

Personality, context, and resistance to organizational change

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The article proposes and tests a model of resistance to organizational change. Contrary to most works on resistance, resistance was conceptualized here as a multifaceted construct. Relationships among resistance components and employees' personalities, the organizational context, and several work-related outcomes were examined. Through a study of 177 employees, both personality and context have been found to significantly associate with employees' attitudes towards a large-scale organizational change. These attitudes were, in turn, significantly associated with employees' job-satisfaction, organizational commitment, and intention to leave the organization.

The term *resistance to change* is used frequently in the research and practitioner literature on organizational change, usually as an explanation for why efforts to introduce large-scale changes in technology, production methods, management practices, or compensation systems fall short of expectations, or fail altogether. Despite the popularity of the term, a number of works (e.g., Dent & Goldberg, 1999; Merron, 1993) suggested to abandon it in the claim that it misrepresents what really happens in the change dynamic. According to Dent and Goldberg (1999), organizational members resist negative consequences (e.g., losing one's job) and not necessarily change in itself. Therefore, the belief that people resist change hinders organizations' chances of understanding and dealing with real organizational problems. Similarly, Nord and Jermier (1994) argue that the term is often used as part of an agenda that may overshadow employees' legitimate reasons for objecting to change. However, according to Nord and

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Jermier, rather than “resist resistance” and abandon the concept, researchers should try to better address employees’ subjective experiences in order to obtain a more valid understanding of what resistance is really about.

Other critics of resistance studies, as these are conducted today, argue that much is lost in the attempt to understand resistance due to a unifaceted view of the phenomenon (e.g., George & Jones, 2001; Piderit, 2000). For example, a recent theoretical model of resistance suggests that resistance to change comprises both cognitive and affective components that come into play at different stages of the resistance process (George & Jones, 2001). Similarly, Piderit (2000) suggests that resistance may often involve a sense of ambivalence whereby employees’ feelings, behaviours, and thoughts about the change may not necessarily coincide. Accordingly, she proposes that resistance be viewed as a multidimensional attitude towards change, comprising affective, cognitive, and behavioural components.

Such a view is more likely to capture the complexity of the resistance phenomenon and may provide a better understanding of the relationships between resistance and its antecedents and consequences. Whereas some sources of resistance may have their strongest impact on employees’ emotions, others may more directly influence their behaviours, and yet others, in line with Nord and Jermier’s (1994) arguments, may most influence what employees rationally *think* about the change. Following these recommendations, the purpose of the present study is to propose and test a theoretical model of resistance to change that views resistance as a subjective and complex, tridimensional, construct.

Using such a conceptualization, the present study considers several of the potential antecedents and consequences of resistance. As in regards to any human reaction, potential sources of resistance lie both within the individual as well as in the individual’s environment (Lewin, 1951). The vast majority of empirical studies on resistance (e.g., Armenakis & Harris, 2002; Coch & French, 1948; Goltz & Hietapelto, 2002; Lines, 2004; Rosenblatt, Talmud, & Ruvio, 1999; Trade-Leigh, 2002) have focused on contextual variables that are related to resistance, such as participation or trust in management. Very few have adopted an individual differences perspective (e.g., Cunningham et al., 2002; Judge, Thoresen, Pucik, & Welbourne, 1999) and hardly any have considered the combined role of context and personality in predicting employees’ reactions to organizational changes (for an exception see Wanberg & Banas, 2000). In the present study, both personality and context are considered potential antecedents of resistance. Resistance, in turn, is expected to correlate with a number of work-related consequences, such as job satisfaction and organizational commitment (e.g., Rush, Schoel, & Barnard, 1995; e.g., Schweiger & DeNisi, 1991). The variables and relationships tested in the study are illustrated in Figure 1.

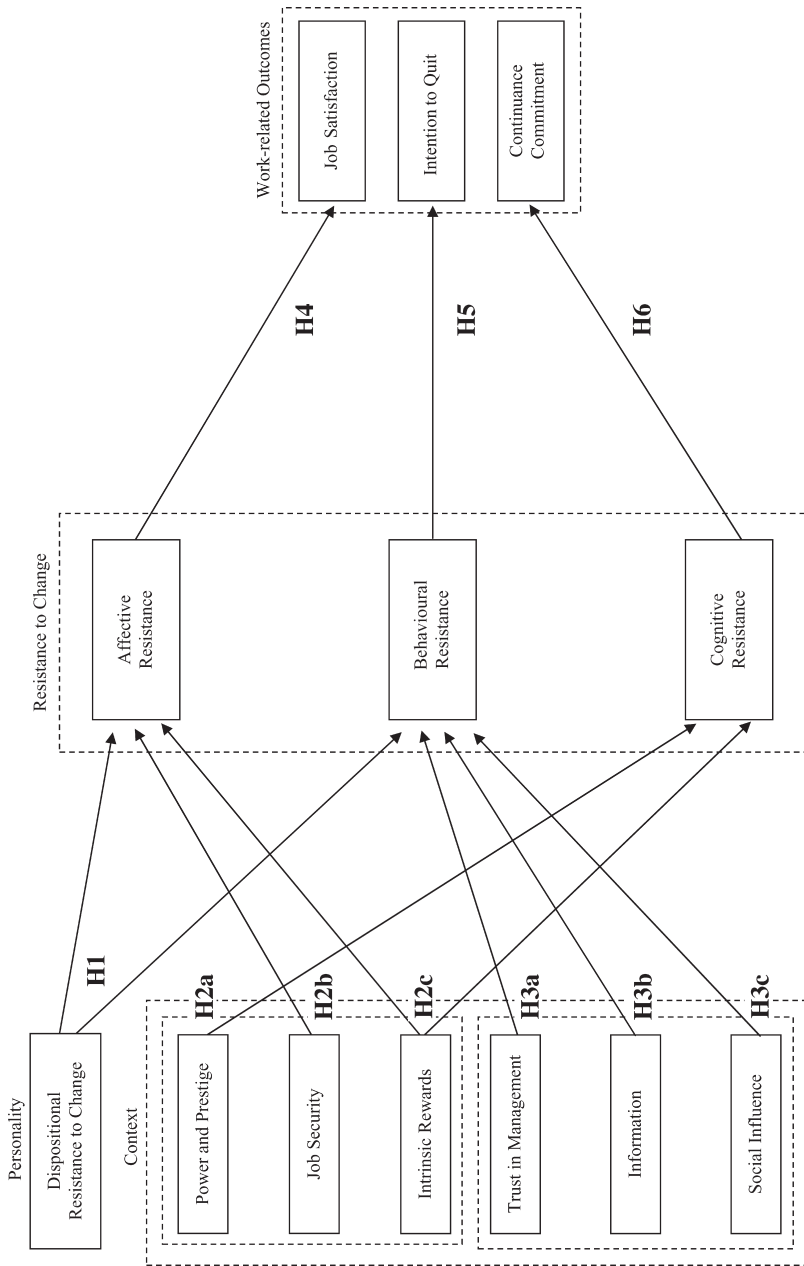


Figure 1. The theoretical model with study hypotheses.

