

Online Research @ Cardiff

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository: <http://orca.cf.ac.uk/72928/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Bottomley, Paul Andrew, Mostafa, Ahmed, Gould-Williams, Julian Seymour and León-Cázares, Filadelfo 2016. The impact of transformational leadership on organisational citizenship behaviours: the contingent role of public service motivation. *British Journal of Management* 27 (2) , pp. 390-405. 10.1111/1467-8551.12108 file

Publishers page: <http://dx.doi.org/10.1111/1467-8551.12108> <<http://dx.doi.org/10.1111/1467-8551.12108>>

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See <http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



The Impact of Transformational Leadership on Organisational Citizenship Behaviours: The Contingent Role of Public Service Motivation

Abstract

This paper examines whether the relationship between transformational leadership and organisational citizenship behaviours is contingent on public service motivation (PSM). We propose that PSM may reduce followers' reliance on the motivational behaviours of transformational leaders in public sector organisations. Using a sample of Mexican employees we tested this proposition with structural equation modelling. Our results show that public sector followers higher in PSM placed less reliance, than those lower in PSM, on transformational behaviours. A follow-up study in private sector organisations did not reveal a similar interaction effect. These findings appear consistent with previous research demonstrating that PSM is more aligned to the goals and values of public rather than private sector organisations.

Introduction

Leadership is a central challenge facing organisations today. One style that has attracted particular attention from scholars is transformational leadership, a key factor influencing many beneficial employee outcomes, including organisational citizenship behaviours (OCBs: Judge and Piccolo 2004; Herrmann and Felfe 2014). Transformational leaders not only recognise and reward followers' efforts, but encourage them to ask '*What can I do for the organisation?*' rather than '*What can the organisation do for me?*' (Bass 1999). By increasing the salience and alignment of followers' and organisational goals, transformational leadership encourages followers to 'transcend their own self-interests for the sake of the team, organisation and larger polity.' (Shamir et al.1993, 579). In addition, by acting as role models, transformational leaders' behaviours not only motivate but inspire followers to 'go the extra mile' and perform beyond their expectations (Wright and Pandey 2010). Research in the public sector supports both the existence of transformational leadership (Wright and Pandey 2010) and its beneficial impact on employees' work behaviours (Trottier, Van Wart and Wang 2008; Oberfield 2012). Indeed, some scholars have even contended that 'transformational leadership is a universally positive management practice' (Li, Chiaburua, Kirkman and Xie, 2013, 226).

By emphasising collective organisational goals rather than individual goals, transformational leadership theory brings centre-stage concerns for the well-being of others (Bass 1999). Therefore, this leadership style is likely to be of relevance to public sector organisations where concerns for the community and society figure prominently (Wright and Pandey 2010). Indeed, Kjeldsen and Jacobson (2013) argue that a central purpose of public organisations is to serve the public's interest and ensure citizens have an adequate level of welfare. These same beneficiaries are likely to be highly salient to individuals with high public service motivation (PSM), the focus of our study. PSM has been defined as

‘individuals’ prosocial motivation to do good for others and society through the delivery of public services’ (Perry and Hondeghem 2008, 3). In other words, individuals with high levels of PSM will also desire to help or benefit members of their community or society. However, questions arise as to what influence transformational leaders have when followers *already* possess the characteristic (high PSM) they are endeavouring to promote? Does higher PSM enhance or diminish the inspirational role of transformational leadership in public organisations? Likewise, what happens if PSM is less consistent with organisational goals and is not a focus of transformational leaders’ behaviours, as might typify many private sector organisations? For instance, PSM is primarily community or public focused, whereas in private sector organisations the prosocial motivations are likely to be directed at different beneficiaries - customers or clients.

Although the role of followers and their individual characteristics are important issues with both theoretical and resource implications, scholars in the general leadership and public administration fields have primarily focused on leaders and their characteristics (e.g., leader personality, and Judge and Piccolo 2004), with followers seldom considered. Thus there is an accumulation of evidence showing *how* transformational leaders affect followers’ behaviour, rather than *why* transformational leadership is more or less effective (Li et al. 2013). In our view, *not* considering followers’ characteristics is an important omission given the plaudits transformational leadership has received by public sector scholars (e.g., Trottier et al. 2008; Paarlberg and Lavigna 2010). We caution that such plaudits may exaggerate the capacity of transformational leadership as followers’ desire to serve the public (as evident by their PSM), may diminish their reliance on leadership.

