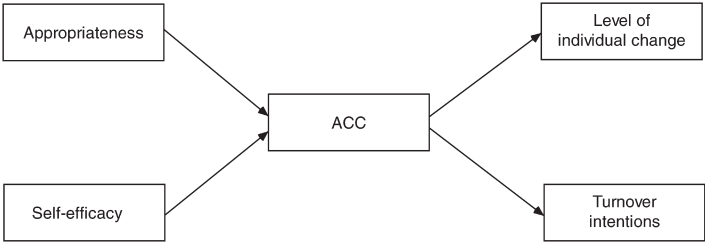
Figure 1. Proposed model for readiness for change, level of individual change and turnover intentions

Readiness for Organizational Change

For a long time evidence has accumulated that the successfulness of change efforts is due not only to their content or substantive nature but also to the processes followed or actions undertaken during their implementation (see Armenakis *et al.*, 1993; Hendry, 1996). Managers should focus on creating readiness for change by minimizing resistance, transforming employees into agents of change, while crafting a change message that facilitates the adoption of behaviors that are

indispensable for the successful implementation of change. The model developed by Armenakis *et al.* (1999) focuses on the mechanisms underlying the adoption and institutionalization of change. It draws from Lewin's (1947) ground-breaking work and Bandura's (1986) social learning theory. In order for the change to be effective, the change message should incorporate five components: (a) discrepancy; (b) principal support; (c) self-efficacy; (d) appropriateness; and (e) personal valence (Armenakis *et al.*, 1999).

Discrepancy addresses the sentiment regarding whether the change is needed and is represented by an explanation of the difference between the actual state and the desired final state (Katz and Kahn, 1978). It can depend on increased competition, changes in governmental regulations or depressed economic conditions (Armenakis *et al.*, 1993). Principal support is also important because change efforts may fail due to the lack of support from management or higher authorities, since those directly involved may not be willing to change unless they have seen a clear demonstration of support from key organizational leaders.

Self-efficacy refers to the sentiments of organizational members regarding their confidence in their ability to cope with change effectively (Bandura, 1986). This mastery is progressive and individuals gradually accumulate more complex skills, increasing their feelings of self-efficacy, while minimizing stress from abandoning the old behaviors. So, while creating readiness for change, one should reinforce employee's feelings of self-efficacy in order to reduce discrepancy (Armenakis *et al.*, 1993). Bernerth (2004) proposed that during stressful times, such as organizational change, low self-efficacy presents a negative cyclical relationship in that individuals who judge themselves as incapable of coping with environmental demands will tend to dwell on personal deficiencies and magnify the severity and difficulty of the task/change at hand, thus making it more difficult to change their own behaviors.

Appropriateness focuses on if the specific change is adequate for the organization and if individuals agree with it. It emphasizes organizational values and if organizations change in accordance with such values. Although very little work has examined how values affect the change process (Kabanoff *et al.*, 1995), it has been acknowledged that change is very much a function of the values embodied within the organization itself (Amis *et al.*, 2002).

Finally, personal valence emphasizes the positive and negative outcomes of change, its intrinsic and extrinsic benefits, and its fairness (that is, it is in our best interest to change). Personal valence can be operationalized through employee's affective commitment to change, since it reflects a desire to provide support for the change based on a belief on its inherent benefits (Herscovitch and Meyer, 2002). As appropriateness focuses on organizational values, affective commitment to change can be looked at as a function of the change's fit to employee's values, since values represent the belief about the social desirability of modes of conduct (Kabanoff *et al.*, 1995). During the implementation of innovations, for example, employees who perceive the innovation as congruent with their own values are more likely to internalize these changes, thus becoming more committed and enthusiastic toward them (Klein and Sorra, 1996). Several authors have produced a compelling rationale for using commitment in the assessment of the impact of organizational change on employee-organization

relations (Becker; 1992; Becker *et al.*, 1996; Meyer and Allen 1997; Neves and Caetano, in press).