DEFINING RESISTANCE TO CHANGE

The present study answers Piderit's (2000) call and defines resistance as a tridimensional (negative) attitude towards change, which includes affective, behavioural, and cognitive components. These components reflect three different manifestations of people's evaluation of an object or situation (McGuire, 1985). The affective component regards how one feels about the change (e.g., angry, anxious); the cognitive component involves what one thinks about the change (e.g., Is it necessary? Will it be beneficial?); and the behavioural component involves actions or intention to act in response to the change (e.g., complaining about the change, trying to convince others that the change is bad). Of course the three components are not independent of one another, and what people feel about a change will often correspond with what they think about it and with their behavioural intentions in its regard. Nevertheless, the components are distinct of one another and each highlights a different aspect of the resistance phenomenon.

Under such a definition of resistance, the examination of antecedents and consequences is likely to reveal a much more complex picture than has been depicted in earlier resistance studies. Beyond demonstrating that certain variables are associated with resistance, the tridimensional conceptualization of resistance enables a higher resolution that highlights the particular resistance components that are associated with each of the antecedents and consequences. Whereas some variables may have their primary influence on how people feel about a change, others may have more impact on what they do, and yet others on what they think about it. Similarly, people's feelings toward a change may lead to different outcomes than the outcomes of their behaviours or of their thoughts.

PERSONALITY, CONTEXT, AND RESISTANCE

Personality and resistance

A number of studies found that employees' openness towards organizational change can be predicted by traits such as self-esteem (Wanberg & Banas, 2000), risk tolerance (Judge et al., 1999), need for achievement (Miller, Johnson, & Grau, 1994), and locus of control (Lau & Woodman, 1995). Although these traits are related to how people react to change, they have not been conceptualized with the purpose of assessing the dispositional inclination to resist change.

Recently, the concept of dispositional resistance to change has been established and the resistance to change scale (RTC) was designed to measure the personality component of resistance to change (Oreg, 2003). According to Oreg, people differ from one another in their internal

inclination to resist or adopt changes. These differences can predict people's attitudes towards *specific* changes—both voluntary and imposed. People that are high on dispositional resistance to change, which is conceptualized as a stable personality trait, are less likely to voluntarily incorporate changes into their lives, and when change is imposed upon them they are more likely to experience negative emotional reactions, such as anxiety, anger and fear. Oreg's (2003) studies have established the scale's convergent, discriminant, and predictive validities, as well as its internal-consistency and its test–retest reliabilities. Moreover, the scale has been shown to predict specific change-related behaviours above and beyond other related personality characteristics, such as tolerance for ambiguity (Budner, 1962), risk-aversion (Slovic, 1972), or sensation-seeking (Zuckerman & Link, 1968).

When considering affect, behaviours and cognition, a particularly strong link has been established between personality and affect (e.g., Larsen & Ketelaar, 1991; McCrae & Costa, 1991; Yik, Russell, Ahn, Dols, & Suzuki, 2002). In fact, personality traits have often been considered fundamentally affective in nature (e.g., Lucas, Diener, Grob, Suh, & Shao, 2000; Tellegen, 1985; Watson & Clark, 1997). Indeed, a strong component in the definition of the resistance to change personality trait (Oreg, 2003) involves individuals' emotional predispositions towards change. In a study of employees' reactions to an office move (Oreg, 2003, Study 7), dispositional resistance to change had its strongest impact on employees' emotional responses. It is therefore expected that in the present study dispositional resistance to change would be correlated with employees' affective resistance to the change. Another significant, yet weaker, relationship that was found in Oreg's (2003) study was between dispositional resistance and employees' behavioural reactions (i.e., avoiding coming to the office, taking action against the move) to the change. Accordingly, such a link is also expected in the present study. It is therefore hypothesized that:

Hypothesis 1: Employees' dispositional resistance to change will have significant positive correlations with employees' behavioural, and in particular with their affective, resistance to the particular change at hand.

Context and resistance

Theories and research on resistance to change have primarily addressed the context-specific antecedents of resistance. A large variety of contextual variables have been proposed as related to employees' resistance to change (e.g., Armenakis & Harris, 2002; Kotter, 1995; Miller et al., 1994; Tichy, 1983; Wanberg & Banas, 2000; Watson, 1971; Zaltman & Duncan, 1977; Zander, 1950). Whereas some antecedents have to do with the outcomes of change (e.g., losing or gaining power), others focus on the way in which

change is implemented (e.g., the amount of information about the change that is given to employees).

This distinction resembles the distinction between perceptions of distributive and procedural justice (Cropanzano & NetLibrary Inc, 2001; Greenberg & Cropanzano, 2001). Whereas perceptions of distributive justice are about the fairness of organizational outcomes, procedural justice involves the fairness of the procedures used to achieve those outcomes (Greenberg, 1990). The literature on resistance to change does not distinguish between the two types of reactions: reactions to change outcomes and reactions to the change process. One reason why such a distinction has not been observed in the context of resistance may have to do with the fact that resistance was viewed as a unidimensional construct. In considering a multifaceted view of resistance, the distinction between resistance to outcomes and resistance to process may become clearer.

For the present study, three outcome and three process variables were selected: Power and prestige, job security, and intrinsic rewards were the three outcome factors, and trust in management, social influence, and information about the change were the three process factors (see Figure 1). These were among the variables mentioned most frequently in prior works as potential correlates of resistance. Whereas previous works have argued for links between these antecedents and a unidimensional resistance construct, the present study elaborates on and empirically tests the specific relationships between antecedents and each of the three proposed resistance components. Because the three components are conceptually related to one another, all of the proposed antecedents can potentially influence all three resistance components. Nevertheless, depending on the specific nature of the antecedents, specific hypotheses can be raised regarding the particular components on which each antecedent is likely to have the strongest impact.

The distinction between change outcomes and change process is particularly meaningful in this respect. Studies of organizational justice suggest that although both outcomes and process influence people's reactions, procedural aspects are most likely to influence employees' behavioural responses (e.g., Crino, 1994; Skarlicki & Folger, 1997). In other words, whereas both outcomes and process influence how employees feel and think about organizational actions, the process, but not outcomes, are those which will most likely influence employees' behavioural intentions (Robbins, Summers, & Miller, 2000). It is therefore expected that resistance due to the anticipated outcomes of the change will primarily involve the affective and cognitive components of resistance, whereas resistance due to the change process will also be associated with the behavioural component. I'll now review the specific types of outcomes and process variables that are addressed in this study.