This paper aims to test these propositions by drawing on the logic of substitutes-for-leadership theory which proposes that situational factors (including individual characteristics) may reduce the effects of leadership (Avolio, Walumbwa and Weber 2009). Proponents of

substitutes-for-leadership theory challenge the prevailing assumption that transformational leadership is a universally positive practice, stating there are conditions under which it is more or less effective. Li et al. (2013, 236), likewise contend that identifying ‘contingencies allows a more nuanced view of transformational leadership relationships, which have typically exhibited positive direct relationships with follower task and contextual performance.’ Wang et al.’s (2011, 250) meta-analytic study also concludes that there is a need for moderators to increase ‘the precision of transformation leadership theory.’

Acknowledging this concern, we examine the role of PSM which may condition the strength of the transformational leadership-OCB relationship. In cases where employees have lower PSM, they will be more reliant on leaders’ motivation, thus leadership may have a substantial influence. However when employees have higher PSM, they will be less reliant on leaders’ motivation, thus leadership may be less effective in motivating and inspiring followers. To test this proposition empirically, we adopt an interactionist approach in which PSM moderates the relationship between transformational leadership and OCBs. We focus on OCBs because they are a key employee outcome, which have independently been linked to both transformational leadership and PSM (Li et al. 2013; Taylor 2013). In addition, OCBs have been associated with many other important individual and organisational outcomes (Messersmith et al. 2011).

This paper is structured as follows. First, we describe transformational leadership; outline its behavioural components and benefits. Thereafter, on the basis of substitutes-for-leadership theory, we argue that the relationship between transformational leadership and OCBs is moderated by PSM in the public sector. Next, we describe our primary dataset which comprises Mexican public sector employees and present our structural equation modelling results. We conduct a follow-up study with Mexican private sector employees. We anticipate that PSM will no longer moderate the relationship between transformational

leadership and OCBs as private sector organisations' goals are more customer-focused than community focused. The paper concludes with a discussion of the implications of our findings for theory and practice.

Transformational Leadership and OCBs

Since the 1990's, research on transformational leadership has grown to the extent that more research has been conducted on this leadership style than any other (Judge and Piccolo 2004). Transformational leadership is viewed by many researchers as the most effective form of leadership. According to scholars, the *sine qua non* of transformational leaders is their ability to motivate followers to 'perform beyond the level of expectation' (Bass 1985, 32).

Transformational leadership is generally conceptualized as consisting of four behavioural components: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass 1985). *Idealized influence* (also referred to as charisma) refers to leaders displaying trust and showing respect to followers, appealing to them on an emotional level. This component also captures leaders' willingness to take a stand in challenging situations because they are convinced it is the ethical and right thing to do. Through such actions, transformational leaders become role models in acting out behaviours which are consistent with the organisation's mission, goals and values. These behaviours help employees develop confidence and pride in their organisations (Wright and Pandey 2010; Judge and Piccolo 2004). *Inspirational motivation* captures the extent to which leaders articulate an attractive vision for the future, and energise followers to take on challenging assignments and reach ambitious goals. This component reflects the degree to which leaders talk optimistically and enthusiastically about the organisation's mission and stimulate followers' higher order needs by encouraging them to pursue the organisation's goals and values rather than their own. In doing so, leaders provide meaning to the tasks at hand and

encourage followers to uphold high standards of performance. *Intellectual stimulation* is a leadership trait in which followers are encouraged to challenge previously held assumptions and beliefs, and become more creative in their approach to work, taking risks where necessary as they endeavour to solve organisational problems in order to meet its goals (Herrmann and Felfe 2014). Finally, *individualized consideration* is the transformational component of leadership in which leaders take a personal interest in their followers' individual needs and listen to their concerns. Here leaders act as mentors and coaches, helping followers achieve their aspirations in line with the organisation's mission.

Taken together, these four components suggest that transformational leaders inspire followers to exceed their work expectations by setting demanding goals and acting as role models. By giving each employee personalised attention and assistance, they help followers align their values with those of the organisation, and thus serve a higher collective purpose. A meta-analysis also shows that transformational leadership is likely to be just as prevalent and effective in public sector organisations as the private sector (Dumdum et al. 2002). Also, more recently Oberfield's (2012) dynamic panel study, using secondary data for a wide range of US public organisations, reinforces this view. He reports that transformational leadership shapes public employees' work behaviours and performance in both current and future time periods. Thus, the 'elaborate control systems associated with the mechanistic or bureaucratic organisations' found in the public sector does not appear to limit transformational leadership's introduction or effectiveness (Wright and Pandey 2010, 78).

