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A FRAMEWORK FOR ASSESSING COMMITMENT TO CHANGE. PROCESS AND CONTEXT VARIABLES OF ORGANIZATIONAL CHANGE

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ABSTRACT

Major organizational changes yield limited success. Failure of change is frequently due to a lack of commitment and motivation of the employees who have to implement the change. In this paper a framework is developed in which employees' emotional involvement and their commitment to change is explained by change process variables and internal context variables. The process variables refer to the different aspects organizations have to follow in implementing fundamental changes. The internal context variables are located at the organizational, work unit and individual level. We found that emotional involvement is an important mediating variable between change process and context variables and commitment to change. To explore the merits of this framework, we studied the perceptions of employees involved in major changes of different organizations. Results indicated that the organization's change history, jobsatisfaction, participation in the change process, availability of time and emotional involvement are important variables in understanding commitment to change. Study findings are discussed and implications for research and theory-building are suggested.

Key words: organizational change, commitment, emotional involvement

Efforts to implement organizational change have frequently been shown to fail (Edmonson & Woolley, 1999; Kotter, 1995). The difficulty of changing an organization is exemplified by the many firms that have tried to adopt TQM and have failed. Research has indicated that 70% of the business process reengineering projects have yielded limited success (Bashein, Marcus & Riley, 1994). A study of the American Management Association showed that less than half the companies involved in repeated restructuring and downsizings achieved their expense reduction goals and less than one in four increased their productivity (Applebaum & Batt, 1993). One of the main reasons for all of these failures was the lack of motivation and a sharp loss of morale of the workers who had to implement the changes.

Although organizational change is often about changes in structures, hierarchy, reward systems, communication, technology and so forth, all change and every form of learning starts with individual change and individual learning. Organizational change is always mediated through individual changes (Schein, 1980). As Schneider, Brief & Guzzo (1996: 7) put it: "... if the people do not change, there is no organizational change." One of the fundamental reasons why organizational change is so difficult to achieve is this individual, psychological nature of organizational change. It explains also why organizational change efforts often are misconceived.

In this paper, a framework is presented of organizational, process and attitudinal variables that are related to commitment to change.

THEORETICAL BACKGROUND AND HYPOTHESES

Commitment to change

Change is often described as a process that goes through a series of different phases that require a considerable length of time. These phases correspond with Lewin's (1952) three-phase change process of unfreezing, moving and freezing. In the unfreezing-phase, it is important to create a sense of urgency (Kotter, 1995) so that individuals are ready to change. Armenakis, et al. (1993) described readiness to change as the "organizational members' beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization's capacity to successfully make those changes." During the implementation process (the second changing-phase and the third re-freezing-phase), the active support of workers is essential (Armenakis & Bedeian, 1999). When people are invited to participate and when their ideas are taken seriously, their commitment to the change process will increase (Armenakis & Bedeian, 1999; Strauss, 1998). Jaffe, Scott and Tobe (1994) indicated that commitment takes place as organizational members embrace a proposed change. Commitment is the final stage in their four-stage model of how organizational members experience change as it unfolds. In this model, commitment is preceded by denial (or readiness to change), resistance and exploration. Readiness to change and the commitment to change of individuals are interrelated. Both constructs indicate the degree to which organizational members are prepared to support organizational change. In this article we focus on the commitment of individuals to change during the implementation process of major changes.

Emotional involvement

Change theorists have a strong cognitive orientation (e.g. Schein, E.R., 1980; Argyris, 1990, 1993). However, many scholars (Bartunek, 1993; Gersick, 1991; Lazarus, 1991; Frijda, 1996; Huy, 1999; Seo, 1999) have stressed that organizational behavior and change are strongly influenced by emotions. Emotion is inseparable from the cognitive process, playing a central role in perception, decision and behavior (Damasio, 1994). This is definitely the case when the individual's well-being is at stake (Lazarus, 1991). In change processes people ask themselves whether the new situation is a threat or a benefit to their personal well-being. If change recipients evaluate the potential consequences as harmful, they are likely to be non receptive to change, but if they see it as a challenge they will be better attuned (Huy, 1999). In this paper we present a model that links emotional involvement to commitment to change. As Huy (1999) has indicated, emotional receptivity influences the concrete actions taken by a person in the direction of change. These actions depend on the necessary commitment to cooperate during the change process. We propose that an individual's commitment to change is mediated by his emotional involvement.

