Facilitating Acceptance of Organizational Change: The Importance of Self-Determination[1]

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Self-determination theory (Deci & Ryan, 1985, 1987, 1991) proposes that internalization can be facilitated by supporting a person's autonomy. Autonomy support can be achieved using 3 means: giving a rationale for doing a task, offering some choice about how to do the task, and acknowledging feelings about the task. We examined the effects of these 3 factors on acceptance of change in a work organization. Employees from a large Canadian telecommunications company that was in the midst of profound transformation completed scales on 2 separate occasions. Cross-sectional and longitudinal results demonstrated that the 3 factors facilitated acceptance of organizational change, with substantial effect sizes. Implications for successful organizational transformation are discussed.

Self-determination theory "views human beings as proactive organisms whose natural or intrinsic functioning can be either facilitated or impeded by the social context" (Deci, Eghrari, Patrick, & Leone, 1994, p. 120). As such, the theory posits that we have a basic need for autonomy. This premise has been supported by research showing that controls, such as rewards (Deci, 1971), deadlines (Amabile, DeJong, & Lepper, 1976), and competition (Reeve & Deci, 1996), undermine task interest and quality of performance. These findings imply that when people are coerced into doing something without a clear rationale, they generally become less interested in the task and will perform it only as long as there is some form of surveillance. On the other hand, when people are provided with reasons and choices for doing the task, they generally become more interested in it and are more likely to continue engaging it, even after external demands are removed (Koestner, Ryan, Bernieri, & Holt, 1984).

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Thus, self-determination theory (Deci & Ryan, 1985, 1987, 1991) suggests that contexts that support autonomy foster internalization of the value of doing a task (Ryan, 1995). Autonomy is supported when the task appears important, feelings toward the task are acknowledged, and a choice in how to perform the task is provided. Deci et al. (1994) conducted a laboratory study to examine how to facilitate internalization of the value of performing a boring but important activity. Participants had to perform a boring target detection task under different conditions that included either none, one, two, or three of the following factors: (a) having choice regarding how to perform the task, which increases perceived control and minimizes pressures; (b) understanding the rationale behind the task, which helps a person find meaning in the task; and (c) acknowledging negative feelings toward the task, which conveys empathy for a person's experience. Results demonstrated that participants showed greater internalization (operationalized as time spent on the activity during a free-choice period and self-reported perceived usefulness of the task, enjoyment, and interest) as a linear function of increasing the number of factors present in the different experimental conditions. Thus, increasing autonomy support was shown to foster internalization of the value for engaging in a rather boring and tedious task.

Autonomy support has shown positive effects in applied settings. Research in organizational settings has demonstrated that management autonomy support relates to increased trust in the organization, satisfaction, engagement, and decreased stress (Baard, Deci, & Ryan, 1999; Deci, Connell, & Ryan, 1989; Deci, Ryan, Gagné, Leone, Usunov, & Kornazheva, in press). Similar results have been obtained in school settings, where autonomy-supportive teaching yielded higher levels of enjoyment and achievement in students (Connell & Wellborn, 1990). Health behavioral research also shows that having an autonomy-supportive health-care provider leads to higher success rates in weight loss (Williams, Grow, Freedman, Ryan, & Deci, 1996), smoking cessation (Williams, Gagné, Ryan, & Deci, 1999; Williams, Quill, Deci, & Ryan, 1991), and diabetes management programs (Williams, Freedman, & Deci, 1998). Patients with autonomy-supportive physicians were also shown to adhere to their medication regimens more consistently (Williams, Rodin, Ryan, Grolnick, & Deci, 1996).

We conducted a longitudinal study to examine the prospective effects of the same three factors on the likelihood that employees would endorse upcoming changes in their organization. A large body of literature in management and organizational psychology indicates that people have a strong tendency to resist change. Reasons that may account for resistance include fear of the unknown, mistrust, anxiety about future benefits, and the desire to preserve the status quo. Mealiea (1978) asserted that organizational change makes people feel vulnerable by reducing feelings of control and understanding of the work environment. Since one of the crucial aspects of successful organizational transformation is the adoption and support of change by its constituents, many researchers have proposed

ways to help people accept change. Marrow, Bowers, and Seashore (1967) developed a participative management program, which advocates participative decision making and effective communication. Lawler (1986) suggested a program that provides employees with decision-making authority, information, knowledge and skills, and various rewards. Kotter and Schlesinger (1979) described six more or less effective ways of overcoming resistance to change: communication, participation, emotional and skill support, negotiation, manipulation, and coercion. Similarly, Kirkpatrick (1985) suggested three key factors that facilitate employee acceptance of change: participation, communication, and empathy.

