## The Interactive Effect of Leadership and Core Self-Evaluations on Commitment to Change

## in the Public Sector

Forthcoming in: International Public Management Journal

Running Head: Leadership and Commitment to Change

Adrian Ritz (corresponding author) University of Bern Centre of Competence for Public Management Schanzeneckstrasse 1, P.B. 8573, CH-3001 Bern Email: adrian.ritz@kpm.unibe.ch

Amanda Shantz York University Department of Human Resource Management 4700 Keele Street, Toronto, Ontario M3J 1P3 Email: amandashantz100@hotmail.com

Kerstin Alfes Kingston University, Kingston Hill Department for Leadership, HRM and Organisation Kingston upon Thames, KT2 7LB Email: k.alfes@kingston.ac.uk

Alana S. Arshoff

University of Toronto Centre for Industrial Relations and Human Resources 121 St. George St., Toronto, ON, M5S 2E8 Email: alana.arshoff@utoronto.ca

Erschienen als: Ritz, A., Shantz, A., Alfes, K. and Arshoff, A. S. 2012. "Who needs leaders the most? The interactive effect of leadership and core self-evaluations on commitment to change in the public sector." International Public Management Journal, 15(2): 160-185. <u>https://doi.org/10.1080/10967494.2012.702588</u>

#### ABSTRACT

The purpose of this paper is to shed light on an understudied topic in public administration, namely, commitment to organizational change. Specifically, this study examines the extent to which the quality of the relationship between employees and their managers positively influences employees' commitment to change. Further, it investigates whether this relationship varies as a function of a person's core self-evaluations, that is, the valence of a person's self-regard. Evidence from a multivariate regression analysis in a public sector organization at the local level in the UK revealed that individuals who have high-quality relationships with their managers are more likely to be accepting of change; this is especially true for individuals with lower levels of core self-evaluations. Implications for theory and practice are discussed.

#### INTRODUCTION

The public sector is currently undergoing a cataclysm of change. Inspired by public management reform initiatives, change is sweeping through government offices around the world (Bouckaert and Halligan 2008; Kettl 2000; Pollitt and Bouckaert 2004; Zaltsman 2009) <u>ENREF 3</u>. Surprisingly however, to date, research on change in government agencies has been sparse relative to the vast amount of research in the private management literature (Choi 2011; Fernandez and Rainey 2006; Kelman 2005).

In particular, there is a scarcity of research analyzing individuals' attitudes relating to change (Fernandez and Pitts 2007). This is an important omission as commitment to change has been identified as a key factor in a successful change process (Herscovitch and Meyer 2002), and may be a particularly important focus given that resistance to change is widespread in the public sector (Rainey 2009). One factor that may be especially relevant for the successful implementation of change in the public sector is the quality of a person's relationship with his or her manager. The success of organizational change rests largely with managers (Anderson and Anderson 2010; Dull 2009) and the root of many problems that occur during a change process are a result of a manager's behavior (Higgs and Rowland 2005). For example, Kelman (2005) pointed out the role of the line manager in using positive feedback as leverage for change.

Only a handful of studies have investigated the relationship between leadership and commitment to change in the public sector. All have found positive and significant results. We build on these studies in two ways. First, we use leader-member exchange (LMX) theory (Graen and Uhl-Bien 1995), rather than other models of leadership as a theoretical framework. This is because the impact of change is felt by employees in their day-to-day interactions with others at work, and LMX theory and measurement capture the quality of such relationships. Lo *et al.* 

(2009) suggested that in the context of change, LMX theory is particularly useful as a theoretical paradigm. Second, we test the relationship between leadership and commitment to change for the first time in a public sector organization in the UK. In doing so, we address a call from Van Wart (2003) and Pinnington (2011) to analyze leadership in public administration in a variety of contexts by linking well-articulated models with concrete data.

We also build on these previous studies by examining a potential boundary condition to the relationship between leadership and commitment to change, namely, core self-evaluations (CSE). CSE is a broad, integrative trait composed of self-esteem, generalized self-efficacy, emotional stability and internal locus of control. Judge, Locke and Durham (1997) defined CSE as the valence of a person's self-regard. A person with a high level of CSE is confident (i.e. high self-esteem), feels capable of performing a variety of tasks (i.e. generalized self-efficacy), has a positive outlook on life (i.e. emotional stability) and feels in control of events in life (i.e. internal locus of control). Cooper *et al.* (2001) suggested that positive evaluations of the self and one's abilities may act as a buffer against stressful work situations, such as change. This is because change can be demanding; it can involve uncertainty, fear of failure, sense-making, and loss of control. Since the existence and valence of these factors are largely in the eyes of the beholder, Herold *et al.* (2007) suggested that individual differences may influence peoples' perceptions of, and reactions to change.

We propose to test this contention by examining the extent to which the relationship between leadership and commitment to change varies as a function of a person's CSE. Conservation of Resources (COR) Theory (Hobfoll 1989, 2001) is used as a guiding theoretical framework, as this theory suggests that individuals with higher levels of coping ability are able to resist the negative effects of stress, such as change. Research has shown that other individual difference factors such as political skill (Harvey *et al.* 2007) can act as a buffer against stress in a work-related domain. We argue that CSE can have a similar moderating effect due to its beneficial influence on coping resources.

Specifically, we argue that individual differences such as CSE are masked when individuals have a high-quality, trusting relationship with their leader. This is because a person with high CSE is resilient in the face of challenges, exhibits agency, views situations in a favorable light (Judge *et al.* 1998), and has the resources to cope with stressful situations (Harris *et al.* 2009); therefore they will embrace the change and their underlying attitudes towards a proposed change are in general more positive regardless of the quality of the relationship with their leader.

However, when an individual reports lower levels of CSE, a high-quality relationship with his or her leader may be especially vital to generate commitment to change, as this person does not have sufficient internal resources to manage the change. No study, to our knowledge, in either the public or private management literatures, has examined the hypothesis that an effective working relationship with one's leader is especially crucial for individuals who have lower positive self-regard. This is an important omission as researchers have emphasized the interactive effect between individual difference and contextual variables in examining commitment to change (Wanberg and Banas 2000).

This paper unfolds as follows. In the first section we present the theoretical framework and hypotheses. In the section that follows, the dataset, method for analysis, and measures are explained. Next, the hypotheses are tested and the results are described. This is followed by a discussion of the main findings including suggestions for future research, limitations of the analysis, and concluding remarks.

#### **THEORY AND HYPOTHESES**

## **Commitment to Change in the Public Sector**

Prior research in the private sector has identified employees' commitment to change as a key factor in the successful implementation of an organizational change process (Conner and Patterson 1982; Sonenshein and Dholakia 2012). Commitment to change has been described as a state of mind, which "binds an individual to a course of action deemed necessary for the successful implementation of a change initiative" (Herscovitch and Meyer 2002). Based upon Meyer and Allen's (1991) conceptualization of organizational commitment, this state of mind can take the form of affective, continuance or normative commitment. In the present study, we focus on affective commitment to change, as this type of commitment has been the most prominent form analyzed in academic research and found to be one of the most important factors for developing employee support for change processes (Wright and Isett 2011). Affective commitment to change has been described as "the desire to provide support for the change based on a belief in its inherent benefits" (Herscovitch and Meyer 2002) and signals employees' initial responses to a change process, which will influence their long-term reactions to the change process (Rafferty and Restubog 2010).