Hypothesis 1: Emotional involvement is a mediating variable for commitment to change.

Factors related to commitment to change

The factors that influence the commitment of the workers towards change, apart from emotional involvement, are diverse and complex. A first set of factors correspond with the implementation process of specific changes. These factors refer to the different aspects the

change agents have to follow in implementing fundamental changes. However, as Armenakis and Bedeian (1999) indicate in their recent review of the organizational change research, responses to changes also depend on contextual elements. These elements comprise external and internal factors. External, environmental conditions such as industry-level changes (Meyer, Brooks & Goes, 1990), legislative and technological changes (Haveman, 1992; Kelly & Amburgey, 1991) and competitive pressure (Meyer, Brooks & Goes, 1990) have a major relevance for strategic change management. Internal contextual elements are located at the organizational level, at the group or work unit level and at the individual level (Burke & Litwin, 1992; Eby et al., 2000). As commitment to change is a typical attitude influenced by internal organizational and individual characteristics, we are especially interested in internal context factors. Very little research has tried to explain the individual commitment to organizational change from both a process and a contextual perspective. In this article, we build a model that comprises both change process and context factors that are related to the individual commitment of change.

Change process factors

We reviewed the process literature in search of the variables most likely to be related to change commitment. On the basis of this review, we identified four variables: support of top management, time, participation and line leadership. These variables were chosen on the basis of three criteria: (a) there appeared to be a theoretical relationship between the variable and commitment to change; (b) measures of the variables existed and (c) we found construct validity for the selected variables. Though our review was comprehensive, it is not intended to be exhaustive, as there may be traits that met our three conditions that nevertheless were excluded from the study.

Support of top management. Top management behavior is an important component in the change process. Establishing and communicating a need to change is one of the first important steps to follow in implementing change (Armenakis & Bedeian, 1999; Galpin, 1996; Judson, 1991; Kotter, 1995). In major changes, the head of the organization is key in this communication process (Kotter, 1995). Organizational members will not take change efforts serious, if top management does not actively support the change process. The development of a sense of urgency and a vision that is relatively easy to communicate and appeals to employees is an important element in this process. Organizational change is also less successful when top management fails to keep employees informed about the process of change (Kreitner & Kinicki, 2000: 674). If employees get the feeling that those in power lose interest in the on going process, their belief in the transformation efforts will fade out.

Hypothesis 2: Support of top management is positively related to emotional involvement and commitment to change.

Line leadership. Kotter (1995) has stressed that successful major changes need a powerful guiding coalition. This powerful coalition goes beyond the support of top management. Groups without strong line leadership never achieve the power that is required (Kotter, 1995: 62). Moreover, line managers have to translate the general goals of organizational change efforts into specific departmental objectives (Kanter et al., 1992). Organizational transformation often implies a change in the tasks of line managers, their personal leadership style and their social relations with subordinates. The leadership style of line managers during the change process remains an important element to be monitored

during the change process. The active support, the ability to confront the new challenges and the ability to support subordinates adequately are all crucial elements of this line leadership.

Hypothesis 3: Line leadership is positively related to emotional involvement and commitment to change.

Time. Time plays at least in two ways a central role in the change process. First, implementation of change goes through different phases. Several models have described the different phases (Judson, 1991; Kotter, 1995; Galpin, 1996; Armenakis, Harris & Field, 1999; Isabella, 1990; Jaffe, Scott and Tobe, 1994). These phases take time. Common to all the implementation models is the message that efforts to bypass these phases seldom yield a satisfactory result (Armenakis & Bedeian, 1999: 303). Second, major change efforts demand hard work, permanent attention and perseverance. When organizational members are faced with too many changes at the same time, they can not allocate their time properly to all of the changes and continue their daily tasks at the same time. There is not enough time to test the recommendations (Galpin, 1996) and to explore new behaviors (Jaffe et al., 1994). In the end, the change project fails and employees become cynical towards the announcements of new change projects (Wanous, Reichers & Austin, 2000).