In this paper, we focus on an important individual level performance outcome, OCBs - employee activities that extend beyond the core task requirements (extra-role behaviours). Such behaviours 'support the organisational, social, and psychological environment' in which tasks are performed (Borman and Motowidlo 1993, 73) and are consistent with the assertion that transformational leaders motivate followers to exceed expectations (Bass 1985).

Consistent with Christensen et al. (2013), we consider two types of OCBs: discretionary behaviours of benefit to the organisation (OCBO) and employees (OCBI) (see also Williams and Anderson 1991). OCBOs capture aspects of identification, commitment and loyalty to the organisation (such as defending the organisation when others criticize it, and showing pride when representing the organisation in public). OCBI, or helping behaviours, are defined as ‘voluntarily helping others, or preventing the occurrence of work-related problems’ (Podsakoff et al. 2000, 516), and include actions such as helping others who have been absent from work or who have work-related problems.

While we acknowledge that it is possible for those engaging in OCBs to benefit from their own discretionary actions through impression management (Bolino 1999), we adopt the orthodox position that respondents do so as an expression of their indebtedness to the organisation. Although OCBs are one of the most widely studied topics in the fields of organisational behaviour and general management, relatively few studies have considered these behaviours in public administration (Kim 2006; Christensen et al. 2013; Taylor 2013). The paucity of research is surprising given that OCBs may be of particular importance here due to the labour-intensive nature in delivering many public service jobs (Taylor 2013).

Theoretically, we argue that the behaviours characterising transformational leaders, will have positive effects on followers’ OCBs. The unselfish characteristics associated with idealized influence and individual consideration for instance, may encourage followers to act in commendable ways. Transformational leaders who ‘walk the talk’, treat their followers fairly and show that they trust them, along with taking an interest in their individual well-being, are more likely to see similar behaviours replicated by the workforce. Such leaders generate enthusiasm amongst followers to display prosocial activities such as OCBs, as they provide a role model for them to follow (Gilmore et al. 2012). When transformational leaders display inspirational motivation and intellectual stimulation they will provide an environment in

which followers feel positive about their tasks at hand. Followers will have a clear future vision based on the organisation's mission, which energises them to act and take on challenging assignments. As transformational leaders encourage followers to challenge the status quo and recommend innovative solutions to remedy poor practice, then followers will feel more comfortable suggesting improvements that will impact both the psychological and social environment within the workplace. Accordingly, we believe that transformational leadership will have a positive effect on both OCBO and OCBI as followers mirror their exemplary behaviours. Indeed there is now accumulating evidence in both the private and public sectors of a positive relationship between transformational leadership and OCBs (e.g. Judge and Piccolo 2004; Podsakoff et al. 1996; Wang et al. 2011; Vigoda-Gadot and Beeri 2012; Oberfield 2012). Thus, we predict:

Hypothesis 1: Transformational leadership will be positively related to OCBS (OCBO and OCBI).

The moderating role of PSM on the transformational leadership-OCBs relationship

According to Gilmore et al. (2012), an interactionist approach should be adopted if a better understanding of the relationship between transformational leadership and employee behaviours is to be achieved. In other words, scholars should endeavour to give more consideration to the individual characteristics and the situational context in which leadership occurs. To this end, Kerr and Jermier's (1978) substitutes-for-leadership theory 'represents the most comprehensive attempt to identify the potential factors that may moderate leader effects on followers' (Whittington, Goodwin and Murray 2004, 594). substitutes-for-leadership theory is a contemporary theory which postulates that situational factors (including individual characteristics) will diminish the effects of leaders' behaviours on followers'

performance (Avolio, Walumbwa and Weber 2009). Individual characteristics are referred to as moderators because they have been found to interact with the leader's behaviour to change his or her influence over their followers (Villa et al. 2003). Consistent with the logic of theory, we argue that PSM, an individual characteristic, may act as an important moderator of transformational leadership's influence on followers' OCBs in public organisations.