Recently, Armenakis *et al.*'s (1993, 1999) model of readiness for change has been applied to consultancy case studies. Bernerth *et al.* (2004) provided a case study concerning a spin off that displayed the need to communicate each of the change message components. The inability to create readiness for change at a cognitive level led to speculation and rumors which ultimately resulted in resistance to change. Armenakis and Harris (2002) also described their experience as consultants for a major reorganization in a large multinational corporation, where they helped management build and expand a readiness for change message. Armenakis *et al.* (2007) provided qualitative evidence for the utility of the assessment of the five readiness for change sentiments in top management team members in order to prepare and guide change. Empirical studies have also been conducted using readiness for change but usually measuring it a as one-dimensional construct (Cunningham *et al.*, 2002; Jones *et al.*, 2005), and found encouraging results. However, only recently Holt *et al.* (2007) and Armenakis *et al.* (2007) developed scales to measure readiness for change. Their results suggest that readiness for change is in fact a multidimensional construct, although they differ in the number of factors. It has been suggested that researchers should expand the empirical tests of the model in order for leaders to implement and initiate change more effectively (Armenakis and Harris, 2002; Armenakis *et al.*, 2007).

Armenakis *et al.* (1999) described the change process as a three-step program: readiness, adoption, and institutionalization, which is consistent with Lewin's (1947) model of unfreezing, change and freezing. Inserted at a micro-level, people-oriented perspective, we propose to further the empirical knowledge of how individuals' perceptions of readiness affect the adoption phase of change. The micro-level approach has been frequently used in the organizational change literature (Judge *et al.*, 1999; Neves and Caetano, 2006; Cunningham, 2006; Self *et al.*, 2007; Neves and Caetano, in press).

Readiness for Change, Individual Change, and Turnover Intentions

As mentioned earlier, readiness for change comprises five different components. Nevertheless, the relevance and weight of each factor may depend on the type of change organizations face. When the change focuses primarily on the individual performance of employees (that is, implementation of a new performance appraisal system), for example, the role of individual and content variables such as appropriateness, self-efficacy and personal valence is enhanced. In such situations, people tend to focus on what is expected of them, if they are able to do it and what the consequences of change are. We expect these three dimensions of readiness for change to have a significant relationship with how individuals intend to behave, both concerning the change (how much their individual behaviors are influenced by change) and the organization in general (if they want to leave the organization). Organizational factors might not be measured directly from employees, but they provide the context in which change occurs. In the present case, the need for change (discrepancy) is illustrated by the guidelines outlined by governmental

bodies, with which organizations have to comply, and organizational leaders were committed to the successful implementation of change (principal support) since important organizational outcomes, such as public financing, would be affected by the outcome of change.

As the present paper is focused on how much individuals were affected by change, we expect the three individual- and content-based dimensions of readiness for change to operate at different levels: when employees think they are able to cope with change (self-efficacy) and agree that change is the adequate solution for the organization (change appropriateness), they have a better understanding of the benefits of change, increasing their affective commitment to change (personal valence), and influencing their behavioral intentions. Although content variables and work experiences, such as change appropriateness, are expected to have a stronger impact on commitment, particularly on affective commitment, than personal characteristics, these last should not be overlooked (Meyer *et al.*, 2002). Consistent with this reasoning, Cunningham *et al.* (2002) found that employees with higher job-change self-efficacy reported higher readiness for change and contributed more to the change intervention. Additionally, Judge *et al.* (1999) found that employees coping behavior (a composite measure which included self-efficacy) was positively related to organizational commitment. Meyer *et al.* (2002), however, only found support for a weak positive effect of self-efficacy on affective organizational commitment. We therefore propose that the more confidence individuals have on their ability to cope with change, the better they think the change is for themselves and for the organization. Similarly, since change appropriateness demonstrates to employees that the organization's values are congruent with their own values and that change is the best solution for the organization, it should also lead to higher affective commitment to change. Thus:

Hypothesis1a: There is a positive relationship between change appropriateness and affective commitment to change.
Hypothesis1b: There is a positive relationship between employee's self-efficacy and affective commitment to change.