Hypothesis 4: Time is positively related to emotional involvement and commitment to change.

Participation. Lack of participation is a major cause of disappointing results with organizational renewal (McNabb & Sepic, 1995). In their research about cynicism of organizational change, Reichers et al. (1997) indicated employees must believe that their

opinions have been heard and given careful respect and consideration. More substantive forms of participation in the change process (i.e. shared decision-making) tend to be associated with higher commitment.

In order to participate employees must dispose of the necessary information. Participation provides opportunities to receive more information. Without proper information, organizational members can hardly be involved in the change effort. Kotter (1995: 63) has stressed the importance of credible and timely information to capture the hearts and minds of employees. Change agents must prevent that employees get their information through the grape vine. Lack of information and rumours make it easier to conclude that the change effort is failing (Reichers et al., 1997) and decreases the commitment of employees to the change process. We conclude that information and involvement in the decision-making are two important elements in the participation process.

Hypothesis 5: Participation is positively related to emotional involvement and commitment to change.

Contextual factors

Many studies in organizational change try to explain why change efforts succeed or fail. In these studies the organization is treated as the appropriate unit of analysis for assessing the result of a change program. This is rather surprising since organizational change is always mediated through individual change. Edmonson and Woolley (1999: 4) state that

“Organization change starts with new behaviors and decisions on the part of individuals, who are influenced by proximal interpersonal factors as well as by organization-level factors.”

They indicate that different parts of the organization can react differently on change initiatives. Work units or groups are the key elements in organizational change efforts rather than the organization as a whole. This interesting view on organizational change underscores the importance of interpersonal conditions as well as the individual nature of organizational change.

Differentiation theories share a similar view on individual and social change (Armenakis et al., 1993). Individual differences theory argues that the response of one individual may diverge from that of another because of differing cognitive structures: specific individuals may react differently to the same message. Social differentiation theory argues that the response to influence attempts will be determined by the target's cultural or subcultural membership. Hierarchical differentiation shape group membership and result in psychological boundaries that may affect the beliefs, attitudes, intentions and behaviors of members.

In their article on the psychodynamics of organizational transformation and change, Kets de Vries and Balazs (1998) have also stressed the importance of factors at the individual and the interpersonal level in facilitating change. They have stated that the outcome of the transformation process is influenced by two primary factors: the presence of a support system to ease the process of change and the personality type of the individuals involved. Judge et al., (1999) have found that coping successfully with organizational change is related with certain personality variables (e.g. locus of control).

It is clear that organizational change is related to a number of factors at three levels: 1) the organizational level; 2) the work unit level and 3) the individual level. We propose that these factors can have a cumulative effect on the change commitment of individuals. For each level, we have selected a number of factors, based on a theoretical relationship between the variable and commitment to change. We used existing measures when the literature provided validated

measures. We also established construct validity. As with the change process variables, we do not claim that our selection is exhaustive.

Organization

Procedural justice. Schneider, Brief & Guzzo (1996) have indicated that the decision process of top management plays an important role in the creation of a climate and culture for sustainable organizational change. Mutual trust and the possibility to participate in the decision process are central in the development of a change-friendly climate. Conger (1998) has found that managers who are considered to be trustworthy and fair, establish credibility. This credibility is a prerequisite to introduce organizational changes. The extent to which the top management's decision process is judged to be fair, can be defined as procedural justice (Kim & Mauborgne, 1993). This concept refers to the two-way communication, the consistency of decisions across subsidiary units, the transparency of the decisions and the possibility to challenge top management views.

Hypothesis 6: The perception of procedural justice in the organization is positively related to emotional involvement and commitment to change.

Rewards. Apart from trust in top management's decisions, the focus of rewards determines the climate for sustainable change (Schneider, Brief & Guzzo, 1996). Organizations where risk taking is rewarded stimulate organizational learning and innovation (Senge, 1990). Their culture differs from bureaucracies where procedure compliance is dominant and where mistakes are punished. Burke & Litwin (1992) have provided a model of organizational performance and change. They proposed that the organization's reward system

is perhaps the most important subsystem of the organization's policy and procedures. People do what they are rewarded for doing. Therefore pay-for-performance reward systems influence behavior in the workplace.