Earlier we noted that PSM has been referred to by scholars as an 'individuals' prosocial motivation to do good for others and society through the delivery of public services' (Perry and Hondeghem 2008, 3). Employees high in PSM care about doing work that has a positive impact on others, and exert greater effort to achieve organisational goals. Therefore, we argue that PSM will play a substantial role in moderating the relationship between transformational leadership and OCBs in public organisations as the employees' values overlap with their organisations. Specifically, as employees with higher levels of PSM are more inclined to want to do good for others, they willingly engage in behaviours that benefit the organisation and work colleagues, and in turn the public. Such highly public service motivated individuals are thus more likely to act in ways that are consistent with their organisation. They are also *less* likely to be reliant on the stimulating and inspirational influences characterising transformational leaders' behaviours. The transformational effect however, will be *greater* for followers lower in PSM, in that they will have a greater capacity to be influenced by the transformational leadership style as they are relatively less other-focused. As such, consistent with the logic of substitutes-for-leadership theory we propose that transformational leaders will be more effective at promoting followers' OCBs when followers have lower levels of PSM as compared to those with higher levels of PSM in public organisations. Theoretically, we propose that higher PSM may, to some extent, substitute for the mechanisms by which the positive effects of transformational leadership increase OCBs.

Our view that individual characteristics that are consistent with the organisation's values, will diminish (moderate) the effects of leaders' transformational behaviours, is in line with prior research. For instance, De Cremer (2002) found that charismatic leaders were not able to promote group member cooperation amongst followers who were already inclined to cooperate. As such, inclination to cooperate acted as a substitute for charismatic leadership. In contrast, charismatic leaders had a transformational influence on followers who were more concerned with maximizing their own self-interests. Similarly Gilmore et al. (2012) reported that the positive effects of transformational leadership on OCBs were reduced when employees were enthusiastic, alert, interested and determined about life in general (high positive affect). In line with this, Den Hartog and Belschak (2012) reported that the impact of transformational leaders influence on followers' proactive work behaviours was reduced for those higher compared to those lower, on self-efficacy (ability to perform a task). Finally, Li et al. (2013) reported that both followers' proactive personalities (taking the initiative) and high goal orientation (setting ambitious goals) reduced the reliance on transformational leaders' motivational behaviours. Accordingly, we propose the following hypothesis.

Hypothesis 2: Followers' PSM will moderate the relationship between transformational leadership and OCBO and OCBI such that the positive association between transformational leadership and OCBs will be attenuated when followers are high on PSM.

Figure 1 depicts the conceptual model of this study.

FIGURE 1 ABOUT HERE

Study 1 Mexico Public Sector

The objective of Study 1 is to test the moderating effects of PSM on the relationship between transformational leadership and OCBs in the Mexican public sector context.

Methods and approach

Sample and Procedures

Data for our primary study were obtained in 2010 from civil servants in the Guadalajara Metropolitan Area (GMA). GMA is the second largest metropolitan area in Mexico, and the centre of state and local government administration. To ensure equivalence of the measures, the English questionnaire was back-translated into Spanish and pretested by a number of Mexican public sector employees (Brislin 1970). To reduce the risk of social desirability response bias, we contacted the participants directly, rather than through their organizations, and reassured them that their responses would be anonymous (Miao, Newman, Schwarz and Xu 2013). A total of 1,500 questionnaires were distributed among public employees working in, *inter alia*, finance, planning, health, foreign affairs and social security in federal, state, and local government agencies. We received 1,016 questionnaires, yielding a response rate of 67.7 percent. The majority of the respondents were male (53 percent), with a mean age of 36 years, a bachelor's degree (59 percent) and an average of 7.4 years tenure with their organisation.

We checked for non-response bias following Armstrong and Overton's (1977) approach. This entailed comparing early respondents to the survey (first 15 percent of returned questionnaires) to late respondents (last 15 percent of returned questionnaires). Results of independent sample t-tests showed that there were no significant differences in the means of

early and late respondents on each of the indicators of the focal constructs, suggesting that non-response bias is unlikely to be a major problem.

Measures

Responses to questionnaire items were measured on a five-point Likert scales where 1 = “Strongly disagree” and 5 = “Strongly agree”, with the exception of leadership behaviours where 0 = “not at all” and 4 = “frequently, if not always”.

Transformational Leadership. We measured transformational leadership using the Multi Factor Leadership Questionnaire (MLQ5x) (Bass and Avolio 2000), which comprises 20 items measuring the four facets of transformational leadership, namely idealized influence (8 items), inspirational motivation, individualized consideration and intellectual stimulation (4 items each). Consistent with previous research (e.g., Gilmore et al. 2012; Kovjanic et al. 2012, Li et al. 2013), we averaged the items within each dimension and treated the four dimensions as indicators of a higher-order, overall transformational leadership construct.