In addition, commitment to change (personal valence) is expected to play an important role in predicting attitudes toward change. It has been related to employee's individual support for the change initiative (Herscovitch and Meyer, 2002), perceptions of coping with the change process (Cunningham, 2006) and work outcomes (Neves and Caetano, in press). Although change interventions have the goal of creating a new set of attributes that replace the old ones (Biggart, 1977), no empirical studies have focused on employee's behavioral change resulting from the organizational change intervention. Usually, criterion variables involve success/failure criteria, such as profitability or market share (Meyer *et al.*, 1990; Kelly and Amburgey, 1991; Haveman, 1992). Nevertheless, since the goal of change is to enact new behaviors, these should also be evaluated when trying to understand the consequences of change. Since affective commitment to change is a positive manifestation of employee's attitude toward change, it should influence the successful implementation of change at the individual

level. We expect that the more self-efficacious employees feel and the more appropriate they perceive the change to be, the more affectively committed they will be toward the change, which in turn would lead to changes in individual behaviors due to the implementation of change.

One of the reasons for the extensive study of organizational commitment is its strong relationship with turnover intentions and actual turnover (Reichers, 1985; Meyer and Allen, 1991). Additionally, turnover intentions are a form of resistance to change (Armenakis and Bedeian, 1999) and for that reason it is an important outcome to evaluate the success of change. Cunningham (2006) and Neves and Caetano (in press) found that commitment to change was an important predictor of turnover intentions. Based on these results we also expect that self-efficacy and change appropriateness contribute to the decrease of employee's turnover intentions through its relationship with affective commitment to change. Hence:

Hypothesis 2a: The positive relationship between change appropriateness and employee's level of individual change is mediated by affective commitment to change.
Hypothesis 2b: The negative relationship between change appropriateness and turnover intentions is mediated by affective commitment to change.
Hypothesis 3a: The positive relationship between employee's self-efficacy and their level of individual change is mediated by affective commitment to change.
Hypothesis 3b: The negative relationship between employee's self-efficacy and turnover intentions is mediated by affective commitment to change.

Research Context: Implementation of a Performance Appraisal System

The implementation of performance appraisal systems is one the most powerful tools of human resource management. It allows for improvement for both individual and organizational results, helping workers to achieve higher performance levels, while creating an information system that develops measures of personal and professional development. There is a human tendency to make judgments about those one works with, as well as about oneself (Dulewicz, 1989) and as such, in the absence of a structured appraisal system, people will tend to judge the work of others informally and sometimes arbitrarily. So, while some view it as a key element of organizational life (Lawrie, 1990), others suggest that the process of evaluating performance is so inherently flawed that it may be almost impossible to perfect it (Derven, 1990). Nevertheless, the need for evaluation has led organizations to adopt and develop complex forms of performance appraisal.

The Portuguese government approved the Integrated Performance Appraisal System for the Public Administration (SIADAP, Law n° 10/2004), with three main goals: the improvement of management and services; the increase of personal responsibility and control levels; and the increase of productivity and costs reduction. SIADAP was built according to the following guidelines (SIADAP, 2004): (a) it should be applied in articulation with other HR management tools; (b) it should promote individual differentiation by merit; (c) it must include

quotas for merit and excellence; (d) it ought to reinforce direct management (supervisors) responsibility; (e) it should include a clear definition of individual goals; and (f) it must include a final, yearly report, that assesses difficulties and proposes improvements. The first year, 2005, was a testing period, which allowed employees and managers to adapt to the new performance appraisal system. This meant that while the evaluation for that year was already following all the standard procedures, its results would not influence employee's progression in their career. We conducted the present study at a higher education institution, immediately after the testing period was completed.