Hypothesis 7: Reward systems that focus on risk taking and pay-for-performance are positively related to emotional involvement and commitment to change.

History of change. The readiness to change is influenced by the track record of successfully implementing major organizational changes (Schneider, Brief & Guzzo, 1996). If organizational changes have failed in the past, employees will be reluctant towards new change initiatives. In their research on cynicism about organizational change Wanous, Reichers & Austin (2000) have found that the history of change is correlated with the motivation to keep on trying to make changes. This relationship suggests that cynicism may be somewhat self-fulfilling. The researchers indicated that the higher the preexisting level of cynicism about organizational change, the more executives need to confront and discuss previous failures before moving ahead.

Hypothesis 8: A history of organizational change failures is negatively related to emotional involvement and commitment to change.

Work unit

Psychological safety. Apart from organizational factors, behavioral changes are also affected by interpersonal and group-level factors (Lee, 1997), because these changes occur in face-to-face interaction. People's readiness to change depends on their beliefs about how

proximal others will respond (Edmondson, 1999). Trust in top management and reward systems that stimulate risk taking behavior at the organizational level, must be complemented with mutual trust and confidence in the subsidiary work units. Edmondson & Woolley (1999: 7) defined psychological safety as “the perception that one’s work environment is safe for interpersonal risk-taking such that proximal others will not reject or embarrass those who make mistakes or speak up about difficult issues.” The researchers stressed that although peers’ attitudes directly affect psychological safety, relationships between subordinates and supervisors/managers are centrally important in this construct. If subordinates believe that managers cannot be counted upon to provide help, then employees will find it very difficult to cope with changes productively.

Hypothesis 9: Psychological safety is positively related to emotional involvement and commitment to change.

Participation at work. Apart from participation of employees in major change efforts, participation at work at a general level may impact motivation to large-scale change (Schneider et al., 1996). Research has indicated that participation can influence job attitudes and motivation (Leana et al., 1990). In their study of organizational readiness for change, Eby et al. (2000) found marginal support for participation at work to be positively related to readiness to change. The scholars pointed out that it is expected that employees who perceive their work environment as highly participative are more likely to anticipate being involved in decisions relevant to a pending change effort. Since theory has underscored the importance of participation in organizational renewal (e.g. Armenakis et al., 1993; McNabb & Sepic, 1995), we expect participation at work at a general level to be related to commitment to change.

Hypothesis 10: Participation at work is positively related to emotional involvement and commitment to change.

Individual

Locus of control. In the literature, little research has taken a psychological focus in studying the process of organizational change. The study of Judge, et al. (1999) is one of the rare exceptions, as the authors rightfully claimed in their recent article in the Journal of Applied Psychology. However, several studies have analyzed the relationship between personal characteristics and entrepreneurship (e.g. Boone, et al., 1996; Brockhaus, 1980; Van de Ven, et al., 1984). In all of these studies locus of control is perceived as one of the most influential personal characteristics affecting innovative behavior. Rotter (1966) and his colleagues developed this concept. They defined locus of control as the perception by the individual of his or her ability to exercise control over the environment. Those with an internal locus of control see themselves as active agents and believe they have control over their environment and their personal successes. Those with an external locus of control see themselves as relatively passive agents and believe that the events in their lives are controlled by external forces such as change and powerful others.

Hypothesis 11: Internal locus of control is positively related to emotional involvement and commitment to change.

Jobsatisfaction. We believed that people with a high jobsatisfaction are more motivated to support organizational changes, independent of the way in which these changes are introduced and implemented. Research has found that positive views of organizational

change is positively related to jobsatisfaction (Judge, et al., 1999; Schweiger & DeNisi, 1991; Wanberg, 2000). Employees who find their jobs challenging and satisfying will have a positive attitude towards new changes.

Hypothesis 12: Jobsatisfaction is positively related to emotional involvement and commitment to change.

METHODS

Setting, participants and procedure

Individual employees, going through an organizational change process, comprised the sample of our study. The participants were employed by 35 organizations located in Belgium. Upper management confirmed that each of these organizations was experiencing important change processes.