Commitment to change is arguably imperative for successful change implementation, especially in the public sector. This is because of its bureaucratic forms of organization and tendency to assign people to positions and administrative units based on legal rules (Rainey 2009). Thus, resistance to change is induced by a history of the institution and by the socialization of individuals within them. Public employees might not see themselves as first movers or early adopters. Rather, they serve the public good, and this is often more strongly related to a commitment to an enduring institution or policy. As described by Downs (1967),

ambitious "zealots" or "advocates" leave their offices or turn into "conservers" the older and larger an organization grows, or cautious career civil servants preserve their positions by resisting change while waiting for turnover of political appointees (Warwick *et al.* 1975). Although public organizations may have institutional characteristics that make it more difficult to bring change initiatives to success (Wilson 1989), change regularly happens at all levels of public organizations. It is therefore important to identify factors that enhance employees' commitment to change, to which we now turn.

## Leadership and Commitment to Change

Hennessey (1998) argued that effective leadership is the key to facilitating successful change in the public sector. Despite this, Van Wart (2003) suggested that research into public sector leadership is lagging behind that of the private sector. This paucity is surprising given that initiatives for change fail more often than they succeed and organizational change depends on the actual behavior of managers (Anderson and Anderson 2010; Dull 2009). Given that the cause of many problems that occur during the change process are a result of a leader's behavior (Higgs and Rowland 2005), there is a need to address the role of the manager in the change process in the public sector.

A handful of studies have found a positive relationship between leadership and commitment to change in the public sector. In an Australian hospital, Lok and Crawford (1999) found that supportive leadership was more strongly related to commitment to change, compared to task-oriented leadership. Yu *et al.* (2002) found that transformational leadership was significantly, albeit weakly, related to commitment to change among primary school teachers in China. Similarly, Lo *et al.* (2009) examined the commitment to change of lecturers in Malaysia. They

found that it was significantly related to two aspects of transformational leadership (i.e. inspirational motivation and individualized concern), and two aspects of transactional leadership (i.e. contingent reward and passive management by exception). In an Israeli school context, Oreg and Berson (2011) found that transformational leadership was negatively related to teachers' intentions to resist wide-scale organizational change. Finally, Hennessey (1998) analyzed reinvention efforts in nine U.S. federal offices and concluded that outstanding leaders made change happen for individuals by improving the organizational culture and by developing trustful relationships with their followers.

The present study builds on this research by examining the extent to which a high-quality relationship with one's leader leads to higher commitment to change. Unlike the aforementioned studies, we draw from leader-member-exchange (LMX) theory (Graen and Uhl-Bien 1995). This is because LMX theory, rather than other leadership theories, is well positioned to shed light on people's reactions to change in organizations (Lo *et al.* 2009). Rather than focusing on the charismatic qualities of a leader, a leader's ability to be visionary, or his/her leadership style, we focus on the outcome of the day-to-day interactions between leaders and followers, that is, the quality of their relationship, which arguably is highly relevant for individuals in the context of change.

LMX theory is based on the premise that leaders develop special relationships with their team members based upon a series of interpersonal exchanges. These exchange relationships differ with regard to the resources, information and support exchanged by both parties (Liden *et al.* 2006; Wayne *et al.* 1997). Low-quality relationships are characterized by low levels of trust and obligation, where followers only do what is defined as part of their job description (Graen and Uhl-Bien 1995). Conversely, high-quality relationships are characterized by mutual trust,

respect, liking and obligation (Liden and Maslyn 1998). In high-quality LMX relationships, supervisors provide resources and support, which is reciprocated by employees through positive attitudes and behaviors (Graen and Scandura 1987; Settoon *et al.* 1996).

During organizational change, employees in high-quality LMX relationships may have different perceptions of the change process in comparison to those with low-quality ones. For instance, employees in high-quality LMX relationships may interpret meaning and the intent of management tactics in a positive way so that positive leader-member relationships attenuate the effect of change on individual resistance to change (Furst and Cable 2008). Moreover, social exchange theory suggests that employees in high-quality LMX relationships feel obligated to reciprocate benefits received in order to maintain positive relations (Graen and Scandura 1987; Settoon *et al.* 1996) and may therefore be inclined to assist with or champion the change process in order to support their leader. Hence, LMX, or the relationship individuals develop with their immediate supervisor, may have a direct impact upon whether commitment to change is likely to occur (Hassan and Rohrbaugh 2011). This leads to our first hypothesis:

*Hypothesis 1: LMX is positively related to affective commitment to organizational change.* 

# The Moderating Influence of CSE on the Relationship between Leadership and Commitment to Change

Judge *et al.* (2005) defined CSE as the "fundamental evaluations that people make about themselves, their worthiness, competence and capability." It can be described as a broad, integrative trait composed of self-esteem, generalized self-efficacy, emotional stability and internal locus of control.

Research has shown that individuals with high levels of CSE rate themselves in a consistently positive way across different situations; they see themselves as capable, worthy, and in control of their lives (Judge *et al.* 2004). As such, a high level of CSE has consequences for job-related outcomes. For example, research in the private sector indicates that individuals who have higher levels of CSE are more motivated (Erez and Judge 2001), perform their work more effectively (Judge *et al.* 2003), and are more satisfied with their work and lives (Judge and Bono 2001; Judge *et al.* 1998).

Conservation of Resources (COR) theory can be used as a theoretical framework for understanding how CSE may moderate the relationship between leadership and commitment to change. This theory proposes that people seek to acquire and maintain resources, and stress is a reaction to an environment in which there is a threat of resources, an actual loss in resources, or a lack of expected gain in resources. Personal characteristics have been identified as one resource that is especially relevant to this study (Hobfoll 1989, 2001). Although COR theory does not explicitly mention CSE as a resource, there is support in the literature to conceptualize it as such (Harris *et al.* 2009). For instance, self-esteem, self-efficacy (Hobfoll 2001), internal locus of control (May *et al.* 1997), and neuroticism (Kling *et al.* 2003), all component parts of CSE, have all been identified as important factors that influence how individuals view and react to stressful situations. In one of the only studies to examine CSE as a resource used to manage stressful situations, Harris *et al.* (2009) found that CSE buffered the negative influence of social stressors on job satisfaction and turnover intentions.

In the present study, we draw inspiration from the work of Harris *et al.* (2009) and suggest that CSE may moderate the relationship between leadership and commitment to change. Since individuals with high levels of CSE are able on their own to cope with situations

characterized by stress and ambiguity (Kammeyer-Mueller *et al.* 2009), their commitment to change may be relatively unaffected by their relationship with their line manager. This is because they have sufficient internal resources to assist them in managing the stressful situation. Individuals with low levels of CSE, on the other hand, may not be confident about their ability to manage the change, feel a loss of control with regards to their own career, and thereby resist change because they believe that the demands of the change will exceed their work capabilities (Armenakis *et al.* 1993). In such cases, a supportive leader may provide employees with the needed resources, and create a trustful working environment which may enable employees with lower levels of CSE to understand and believe in the benefits of the change initiative.