As mentioned by By *et al.* (2008), the European higher education sector is experiencing enormous pressures, due to changes not only in government policies, but also in funding criteria, growing competition and new technologies. As such, public higher education employees feel the pressure from both sides: as state employees and as higher education employees. This makes it difficult for them to know who to follow and when. Sometimes, the effects of these changes have been either negative or negligible (Apple, 2005), which makes it particularly important to understand how to motivate employees in such a difficult environment, and if creating readiness for change actually improves how the change is viewed and if it has an impact on employee's behaviors. As such, and according to Armenakis *et al.*'s (1999) model of change, we evaluated the change initiative during the adoption phase, and our research interest focused mainly on the relationship between the three individual- and content-based dimensions of readiness for change and employee's individual change and turnover intentions.

Methods

Sample and Procedure

Participants were full-time employees of a public university implementing a new performance appraisal system. The university had 145 employees. Of these, 10 were on absence leave and 21 were not evaluated by the new appraisal system (these included a wide variety of cases, such as employees who were subcontracted to other companies or part-time employees) and therefore were left out of the sample, and 26 did not return completed surveys. A total of 88 responses were obtained (77% response rate). Overall, 20% of the participants had completed secondary school, while 26% had a university degree and 40% of them were under 36 years old. The majority of employees were women (74%). Employee tenure at the university was spread (56% of the employees had worked there for less than 10 years). Surveys were distributed and collected directly by the researchers in order to ensure anonymity and to reduce social desirability.[1]

Measures

Affective commitment to change was measured with three items from the original Herscovitch and Meyer's (2002) scale: 'I believe in the value of this change';

'This change is a good strategy for this organization'; and 'This change serves an important purpose' (Cronbach's alpha = 0.83).

Change appropriateness was measured with four items: 'The new appraisal system corresponds to the work that is effectively done'; 'The new appraisal system has been objective'; 'I know the criteria used in the new appraisal system'; and 'The criteria used in the new appraisal system are adequate' (Cronbach's alpha = 0.74).

Self-efficacy was measured with three items, adapted from Cunningham *et al.* (2002): 'I have easily accepted the new appraisal system'; 'The new appraisal system puts me under pressure/stress' (R); and 'I think I will be able to do all that is required by the new appraisal system' (Cronbach's alpha = 0.60).

Level of individual change was evaluated with four items: 'The new appraisal system has motivated me to be more efficient'; 'The new appraisal system has helped me to correct what I do wrong in my job'; 'The new appraisal system has helped me to be more responsible'; and 'The new appraisal system has allowed me to show what I do best in my job' (Cronbach's alpha = 0.83).

Turnover intentions were measured with three items, adapted from Robinson (1996): 'If I have an opportunity I will change jobs'; 'I am actively looking for a new job'; and 'If I could choose, I would rather work in a different organization' (Cronbach's alpha = 0.76). All scales were measured through a five-cell Likert format anchored in 1 = totally disagree and 5 = totally agree.

Results

Table 1 shows the means, standard deviations, intercorrelations, and reliabilities for all variables. The multi-item scales' reliabilities were good, with the exception of change-related self-efficacy, although for exploratory studies a commonly-accepted rule of thumb is that an alpha as low as 0.60 indicates acceptable reliability.

Table 1. Descriptive statistics and correlations[a,b]

	Mean[a]	S.D	1	2	3	4	5
1. Change appropriateness	3.56	1.16	(0.74)				
2. Change-related self-efficacy	3.84	.87	0.20[+]	(0.60)			
3. Affective commitment to change	3.96	1.07	0.49**	0.04	(0.83)		
4. Level of Individual change	2.41	1.14	0.34**	−0.04	0.45**	(0.83)	
5. Turnover intentions	1.93	1.13	−0.21*	−0.41**	−0.37**	−0.30**	(0.76)

Notes: a. 5 points scales; b. Cronbach's alpha is reported on the diagonal. ** significant at $p < 0.01$; * significant at $p < 0.05$; + marginally significant at $p < 0.10$.

An exploratory factor analysis (EFA) with an oblique rotation was employed for the change-related variables to analyze how well the items discriminated

among the hypothesized constructs, since two of these scales were new. The EFA results are presented on Table 2.