For each organization a team of employees, ranging from 6 to 10 people, completed the questionnaire. They answered the questionnaire as part of a training preassessment. Context as well as process variables were measured. All survey items were measured using a 5-point Likert-type scale (1 = strongly disagree, 3 = neutral, 5 = strongly agree). The higher scores indicate higher levels of each construct. 234 employees completed the questionnaire; 66 percent are males, 34 percent females. Most employees (44.9%) are between 35 and 44 years old (27.8% is older than 44, 25.6% is between 25 and 34, and only 1.3% is younger than 25). Almost half of the employees (49.6%) have an organizational tenure of more than 10 years.

Respondents completed the questionnaire voluntarily. They were promised that their responses were completely confidential.

Measurements: independent and dependent variables

The dependent variable commitment to change was measured by a scale developed by Boonstra (1998). The reliability coefficient α was .86. An example item includes “I’m willing to contribute to the change process”.

The scale emotional involvement was based on a study by Metselaar (1997). One meaningful factor emerged from the principal component exploratory factor analysis. The Cronbach α of the scale was .86. The scale measures the feeling people have with regard to the change process, e.g. “I experience the change process as something positive”.

To measure the process variables – support of top management, time, line leadership and participation – we used scales based on the research by Boonstra (1998). Every scale was subjected to a principal component exploratory factor analysis. Items with factor loadings of .50 or less were eliminated (Becker and Bös, 1979). If only one meaningful factor emerged, the scale was confirmed. Based on the factor analyses and reliability analyses two of the previous developed scales were retained: line leadership (e.g. ‘Line managers pay attention to the personal consequences of the change project for the employees’; $\alpha = .67$) and participation (e.g. ‘The employees are involved to analyze the problem’; $\alpha = .91$). The two other scales, support of top management and time, were reduced to the items loading on the same factor. The reliability (α) of these scales was .61 for support of top management (e.g. ‘The top of the organization is actively involved in the change project’) and .62 for time (e.g. ‘Employees have sufficient time to complete each of the phases of the change project’).

The context variables were measured at three different levels: organization, work unit and individual level. The first level (organization) included three variables: procedural justice, rewards, and history of change.

To measure procedural justice we employed the measure developed by Kim and Mauborgne (1993). This variable is a measure of trust in top management, e.g. “Bilateral communication between top management and subsidiary units is excellent”. The Cronbach α for this scale was .80.

The rewards construct was assessed by using a newly developed scale (e.g. ‘Employees are rewarded for looking for new solutions’). The scale was subjected to a principal component exploratory factor analysis; one meaningful scale emerged. The reliability coefficient (α) for this scale was .73.

The measurement of the ‘history of change’ construct was a combination of a scale developed by Metselaar (1997) and three newly developed items. The items with factor loadings of .50 or less were eliminated. An example item of this scale is “I have been actively involved in the implementation process of previous change projects” ($\alpha=.62$).

The second level, work unit, included two variables: psychological safety and participation at work. To measure psychological safety we used the scale developed by Edmondson and Woolley (1999). This scale measures the trust and help employees experience in their relationship with their supervisors (e.g. ‘If I have a problem in this company, I could depend on my manager to be my advocate’; $\alpha=.75$).

Participation at work was measured with a newly developed scale (e.g. ‘Management takes into account the remarks of the employees’; $\alpha= .83$).

On the individual level two variables were assessed: jobsatisfaction and locus of control.

The development of the job satisfaction scale was based on the scale used by Hay and Miskel (1978) (e.g. 'In general I'm satisfied with my present job'; $\alpha = .72$).

The locus of control scale was excerpted from Rotter (1966) (e.g. 'Capable people who fail to become leaders have not taken advantage of their opportunities'; $\alpha = .64$).

ANALYSES AND RESULTS

Demographic variables. We asked the respondents about their age, gender, hierarchical level, the organization they work for and organizational tenure. We selected these variables because previous research had related them to commitment phenomena (Fry & Greenfeld, 1980; Luthans, McCaul, & Dodd, 1985; Morrow & McElroy, 1987). We treated these variables as control variables. We used regression analysis and found no significant relationship between the control variables on the one hand and commitment to change and emotional involvement on the other hand.