Anticipated change outcomes

Presumably, one of the first determinants of whether employees will accept or resist change is the extent to which the change is perceived as beneficial versus detrimental to them. These factors constitute the “rational” component of resistance to which Dent and Goldberg (1999) and Nord and Jermier (1994) refer as perhaps the most valid reason to resist change. Such outcome factors would therefore be expected to most strongly influence employees’ cognitive evaluations of the change. A number of works (e.g., Tichy, 1983; Zaltman & Duncan, 1977) suggest the types of outcomes that are likely to impact employees’ evaluations:

Power and prestige. These have been suggested as potential determinants of employees’ attitudes towards change (Buhl, 1974; Tichy, 1983; Zaltman & Duncan, 1977). Organizational change often entails changes in the allocation of power. Some are assigned more influential roles, while others lose the control they had over people or resources. Associated with the notion of power are also issues of status and prestige, where some positions are more desirable than others. According to Tichy (1983), the political ramifications of organizational change constitute one of the main reasons why organization members negatively evaluate change. Similarly, Goltz and Hietapelto (2002) suggest that threats to power are among the primary instigators of resistance to change.

Stewart and Manz (1997) also discuss the reluctance to relinquish power as one of the central factors for resistance, and they argue that members’ cognitive perceptions stand at the heart of such resistance. Therefore, although an anticipated negative change in one’s power may certainly influence one’s affect and behaviour, it is primarily expected to impact the cognitive evaluation of the change. As threat to power and prestige increases, so will employees’ cognitive evaluation of the change become more negative.

Job security. Obviously, if employees fear losing their jobs because of a change, they have all the reason to resist it (e.g., McMurry, 1947). Several recent studies have emphasized the role of job security in its impact on employees’ reactions to organizational change (Baruch & Hind, 1999; Burke & Greenglass, 2001; Probst, 2003). Based on their positions and occupations within a particular organization, different employees would have varying levels of concern regarding the possibility of losing their jobs. The source of resistance due to job security threats is driven by strong emotional factors (Burke & Greenglass, 2001; McMurry, 1947). Therefore, perceived threat to job security is particularly expected to yield a significant correlation with employees’ affective reactions to the change.

Intrinsic rewards. Organizational changes can also threaten the intrinsic satisfaction that employees gain from their jobs. Organizational changes often involve changing positions and redefining tasks. For many, the expectation of transferring to a less interesting, less autonomous and less challenging job would create negative evaluations of the change in comparison with those who expect no change, or even improvement of these factors (Hackman & Oldham, 1980; Tichy, 1983). In addition to cognitively resisting decreases in autonomy and challenge, threats to these factors would also be expected to yield strong emotional responses (Deci & Ryan, 1985). According to Ryan and Deci (2000), individuals' well-being is to a great degree dependent on their ability to satisfy intrinsic needs such as the need for autonomy and self-determination. In the organizational context, the ability to satisfy these needs has been shown to influence employees' affective responses in the workplace.

Although the connection between each of these factors and resistance to change may seem undisputed, their inclusion is warranted for three main reasons: First, most of these connections have not been tested empirically. Second, whereas the relationships between the perceived outcome factors and a unidimensional resistance construct may be straightforward, the relationships with a multidimensional construct are not. Based on findings from research on organizational justice (e.g., Crino, 1994) it is hypothesized here that contrary to employees' reactions to the change *process*, reactions to change *outcomes* will be internal (i.e., cognitive and affective) but not behavioural. And, third, it would be valuable to examine the relative importance of these factors and their impact in relation to the other variables in the model. At the least, it would be necessary to control for the impact of perceived outcomes when examining the role of dispositions and change-process variables. Thus it was hypothesized:

Hypothesis 2a: Perceived threats to employees' power will be positively associated with employees' cognitive resistance to change.

Hypothesis 2b: Perceived threats to job security will be positively associated with employees' affective resistance to change.

Hypothesis 2c: Perceived threats to intrinsic motivation will be positively associated with employees' affective *and* cognitive resistance to change.

The change process

In addition to the outcomes of change, factors in the manner in which the change is implemented have also been found to influence employees' attitudes towards change:

Trust in management. A recurring recommendation made by organizational change gurus is to convey an atmosphere of trust and a general feeling that employees can count on their supervisors to do what's best for the organization and its members (Kotter, 1995; Zander, 1950). A number of works address the importance of a trusting relationship between managers and employees as the basis for organizational change initiatives (e.g., Gomez & Rosen, 2001; Simons, 1999). In a study that examined the influence of different power bases on employee cooperation in the context of an organizational change, referent power appeared to yield the most cooperation (Munduate & Dorado, 1998). In other words, supervisors who are able to inspire employees and instil in them a sense of trust appear to be most effective in circumventing resistance to change. Although not at the focus of their study, Stanley, Meyer, and Topolnytski (2005) recently found a relationship between trust in management and employees' intentions to resist change.

Information. The amount and quality of information that is provided can also influence how organizational members will react to change. Information provided to employees as part of management's efforts to increase employee involvement in organizational decision making has been argued to influence employees' resistance to change (e.g., Coch & French, 1948; Kotter & Schlesinger, 1979). In other works that directly examined the influence of providing information, detailed information about a change has been shown to reduce resistance to change (Miller et al., 1994; Wanberg & Banas, 2000). In particular, employees that reported receiving timely, informative, and useful information about an organizational change presented a more positive evaluation of the change and increased willingness to cooperate with it (Wanberg & Banas, 2000).

Social influence. Social influence for or against change is another factor in the process of change that can increase or decrease resistances. Social network theory argues that individuals are embedded within social systems that function as reference points for the formation of attitudes (Erickson, 1988). In other words, the social systems within which an employee works have a substantial role in determining the employee's attitudes (Burkhardt, 1994; Gibbons, 2004). In the context of resistance to change, research on the influence of social networks on reactions to change suggests that when an employee's social environment (i.e., colleagues, supervisors, and subordinates) tends to resist a change, the employee is more likely to resist as well (Brown & Quarter, 1994).

While these process factors may certainly influence all resistance components, the literature concerning the three process factors (i.e., trust, information, and social influence) highlights the impact of these factors on

employees' behavioural intentions in response to the change initiative. Furthermore, findings concerning the relationship between procedural justice and employee behaviours (e.g., Skarlicki & Folger, 1997) imply that factors involving the process through which change is implemented would be particularly meaningful with respect to employees' behavioural responses. It is therefore hypothesized that:

Hypothesis 3a: Employees' trust in management will be negatively associated with employees' behavioural resistance to change.

Hypothesis 3b: The amount of information that is provided about the change will be negatively associated with employees' behavioural resistance to change.

Hypothesis 3c: The extent to which employees' social environment is opposed to the change will be positively associated with employees' behavioural resistance to change.