The supportive function of leaders is specifically important in public sector organizations for those with low levels of CSE because there are few other resources available to employees. With an historical norm of job security, and a lack of change-facilitating programs in the public sector, there are few other resources to rely upon other than one's manager. Thus, the direct line manager may play a major role in motivating insecure employees for change. We therefore propose that:

Hypothesis 2: The relationship between LMX and affective commitment to organizational change will be moderated by CSE, such that individuals with a low level of CSE will benefit more from a high LMX relationship, than those with high levels of CSE.

## **DATA AND METHODS**

## Data

Employees of a public authority at the local level in the UK were contacted to participate in the study. The authority provides typical services of a British local government. For example, like

other local authorities, the organization provides services directed towards adult health and social care (e.g. housing adaptations for disabled people; housing finance advice; homelessness campaigns and support), parents and children (e.g. children's nurseries; services for disabled children; parenting support groups), young people (e.g. counseling services related to sexuality, bullying, divorce, domestic violence, homophobia; libraries; parks and open spaces management), and business (e.g. trading standards; health and safety; business advice).

The global economic crisis that began in 2008 triggered successive waves of transformational reform within the public service in the UK. Bach (2011) noted that some UK government departments' budgets were cut by as much as 25%. Government agencies have been responding to these cuts in a number of ways. For some, there have been significant job losses, for others, some activities have been drastically cut back, or halted. Other public service organizations are undergoing changes in order to minimize costs (Bach 2011). At the time the data was collected, the organization under study was responding to this crisis. Specifically, it was preparing itself for an imminent merger with another local authority. The primary aim of the merger was to reduce costs by streamlining processes, reducing headcount, and eliminating some non-essential public offerings. The new provider of many of the public services will be the other public sector organizations hope to achieve economies of scale through joint service provision and procurement. The concept is being adopted by local authorities across the UK, but the arrangement was the first of its kind in its geographic location.

The purpose of the employee survey was to assess the level of commitment towards the change. The HR manager who spearheaded the survey called it a "pressure check" in that she wanted to assess how employees were currently experiencing the change, and if there were any

potential problems or concerns that could be addressed before the merger. We were not in a position to assess the effectiveness of the change, as the merger had yet to take place.

A questionnaire was administered to the employees in hard copy in an envelope. In each envelope was a self-addressed envelope that could be sealed and then sent back to the researchers. All potential participants were assured that their responses would remain anonymous, and that at no time would they be made available to any company personnel. From the 198 individuals who were sent the questionnaire, 114 questionnaires were returned, constituting a response rate of 58%. The mean age of the participants was 40 (SD = 12), 27% of participants were male, and the mean tenure of the participants was 6.66 years. Respondents represented a range of occupational roles, including head of service (5.3%), team manager (16.7%), professional (41.2%), administration (14.9%), trainee (5.3%) and other (4.4%). 12.2% of people did not respond to the question on job type.

#### Measures

Responses to all Likert-type scale items ranged from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*), unless otherwise noted. Items were averaged to form each multiple-item measure, and we sometimes used shorter versions of existing measures to reduce survey length. All of the items were based on existing survey questions from the literature. All of the main study items and frequency distributions for each item can be found in Appendix 1.

Affective commitment to organizational change. Affective commitment to organizational change was measured using a 3-item scale developed by Herscovitch and Meyer (2002). Cronbach alpha was 0.86.

*Core self-evaluations*. CSE was measured using a 12-item scale developed by Judge *et al.* (2001). Cronbach alpha was 0.80.

*Leader member exchange.* LMX was measured using an adapted version of the 7-item scale recommended in Graen and Uhl-Bien's (1995) review. Cronbach alpha was 0.90.

*Control variables.* The control variables used in this study were gender, age, tenure, and whether participants felt that the organizational change resulted in a developmental change to their job, the reorganization of work in their job, and operational and process oriented changes to their job. Gender was selected as a control in order to control for the dominance of females in the public sector. Age was included in order to control for the various unobservable factors related to age. Tenure was selected as a control variable because previous research has found that tenure is inversely related to commitment to change (Herscovitch and Meyer 2002). This is because individuals who remain with an organization for several years might become rooted in their ways, and therefore might be reluctant to accept change. However, not all studies have found similar results (Kelman 2005).

The developmental change to the job, the reorganization of work in the job, and the operational and process oriented change to the job variables were based on the question "As a result of the change at [name of organization], have you experienced (1) developmental changes to your job? (2) re-organization of your work in your job? (3) operational or process oriented changes to your job?" Responses were coded as 0 for "no impact" and 1 for "impact." These perceptions of the impact of the change were included in the analyses in order to separate impacts of the change itself from the effect of the quality of the relationship between management and employees on commitment to change. Ashford (1988) suggested that

individuals vary to the extent that they perceive their job to be affected by change; with those who feel strongly affected experiencing the most distress as a result of the change.

## **Preliminary Analyses**

An important issue to address is whether responses are biased by non-respondents. Based upon Armstrong/Overton (1977), we can assume that in comparison to early respondents, the characteristics of late respondents are, generally speaking, more similar to non-respondents. Therefore, we conducted a series of t-tests comparing response patterns between early and late respondents. No significant differences were found for any of the variables being studied.<sup>1</sup>

We also examined whether our sample is representative of public sector workers in the UK. Mumford and Smith (2004) reported that the mean age of public sector employees was 39 (the same as our sample), and the mean tenure 5.4 years, slightly less than found in our sample (6.66 years). Data collected by the Office for National Statistics in the UK in 2010 showed that 24.6% of local government employees are male, and 75.4% are female, and the proportion of males versus females in the population of the local authority that was sampled is 23.8% to 76.2% (ONS 2010); this is a close reflection of the proportions found in our sample (27.2% are male). We conducted a chi-square test to examine the possibility that men and women tended to have different types of jobs, which may explain differences in perspective. The results showed that men and women were not significantly over- or under-represented in any job type ( $\chi^2 = 3.65$ , p = .60).

We also examined whether missing data influenced the results of the study. Less than three percent of the data that was used in the present analyses were missing. There were no more than five missing values for a survey content question (e.g. leadership); however there were 11 individuals who did not report their gender, 28 who did not report their age, and 26 who did not report their tenure. In order to evaluate whether the missing data values were random, we followed procedures outlined by Schwab (2005) and re-ran our analyses using mean imputation.<sup>2</sup> Based on these analyses, we concluded that missing data were likely to be random and did not unduly influence the results.

As all our variables were collected from a single source, we addressed two issues prior to testing our hypotheses: the potential impact of common method bias on our results and the distinctiveness of the constructs in our study. In order to assess the influence of common method bias we followed established recommendations by Podsakoff and Organ (1986) and Podsakoff *et al.* (2003). We used established scales only, explained the procedures to the participants, and guaranteed anonymity. Furthermore, we separated the measurement of the independent, dependent and moderating variables by placing them in different sections of the survey. Finally, we used filler items and different instructions to create a psychological separation between the three sets of variables.