The correlations between the independent variables ranged from .014 to .56. To be sure we had no redundant variables in our analysis, we assessed multicollinearity. For each variable we computed tolerance ($1 - R^2$), where R^2 is the squared multiple correlation of a variable with the other independent variables. When the tolerance value is small (close to 0), the variable is almost a linear combination of the other independent variables. The tolerance values in our study ranged from .478 to .919, which means that there is no multicollinearity problem.

As we wanted to test our model, LISREL is an appropriate analytical method. Although we have a final sample of 234 employees, it is rather small for analytic purposes using LISREL. In order to restrict the number of variables in the model, we first used regression analyses to determine the significant relationships between context and process variables on the one hand and emotional involvement and commitment to change on the other hand.

Looking at the regression analysis of the context variables on emotional involvement, we found a significant standardized regression weight for rewards ($\beta = .210, p < .01$) and history of change ($\beta = .314, p < .01$) (both at the organizational level) and for job satisfaction ($\beta = .193, p < .01$) (at the individual level). We also regressed the context variables on the dependent variable 'commitment to change' and we found similar results except for rewards. The standardized regression weight for history of change is 0.405 ($p < .01$); for jobsatisfaction the standardized regression weight is 0.223 ($p < .01$). The coefficient of rewards is not significant.

With regard to the process variables the results show a significant relationship between two of these variables and emotional involvement, i.e. participation ($\beta = .414, p < .01$) and time ($\beta = .177, p < .01$). A regression of the process variables on commitment to change results in the following significant regression weights: support of top management ($\beta = .161, p < .05$), participation ($\beta = .232, p < .01$) and time ($\beta = .182, p < .01$).

The regression of emotional involvement on commitment to change demonstrates a positive and highly significant relationship between the two variables ($\beta = 0.535, p < .001$).

Based on these results we ran a LISREL analysis, leaving out the variables with no significant relationship with emotional involvement or commitment to change. We hypothesized that the variables rewards, history of change (at the organizational level), and jobsatisfaction (on the

individual level) will have an influence on the emotional involvement to change. Also participation, time, and support of top management (i.e. the process variables) will influence emotional involvement to a change project. Emotional involvement, at last, is expected to have an influence on commitment to change.

The general model does fit the data. The chi-square is 7.176 with 3 degrees of freedom ($p = 0.0665$). Other indices are: GFI = 0.992, AGFI = 0.910, CFI = 0.990. The t-values of the standardized path coefficients are significant at the .01 level except for rewards ($t = 1.677$) and support of top management ($t = 0.919$).

Based on these findings we can conclude that the main context variables influencing emotional involvement to change are history of change and jobsatisfaction; the main process variables are participation and time. Emotional involvement is a significant indicator of commitment to change ($t = 6.761$). A remarkable finding is that the two main context variables, history of change and jobsatisfaction, also have a direct influence on commitment to change.

Insert figure 1 about here

Consistent with expectation, emotional involvement of individuals has a significant influence on their commitment to a change project. In addition, emotional involvement is a linking factor between some process and context variables on the one hand and commitment to change on the other hand, supporting hypothesis 1. Two of the process variables have a significant influence on emotional involvement, i.e. participation of the employees in the change process and the time they have to realize the change project. This was predicted by hypotheses 4 and 5. We also expected the two process variables to be directly related to commitment to change; this was not supported. The two context variables influencing

emotional involvement are history of change and job satisfaction. Individuals having positive experience with past change projects show a higher emotional involvement and commitment to change, supporting hypothesis 8. People who are satisfied with their job also show a higher emotional involvement and commitment to change, as predicted by hypothesis 12. No support was found for the other hypotheses.

DISCUSSION

The purpose of this study was to examine several variables related to the employees' commitment to change. Following the recommendations of Huy (1999), it was hypothesized that emotional involvement reinforces employees' commitment to organizational change. This idea is also consistent with Damasio's (1991) argumentation that emotion plays a central role in perception, decision and behavior. Results of the regression analysis and LISREL analysis supported the notion that emotional involvement is strongly related to commitment to change.