RESISTANCE TO CHANGE AND WORK-RELATED OUTCOMES

The primary reason why managers try to avoid resistance to change is clearly because it has negative consequences for the organization. Although not focusing on the concept of resistance, a number of studies found that conditions of change (e.g., uncertainty, perceived pressure, which are here viewed as potential antecedents of resistance) predict organizational outcomes such as job satisfaction, organizational commitment, and intention to leave the organization (Rush et al., 1995; Schweiger & DeNisi, 1991). It is possible that these conditions of change influence employees' attitudes towards the specific change, which in turn could affect their general attitude toward the organization.

A recent study demonstrated precisely this—that resistance to change mediates the relationships between conditions of change and work-related outcomes (Wanberg & Banas, 2000). Wanberg and Banas found that conditions of change predicted employee resistance to change and that, in turn, resistance was associated with lower levels of job satisfaction and with greater intention to quit (Wanberg & Banas, 2000). However, in their study, resistance was conceptualized broadly as low acceptance of change. It is yet to be examined how a multifaceted conceptualization of resistance, that allows for ambivalence towards the change, would relate to such work-related outcomes.

Overall, it is expected that positive attitudes towards change will be associated with improved outcomes. Beyond this, accumulated knowledge about the various types of work-related outcomes also enabled an examination of the more specific relationships between the three attitude

components and work-related outcomes. The multidimensional perspective of resistance adopted in this study presumes that the different components of resistance would have varying relationships with different types of work-related outcomes. Specifically, affective resistance is most likely to associate with affective outcomes, cognitive resistance with cognitively-based outcomes, and behavioural resistance with behavioural outcomes. Job satisfaction represents an outcome with a strong affective affinity (e.g., Locke, 1969; Spector, 1997) and was therefore expected to associate most strongly with the affective component of resistance.

Because the behavioural component of attitudes involves both behaviours and intention to behave, intention to leave the organization seemed an appropriate outcome that could tap the behavioural component of resistance to change. Lastly, organizational continuance commitment was selected as the cognitively-weighted outcome variable. According to Meyer and Allen (1991) continuance commitment involves a calculative approach with which organizational members evaluate whether or not it is worth their while to remain in the organization. The cognitive process involved in this construct is quite explicit. It is not precluded that all three resistance components could associate with employees' job satisfaction, intention to quit, and continuance commitment. However, more specifically it is hypothesized that:

Hypothesis 4: Employees' affective resistance will be negatively related to their job satisfaction.

Hypothesis 5: Employees' behavioural resistance will be positively related to their intention to leave the organization.

Hypothesis 6: Employees' cognitive resistance will be negatively related to their organizational continuance commitment.

METHOD

The organizational context

The present study was conducted in an organization in the defence industry, consisting of approximately 800 employees. The organizational change consisted of a merger of the two core units within the organization, which can be considered relatively mechanistic in its structure (Morgan, 1997), with many hierarchical levels, a clear chain of command, and a high formality of rules. The core occupations are of technicians and engineers; there is a large majority of men, and education levels are high, with a third of employees holding a bachelor's degree, and another third holding graduate degrees.

The primary change involved in the merger consisted of a change in the organizational structure to a matrix design. Before the change, the

organization was structured on the basis of project departmentalization. Employees were associated with one specific project, and employees of different occupations who were working on the same project were all led by one project manager. After the change, rather than one specific project with which each employee was associated, employees were now assigned to various projects, and instead of one manager, employees now had two, or more, authorities to answer to. They were now subordinate to a functional manager, who would provide professional guidance in their particular field (e.g., mechanics, electronics, etc.) and assign them to various projects. Additionally, as before, they were still subordinate to their project managers.

Although not conducted with the purpose of testing the hypotheses in the study, preliminary interviews conducted with company managers and employees revealed substantial overlap between the kinds of concerns raised with respect to the change and many of the antecedents in the study's theoretical model, such as the threat of losing autonomy (i.e., intrinsic motivation), the threat of losing one's managerial position (i.e., power), or threats to job security.

Procedure and participants

The primary data in this study were collected via surveys. Before designing these surveys, 17 semistructured interviews were conducted with company managers and employees in order to get a better feel of the particular change context, and to help design context-specific survey items. Interviews were conducted approximately 10 months after the change was first introduced in the organization and, in spite of the fact that the change had already been initiated, it was clear from interviewees' responses that the change was still very much in progress. The impact of the change was still strongly experienced and interviewees seemed eager to discuss their feelings towards it. Several of them shared their experiences of uncertainty and fears of what will follow.

Shortly after the interviews were conducted, the surveys were designed and administered, with an emphasis on survey anonymity. Two hundred and thirty six surveys were returned (30%). Of these, 59 were filled out by employees who joined the organization after the change was implemented, leaving 177 surveys for the analyses. Eighty-eight per cent of respondents were men, fifty-four per cent had management positions (i.e., had at least one subordinate), the mean age was 45 years ($SD = 12$), and the mean years of tenure was 13 ($SD = 12$). Thirty-seven per cent of respondents had a graduate degree, thirty-five per cent had an undergraduate degree, twenty per cent had a technical degree, and eight per cent had lower levels of education, most of whom had completed a high-school degree. These

percentages were comparable with the overall distribution of gender, age, and education in the entire organization.¹

Measures

Unless stated otherwise, scales used a 7-point scale ranging from “strongly disagree” (1) to “strongly agree” (7). As mentioned above, questionnaires were administered after the organizational change had already been initiated. Therefore, questions about the expected outcomes of the change and about the change process were phrased in the past tense, such that participants were asked to report what they expected from the change and how they experienced it when it was first introduced. Despite the retrospective nature of these questions, the interviews conducted prior to administering the questionnaires indicated that, as far as the employees were concerned, the change was still very much underway, and so their experiences of it were still fresh in their minds. Questions regarding the work-related outcomes of the change (i.e., job satisfaction, intention to quit, and continuance commitment) were phrased in the present tense.

Change attitude scale. Because previous studies did not use a multi-dimensional conceptualization of resistance to change, three subscales were designed in order to measure the three components of employees’ attitudes towards the change. In line with the accepted definitions of attitudes, the affective items involved positive and negative feelings towards the specific change, the behavioural items addressed employees’ intention to act against (or for, where negatively worded items were involved) the change, and the cognitive items involved employees’ evaluation of the worth and potential benefit of the change. Seven items were designed for the affective component, five for the behavioural and six for the cognitive.

Prior to the inclusion of the attitude scale in the present study, the scale was administered to an independent sample of employees, from another organization, who were in the process of having their offices relocated. Confirmatory factor analyses on data from the 112 questionnaires that were collected supported the scale’s three-factor structure: All items loaded significantly ($p < .01$) on their expected factors and the model’s overall fit was satisfactory (Comparative Fit Index, CFI: .92; Tucker-Lewis Index, TLI: .90). An alternative one-factor model presented much poorer fit (CFI: .75; TLI: .64).