Moreover, to detect and control for the influence of common method bias through statistical remedies, we performed a series of confirmatory factor analyses (CFA) on the dataset. First, we examined a full measurement model,<sup>3</sup> where all items loaded on their intended constructs. Overall, the measurement model exhibited good psychometric properties (see Table 1). The  $\chi^2$ /df ratio was lower than 2, indicating a good fit (Kline 2005), and the root-mean-square error of approximation was below .07, indicating a good fit (Browne and Cudeck 1993). The comparative fit index and incremental fit index values were .90. According to Kline (2005), values of .90 or above indicate a good model fit. All factor loadings were significant at the *p* < .001 level and were in the expected directions.

To test for common method variance, we then conducted Harman's single-factor test (Podsakoff *et al.* 2003), which involves a CFA where all variables are allowed to load onto one general factor. The model exhibited very poor fit ( $\chi^2 = 627$ ; df = 206; RMSEA = .14; CFI = .57; IFI = .58), which provided a good indication that a single factor did not account for the majority of variance in our data. We conducted a second test recommended by Podsakoff *et al.* (2003) where we introduced an unmeasured latent methods factor to our original measurement model allowing all items to load onto their intended constructs, as well as onto the latent methods factor. A comparison of both models revealed that including the method factor in the model did not significantly improve the overall fit of the model ( $\Delta \chi^2(df) = 35(18)$ , p < .001).

In order to assess the distinctiveness of constructs in our study, we used sequential  $\chi^2$  difference tests. Specifically, we compared the full measurement model to three alternative models. To account for possible halo effects, we first subsumed CSE and LMX under one factor (model A). In model B, we subsumed CSE and commitment to change under one factor. Finally, we combined LMX and commitment to change in one common factor (model C). As Table 1 reveals, none of these alternative models yielded an acceptable model fit. We therefore concluded that all constructs in our study were distinct from one another.

## (Insert Table 1 around here)

Although the tests carried out indicate that the constructs in our study are distinct from one another and that common method variance does not cause a major problem, we should still be cautious when interpreting the findings. The normality of residuals was first checked by a graphical analysis which shows slightly left-skewed distributions of the residuals. The Shapiro-Wilk test rejected normality for LMX and affective commitment to change (p < 0.05). The skewness is slight, and therefore should not have a major impact on the results. Still, the effect of this model violation on the inferential statistics is unclear; therefore the significance tests should be interpreted with care. The Shapiro-Wilk test for CSE was not significant (p = .21), suggesting it is normally distributed. Multicollinearity was checked by the variance inflation factors (VIF) which range from 1.08 to 1.49. The VIFs are found in Appendix 2.

#### **Method of Main Analysis**

Hierarchical regression was used because we examined whether LMX and CSE improved prediction of commitment to change over and above the controls, and whether the interaction term improved the prediction of commitment to change above and beyond the main effects. Moreover, we also wanted to isolate the second set of variables (CSE and LMX) in predicting commitment to change irrespective of the interaction term, in order to test our hypothesis that LMX is positively related to commitment to change. Hierarchical regression provides an indication of the relative contribution of these models, via the R-square change and associated Ftest. The final model in the hierarchical regression is the same as conducting a simple standard regression. Hierarchical regression allows us to compare a "full model" to a "reduced model" (Bottenberg and Ward 1963). In accordance with Aiken and West (1991), the independent variables were standardized, and the interaction term was created by multiplying the standardized LMX and CSE variables. Considering the cross-sectional nature of the data and to avoid any potential issues related to heteroskedastic errors or outliers in the data, we chose robust regression as a method for the analysis (Cohen *et al.* 2003). Following suggestions by Cohen *et al.* (2003) we compared the results of the robust regression and OLS regression analyses. Both approaches led to very similar results.

#### RESULTS

The descriptive statistics and correlations among key variables are found in Table 2. As shown in Table 2, LMX was positively correlated with affective commitment to change at the p < 0.01 level. LMX was also positively correlated with CSE at the p < 0.01 level. As expected, tenure and age are positively correlated at the p < 0.01 level since it is likely that older individuals would remain in the organization for longer. Males were more likely to report that there were developmental changes to their job, and females were more likely to find there were operational changes to their job. Age was positively correlated with the perception of re-organization of work as a result of the change.

(Insert Table 2 around here)

In order to test hypotheses 1 and 2, hierarchical regression was conducted with affective commitment to change as the dependent variable. The results in Table 3 indicate that the control variables (gender, age, tenure, developmental change to job, reorganization of job and operation/process change to job) do not explain a significant proportion of variance in affective commitment to change. Including the main effects of LMX and CSE in the second step,

however, significantly increases the power of the model and explains approximately 19% of the variance in affective commitment to change. Although CSE is not significantly related to commitment to change, LMX has a moderate, positive relationship with it. A one standard deviation increase in LMX would yield a .26 standard deviation increase in predicted commitment to change, assuming that all other variables in the model are held constant. Therefore hypothesis 1 was supported.

## (Insert Table 3 around here)

Including the interaction term in the third step yields a significant improvement in the model such that approximately 24% of the variance in affective commitment to change is explained. The interaction between CSE and LMX was significant at p<.05. The coefficient for LMX (.26) shows the relationship between LMX and commitment to change when CSE is zero, and the coefficient for CSE (.09) shows the relationship between CSE and commitment to change when LMX is 0. Given that the variables have been standardized, the coefficient for LMX shows the effect (slope) of LMX at the mean of CSE and the coefficient for CSE shows the effect (slope) for CSE at the average LMX of the sample.

## (Insert Figure 1 around here)

Figure 1 shows the pattern of relationships among affective commitment to change, LMX and CSE. The figure shows that for individuals with high levels of CSE, a high-quality relationship with their leader does not have a significant impact on their affective commitment to

change; the slope is flat for individuals with high levels of CSE. For individuals who are low in CSE however, a high-quality relationship with one's leader has a significant impact on affective commitment to change. Figure 1 shows that the slope of the line is positive for individuals with low levels of CSE. The relationship is such that a high-quality relationship with a leader significantly increases affective commitment to change for individuals with low CSE. The simple slopes show that the relationship between LMX and affective commitment to organizational change was moderate and positive, and differed significantly from 0 at low levels [B = .33, SE = .15, p < .05] but not at high levels of CSE [B = -.11, SE = .12, p = .33]. At low levels of CSE, a one standard deviation increase in LMX would yield a .33 standard deviation increase in predicted commitment to change, assuming that all other variables in the model are held constant. This further confirms that hypothesis 2 is supported and that individuals who have a low-quality relationship with their leader are less committed to change when they have low levels of CSE.

#### **DISCUSSION AND FUTURE RESEARCH**

In response to calls for micro-level studies examining the processes that lead to successful change implementation, the present study examined leadership by linking well-articulated models with concrete data in a public sector setting (Van Wart 2003; Wanberg and Banas 2000). The results revealed a positive relationship between the quality of the relationship between a person and his or her leader and commitment to change. The positive and significant findings in a UK context add to a growing body of research in public sector organizations in a number of different countries which demonstrates that leadership makes a difference in facilitating

commitment to change (Hennessey 1998; Lo *et al.* 2009; Lok and Crawford 1999; Oreg and Berson 2011; Yu *et al.* 2002).