Based on the observations of Armenakis and Bedeian (1999) we hypothesized that process variables as well as contextual variables will influence emotional involvement and commitment to organizational change.

Results of the LISREL analysis indicated that two process variables related to a specific change project play a central role in the employees' behavior: participation in the change project and availability of time. In order to see a change project as something positive (emotional involvement), employees want to be informed about the project and they want to be involved in the development and the implementation of the change project. Moreover they need enough time to work on the project. The number of change projects they are involved in

at the same time, must be limited. Finally, a positive emotional involvement results in a higher commitment to the change effort. Employees who perceive change efforts as improvements of their work environment are devoted to the transformation.

The behavior of management (top management as well as line leadership) is less important in order to stimulate the employees' emotional involvement. Their motivation to change does not depend on the behavior of other people (i.e. management) but on the impact they have on the change process. Being in control of part of the change process is very important to them.

Two contextual variables, dissociated from a specific change project, have an important influence on the individual's emotional involvement and commitment to change, i.e. history of change (at the organizational level) and job satisfaction (at the individual level).

As Schneider, Brief and Guzzo (1996) mentioned the readiness to change is influenced by the track record of successfully implementing major organizational changes. A positive experience with previous change projects will stimulate the employees' commitment, a negative experience will inhibit their commitment. At the organizational level, the results of this study indicated that the history of change is a major factor influencing the employees' commitment to change while the openness and credibility of top management nor the general reward system seem to have an influence.

None of the variables at the work unit level have a significant influence on the employees' behavior in a change process. Behavior of management (i.e. psychological safety) does not play a dominant role. This is a confirmation of the findings with regard to the process variables support of top management and line leadership.

Eby et al., (2000) reported that participation at work is positively related to readiness to change, although they warned that this finding was marginally significant and should be

interpreted cautiously. They argued that employees with a highly participative work environment might assume that they will be involved in decisions about new changes. Therefore, it seems logic that these employees have a high readiness to change. The findings of our study indicate that there is a major difference between participation at work at a general level and participation in specific change programs. Participation at work is not related at all to the commitment of employees to the change efforts, while participation in the change process is highly significant.

At the individual level job satisfaction has a major influence on emotional involvement and commitment to change. This is confirmed by Judge et al. (1999) and Schweiger and DeNisi (1991) who found a positive relation between job satisfaction and positive views of organizational change.

Locus of control, described by Boone et al., (1996), Brockhaus (1980), and Van de Ven et al. (1984) as a variable affecting innovative behavior, has no significant influence on the involvement in a change project. The meaning of personality characteristics to organizational change remains obscure. Jugde et al. (1999) found a significant relation between locus of control and coping with change, whereas other scholars (Wanous et al., 2000) have indicated that personality-based predispositions are of minor importance in attitudes about organizational change. It is possible that personality has an effect on attitudes towards change and innovation in general, and that this effect becomes irrelevant in specific change projects, due to the decisive effect of the way the change project is managed.

Suggestions for future research

The results of this study indicated that change process factors have a major impact on the commitment to change of employees. The way specific changes were introduced and implemented in the past and in the present seems to influence the commitment to change efforts in a fundamental way. Internal context variables such as procedural justice, rewards, participation at work, psychological safety of employees in their work environment, are not significant for the employees' change commitment. The findings of our study suggest that variables referring to the climate of the organization, as it was in the past, are no reliable predictors of employees' perceptions of new change programs. Paradoxically the only important organizational context variable that is highly related to commitment to change, is the change history of the organization. Results of this study suggest that change management in the past and in the present has a decisive impact on employees commitment to specific changes, independent of the current organizational or work unit climate. The same is true for personality factors like locus of control. Further research is required to study the relationship between contextual variables and change process variables and the impact of both sets of variables on commitment to change. Therefore, longitudinal research is required, studying organizations before and after major organizational changes. Research that compares organizations with a different internal context before and after they have gone through a major change, is necessary to verify our proposition.