¹The percentage of managers in the sample was somewhat higher than the overall percentage of managers in the organization, which is approximately 35%. Separate analyses of the data for managers and nonmanagers yielded equivalent patterns of relationships.

For each component, the five highest-loading items were retained for the present study (see Appendix). Confirmatory factor analyses of the items used in the present study reconfirmed the three-factor structure (CFI: .93; TLIX: .90) and reliability scores for the behavioural, affective and cognitive components were .77, .78, and .86, respectively.

Dispositional resistance to change. This was measured using the 17-item RTC scale (Oreg, 2003). The scale has been validated in a variety of contexts and has consistently demonstrated high structural stability and reliability. Sample items include: "I'd rather do the things I'm used to than try out new and different things", and "When I am informed of a change in plans, I get a bit stressed out". Although the scale also provides four subscale scores in addition to the total RTC score, in this study only the composite RTC score was used to assess employees' dispositional resistance to change. The scale's reliability coefficient (Cronbach's alpha) in the present study was .86.

The perceived outcomes of the change. The perceived outcomes (i.e., power and prestige, job security, and intrinsic rewards) were evaluated using items that asked whether employees had believed, when the change was first introduced, that outcomes would improve, stay the same, or get worse. Items used a 5-point response scale ranging from "would significantly get worse" (1) to "would significantly improve" (5). Items for the power and prestige measure were based on accepted definitions of power in organizations (e.g., Pfeffer, 1981) and focused on the extent to which employees' felt that there would be a change in the amount of influence they have in the organization (e.g., "your responsibility over others in the organization", "the importance that the organization ascribes to your unit").

Items for the intrinsic rewards measure were based on factors from Hackman and Oldham's (1976) job characteristics model and involved the extent to which employees believed that there would be a change in the amount of challenge, autonomy, and personal interest that they have on the job (e.g., "the extent to which you find your job interesting", "the amount of challenge you experience on your job"). Threat to job security was assessed using one item that asked about the extent to which employees believed there would be a change in the chances that they would have to look for a new job as a result of the organizational change. The reliabilities achieved for power and prestige and intrinsic rewards were .92 and .90, respectively.

Trust in management and social influence. These were measured using two 3-item scales that were designed for the purpose of this study. Extant measures of trust in management (e.g., Coyle Shapiro, Morrow, Richardson, & Dunn, 2002; Lee, Pillutla, & Law, 2000) focus on employees' beliefs about management's trustworthiness and fairness, whereas for the present study

the aim was to assess the more general faith employees may have concerning management's ability to steer the organization. Items for the trust in management scale were: "There was the feeling that the leader of this change knows what he or she is doing", "Overall, there was the feeling that you can count on the organization's management", and "I believed that if management is suggesting this change, they are well informed and have good reasons for it". The scale's coefficient alpha was .92. The social influence scale consisted of three items that asked about the extent to which colleagues, subordinates, and supervisors were supportive of, or opposed to, the change (e.g., "To what extent were your colleagues supportive of the change"). The scale's reliability coefficient was .90.

Information about the change. This was measured using Wanberg and Banas's (2000) modified version of Miller et al.'s (1994) scale. The scale consists of four items (e.g., "The information I have received about the changes has been timely", "The information I have received about the changes has been useful"). In the present study, the scale's alpha coefficient was .88.

Job-satisfaction. This was measured using Cammann, Fichman, Jenkins, and Klesh's (1983) 3-item overall job-satisfaction scale. Scale items were: "All in all, I am satisfied with my job", "In general, I don't like my job" (reversed scoring), and "In general, I like working here". Respondents were asked to reflect on the extent to which they presently (at the time of the survey's administration) agree or disagree with each of the items. The scale's reliability coefficient in the present study was .77.

Intention to quit. This was measured using Cammann et al.'s (1983) 3-item intention to turnover scale. The items were: "It is likely that I will actively look for a new job in the next year", "I often think about quitting", and "I will probably look for a new job within the next year". The scale's reliability in this study was .87.

Continuance commitment. This was measured using Meyer, Allen, and Smith's (1993) 6-item scale. Sample items included: "One of the few negative consequences of leaving this organization would be the scarcity of available alternatives", "Too much of my life would be disrupted if I decided I wanted to leave my organization now". The reliability yielded in the present study was .74.

RESULTS

Descriptive statistics and intercorrelations of the variables in the study are presented in Table 1.

TABLE 1
Descriptive statistics and correlations for the variables in the study (N=177)

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Age	45	12	1													
2. Manager	0.54	0.50	.17*	1												
3. Dispositional resistance to change	3.19	0.75	.19*	-.04	1											
4. Improvement in power-prestige	2.91	0.74	.11	.09	.05	1										
5. Improvement in job security	2.81	0.68	.20**	.11	.02	.48**	1									
6. Improvement in intrinsic rewards	3.12	0.67	.10	.14	.18*	.68**	.30**	1								
7. Trust in management	3.82	1.39	-.01	.09	-.03	.32**	.25**	.31*	1							
8. Information	3.93	1.34	.13	.19*	.04	.13	.05	.08	.45**	1						
9. Social influence (against the change)	3.71	1.44	-.01	-.13	-.05	-.27**	-.06	-.09	-.15	-.03	1					
10. Affective resistance	3.02	1.15	-.09	-.01	.31**	-.43**	.31**	.32**	.33**	-.02	.33**	1				
11. Behavioural resistance	2.30	1.19	.01	.17*	.12	-.30**	-.19*	-.24**	.30**	.03	.26**	.60**	1			
12. Cognitive resistance	4.21	1.11	.03	-.04	-.03	-.55**	-.24**	-.52**	.52**	-.09	.23**	.46**	.50**	1		
13. Job satisfaction	5.74	0.92	.15	-.04	.00	.17*	.06	.21**	.17*	.19*	-.17*	-.15*	-.18*	-.02	1	
14. Intention to quit	2.42	1.26	-.15	.03	-.06	-.17*	-.16*	-.16*	-.24**	-.19*	.13	.23**	.15	.15*	-.49**	1
15. Continuance commitment	3.71	1.09	-.01	-.15	.33**	.10	-.03	.10	.02	-.04	.02	-.01	.11	-.12	-.11	.10

* $p < .05$, ** $p < .01$.

Structural equations modelling (SEM), with the AMOS (Arbuckle, 1999) software package, was used to test the study's path model² (see Figure 1). The advantage of testing the path model using SEM is that this enables one to test the two sets of relationships (i.e., antecedents–attitude and attitude–outcomes) simultaneously. Because of the many possible paths contained within the model, presenting the results via a diagram proves to be quite difficult to read and, therefore, for presentation purposes only, the SEM results are also displayed in two separate tables (for diagram form see the Figure 2).