Public service motivation. PSM was measured using a shortened version of Perry’s (1996) scale. This instrument was developed and tested by Coursey and Pandey (2007). The scale comprised 10 items representing three dimensions of PSM (attraction to policy making, commitment to public interest and compassion). The fourth dimension of PSM, self-sacrifice, is often omitted from PSM scales as it is highly correlated with compassion ($r = .89$; Perry 1996; see also Moynihan and Pandey 2007; Kjeldsen and Jacobsen 2013). This three-dimensional measure has a better conceptual fit with the rational, norm-based, and affective motivations underlying PSM¹ in comparison with more complex four-dimensional scales (Coursey and Pandey 2007). Cronbach’s alphas ranged between 0.64 (attraction to policy making) and 0.70 (commitment to public interest).

¹ See Perry (1996) and Perry and Hondeghem (2008) for more details of the dimensions of PSM.

Organisational citizenship behaviours. OCBs were measured using eight items from the scale developed by Lee and Allen (2002). Four items represented behaviours that are beneficial to the organisation (OCBO) (e.g., ‘I show pride when representing the organisation in public,’ ‘I express ideas to improve the functioning of the organisation’), and four items measured behaviours that are beneficial to individuals and co-workers (OCBI), (e.g., ‘I help others who have been absent’, ‘I willingly give time to others who have work related problems’). Cronbach’s alpha for OCBO and OCBI was 0.91 and 0.84 respectively.

Controls. We controlled for gender, education, organisational tenure and age as they have been shown to influence OCBs. For instance, female employees’ may be more considerate than their male counterparts (Kidder 2002), and tenure has been increasingly recognised as relevant for understanding work outcomes (Messersmith et al. 2011; Fong and Snape 2013; Li et al. 2013).

Measurement validation

Prior studies have consistently supported a single-factor structure of transformational leadership (Judge and Piccolo, 2004). Acknowledging previous research (e.g., Gilmore et al 2012; Kovjanic et al. 2012), we combined the items measuring each dimension of transformational leadership and treated the four dimensions as indicators of an overall transformational leadership construct in the structural equation analyses.

Using AMOS18 and robust maximum likelihood, we conducted a confirmatory factor analysis (CFA) for a second-order measurement model of PSM, wherein the three dimensions of PSM were treated as first-order factors and the items of the dimensions were the observed items. The standardized second-order factor loadings for commitment to public interest and compassion were 0.84 and 0.80 respectively, and highly significant ($p < 0.001$). However, the factor loading on attraction to policy making was weak ($\beta = 0.027$, $p = 0.627$) and

exhibited low correlations with the other two PSM dimensions. Lacking content validity, it was dropped from further analysis (Kim 2009 adopted a similar solution to this problem). The remaining items measuring commitment to public interest and compassion were then combined and treated as two indicators of a general PSM construct.

We then conducted an overall CFA to assess the relationships amongst the four focal latent constructs (OCBO, OCBI, PSM and TF) and evaluated their reliability and validity. Fit of the model was good (χ^2 (df = 71) = 328.753, $p < 0.001$; CFI= 0.966, RMSEA= 0.060, and TLI= 0.950). The factor loading of each item on its corresponding construct was significant at the 0.001 level, in support of convergent validity (Anderson and Gerbing, 1988). The constructs also possessed high internal consistency (see Table 1) with composite reliabilities above 0.75 with the exception of the two item PSM scale which approached recommended thresholds (Bagozzi and Yi 2012). Discriminant validity was examined by comparing whether the square root of the average variance extracted (AVE) of each construct was greater than the correlation between that construct and all other constructs in the model (Fornell and Larcker 1981). Table 1 shows discriminant validity was satisfied in all cases.

TABLE 1 ABOUT HERE

Since data for both dependent and independent variables were collected from the same respondents, we tested whether common method bias (CMB) might have impacted the focal construct relationships. Following Podsakoff et al.'s (2003) guidelines, we addressed this issue in several ways. First, the data collection process ensured respondents anonymity and confidentiality, and used a variety of scale formats. Second, we conducted two statistical tests to detect and control for CMB. We performed Harman's single-factor test, whereby all items load on one super-ordinate factor representing the common influence. The CFA exhibited an

extremely poor fit (χ^2 (df = 665) = 6782.76, $p < 0.001$; CFI = 0.574, RMSEA = 0.095, and TLI = 0.526), suggesting CMB was not a serious problem. Because Harman's test is not without limitations, we also used the more stringent common method factor approach (Podsakoff et al. 2003). This test involves re-estimating the measurement model but allowing each item to load on both its theoretical constructs and the latent common method factor. This model exhibited a good fit (χ^2 (df = 57) = 180.113, $p < 0.001$; CFI = 0.984, RMSEA = 0.046, TLI = 0.970), but more importantly the variance extracted (AVE) by the common method factor was only 0.34, falling below the 0.50 criterion suggested by Fornell and Larcker (1981) as indicating the presence of a substantive construct. So again, CMB did not appear problematic.