Table 2. Factor analysis of all the change related variables

	Factor			
Items	I	II	III	IV
Affective commitment to change				
1. I believe in the value of this change	0.30	0.27	**−0.59**	−0.08
2. This change is a good strategy for this organization	0.08	−0.06	**−0.83**	−0.04
3. This change serves an important purpose	0.01	0.01	**−0.83**	−0.20
Level of individual change				
1. The new appraisal system motivated me to be more efficient	**0.84**	−0.10	−0.13	0.02
2. The new appraisal system has helped me to correct what I do wrong in my job	**0.87**	0.02	−0.02	−0.02
3. The new appraisal system has helped me to be more responsible	**0.83**	−0.11	0.10	0.02
4. The new appraisal system has allowed me to show what I do best in my job	**0.67**	0.09	−0.07	−0.06
Change appropriateness				
1. The new appraisal system corresponds to the work that is effectively done	0.26	0.07	0.08	**−0.76**
2. The new appraisal system has been objective	0.18	0.19	0.04	**−0.75**
3. I know the criteria used in the new appraisal system	−0.13	−0.06	−0.01	**−0.71**
4. The criteria used in the new appraisal system are adequate	−0.08	−0.10	−0.25	**−0.62**
Change-related self-efficacy				
1. I easily accept the new appraisal system	−0.04	**0.74**	−0.35	0.00
2. The new appraisal system puts me under pressure/stress (R)	−0.04	**0.50**	0.34	−0.11
3. I think I will be able to do all that is required by the new appraisal system	−0.03	**0.82**	0.07	0.05

Notes: Principal component analysis with an oblimin rotation was performed. KMO = 0.77; Bartlett's test of sphericity was significant ($\chi^2 = 441.49$; $p < 0.01$). Each item's highest loading is presented in boldface. Eigenvalues and percentage of variance accounted for by Factors 1, 2, 3, and 4 were 4.54 (32.43%), 1.96 (13.98%), 1.50 (10.69%), and 1.10 (7.87%), respectively. (R) = reverse scored.

All items loaded highest on the appropriate factors and had loadings over 0.50. The four factors accounted for 64.97% of common variance. Additionally, to determine whether demographic variables had an impact in our model, we examined the relationship between age, gender and tenure and our focal variables. These did not present any significant relationships with the outcome variables, and as such were not included in our analyzes.

To test our hypotheses we conducted path analysis. To assess model fit we used the chi-square measure, the goodness-of-fit (GFI), the comparative fit index (CFI) and the root mean square error of approximation (RMSEA). We compared the fit of our fully mediated hypothesized model with four partially mediated nested-models. We also included a fifth nested-model where the path from self-efficacy to affective commitment to change was removed, since it was not significant (Table 3). Model 6 presented the best fit ($\chi^2 = 7.88$, $p > 0.05$; df = 5;

Table 3. Results for nested path analysis models

	χ^2	df	CFI	GFI	RMSEA	$\Delta\chi^2$
Model 1 (theorized)	22.58**	5	0.75	0.92	0.20	
Model 2[a]	22.20**	4	0.74	0.92	0.23	0.38
Model 3[b]	7.52	4	0.95	0.97	0.10	15.06**
Model 4[c]	20.57**	4	0.76	0.93	0.22	2.01
Model 5[d]	22.40**	4	0.73	0.92	0.23	0.18
Model 6[e]	7.88	5	0.96	0.97	0.08	15.07**

Notes: ** significant at $p < 0.01$; a. partial mediation model adds path from self-efficacy to level of individual change; b. partial mediation model adds path from self-efficacy to turnover intentions; c. partial mediation model adds path from appropriateness to level of individual change; d. partial mediation model adds path from appropriateness to turnover intentions; e. partial mediation model adds path from self-efficacy to turnover intentions and removed the non-significant path from self-efficacy to affective commitment to change.

