A Study of Transformational Leadership, Organisational Change and Job Satisfaction

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Abstract

This study investigated how aspects of transformational leadership- articulating vision, intellectual stimulation, role modelling, encouraging group identity, collaboration, and individualised consideration - are related to job satisfaction during change. The possible mediating role of collective efficacy was also examined. Instruments used were the Queensland Public Agency Staff Survey (QPASS; Hart, Griffin, Wearing, & Cooper, 1996) with additional items about leadership within the organisation, and about staff's self-evaluation of their readiness for and performance during the change. The questionnaires were completed by 2549 public servants (1549 females, 998 males, 2 didn't indicate) employed in various government departments undergoing major structural and procedural change. Parallel and Factor analyses revealed that the Leadership items could be represented by two factors: Leadership Involvement (incorporating interpersonal aspects) and Leadership Quality (incorporating strategic aspects). Regression analysis indicated that both of these transformational leadership factors were positively related to job satisfaction during organisational change, and that these relationships were mediated by the collective efficacy of the staff.

Introduction

Contemporary leaders should ideally show individual support as well as having an innovative edge. These qualities are aspects of a transformational leadership style and while they are significant factors contributing to organisational effectiveness as well as job satisfaction among employees (e.g., see Adebayo, 2005; Pillai & Williams, 2004), they become even more important during times of organisational change. Successful management of change depends to a large degree on the quality of leadership during change and this paper will further explore this relationship.

Leadership styles range from autocratic leaders who believe that they alone know what is best for their followers and organisation - leading with a top-down style, to laissez-faire style - the non-leading leader showing minimal involvement (Yeo, 2006). Transformational leaders may strike a nice balance between these two extremes by considering individual capabilities and needs, and at the same time being very active and involved in leading followers towards achieving group goals (Bass & Avolio, 1994; Kirkbride, 2006; Podsakoff, MacKenzie, Moorman, & Fetter, 1990). Podsakoff et al. defined six core characteristics common in leaders who were perceived as having a transformational style: (a) articulating a vision – leadership behaviour that identifies new opportunities and communicates these effectively; (b) high performance expectation – behaviour that makes it clear that excellence is expected from team members; (c) intellectual stimulation – behaviour that challenges followers to think innovatively about work challenges; (d) fostering collaboration – behaviour that fosters co-operation and acceptance of group goals; (e) individualised consideration – respect and support for individual followers; and (f) role modelling – behaviour that sets an example of appropriate attitudes and behaviour for followers. Adebayo (2005) similarly described transformational leaders as being collectively oriented; typically creating a vision that inspires group members to prioritise group goals and needs. Transformation and change – both individual and organisational – are fostered and facilitated within such leadership relationships.

Collective efficacy may serve an important role in explaining any relationship between transformational leadership and organisational change. Bandura (1997) defined collective efficacy as "a group's shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainments" (p.477). Jex and Bliese (1999) found that collective efficacy buffered the relationship between work over-load and job satisfaction. Respondents with high self efficacy coped better, in

terms of physiological and psychological strain than those with low self efficacy when faced with long work hours and work overload, factors often implicit in change processes. High collective efficacy is related to higher group motivation, higher staying power, higher morale and resilience for stressors and greater performance accomplishments (Caprara, Barbaranelli, Borgogni, & Steca, 2003; Jex & Bliese). It is therefore reasonable to predict that high collective efficacy would foster a *can do* spirit when people face challenges such as organisational change, and as such, show higher levels of commitment to change.

Perhaps especially during change, transformational leadership is also important for employee job satisfaction. It is reasonable that the extra strain that undergoing change presents leads to extra distress in employees and lower workplace morale which in turn impacts on job satisfaction (Hart, Griffin, Wearing, & Cooper, 1996). It is plausible that through their collective and visionary approach, transformational leaders buffer employee distress and job dissatisfaction, and motivate followers to collaborate and achieve greater results than expected (Bass & Avolio, 1994; Bass 1999).

This study will empirically investigate the hypotheses that there is a positive relationship between transformational leadership and job satisfaction in an organisation undergoing change, and that collective efficacy will be shown to mediate this relationship.

Method

Participants

Participants consisted of 2549 public servants (1549 females, 998 males, 2 didn't indicate) from several state government departments undergoing significant structural change (53% response rate). Ages ranged from 21 years or younger, to 60 years and above, with a median age group of 31-40. Around 40% had been in their current position within the new organisational structure for less than a year, although 56% had been with the organisation between 6 and 20 years or longer.