Table 2 presents regression weights for the predictors of the attitude components, and Table 3 shows the regression weights for the predictions of the work-related outcomes. All of the possible relationships between antecedents and resistance components, and between resistance components and work-related outcomes, were tested. The model yielded acceptable fit to the data (Hu & Bentler, 1999), $\chi^2(143, 177) = 239.4$, $p < .01$; TLI = .90; CFI = .92; root mean square error of approximation (RMSEA) = .055.

Hypothesis 1, that employees' dispositional resistance to change will relate to employees' affective and behavioural resistance to the particular organizational change, was supported. The higher an employee's score on the RTC scale, the more negative were his or her affective and behavioural response to the change. As expected, the strongest correlation was with the affective component (.38).

Hypotheses 2a–2c suggested that anticipated threats to outcomes due to the change would yield affective and cognitive, but not behavioural, resistance of the change. More specifically, Hypothesis 2a predicted that threats to power and prestige will be associated with cognitive resistance; Hypothesis 2b predicted that threats to job security will be associated with affective resistance; and Hypothesis 2c predicted that threats to intrinsic motivation will be associated with both affective and cognitive resistance. The hypotheses were supported. None of the outcome antecedents were significantly related to behavioural resistance.

Hypotheses 3a–3c suggested that the manner in which the change was implemented would influence how employees would react to the change. In particular, the process antecedents were expected to correlate with behavioural resistance. These hypotheses were partially supported. As expected in Hypothesis 3a, trust in management was significantly negatively correlated with behavioural resistance. In addition, it was also negatively correlated with affective, and even more strongly with cognitive resistance. Those who had little trust in management presented increased behavioural,

²Separate regression analyses that tested: (1) the relationships between the antecedents to resistance and the attitude towards the change, and (2) the relationships between the attitudes towards the change and the work-related outcomes, yielded results that were very similar to the SEM path model results.

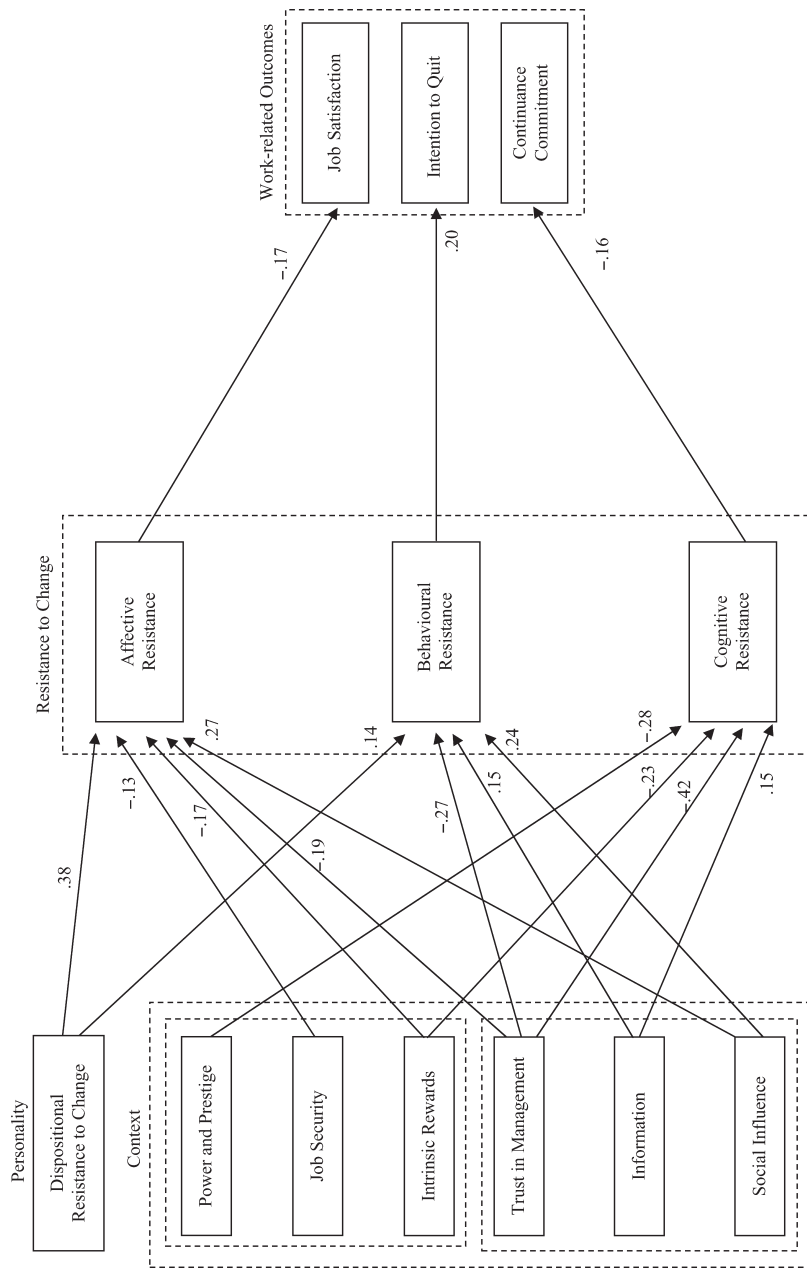


Figure 2. SEM path model results. Only paths that achieved significance at the .05 level or lower are drawn.

TABLE 2
SEM results for paths from antecedents to resistance components ($N = 177$)

<i>Variable</i>	<i>Affective resistance (β)</i>	<i>Behavioural resistance (β)</i>	<i>Cognitive resistance (β)</i>
Control			
Age	-.12*	-.04	.05
Manager (0 = no, 1 = yes)	.12*	.27***	.03
Personality			
RTC	.38***	.14*	-.00
Context—anticipated change outcomes			
Improvement in power and prestige	-.12	0.05	-.28***
Improvement in job security	-.13*	-.04	.05
Improvement in intrinsic rewards	-.17*	-.16	-.23**
Context—change process			
Trust in management	-.19**	-.27***	-.42***
Information	.09	.15*	.15*
Social influence (against the change)	.27***	.24***	.08
R^2	.43	.30	.47

* $p < .05$, ** $p < .01$, *** $p < .001$.