We built upon this research by providing a greater understanding of the individual differences that alter the relationship between leadership and an individual's reaction to change, using COR as a theoretical framework. Our analysis revealed that individuals who report a high level of CSE are more likely to commit to change, regardless of the quality of the relationship with their leader. However, our results do not imply that leadership is impotent in the public sector; instead, a high-quality relationship with one's manager is especially crucial for garnering commitment to change when a person has a low level of self-regard. This is because individuals with a low level of CSE lack personal resources to assist them in coping with the stress associated with change; a supportive leader then is instrumental in providing the necessary resources to facilitate commitment to change. These findings complement research by Wright *et al.* (2011), which has revealed the importance of examining individual characteristics that may facilitate or inhibit successful change in public sector organizations. We argue that CSE is one such individual difference.

The present study contributes to a central debate in the literature. Van Wart (2003) posed an important question in his review of leadership in the public sector: When is leadership most effective? The present study provides one answer to this question, that is, leadership is most needed when employees feel a loss of control, lack agency, and do not have sufficient efficacy to believe that they are able to cope with change. Indeed, results of our moderation analysis demonstrate that leaders, by creating a supportive work environment, can enhance affective commitment to change for people who fear a loss resulting from the change and are skeptical about the new environment and therefore do not believe in the inherent benefits of the change. The findings from the present study imply a rich agenda for how leadership should be examined in a public sector context. Although the present results suggest that positive LMX relationships may be helpful for those lacking the personal resources for stressful organizational change, it does not provide sufficient information about what helps leaders create higher quality relationships with employees. Future research can address this gap in the public sector literature from at least four different perspectives.

First, the present findings provide support for a contingency approach to leadership (Fiedler 1967; House 1996; Lawrence and Lorsch 1967). Hersey and Blanchard (1988) proposed that effective leaders vary their style with the "readiness" of followers, in that readiness refers to the employee's ability and willingness to accomplish a task. Similarly, House (1996) suggested that leaders need to adapt their leadership style to suit the needs of both environmental and employee contingencies. One such contingency is an employee's locus of control. For employees with an internal locus of control, a participative or achievement oriented leadership style is most effective, whereas for employees who exhibit an external locus of control, a leader may wish to use either a directive or supportive leadership style (Mitchell et al. 1975). Locus of control is a component part of CSE, and therefore, leaders may wish to adapt their leadership style to the needs of their people. These contingency approaches to leadership imply adopting a servant leadership mindset (Greenleaf 1977). Rather than viewing leadership as a position of power, servant leaders are coaches, stewards, and the facilitators of employee success. Servant leadership implies an obligation to understand employee individual differences, and adapt one's approach to meet those needs. Although servant leadership has been gaining popularity amongst public sector researchers and practitioners (e.g., Perry 2009; Reinke 2004; Van Wart 2003), there is a need for more research into its effectiveness and applicability to the public sector.

Second, since the leader-member exchange is dyadic, it is important to examine the characteristics of both parties and their mutual influence on one another in the development of their relationship. Previous research shows that both leaders and followers contribute to the quality of LMX relationships, and therefore it is critical to examine not only the leader's behavior, but also the behavior of the followers (Dienesch and Liden 1986; Dulebohn *et al.* in press). This analysis should take into account that the development of high-quality LMX relationships in public sector organizations might be complicated by differing values, multiple principles, and politics (Golembiewski 1969; Wilson 1989).

Third, future research should investigate potential mediators of the relationship between effective leadership and commitment to change. In other words, what do leaders "do" to bring about commitment to a change program in the public sector? Possible answers to this question might lay in public service values and/or public employee motivation to service the public good (Moynihan 2010; Perry *et al.* 2010; Perry and Wise 1990; Ritz *et al.* forthcoming).

Fourth, it may be important to examine the influence of the organizational environment on leader-member exchange. This is highly relevant as the change context in public sector organizations is influenced by specific context variables like legal constraints, public opinion and media scrutiny, and HRM policies that are moving away from career-based HRM systems. For example, the culture of the organization or the nature of HRM policies and practices as part of a change strategy may help or hinder leaders in establishing higher-quality relationships with their followers. COR theory might be leveraged to understand the resources that are available to employees in a public sector context.

Summing up, we are beginning to learn that high-quality leader-member relationships are essential for employees' commitment to change. However, we need to further analyze the extent

to which leaders' style flexibility, the mutual influence of leaders' and followers' attitudes and behaviors, and specific public and political constraints of an organization's environment help to create higher quality relationships to facilitate change in the public sector.

### **PRACTICAL IMPLICATIONS**

The results of this study are important for HRM practitioners and line managers. Specifically, before the implementation of change, line managers should be coached on the importance of developing trustful leader-member relationships. This is specifically relevant in public sector organizations where managerial roles are often occupied by functional experts, rather than people managers. Our data also show that it is important that the consequences of the change for employees and subsequent people interventions have to be considered in the planning of the change from early on. The reason for this is that in order to maintain a trustful working climate it is imperative that employee-related interventions (e.g., layoffs) are decided and communicated at an early stage. This calls for a proactive HR department, which acts as a driver of change via the development and deployment of interventions in areas such as training, communication and performance management (Alfes *et al.* 2010).

Moreover, our findings regarding the role of CSE have implications for practice. They suggest that managers should attempt to increase the self-efficacy of their employees. Self-efficacy is related to an individual's understanding of his or her work within the broader environment. One way to improve such understanding is for leaders to disseminate the organization's mission and values (Paarlberg *et al.* 2008; Ritz *et al.* forthcoming). Another promising way for leaders is to invite beneficiaries of employees' efforts to deliver inspiration to them by showing how those who benefit from their work are positively influenced (Grant and Hofmann 2011). In addition,

managers may wish to engage their employees in training programs that assist them in changing dysfunctional to functional self-talk, using techniques developed by Meichenbaum (1977). In short, the technique involves an employee observing someone successfully modeling a desired behavior, then enacting the behavior while overtly verbally instructing oneself, and then performing the task while verbally instructing oneself covertly. This technique may help individuals with low levels of CSE to feel capable of dealing with change. Techniques that improve self-efficacy have proven to be effective for displaced managers (Millman and Latham 2001) and unemployed IT professionals (Shantz and Latham in press).

### LIMITATIONS

Our results should be assessed against the background of the following potential limitations in our study. First, we collected data at one point in time, which limits conclusions that can be made regarding the causal order of our relationships. For example, it might be plausible that leadership moderates the relationship between core self-evaluations and commitment to change, or commitment to change leads individuals to positively appraise their managers Although the linkages found in the present study are consistent with the literature on affective commitment (Herscovitch and Meyer 2002), future research needs to employ longitudinal or experimental designs to provide more definitive conclusions regarding the relationships in our model to substantiate the causality of our hypotheses.

Second, the present study was carried out in a single public sector organization in the UK during a merger of two local authorities. This limits the generalizability of our findings. Hence, it would be interesting to explore whether the same pattern between our variables of interest holds

in different types of change processes, for example, downsizing or privatization of public entities, or process redesign.