CFI = 0.96; GFI = 0.97; RMSEA = 0.08), and the chi-square difference test showed that this model resulted in a significant increase in model fit ($\Delta\chi2 = 15.07$; $p < 0.01$). This model included a direct path from self-efficacy to turnover intentions and removed the non-significant path from self-efficacy to affective commitment to change (Figure 2).
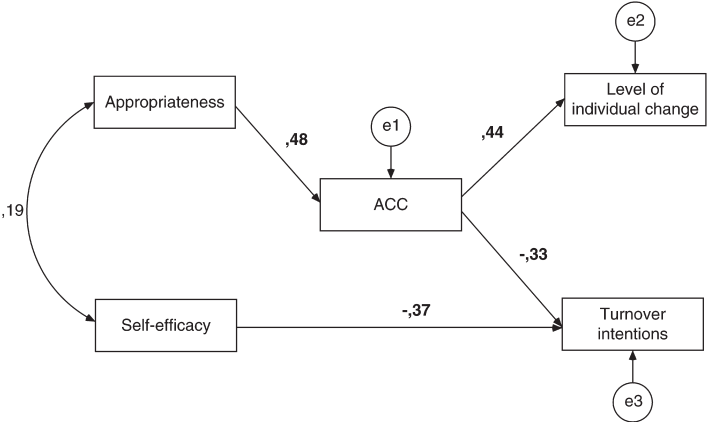

Figure 2. Final mediation model for readiness for change, level of individual change and turnover intentions

The analysis revealed that, as expected, change appropriateness was signifi-cantly related to affective commitment to change ($\beta = 0.48$; $p < 0.01$), explaining 23% of its variance. On the other hand, contrary to our expectations, self-efficacy did not present a significant relationship with affective commitment to change. Hypothesis 1a was therefore supported, while hypothesis 1b was not. Since the path from self-efficacy to affective commitment to change was not significant, thus not fulfilling one of the conditions for mediation, hypotheses 3a and 3b were also not supported. Despite this result, we found a significant direct negative

relationship between self-efficacy and turnover intentions ($\beta = -0.37$; $p < 0.01$). Additionally, affective commitment to change was positively related to the level of individual change ($\beta = 0.44$; $p < 0.01$), and negatively related to turnover intentions ($\beta = -0.33$; $p < 0.01$).

The strength of the mediation effects proposed in hypotheses 2a and 2b, that the relationship between change appropriateness and employee's level of individual change and turnover intentions is mediated by affective commitment to change, was tested using the z-prime method (MacKinnon *et al.*, 1998). MacKinnon *et al.* (2002) demonstrated that the z-prime method of testing mediations provides superior power and a lower Type 1 error rate than other methods. It differs from Baron and Kenny's (1986) procedure only in the statistical distribution used to determine whether the indirect (mediated) effect of the independent variable on the dependent variable through the mediator is significant. The z-prime indirect effects test revealed that the indirect effect of change appropriateness on the level of individual change through affective commitment to change was significant ($z' = 3.34$; $p < 0.01$), thus supporting hypothesis 2a. Similarly, the indirect effect of change appropriateness on turnover intentions through affective commitment to change was also significant ($z' = 2.82$; $p < 0.01$), thus supporting hypothesis 2b. Our model explained a total of 20% of employee's level of individual change and 27% of turnover intentions.

In sum, the positive relationship between change appropriateness and the level of individual change was fully mediated by affective commitment to change. Likewise, the negative relationship between change appropriateness and turnover intentions was also fully mediated by affective commitment to change. Self-efficacy did not present a significant relationship with affective commitment to change and the level of individual change, but held a significant negative relationship with turnover intentions.