Questionnaires

Particular items that tapped into the constructs of interest were selected for use in this study. Items were chosen from the large number of questions that made up the overall survey.

Leadership behaviours. Items were selected which represented the six transformational leadership behaviours identified in Podsakoff et al. (1990). Articulating a vision was estimated by using two items about the employees' view on leadership; (a) "leaders have a clear understanding of where the organisation is going", and (b) "leaders clearly articulate their vision of the future". Intellectual stimulation was estimated by one item – "leaders challenge employees to think about problems in new ways". Fostering collaboration was measured by four of the items originally used to measure professional interaction in the QPASS (Hart et al., 1996). One example is, "I have the opportunity to be involved in cooperative work with other members of staff". Individualised consideration was measured by five items which made up the Supportive Leadership subscale of the QPASS. A sample item is: "I am able to approach the managers in this workplace to discuss concerns and grievances". The reliability for this subscale has been reported by Hart et al. as $\alpha = .84$. One item represented Role modelling: "Leaders lead by example", and encouraging individuals to identify with the group was gauged by one item: "Leaders say things that make employees be proud to be part of the organisation". Participants were asked to rate the items on a five-point Likert scale ranging from "strongly agree" to "strongly disagree".

Collective efficacy. Five items measured *collective-efficacy* specific to work capabilities. Participants were asked to indicate on a scale from 1 to 5, with 1 representing the lowest level of performance and 5 representing the highest level, their ratings of processes and performance in their work area. One example is "the effectiveness of our communication".

Change specific collective efficacy was gauged by five items asking participants to rate how they felt the organisation managed change. Items responses were five point Likert scales with anchor points ranging from "needs significant improvement" to "very good". One example is "Rate your experience of implementation of changes".

Job satisfaction. Job satisfaction was measured by the three item QPASS job satisfaction scale (Hart et al., 1996). The items were ranked on a seven-point Likert scale ranging from "Extremely dissatisfied" to "Extremely satisfied". For example, "Overall, how satisfied are you with your job"?

Procedure

Data were collected by a consultancy team from the Community and Organisational Research Unit at the University of Southern Queensland (USQ). Normal confidentiality procedures were adhered to and participants completed the employee survey on-line linked to a secure university database. For participants choosing to complete the paper-based form of the survey, a pre-paid return envelope was provided.

Results

Parallel analysis was used as a first step in determining the structure of the items used to measure leadership. It revealed that there were two factors with eigenvalues in the upper 95% of 100 random data sets of the same dimension of the data set. Guided by this information, principal axis factoring analysis using oblimin rotation was then performed extracting two factors – Leadership Involvement and Leadership Qualities – which together accounted for 63.71% of the total variance. Details of these analyses and descriptive statistics and correlations for all variables are available from the first author.

Scores on these two newly defined scales were then calculated using the additive method. Table 1 contains Pearson product-moment intercorrelations between the new leadership variables, collective efficacy, change specific collective efficacy, and job satisfaction.

Table 1: Correlations between variables.

Variables	1	2	3	4
1. Ldr Involvement	1.0			
2. Ldr Qualities	.63*	1.0		
3. Coll Efficacy	.33*	.35*	1.0	
4. Change Efficacy	.50*	.55*	.44*	1.0
5. Job Satisfaction	.57*	.51*	.39*	.54*

Note. Ldr Involvement. = leadership involvement, Ldr Qualities. = leadership qualities, Coll Efficacy = collective efficacy. $p < 0.01$.

Simple regression and sequential regression analysis were conducted to test whether leadership (leadership qualities and/or leadership involvement) predicted outcome variables (commitment to change and/or job satisfaction) and whether these relationships were mediated by collective efficacy (group task related collective efficacy and/or change specific collective efficacy). So, altogether eight mediation effects were tested for.

The mediation effects of collective and change efficacy on the relationship between leadership variables and job satisfaction were tested using the method suggested by Frazier, Tix, and Barron, (2004). They stipulate that significant relationships should exist between the predictor and outcome variables, the predictor and mediator, and the mediator and the outcome. If these conditions prevail then a series of regressions are performed to see if the relationship between the predictor and the outcome variable is weaker when the mediator variable is included in the analysis. The Sobel test (Preacher & Leonardelli, 2006) was used to test the significance of the mediation effect.

Four mediation effects were evaluated using this method (by examining the relationships among the two leadership factors and job satisfaction, using the two efficacy scores as possible mediators). Change-specific collective efficacy was shown to partially mediate the relationship between leadership involvement and job satisfaction. The variance in job satisfaction accounted for by leadership involvement dropped from 32%, $R = .57$, $R^2 = .32$, $R^2_{adj} = .32$, F (1, 2537) = 1197.22, $p < .001$, to 12%, $R^2_{change} = .122$, F_{change} (1, 1610) = 334.91, $p < .05$. This partial mediation effect was significant, $z = 15.18$, $p < .001$.