Third, all of our measures were self-reported, which raises concerns about common method bias. However, all of the scales in the study were multi-item and had high reliability (Spector 1987). Moreover, as noted earlier, we conducted a number of tests that found that the constructs in our study are distinct from one another and that common method variance does not pose a major threat to our analyses. Furthermore, Siemsen *et al.* (2010) stated that interaction effects cannot be artifacts of common method variance, and that interaction terms can be severely deflated through common method variance, making them difficult to detect statistically. This would make our interaction results conservative. Moreover, we would also argue that selfreport measures might actually be the most valid measurement method for our variables, as individuals are best placed to report their levels of CSE, relationship with their leader and their commitment to change. Therefore, we have confidence in the results of the present study. Nevertheless, the magnitude of the effects in the model should be interpreted in light of our methodology. We therefore encourage future research to collect data on leadership and commitment to change from different sources.

Fourth, our sample size is relatively small, which did not enable us to compare individual reactions to change across different types of employees. Public sector employees are often sensitive to public and legislative imperatives, and exhibit a high level of professional orientation (Freidson 2001). It is of interest for future research to investigate the impact of leadership on affective commitment to change comparing different occupational groups (Hassan and Rohrbaugh 2011).

Finally, although there were several reform objectives related to the organizational change of the local authority sampled in the present study, we cannot separate the effect of isomorphic forces caused by a general reform trend from more substantive effects of this particular reform *per se*. This could bias responses. However, informal discussions with the HR manager at the local authority did not give the impression that the reform at the organization under study was mainly influenced by such a general movement. Even if the change is a result of an isomorphic trend, we would expect that in such circumstances, employees will vary in their perceptions and experiences of organizational change.

#### CONCLUSION

This study calls attention to the potential benefits for public sector researchers in exploring new concepts from related fields (here social psychology and leadership studies) to inform an understanding of public sector leadership. The results revealed that although a person's relationship with his or her leader influences the extent to which the person will commit to change, leadership has a powerful role to play for employees with low levels of positive self-regard. Our results have meaningful implications for theory development, and for management researchers and HR practitioners, regarding the extent to which individual differences modify the relationship between leader effectiveness and employee commitment to change.

#### REFERENCES

- Aiken, L. S. and S. G. West. 1991. *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park, CA: Sage.
- Alfes, K., C. Truss, and J. Gill. 2010. "The HR Manager as Change Agent: Evidence from the Public Sector." *Journal of Change Management*, 10(1): 109-127.
- Anderson, D. and L. Anderson. 2010. *The Change Leader's Road Map: How to Navigate your Organization's Transformation*. San Francisco: Pfeiffer.
- Armenakis, A. A., S. G. Harris, and K. W. Mossholder. 1993. "Creating Readiness for Organisational Change." *Human Relations*, 46(6): 681–703.
- Armstrong, J. S. and T. S. Overton. 1977. "Estimating Nonresponse Bias in Mail Surveys." Journal of Marketing Research, 14(3): 396-402.
- Ashford, S. J. 1988. "Individual Strategies for Coping with Stress during Organizational Transitions." *Journal of Applied Behavioral Science*, 24(1): 19-36.
- Bach, S. 2011. A New Era of Public Service Employment Relations? The Challenges Ahead. InAcas (Ed.), Vol. August: 1-23. London: Advisory, Conciliation and Arbitration Service.
- Bottenberg, R. A. and J. H. Ward. 1963. *Applied Multiple Linear Regression*. Texas: Lackland AF Base.
- Bouckaert, G. and J. Halligan. 2008. *Managing Performance. International Comparisons London*. New York: Routledge.
- Browne, M. W. and R. Cudeck. 1993. "Alternative Ways of Assessing Model Fit." Pp. 136-162 in K. A. Bollen and J. S. Long, eds, *Testing Structural Equation Models*. Newbury Park: Sage.

- Choi, M. 2011. "Employees' Attitudes toward Organizational Change: A Literature Review." *Human Resource Management*, 50(4): 479-500.
- Cohen, J., P. Cohen, S. G. West, and L. S. Aiken. 2003. Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences, 3 edn. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Conner, D. R. and R. W. Patterson. 1982. "Building Commitment to Organizational Change." *Training & Development Journal*, 36(4): 18-30.
- Cooper, C., P. Dewe, and M. O'Driscoll. 2001. Organizational Stress: A Review and Critique of Theory, Rresearch, and Applications. Thousand Oaks: Sage.
- Dienesch, R. M. and R. C. Liden. 1986. "Leader-Member Exchange Model of Leadership: A Critique and Further Development." *Academy of Management Review*, 11(3): 618-634.

Downs, A. 1967. Inside Bureaucracy. Boston: Little, Brown.

- Dulebohn, J. H., W. H. Bommer, R. C. Liden, R. L. Brouer, and G. R. Ferris. in press. "A Meta-Analysis of Antecedents and Consequences of Leader-Member Exchange: Integrating the Past with an Eye toward the Future." *Journal of Management*.
- Dull, M. 2009. "Results-Model Reform Leadership: Questions of Credible Commitment." Journal of Public Administration Research & Theory, 19(2): 255-284.
- Erez, A. and T. A. Judge. 2001. "Relationship of Core Self-Evaluations to Goal Setting, Motivation, and Performance." *Journal of Applied Psychology*, 86(6): 1270-1279.
- Fernandez, S. and H. G. Rainey. 2006. "Managing Successful Organizational Change in the Public Sector." *Public Administration Review*, 66(2): 168-176.

- Fernandez, S. and D. W. Pitts. 2007. "Under What Conditions Do Public Managers Favor and Pursue Organizational Change?" *The American Review of Public Administration*, 37(3): 324-341.
- Fiedler, F. E. 1967. A Theory of Leadership Effectiveness. New York, McGraw-Hill.

Freidson, E. 2001. Professionalism: The Third Logic. Cambridge: Polity Process.

- Furst, S. A. and D. M. Cable. 2008. "Employee Resistance to Organizational Change: Managerial Influence Tactics and Leader-Member Exchange." *Journal of Applied Psychology*, 93(2): 453-462.
- Golembiewski, R. T. 1969. "Organizational Development in Public Agencies: Perspectives on Theory and Practice." *Public Administration Review*, 29: 367-368.
- Graen, G. B. and T. A. Scandura. 1987. "Toward a Psychology of Dyadic Organizing." *Research in Organizational Behavior*, 9: 175-208.
- Graen, G. B. and M. Uhl-Bien. 1995. "Relationship-Based Approach to Leadership:
  Development of Leader-Member Exchange (LMX) Theory of Leadership over 25 Years:
  Applying a Multi-Level Multi-Domain Perspective." *The Leadership Quarterly*, 6(2): 219-247.
- Grant, A. M. and D. A. Hofmann. 2011. "Outsourcing Inspiration: The Performance Effects of Ideological Messages from Leaders and Beneficiaries." *Organizational Behavior and Human Decision Processes*, 116(2): 173-187.
- Greenleaf, R. K. 1977. Servant Leadership. A Journey into the Nature of Legitimate Power and Greatness. Mahwah: Paulist Press.