Another possible explanation for the minor role certain internal contextual variables play in the change commitment of employees in our study is that the relevance of these variables depends on the kind of change that is implemented. Edmondson and Wooley (1999) found that psychological safety is an important variable for a specific kind of change: organizational

learning programs focused on supervisor – subordinate dialogues. In our study, where several organizational changes are studied, psychological safety is not relevant to employees' commitment to change. What is essential for organizational learning programs in work units, is not necessarily relevant to other change efforts. Our study indicates however that certain change process variables, like participation in the change program and the disposable time of change targets, have a relevance for all kinds of changes. Also, job satisfaction and the change history of the organization have a major impact throughout all the different change efforts we analyzed. Future research should focus on the relevance of contextual variables for different kinds of organizational change efforts.

Limitations

We studied organizational changes in 35 different organizations because research in one or two organizations limits generalizability. As we stated earlier, observations of specific organizational changes are not always relevant to all organizational transformations. A disadvantage of our cross-organizational research is that the conditions in which the organizational change took place, are abstracted as well. Unanticipated effects can influence the results. Therefore, we controlled not only for demographic variables such as age, sex, tenure or management-level, but for organization as well.

Many organizational changes fail because they have a demoralizing and demotivating impact on the employees who have to implement the changes. In our study we did not analyze in what way commitment to change actually resulted in an overall organizational commitment and motivation of employees after the changes were implemented. Further longitudinal

research is necessary to understand the effect of employees' commitment to changes on their organizational behavior and on their overall commitment and motivation.

In this study we attempted to build a framework of internal context variables and change process variables related to commitment to change. In this framework emotional involvement is a mediating variable between the context and process variables on the one hand, and commitment to change on the other hand. We suggested that the change history of the organization, the jobsatisfaction of employees, their participation in the change program and their availability of time are important antecedents of their commitment to change. Further research that tries to understand the meaning of different factors that influence an effective change is essential, as organizational change remains a necessary condition to survive in an ever more competitive environment.

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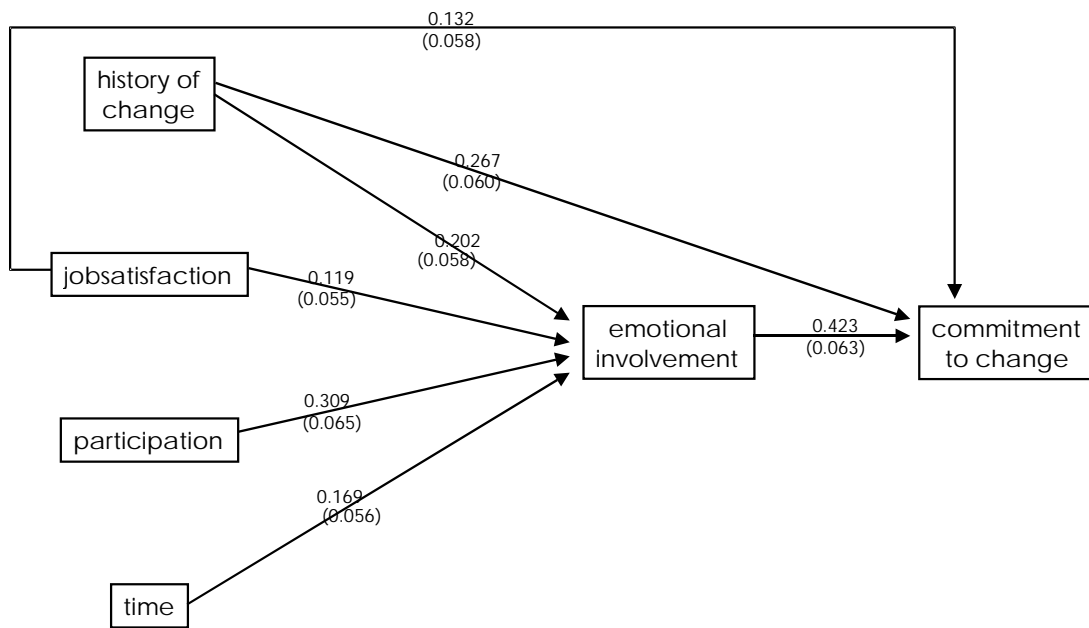
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FIGURE 1



These are the estimated regression coefficients (only significant ones are presented). Standard errors are in parentheses.