Discussion

This study proposed to analyze the mechanisms underlying the adoption of a change initiative at the employee level, in this case the implementation of a performance appraisal system. We found that change appropriateness was positively related to affective commitment to change (hypothesis 1a) and that affective commitment to change mediated the relationship between change appropriateness and both individual change and turnover intentions (hypotheses 2a and 2b), while self-efficacy presented a direct negative relationship with turnover intentions. Overall, our results support Armenakis *et al.*'s (1999) model of change, for three of the proposed dimensions, and suggest that creating readiness for change does influence individuals' behavioral intentions. This is crucial for organizational change since the goal of change is to create a new set of attributes that replace the old ones. It does seem that, as Conner (1992) proposed, commitment to change is the glue that brings people and change goals together, helping them understand the purpose of change and, as a consequence, increasing employee's individual efforts to change their work behaviors while reducing their turnover intentions. Additionally, while other authors (Cunningham *et al.*, 2002; Jones *et al.*, 2005) assessed readiness for change as a one-dimensional construct, our study provides

additional support to the findings of Armenakis *et al.* (2007) and Holt *et al.* (2007), that the dimensions of readiness for change are distinguishable.

The results found for self-efficacy were somehow surprizing. Since the change involved the implementation of a new, more objective appraisal system, it was expected that employees who felt they were more able to deal with the change demands would be more affectively committed to the change and would present higher levels of individual change. However, our hypotheses were not supported. Other authors have also found mixed results. Meyer and colleagues' (Meyer *et al.*, 2002) meta-analysis only found a weak positive effect of self-efficacy on affective organizational commitment, while Wanberg and Banas (2000) found that employee's resilience (which included self-efficacy) had no significant relationship with a more positive view of change. These diverse results may imply that the role of self-efficacy on change-related variables might depend on other contextual variables, such as the characteristics of the undergoing change, due to which these relationships would frequently fluctuate.

Another possible explanation is that the testing period for the new performance appraisal system, which started 12 months prior to the evaluation, may also have influenced the relationship between employee's perceptions of efficacy and commitment to change and individual change. The role of self-efficacy might have been different if employees did not have the opportunity to adapt to the new system. Still, and although self-efficacy did not predict affective commitment to change or individual change, it helped reduce employee's turnover intentions. This means that self-efficacy should not be overlooked, since, as we mentioned previously, turnover is considered not only a negative organizational outcome but also a form of resistance to change (Armenakis and Bedeian, 1999). Further research is needed to fully understand the role of self-efficacy during change initiatives.

In general, change appropriateness, self-efficacy, and personal valence revealed its importance for an effective adoption of change, through two distinct outcomes: by promoting individual change, in which the organization transforms its employees in change agents themselves, which later may help in the institutionalization phase, where these procedures became a part of their everyday life; and by reducing active forms of resistance to change, such as turnover intentions. Nevertheless, several questions remain unanswered.

A challenge for the future is to empirically test how the three phases of change (readiness, adoption and institutionalization) develop throughout time using a longitudinal methodology. Another challenge is to study different types and levels of change, and include all components of readiness for change. Due to the nature of the change initiative evaluated in this study, which primarily targeted how employee's performance was evaluated, we focused on individual- and content-based dimensions (if they agree with the change, if they feel able to cope with it, and if they believe there are gains associated with it). In cases where the change effort is a result of an internal planned intervention, the message of discrepancy and principal support should also be measured.

Additionally, there is a lack of measures that tap into how much the change affects employee behavior. Usually, change research either focuses on hard criteria like profit or market share or on what influences employee's reactions

to change, such as commitment (Herscovitch and Meyer, 2002), readiness (Cunningham *et al.*, 2002), coping (Judge *et al.*, 1999) or openness (Wanberg and Banas, 2000). Our measure of individual change tries to overcome such restriction. However, since the measurement of such individual outcomes is paramount, further attention has to be devoted to the development and validation of a scale to measure individual behavioral change succeeding organizational change.