- Harris, K., P. Harvey, and K. Kacmar. 2009. "Do Social Stressors Impact Everyone Equally? An Examination of the Moderating Impact of Core Self-evaluations." *Journal of Business and Psychology*, 24(2): 153-164.
- Harvey, P., R. B. Harris, K. J. Harris, and A. R. Wheeler. 2007. "Attenuating the Effects of Social Stress: The Impact of Political Skill." *Journal of Occupational Health Psychology*, 12(2): 105-115.
- Hassan, S. and J. Rohrbaugh. 2011. "The Role of Psychological Climate on Public Sector Employees' Organizational Commitment: An Empirical Assessment for Three Occupational Groups." *International Public Management Journal*, 14(1): 27-62.
- Hennessey, T. J. J. 1998. ""Reinventing" Government: Does Leadership Make the Difference?" *Public Administration Review*, 58(6): 522-532.
- Herold, D. M., D. B. Fedor, and S. D. Caldwell. 2007. "Beyond Change Management: A Multilevel Investigation of Contextual and Personal Influences on Employees' Commitment to Change." *Journal of Applied Psychology*, 92(4): 942-951.
- Herscovitch, L. and J. P. Meyer. 2002. "Commitment to Organizational Change: Extension of a Three-Component Model." *Journal of Applied Psychology*, 87(3): 474-487.
- Hersey, P. and K. H. Blanchard. 1988. *Management of Organizational Behavior. Utilizing Human Resources*, 5 edn. Englewood Cliffs: Prentice-Hall.
- Higgs, M. and D. Rowland. 2005. "All Changes Great and Small: Exploring Approaches to Change and its Leadership." *Journal of Change Management*, 5(2): 121-151.
- Hobfoll, S. E. 1989. "Conservation of Resources: A New Attempt at Conceptualizing Stress." *American Psychologist*, 44(3): 513-524.

- Hobfoll, S. E. 2001. "The Influence of Culture, Community, and the Nested-Self in the StressProcess: Advancing Conservation of Resources Theory." *Applied Psychology: An International Review*, 50(3): 337.
- House, R. J. 1996. "Path-Goal Theory of Leadership: Lessons, Legacy, and a Reformulated Theory." *The Leadership Quarterly*, 7(3): 323-352.
- Judge, T. A., E. A. Locke, and C. C. Durham. 1997. "The Dispositional Causes of Job Satisfaction: A Core Evaluations Approach." *Research in Organizational Behaviour*, 19: 151-188.
- Judge, T. A., E. A. Locke, C. C. Durham, and A. N. Kluger. 1998. "Dispositional Effects on Job and Life Satisfaction: The Role of Core Evaluations." *Journal of Applied Psychology*, 83(1): 17-34.
- Judge, T. A. and J. E. Bono. 2001. "Relationship of Core Self-Evaluations Traits—Self-Esteem, Generalized Self-Efficacy, Locus of Control, and Emotional Stability—With Job Satisfaction and Job Performance: A Meta-Analysis." *Journal of Applied Psychology*, 86(1): 80-92.
- Judge, T. A., J. E. Bono, C. J. Thoresen, and G. K. Patton. 2001. "The Job Satisfaction-Job Performance Relationship: A Qualitative and Quantitative Review." *Psychological Bulletin*, 127(3): 376-407.
- Judge, T. A., A. Erez, J. E. Bono, and C. J. Thoresen. 2003. "The Core Self-Evaluations Scale: Development of a Measure." *Personnel Psychology*, 56(2): 303-331.
- Judge, T. A., A. E. M. Van Vianen, and I. E. De Pater. 2004. "Emotional Stability, Core Self-Evaluations, and Job Outcomes: A Review of the Evidence and an Agenda for Future Research." *Human Performance*, 17(3): 325-346.

- Judge, T. A., J. E. Bono, A. Erez, and E. A. Locke. 2005. "Core Self-Evaluations and Job and Life Satisfaction: The Role of Self-Concordance and Goal Attainment." *Journal of Applied Psychology*, 90: 257-268.
- Kammeyer-Mueller, J. D., T. A. Judge, and B. A. Scott. 2009. "The Role of Core Self-Evaluations in the Coping Process." *Journal of Applied Psychology*, 94(1): 177-195.
- Kelman, S. 2005. Unleashing Change: A Study of Organizational Renewal in Government.Washington D. C.: The Brookings Institution.
- Kettl, D. F. 2000. *The Global Public Management Revolution: A Report on the Transformation of Governance*. Washington D.C.
- Kline, R. B. 2005. *Principles and Practice of Structural Equation Modeling*, 2 edn. New York: Guilford.
- Kling, K., C., C. Ryff, D., G. Love, and M. Essex. 2003. "Exploring the Influence of Personality on Depressive Symptoms and Self-Esteem across a Significant Life Transition." *Journal of Personality and Social Psychology*, 85(5): 922-932.
- Lawrence, P. R. and J. W. Lorsch. 1967. "Differentiation and Integration in Complex Organizations." *Administrative Science Quarterly*, 12(1): 1-47.
- Liden, R. C. and J. M. Maslyn. 1998. "Multidimensionality of Leader-Member Exchange: An Empirical Assessment through Scale Development." *Journal of Management*, 24(1): 43-72.
- Liden, R. C., B. Erdogan, S. J. Wayne, and R. T. Sparrowe. 2006. "Leader-Member Exchange, Differentiation, and Task Interdependence: Implications for Individual and Group Performance." *Journal of Organizational Behavior*, 27(6): 723-746.

- Lo, M.-C., T. Ramayah, E. C. de Run, and V. M. Ling. 2009. "New Leadership, Leader-Member Exchange, and Commitment to Change: The Case of Higher Education in Malaysia." *World Academy of Science, Engineering and Technology*, 53: 574-580.
- Lok, P. and J. Crawford. 1999. "The Relationship Between Commitment and Organizational Culture, Subculture, Leadership Style and Job Satisfaction in Organizational Change and Development." *Leadership & Organization Development Journal*, 20(7): 365-374.
- May, D. R., C. E. Schwoerer, K. Reed, and P. Potter. 1997. "Employee Reactions to Ergonomic Job Design. The Moderating Effects of Health Locus of Control and Self-Efficacy." *Journal of Occupational Health Psychology*, 2(1): 11-24.
- Meichenbaum, D. H. 1977. *Cognitive Behavior Modification. An Integrative Approach*. New York: Plenum Press.
- Meyer, J. P. and N. J. Allen. 1991. "A Three-Component Conceptualization of Organizational Commitment." *Human Resource Management Review*, 1(1): 61-89.
- Millman, Z. and G. P. Latham. 2001. "Increasing Reemployment through Training in Verbal Self-Guidance." Pp. 87-97 in M. Erez, U. Kleinbeck, and H. Thierry, eds, *Work Motivation in the Context of a Globalizing Economy*. Mahwah, NJ: Lawrence Erlbaum.
- Mitchell, T. R., C. M. Smyser, and S. E. Weed. 1975. "Supervision and Work Satisfaction." *The Academy of Management Journal*, 18(3): 623-631.
- Moynihan, D. P. 2010. "A Workforce of Cynics? The Effects of Contemporary Reforms on Public Service Motivation." *International Public Management Journal*, 13(1): 24 - 34.
- Mumford, K. and P. N. Smith. 2004. "Job Tenure in Britain: Employee Characteristics versus Workplace Effects." *Economica*, 71(282): 275-297.