Thus, the three factors posited in self-determination theory appear to be similar to at least some of those suggested by various researchers in management. Participation in decision making is akin to giving some control and choice in how to reach organizational goals, while communication and empathy are akin to providing a rationale and acknowledging feelings, respectively. To our knowledge, however, the effectiveness of these factors has not been systematically evaluated in an organizational context.

From a more theoretical point of view, previous suggestions on how to facilitate change appear to be based on ad hoc theories and common sense regarding what it takes to overcome attachment to the status quo. Thus, if fear of the unknown and uncertainty about future benefits are obstacles to change, increased communication is posited as a facilitator of change. In contrast, the facilitators derived from self-determination theory represent a clear theoretical rationale that has already been tested in a laboratory situation. An important question is whether a laboratory finding will generalize to a real-world organizational setting. A successful replication of the laboratory study in an actual workplace would provide further support for self-determination theory. It may also shed new light and possible reinterpretation of previous findings on what facilitates change. For example, self-determination theory may provide an account of the processes through which participative techniques lead to acceptance of change. With this purpose in mind, we secured the collaboration of workers undergoing change in a large company. We assessed the presence of facilitators and acceptance of change on two separate occasions: when the workers learned about the change; and 1 year after, while the change was taking place. We expected that employees' perceptions of the use of facilitators by the company at Time 1 would increase employees' acceptance of organizational change at Time 2.

Method

Participants

Employees from two departments of a Canadian telecommunications company that was undergoing profound organizational transformation completed a

questionnaire on two separate occasions. At Time 1, just before organizational changes were instituted (but employees were aware that the changes were coming), the sample included 159 employees, consisting of 82 (80 male, 2 female) technicians, 57 (38 male, 19 female) sales representatives, 13 (4 male, 9 female) clerks, and 7 (3 male, 4 female) managers. The second questionnaire was administered 13 months after (Time 2), during the transition period, the sample included 99 employees, consisting of 65 (all male) technicians, 26 (13 male, 13 female) sales representatives, 7 (1 male, 6 female) clerks, and 1 (male) manager, 63 of whom had also filled out the Time 1 questionnaire. The 60% attrition rate was a result of various factors, such as turnover (which was quite high because transformation involved some downsizing), vacations at the time of data collection, and failure to fill out the questionnaire completely for unknown reasons. Although the general climate was stressful at the time of the second assessment, the majority of available employees agreed to complete the questionnaire. Gender of participants did not yield any results of interest and will not be discussed further. Average tenure in the company was 12.4 years (range = 3 months to 39.7 years), and the average age of the workers was 36.77 years (range = 20 to 60 years). All workers were unionized, except for the managers, and all were native French speakers.

Procedure

At the time of the first assessment, the employees' managers were informed of the purpose of the study and were asked to announce the opportunity to participate in a study on motivation at work. The employees received envelopes containing a questionnaire packet, a stamped return envelope, a cover letter explaining the study, and a consent form stressing the fact that their participation was confidential and voluntary. The questionnaires included items assessing the three factors posited as facilitators of internalization and items assessing acceptance of change, as well as items pertaining to demographic and baseline information. Other scales were also provided, but are not relevant to the purpose of the present study. Participants were asked to mail the questionnaires back to the university directly once completed to ensure that their managers would not see their responses. Aggregate results were provided to the company, and written reports were made available to all respondents. The same procedure was used at Time 2.

Measures at Time 1

Facilitators of organizational change. Three questions measured perceptions of three facilitators in the workplace (translated from French): "Do you feel that you completely understand the reasons that brought about the change?"