Contributions and Implications for Academics and Practitioners

This research contributes to the change management literature and, in particular, to the readiness for change model, on which there is still a lack of empirical evidence. It not only provides support to a part of the model but advances an explanation as to how its dimensions might work in order to increase change success. Simultaneously, much of extant theory and research on organizational change takes a macro, or systems-oriented, approach (Judge *et al.*, 1999; Cunningham *et al.*, 2002). By (2005), in a review of the change management literature, examined some of the most commonly used models of change. These models focused either on the change's rate of occurrence (discontinuous vs. continuous), on how it comes about (planned vs. emergent) or on its scale (incremental vs. transformational). Although these models have an unequivocal importance for change management, they give limited attention to the individual and look at it as just a small part of the 'big picture'. We propose that further attention should be given to the micro-level processes that take place during change, and our results support that claim. Moreover, we believe future theories and research should try to combine the macro/micro levels of analyzes into a more comprehensive model of change.

We can also draw several practical implications for managers and organizations. First, it draws our attention to the importance of creating a sustainable message of readiness for change, particularly when changes are a result of external pressures. In such situations, managers might feel tempted to not address this issue, since the organization has to comply with the new policies, whether the organization is ready to do so or not. However, our results show that in these situations, readiness for change results from a clear explanation of why the change is appropriate and by enhancing the employee's feeling of self-efficacy. This compels individuals to work toward change and reduces their resistance, which ultimately contributes to the success of change.

Second, by demonstrating that different components of readiness for change contribute differently to the level of individual change and turnover intentions, we also bring attention to the fact that none of these elements should be left aside when planning change. Doing so might contribute to an increase in resistance to change or reduce levels of support. As such, managers should focus not only on explaining the reasons for change, while not worrying about their employee's ability to cope with change (or vice-versa). The success of change is a result of the combined action of the principles highlighted above. Third, these findings provide support to the argument that attempts to recruit or select employees that have certain characteristics might be less effective than carefully managing their experiences inside the organization (Meyer *et al.*, 1991; Irving and Meyer,

1994). Our results show that it is possible to increase levels of support by carefully managing the representation employees have of change, both cognitive and affective, even when the change is a result of external pressures.

Limitations

Nevertheless, this study has some limitations. The sample used for the study can be considered small for a correlational study. However, the high return rate (77%) provides a useful representation of how this particular public institution experienced the implementation of a new performance appraisal system. Common method variance may also raise some concerns. Usually, method variance inflates the relationships between the self-report measures. However, the expected relationship between self-efficacy and both affective commitment to change and the level of individual change were not significant, and the EFA results revealed the measures to be distinct. These results help reduce concerns about method variance.

Additionally, its cross-sectional design does not allow for causal interpretation. Therefore, and although the relationships proposed here are sustained by both theoretical and empirical evidence (Judge *et al.*, 1999; Meyer *et al.*, 2002; Neves and Caetano, in press), longitudinal studies should be pursued. However, and although longitudinal designs are required to enable us to fully assess how employees interpret change, they still represent a difficult challenge. Several factors contribute to that difficulty: many organizations keep their strategic plans to themselves almost until the change takes place, making it difficult to access the organization prior to the beginning of the intervention, while others are very cautious about allowing researchers to access their organization and their employees, especially when these are facing (or about to face) stressful or emotional situations (Sutton and Schurman, 1988), such as change processes.

Conclusion

The present study highlighted the importance of properly addressing readiness for change prior to its adoption, even in cases where the change is due to external contextual factors. As By *et al.* (2008) mentioned, not all changes initiated are required or are even in the best interest of an organization but are based on personal/political interests. As such, it is important to create and share a strong message for change and demonstrate to the involved parties that it is in the best interest of all to change in the proposed direction. This case provides evidence that managers are key actors in promoting feelings of readiness for change in employees and when the change message is carefully crafted, the organization rapidly experiences its benefits, successfully adopting and institutionalizing change.

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Note

1. Since the implementation of the performance appraisal system was very important for the organization, we anticipated that people might answer the questions concerning change in a manner that would be viewed as favorable by their colleagues and supervisors. To control for such effect, we collected data directly, emphasizing anonymity and the importance of honest answers for an accurate evaluation of the implementation of change. Socially desirable answers were reduced, since all the measures presented a normal distribution and there were no ceiling effects.

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