- ONS. 2010. "British Office for National Statistics. [Online:] http://www.ons.gov.uk/ons/index. html".
- Oreg, S. and Y. Berson. 2011. "Leadership and Employees' Reactions to Change. The Role of Leaders' Personal Attributes and Transformational Leadership Style." *Personnel Psychology*, 64(3): 627-659.
- Paarlberg, L. E., J. L. Perry, and A. Hondeghem. 2008. "From Theory to Practice: Strategies for Applying Public Service Motivation." Pp. 268-293 in J. L. Perry and A. Hondeghem, eds, *Motivation in Public Management: The Call of Public Service*. New York et al.: Oxford University Press.
- Perry, J. L. and L. R. Wise. 1990. "The Motivational Bases of Public Service." *Public Administration Review*, 50(3): 367-373.
- Perry, J. L., ed. 2009. *The Jossey-Bass Reader on Nonprofit and Public Leadership*. San Francisco: Jossey-Bass.
- Perry, J. L., A. Hondeghem, and L. R. Wise. 2010. "Revisiting the Motivational Bases of Public Service: Twenty Years of Research and an Agenda for the Future." *Public Administration Review*, 70(5): 681-690.
- Pinnington, A. H. 2011. "Leadership Development: Applying the same Leadership Theories and Development Practices to Different Contexts?" *Leadership*, 7(3): 335-365.
- Podsakoff, P. M. and D. W. Organ. 1986. "Self-Reports in Organizational Research. Problems and Prospects." *Journal of Management*, 12(4): 531-544.
- Podsakoff, P. M., S. B. MacKenzie, L. Jeong-Yeon, and N. P. Podsakoff. 2003. "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies." *Journal of Applied Psychology*, 88(5): 879-903.

- Pollitt, C. and G. Bouckaert. 2004. *Public Management Reform: A Comparative Analysis. Second expanded edition*. Oxford: Oxford University Press.
- Rafferty, A. E. and S. L. D. Restubog. 2010. "The Impact of Change Process and Context on Change Reactions and Turnover During a Merger." *Journal of Management*, 36(5): 1309-1338.
- Rainey, H. G. 2009. Understanding and Managing Public Organizations, 4. ed. edn. San Francisco: Jossey-Bass.
- Reddy, S. K. 1992. "Effects of Ignoring Correlated Measurement Error in Structural Equation Models." *Educational and Psychological Measurement*, 52(3): 549–570.
- Reinke, S. J. 2004. "Service before Self: Towards a Theory of Servant Leadership." *Global Virtue Ethics Review*, 5(3): 30-57.
- Ritz, A., D. Giauque, F. Varone, and S. Anderfuhren-Biget. forthcoming. "From Leadership to Citizenship Behavior in Public Organizations: When Values Matter" *Review of Public Personnel Administration*.
- Schwab, D. P. 2005. *Research methods for organization studies*, 2nd edn. Mahwah, NJ: Lawrence Erlbaum.
- Settoon, R. P., N. Bennett, and R. C. Liden. 1996. "Social Exchange in Organizations: Perceived Organizational Support, Leader-Member Exchange, and Employee Reciprocity." *Journal* of Applied Psychology, 81(3): 219-227.
- Shantz, A. and G. P. Latham. in press. "The Effect of Written Self-Guidance on the Transfer of Interview Training For Unemployed Professionals." *Human Resource Management*.

- Siemsen, E., A. Roth, and P. Oliveira. 2010. "Common Method Bias in Regression Models with Linear, Quadratic, and Interaction Effects." *Organizational Research Methods*, 13(3): 456-476.
- Sonenshein, S. and U. Dholakia. 2012. "Explaining Employee Engagement with Strategic
  Change Implementation: A Meaning-Making Approach." *Organization Science*, 23(1): 1-23
- Spector, P. 1987. "Method Variance as an Artifact in Self-Reported Affect and Perceptions at Work: Myth or Significant Problem? ." *Journal of Applied Psychology*, 72(3): 438-443.
- Van Wart, M. 2003. "Public-Sector Leadership Theory: An Assessment." Public Administration Review, vol. 63(2): pp. 214 - 228.
- Wanberg, C. R. and J. T. Banas. 2000. "Predictors and Outcomes of Openness to Changes in a Reorganizing Workplace." *Journal of Applied Psychology*, 85(1): 132-142.
- Warwick, D. P., M. Meade, and T. L. Reed. 1975. A Theory of Public Bureaucracy : Politics, Personality, and Organization in the State Department. Cambridge, Mass.: Harvard University Press.
- Wayne, S. J., L. M. Shore, and R. C. Liden. 1997. "Perceived Organizational Support and Leader-Member Exchange: A Social Exchange Perspective." Academy of Management Journal, 40(1): 82-111.
- Wilson, J. Q. 1989. *Bureaucracy: What Government Agencies Do and Why They Do It*. New York: Basic Books.
- Wright, B. E., R. K. Christensen, and K. Isett. 2011. Motivated to Adapt? The Role of Public Service Motivation as Employees Face Organizational Change, 11th biennial Public Management Research Association Conference. Syracuse, New York.

- Wright, B. E. and K. Isett. 2011. Validating a Three-Dimensional Model of EmployeeCommitment to Change: Testing Antecedents and Consequences, 15th Annual Conferenceof the International Research Society for Public Management. Trinity College in Dublin,Ireland.
- Yu, H., K. Leithwood, and D. Jantzi. 2002. "The Effects of Transformational Leadership on Teachers' Commitment to Change in Hong Kong." *Journal of Educational Administration*, 40(4/5): 368-389.
- Zaltsman, A. 2009. "The Effects of Performance Information on Public Resource Allocations: A Study of Chile's Performance-Based Budgeting System." *International Public Management Journal*, 12(4): 450-483.

#### NOTES

<sup>1</sup> The independent variable was dichotomous in that 1=responded early (the first 57 responses) and 0=responded late (the latter 57 responses). Independent samples t-tests showed that there was no significant difference in commitment to change for early (M=3.49, SD=.67) versus late respondents [M=3.62, SD=.75; t=.93, p=.36], for leadership for early (M=3.54, SD=.74) versus late respondents [M=3.42, SD=.82; t=.82, p=.41], core self-evaluations for early (M=3.44, SD=.51) versus late respondents [M=3.30, SD=.48; t=1.42, p=.16], age for early (M=39.78, SD=13.35) versus late respondents [M=40.0, SD=.10.22; t=.08, p=.93], tenure for early (M=7.20, SD=8.10) versus late respondents [M=6.10, SD=.8.0; t=.65, p=.52], and a chi-square test showed that there was no significant difference by gender for early (13 males; 39 females) versus late respondents [18 males; 33 females;  $\chi 2$ =1.29, p=.26].

 $^2$  Schwab's (2005) recommendations include creating a new variable that counts missing data for each of the main variables under study, namely, commitment to change, leadership, and core self-evaluations. Next, dummy variables were computed for each item, for each scale, whereby 1 represented that a value was present, and 0 represented that the value was missing. Next, the cases were filtered for those that have fewer than 2 missing values. A correlation matrix was then computed with the dummy coded items for each variable. None of the correlations were statistically significant. In an additional test to examine whether the missing values influence the results of the study, we re-ran all of our analyses with mean imputation; the results presented in this paper are essentially the same with and without imputation of the mean.

<sup>3</sup> In all measurement models, error terms were free to covary between three pairs of CSE items to improve fit and help reduce bias in the estimated parameter values (Reddy 1992).