Table 1

Means for Variables at Time 1 and Time 2

Variable	Time 1 *M*	Time 2 *M*
Facilitators	3.29 (157)	2.73 (98)
Acceptance	4.54 (156)	3.60 (97)

Note. The number of respondents appears in parentheses.

(understanding the rationale); "Do you feel that you personally have control over the implemented change?" (having choice); and "Do you feel that this organization takes into account your opinions and ideas in the change implementation?" (having one's feelings acknowledged). All questions were answered on a 7-point scale ranging from 1 (*not at all*) to 7 (*extremely*). Because the three questions were highly correlated (median $r = .48$), they were combined into a single facilitation measure with an internal reliability (Cronbach's α) of .74.

Acceptance of change. Two items measured acceptance of change on a 7-point scale ranging from 1 (*not at all*) to 7 (*extremely*; the scale was translated from French): "To what extent do you accept the implemented change?"; and "To what extent do you see the change as a stimulating challenge for you?" The effective reliability (Rosenthal & Rosnow, 1984)[3] was .71.

Measures at Time 2

Facilitators of organizational change. We expanded this scale to include four items per facilitator. Items are presented in the Appendix. Because the subscales were highly correlated (median $r = .70$), all items were combined into a single measure of facilitation with an internal reliability of .92.

Acceptance of change. The same items were used again, with an effective reliability of .71.

Results

Because the extensive transformation in the organization may have largely negative implications, we expected that both the perception of facilitators and acceptance of change would decline. Table 1 presents the relevant mean scores.

[3]Effective reliability is based on the mean correlation among items adjusted by the Spearman–Brown formula to take into account the number of items (Rosenthal & Rosnow, 1984) and is used here when only two items are available.

In order to examine the extent to which the variables changed from Time 1 to Time 2, *t* tests were performed separately for workers who filled out both questionnaires (paired samples), and for workers who filled out only the Time 1 questionnaire or only the Time 2 questionnaire (independent samples). Thus, these separate analyses did not include the same respondents. The paired-samples *t* test showed that both the perception of facilitators and acceptance of change significantly decreased from Time 1 to Time 2, $t(60) = 2.01, p < .01, r = .25$; and $t(59) = -2.53, p < .01, r = .31$, respectively. Independent-samples *t* tests yielded comparable results, $t(129) = 3.60, p < .001, r = .30$; and $t(128) = 4.43, p < .001, r = .38$, respectively. Thus, the transformation seems to have equally affected workers who participated at both times and those who participated only once. In spite of these changes in perception and acceptance, test–retest reliabilities for the two measures were still significant across the 13-month period: $r = .41, p < .02$, for facilitators; and $r = .32, p < .02$, for acceptance of change.

To examine the role of facilitation in predicting acceptance of change, we conducted two preliminary regression analyses, one for measures from Time 1 only and one for measures from Time 2 only. In each analysis, acceptance of change was first predicted from tenure and age (entered in Step 1) and then from facilitators (entered in Step 2). At both Time 1 and Time 2, the facilitators significantly contributed to the variance accounted for in acceptance, $F(1, 143) = 67.62, p < .001$, partial $r = .57$; and $F(1, 89) = 122.90, p < .0001$, partial $r = .76$, respectively (separate analyses conducted on each facilitator yielded similar results).

More importantly, we conducted a third regression analysis to examine the prospective influence of facilitators measured at Time 1 on acceptance of change measured at Time 2. In this analysis, acceptance from Time 2 was regressed onto acceptance from Time 1, age, and tenure (entered in Step 1) and on facilitators from Time 1 (entered in Step 2). Results revealed that higher facilitator scores at Time 1 predicted higher acceptance scores 13 months later, $F(1, 55) = 5.08, p < .05$, partial $r = .29$. The inverse of this regression equation, where facilitator scores from Time 2 were regressed onto facilitator scores from Time 1, age, and tenure (entered in Step 1) and on acceptance of change from Time 1 (entered in Step 2) did not yield significant results, $F < 1$. Thus, facilitator scores from Time 1 predicted acceptance of change from Time 2, but acceptance of change from Time 1 did not predict facilitator scores from Time 2.