The second set of mediation analyses revealed that collective efficacy partially mediated the relationship between leadership involvement and job satisfaction. Variance accounted for in job satisfaction decreased from 32%, $R = .57$, $R^2 = .32$, $R^2_{adj} = .32$, F (1, 2537) = 1197.22, $p < .001$, to 21%, $R^2_{change} = .21$, F_{change} (1, 2520) = 840.73, $p < .001$. This partial mediation effect, although small, was significant, $z = 10.47$, $p < .001$.

A third mediation effect was also found for the change-specific collective efficacy partially mediated the relationship between leadership qualities and job satisfaction, with the variance in job satisfaction accounted for dropping from 26%, $R = .51$, $R^2 = .26$, $R^2_{adj} = .26$, F (1, 2534) = 887.79, $p < .001$, to 6%, $R^2_{change} = .06$, F_{change} (1, 1610) = 152.74, $p < .001$, this mediation effect was significant, $z = 16.98$, $p < .001$.

Finally, the predictive value of leadership qualities on job satisfaction [26%, $R = .51$, $R^2 = .26$, $R^2_{adj} = .26$, F (1, 2534) = 887.79, $p < .001$], was reduced to 16% when controlling for collective efficacy, $R^2_{change} = .16$, F_{change} (1, 2516) = 582.90, $p < .001$. The Sobel test indicated that this partial mediation effect was also significant, $z = 10.95$, $p < .001$ (Preacher & Leonardelli, 2006).

Discussion

The hypotheses that transformational leadership behaviours positively correlate with and predict level of job satisfaction, and that collective efficacy mediates these relationships were supported. Both aspects of transformational leadership as defined in this study – leadership involvement and leadership qualities – were shown to be positively correlated with job satisfaction of employees. Leadership involvement consists of aspects of style related to interpersonal skills, support, communication and understanding. Results of this study suggest that this type of support and nurturance is beneficial in facilitating change and maintaining levels of support during periods of upheaval and uncertainty associated with change. However, leadership qualities of vision,

role modelling, and innovation are also necessary and beneficial.

Partial mediation effects were found for these relationships, indicating that the relationship between transformational leadership and job satisfaction can be at least partially explained by the level of efficacy of staff in relation to their ability to achieve their work goals. Collective efficacy regarding change appeared to have a stronger mediating effect than did general collective efficacy. This suggests that even those leaders with excellent understanding and communication of company vision, who model appropriate change behaviour, involve employees in the change at a deep level, and encourage strong group identity are likely to have reduced impact on employee change behaviour if employees do not believe in the organisation's capabilities of effective change. This is in accord with the findings of Armenakis and Bedeian (1999), who suggested that employee cynicism towards change frequently disrupts change success. They argued that this cynicism is caused by past change failures and poor communication about the change, and that if employees do not have faith in the organisation's capabilities to change, then change efforts are more likely to fail.

It is noted that when predicting job satisfaction the type of collective efficacy varied in strength of mediation. Change collective efficacy appeared to have stronger mediating effect than did general collective efficacy. It appears that issues related to change were particularly salient for this group and efficacy in regard to aspects of the organisation's ability to successfully implement the change had a higher impact on job satisfaction than efficacy in more generic work-related areas.

The analysis of this study did not compare transformational leadership to other leadership styles. It is plausible that other leadership styles could also predict job satisfaction and change success (Podsakoff, MacKenzie, & Bommer., 1996). However, this does not detract from the findings that typical transformational leadership behaviours do affect job satisfaction and change as found in this study.

Also, this study was not designed to control for alternative explanations of outcome. For example, there are other factors that may effect job satisfaction: personality, person-environment fit, person-job fit, work place morale, monetary rewards, personal distress, workplace bullying and so forth (Hart et al., 1996; Samad, 2006; Walumbwa, Wang, Lawler, & Shi, 2004.). Further studies looking at more of these issues would therefore be beneficial in understanding the effectiveness of leadership during change.

Conclusion

Results obtained in this study have shown that transformational leadership behaviours are related to job satisfaction during change. Furthermore, change specific efficacy was found to be an important factor helping to explain this relationship These findings give important insight into leadership and change, and are of practical importance to those organisations that are charged with implementing change either within specific workgroups or broadly throughout the organisation.

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