TABLE 3
SEM results for paths from resistance components to work-related outcomes ($N = 177$)

<i>Variable</i>	<i>Job-satisfaction (β)</i>	<i>Intention to quit (β)</i>	<i>Continuance commitment (β)</i>
Affective resistance	-.17*	-.00	-.04
Behavioural resistance	-.09	.20*	-.04
Cognitive resistance	.09	.06	-.16*
R^2	.04	.05	.04

* $p < .05$.

affective, and cognitive resistance. Similarly, confirming Hypothesis 3c, social influence was significantly related to the behavioural component. Beyond this relationship, social influence was also significantly correlated with affective resistance, but not with cognitive resistance. Those who were surrounded by people who opposed the change, reported increased behavioural and affective resistance to the change, but did not necessarily have a negative cognitive evaluation of it.

With respect to Hypothesis 3b, although information about the change did indeed yield a significant correlation with behavioural resistance, the direction of the relationship was opposite than expected. Less information about the change was associated with *less* behavioural and cognitive resistance. This finding will be further addressed in the discussion.

Hypotheses 4, 5, and 6 were all supported. While all of the relationships between each resistance component and all three work-related outcome variables were tested, only those associations that were expected to be particularly meaningful turned out significant. As Table 3 shows, affective resistance was negatively related to job satisfaction, behavioural resistance was positively related to intention to quit, and cognitive resistance was negatively related to continuance commitment.

DISCUSSION

The article introduces and tests an overarching model of resistance to change, where resistance is conceptualized as a three-dimensional (negative) attitude towards a particular organizational change. One purpose of the study was to establish the importance of using such a multi-faceted definition of resistance. Treating resistance as a unified concept unduly simplifies the term by assuming that how people behave under conditions of change completely corresponds with how they feel or what they think about that change. The analyses conducted supported the three-component structure.

In addition, the study's model considers both personality and context as antecedents of resistance. Among the context variables, a further distinction was made between anticipated change outcomes and the change process. As the findings indicate, different relationship patterns emerge between the different antecedent categories and the resistance components. In line with previous work (Oreg, 2003), the resistance to change personality trait showed a strong association with the affective component and a weaker, yet still significant, association with behavioural intention to resist. This suggests that some employees are more likely to experience negative emotions and more likely to act against organizational changes because of their dispositional inclination, independent of the particular nature of the change at hand.

Anticipated changes in outcomes, such as job security, intrinsic rewards, and power and prestige, were associated with the affective and cognitive components of resistance as predicted. The emotionally laden factor of job security had its strongest relationship with employees' affective reaction to the change, threats to power and prestige had their strongest relationship with cognitive resistance, and threats to intrinsic rewards were significantly correlated with both affective and cognitive resistance. None of the outcome factors were significantly associated with the behavioural resistance component.

On the other hand, factors involved in the change process, such as trust in management and social influence concerning the change, were all associated with the behavioural component of resistance, beyond some relationships that were found with cognitive or affective resistance. These different patterns of relationships for change outcomes and change process correspond with findings on the reactions to distributive versus procedural justice, according to which procedural justice—which concerns the processes through which organizational decisions are reached—is particularly likely to arouse behavioural responses beyond the affective and cognitive reactions that arise in response to distributive justice perceptions, which deal with outcomes (Robbins et al., 2000; Skarlicki & Folger, 1997).

Of all antecedents, trust in management was the only variable that presented significant effects on all three resistance components, and a particularly strong effect ($\beta = -.42$) on employees' cognitive evaluation of the change. In other words, lack of faith in the organization's leadership was strongly related to increased reports of anger, frustration, and anxiety with respect to the change, to increased actions against it, and in particular to negative evaluations of the need for, and value of, the organizational change. The fact that trust yielded the strongest effect with the cognitive, rather than behavioural, component may have resulted from the particular nature of the items on the trust scale. These items ask respondents about management's ability to make informed decisions and about respondents' faith in management's reasons for promoting the change, both factors that would appear to stress a cognitive process.

Furthermore, beyond the expected relationship that was confirmed between social influence and behavioural resistance, social influence also yielded a significant relationship with affective resistance. Employees who were surrounded by colleagues who opposed the change tended to express more negative emotions towards the change. Cognitive resistance, however, was not related to social influence. This, in fact, makes sense considering that social influence in itself does not present a rational reason for resisting a change. The fact that others resist a change may influence how one behaves or how one feels about a change, but in itself it provides no material or substantive information on which one would form a negative cognitive evaluation of the change.

In contrast, substantive reasons to resist *are* embedded in the information that is provided about a change. Indeed, in addition to the relationship between information and behavioural resistance, information was also significantly related to cognitive, but not affective resistance. Contrary to social influence, information about the change would be expected to first and foremost be processed cognitively. Interestingly though, the relationship between information and resistance was opposite to that hypothesized. More information about the change was associated with a worse evaluation

of it and with increased willingness to act against it. In line with previous findings (e.g., Wanberg & Banas, 2000) it was expected that the more information employees receive about the change, the *less* will they resist it. However, this argument is based on the assumption that resistance is irrational and is due to employees' unfamiliarity with the details of the change. Nevertheless, in many cases changes are resisted for very good reasons. Whenever employees have something to lose from the change we would expect more information to actually yield *increased* resistance. The relationship between information and resistance would therefore appear to depend on the content, rather than the mere existence, of the information. Furthermore, the manner in which the information is communicated is also likely to influence change acceptance.

Another explanation for these relationships would be a nonlinear relationship that might exist between information and resistance. Not enough information, as well as too much information, may both be detrimental and can thus increase employees' resistance. Moderate amounts of information could therefore be optimal when introducing organizational change. Future research should attempt to identify the specific contexts and processes in which information can alleviate resistance rather than exacerbate it.

Following the relationships between antecedents and resistance, the study's findings also demonstrate the potential outcomes of resistance. Here again the tridimensional conceptualization of resistance proved to be meaningful: Affective resistance negatively correlated with job satisfaction, behavioural resistance positively correlated with intention to quit, and cognitive resistance negatively correlated with continuance commitment. In other words, employees who reported being stressed, anxious, and angry because of the change, also reported being less satisfied with their jobs; those who reported having acted against the change also reported greater intention to leave the organization, and, similarly, those who reported having negative cognitive evaluations of the change when it was first introduced were also less likely to believe it is worth their while to remain in the organization.

As expected, each resistance component was particularly related to the corresponding work-related outcome (i.e., affective resistance to an affective outcome, behavioural resistance to a behavioural outcome, and cognitive resistance to a cognitive outcome). In other words, the relationships between resistance to change and work-related outcomes are not as simple as previous studies would have us believe. For example, being anxious because of an organizational change may decrease job satisfaction, but does not necessarily increase intentions to leave the organization. Obviously, these patterns could not have been revealed were it not for the multifaceted conceptualization of resistance.