Discussion

Self-determination theory posits that under autonomy-supportive conditions, people internalize the value of doing activities that are not initially interesting. A study by Deci et al. (1994) supported this proposal, demonstrating that when people are provided with a rationale for doing a task, when their feelings toward the

task are acknowledged and when they are given some choice about how to do it, they come to internalize the value of doing it. We examined the effects of these three aspects of autonomy support on acceptance of change in a work organization. We expected that the presence of these facilitators would be associated with increased acceptance of organizational change. Cross-sectional and longitudinal results showed that the three facilitators did foster acceptance of change. The effect size for the overall presence of facilitators was moderate (r = .29; Cohen, 1992) in the longitudinal analysis, but quite impressive given the 13-month period between Time 1 and Time 2. Of course, the passage of time could have been partly responsible for the acceptance, but given that the first questionnaire was presented just before the change implementation and the second questionnaire was presented during the transition period, it is unlikely that employees had yet had much time to accommodate to the changes.

The cross-sectional regressions could not shed light on the directionality of the link between the facilitators and acceptance of change. Thus, a longitudinal design such as the one that we used was essential to test the direction of this influence. Results show that facilitators measured at Time 1 influenced acceptance of change at Time 2, but that the reverse was not supported. Therefore, we replicated Deci et al.'s (1994) laboratory results in an applied organizational context: Providing a rationale for organizational change, providing choice, and acknowledging people's feelings toward the change all facilitated its acceptance. However, this particular measure of acceptance was limited by the fact that it consisted of only two indicators (acceptance and the perception of challenge) and that it might not necessarily reflect internalized acceptance. Future studies should expand the scale to include more indicators that could tap a broader-band construct of acceptance. Future studies should also attempt to link acceptance to behavioral indicators of increased engagement in work activities (e.g., performance and absenteeism indicators), which would provide validity to our claim that autonomy support facilitates the internalization of the value of organizational change. Despite this limitation, the results obtained in the present study were strong in light of the fact that acceptance was measured during the transition period.

Similarly, the assessment of the facilitators at Time 1 was limited to three items because of time constraints. The scale was expanded for the second assessment and was found to be highly reliable. Like the acceptance scale, however, it will need to be validated in future studies. Moreover, future intervention studies should attempt to manipulate the facilitators in order to examine their causal effects on acceptance of change. Operationalizing the facilitators into concrete guidelines would permit organizations to use them when faced with transformations. For example, one way to acknowledge employees' feelings and promote participation might be for companies to organize brainstorming groups that would provide a nonthreatening venue where employees can voice their concerns about the changes. Such interventions have been implemented successfully in

health behavioral research. When health-care providers provided a meaningful rationale, acknowledged their patients' perspectives, and emphasized choice, patients took more responsibility for their health, such as by watching their diets (Williams, Grow, et al., 1996), monitoring their diabetes (Williams et al., 1998), and quitting smoking (Williams et al., 1999).

On a more practical level, the use of these facilitators can be cost effective and intuitive both to organizations and to their employees. Keeping employees informed about upcoming changes and explaining the need for the changes can help people to envision future outcomes for the organization, which can decrease their fears. Acknowledging employees' feelings and listening to their fears about the changes can greatly facilitate trust and adjustment. Finally, offering some choice about how to implement the changes by permitting participation in decision making can engage employees in the change process. Even though participative management has been around for more than 30 years, more research on how to adequately apply such techniques is important to successful organizational transformation. Without the support and participation of their employees, organizations can jeopardize their growth.

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Appendix

Facilitators Scale (Translated From French)

Understanding the Rationale

Do you feel that you completely understand the reasons that brought about the changes?
Do you feel that this organization provides you with the necessary information to understand the reasons behind the changes?
Do you understand why the changes are implemented in this way?

Feelings Acknowledged

Do you feel that this organization takes into account your opinions and ideas in the change implementation?
Do you feel that this organization cares about your worries toward the changes?
To what extent were your worries taken into account before the change implementation?

Having a Choice

Do you feel that you personally have control over the implemented changes?
Do you have the opportunity to propose ways of implementing the changes?
Do you feel that you personally have influence in the way the changes are implemented?