In addition to the hypothesized relationships in the study, the two control variables of age and managerial position also yielded significant relationship with some of the resistance components (see Table 2). Age was negatively related to affective resistance, and managers tended to exhibit increased affective and behavioural resistance in comparison to employees without a managerial position. In the context of the particular organization studied, these findings are not surprising. In their interviews, several of the more senior employees, who would naturally tend to be older than the more recent recruits, described a long list of changes they had experienced in the course of their work in the organization. Some of these senior employees explicitly noted the fact that these many changes have brought them to the point where they are now somewhat apathetic about new change initiatives. This could therefore explain why stronger affective responses tended to come from the newer and less senior employees.

A possible explanation of why managers tended to exhibit more affective and in particular more behavioural resistance is the fact that, for better or worse, managers tend to be more involved in what happens within the organization. Although this may potentially help to reduce resistance (e.g., Coch & French, 1948), when negative consequences are foreseen managers are more likely to experience increased stress and anxiety and are more likely to try to take action against the change. Clearly, these explanations should be explicitly tested in other studies. Nevertheless, in order to test the validity of the study's model across types of position (management vs. nonmanagement), the model was reanalysed twice, once for the employee sample and again for the managerial sample. In both cases results confirmed the general pattern of relationships found in the original analysis.

The study suffers from a number of limitations. First, due to limited access to the organization, data for both predictor and criterion variables could only be collected in one survey, thus raising the concern for a monomethod bias. Nevertheless, if relationships in the study were found only because independent and dependent variables were assessed in the same survey, we would expect practically all of the relationships in the model to be significant. This was not the case. In fact, where specific relationships were expected between predictor and criterion variables, almost all of these relationships were indeed found to be significant, whereas the vast majority of the remaining possible relationships were not.

In addition, Lindell and Whitney's (2001) marker-variable analysis was used to estimate the amount of inflation in correlations due to common method variance. Based on Lindell and Whitney's recommendations, a marker variable was incorporated a-priori into the study's survey. The marker variable was the Physical Development Value, which involved the extent to which individuals pay attention and care about their physical appearance, and was measured using Scott's Physical Development Value

scale (Scott, 1965). Assuming that the true correlation between this variable and each of the criterion variables in the study is zero, the measured correlation between the marker variable and the criterion would constitute a satisfactory proxy for the method effect. After controlling for the method effect in this study, all of the significant correlations between predictor and criterion variables remained significant, thus increasing confidence in the validity of the study's conclusions.

Another limitation of the study is the fact that survey data were collected only once, after the organizational change had already been well underway. Because of this, no claims can be made regarding causality in the relationships found between the study's variables. Although previous theory and research exist to support the directionality suggested in this paper, other directions can not be precluded. For example, the association found in this study between affective reactions to change and job satisfaction can be interpreted to suggest that employees' job satisfaction is responsible for their retrospective reports about what they had felt towards the change when it was first introduced, just as well as the opposite relationship suggested herein that employees' affective reactions to the change were responsible for their ultimate satisfaction with their jobs.

Furthermore, because surveys were administered several months after the change was first introduced, it cannot be precluded that, at least to some extent, the findings are influenced by retrospective sense making. Nevertheless, the first introduction of the change only marked the beginning of the change process and, as was revealed in the preliminary interviews, the process was still very much underway even as the study surveys were being administered. More importantly, because respondents were not aware of the study's hypotheses, there is no reason to believe that their retrospective sense making would entirely overlap with the rationale that underlies the hypotheses. In other words, although retrospective accounts may sometimes distort actual occurrences, it is not likely that they would distort them in the precise direction of the theoretically grounded hypotheses. Nevertheless, it would be good if future studies, with several points of access to the organization over time, could allow for a longitudinal design that could help address these limitations.

Lastly, although the hypotheses raised in this study were derived from a review of the literature on resistance to change, and were not tailored to the particular organization or the particular organizational change addressed in this study, the findings are based on the study of one organization that has undergone a merger of two of its subunits. Furthermore, the large majority of organizational members in the study were men. While there is no reason to believe that the general patterns revealed in this study would not surface among women, in other organizations, and with respect to other organizational changes, this is an empirical question that is yet to be

answered. At the least, the findings of this study present a good first step in exploring these relationships with resistance.

The study's findings bear a number of implications for managers and change agents. First of all, relative to the other antecedents, employees' sense of challenge, autonomy, and stimulation (i.e., intrinsic motivation), and their trust in management were the most meaningful antecedents of resistance to the change. Of the change outcomes considered, threats to intrinsic rewards aroused the most concerns. To the extent that these findings can be generalized to other types of organizational changes, change agents should give special attention to the possible ramifications the change may have on employees' ability to actualize themselves in their jobs.

Similarly, with respect to the manner and general atmosphere in which the change was implemented, trust in management proved to be a dominant variable in its associations with all three resistance components. Hopefully, managers make it a basic practice to invest in building and maintaining the trust of their employees. The present findings emphasize the added value of such practices when planning and implementing organizational change.

Furthermore, the present study responds to Piderit's (2000) call to consider the likely ambivalence involved with respect to most organizational changes, rather than limit ourselves to a dichotomous view of resistance versus acceptance. In interpreting employee responses to change proposals, managers should be sensitive to the different forms in which resistance can manifest itself. As this study's findings suggest, different forms of resistance can indicate different types of antecedents, and thus would point to different measures for alleviating resistance. Whereas a lack of trust in management is likely to provoke a full spectrum of resistance forms, other characteristics of the change are more likely to arouse specifically only one or two forms. In particular, whereas anticipated change outcomes influence how people feel and think about the change, people's perceptions of the process through which the change is implemented can actually drive them to take action against the change.

Because resistance to change is often based on valid concerns (Nord & Jermier, 1994), resistance should be something the organization uses to improve itself and its decisions. In her discussion of attitudes towards change, Piderit (2000) addresses the potential advantages of fostering employee ambivalence towards proposed organizational change. Along these lines, the findings of this study suggest that by acknowledging ambivalent reactions towards change managers may find it easier to generate new ideas and solutions for dealing with the situation that instigated the change to begin with.

Finally, managers can learn from the relationships found in this study between the different resistance components and the different types of work-related outcomes. Managers should be aware that people's feelings about a

change may predict how they'll feel about their jobs somewhere down the line; that what they do as the change takes its course could help anticipate their willingness to remain in the organization; and that their beliefs about the benefits or hindrances of the change could later on translate into their commitment to the organization.

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APPENDIX

Items for the change attitude scale

Affective	I was afraid of the change I had a bad feeling about the change I was quite excited about the change* The change made me upset I was stressed by the change
Behavioural	I looked for ways to prevent the change from taking place I protested against the change I complained about the change to my colleagues I presented my objections regarding the change to management I spoke rather highly of the change to others*
Cognitive	I believed that the change would harm the way things are done in the organization I thought that it's a negative thing that we were going through this change I believed that the change would make my job harder I believed that the change would benefit the organization* I believed that I could personally benefit from the change*

Words marked with an asterisk (*) were reverse coded.