Table 1 shows means, standard deviations and correlations among the variables in this study. As anticipated, public sector employees are relatively highly public service motivated (mean 3.69; 1-5 Likert scale), and perceive their supervisors as displaying transformational leadership behaviours (mean 2.65; 0-4 Likert scale). Also, in line with our hypotheses, transformational leadership and PSM are positively related, and both are associated with OCBO and OCBI. A comprehensive analysis using SEM follows below.

Structural Model Estimation

As traditional methods, such as moderated regression with observed variables, do not control for measurement error, they lack power and parameter estimates may be biased (Villa 2003). Latent interaction modelling with SEM is considered a preferred alternative (Little, Bovaird, and Widaman, 2006; Steinmetz, Davidov and Schmidt, 2011).

To examine the moderating role of PSM on the transformational leadership–OCB relationship, the *residual centring approach* advocated by Little et al. (2006) and Geldhof et al. (2013) was used. The benefits of this approach are fourfold: (i) It has more power in

detecting interaction effects than conventional multiple regression; (ii) It is relatively easy to use in comparison to earlier complex latent interaction approaches, which imposed numerous non-linear constraints on model parameters; (iii) The relative contribution of interaction and main (first-order) effects are clearly identified as the orthogonalising process ensures that multicollinearity between the main (first-order) effects and associated interaction is not an issue ($r = 0$); (iv) It performed well in simulation studies (unbiased parameter estimates and broadly acceptable power) of alternative latent interaction methods.

The residual centring approach consists of a two-step procedure. First, two indicators are selected, one from each first-order construct (transformational leadership and PSM), and multiplied together (e.g., TF1*PSM1). The cross-product is regressed on all indicators of the two first-order constructs (TF1, TF2, TF3 TF4, PSM1, PSM2) and residuals retrieved, in this instance (TF1*PSM1_res). The procedure is then repeated for each ($4 \times 2 = 8$) cross-product. Second, the 8 sets of residuals are treated as indicators of the latent (transformational leadership-PSM) interaction term when estimating the structural model. Finally, correlated covariances are estimated between residual-centred indicators if the original cross-product comprised the same first-order indicator (e.g., TF1*PSM1_res and TF1*PSM2_res may share unique variance associated with indicator TF1).

Results revealed that the proposed structural model provided a good fit to the data (χ^2 (df = 185) = 439.199, $p < 0.001$; CFI = 0.981, RMSEA = 0.037, and TLI = 0.974). In this model, the predictor variables explained 47.5 percent of the variance in OCBO ($R^2=0.475$) and 40.5 percent of the variance in OCBI ($R^2=0.405$). The analysis showed that transformational leadership had significant positive associations with OCBO ($\beta = 0.412$, $p < 0.001$), and OCBI ($\beta = 0.262$, $p < 0.001$). This suggests that transformational leadership enhances citizenship behaviours directed towards both the individual and organisation. Therefore, our first

hypothesis was supported. PSM also had significant positive associations with both types of OCBs ($\beta = 0.614, p < 0.001$ for OCBO, and $\beta = 0.574, p < 0.001$ for OCBI). Thus, increased levels of public service motivation also contribute to citizenship behaviours. More importantly, the analysis revealed that the interaction between transformational leadership and PSM was significant and negative for both OCBO and OCBI ($\beta = -0.154, p < 0.01$ and $\beta = -0.197, p < 0.001$ respectively), indicating support for our second hypothesis. The negative interaction term indicates that as follower PSM increased, the association between transformational leadership and follower OCBs decreased. In other words, transformational leadership had *less* of an impact on followers' citizenship behaviours when employees had higher, rather than lower, levels of public service motivation.

To better understand the form of the interactions, we reverted to moderated multiple regression analysis and used Aiken and West's (1991) 'spot-light' procedures to illuminate the nature of the relationship between transformational leadership and OCB. Regression analysis, which includes information on both mean-structures and co-variances, offers greater flexibility than SEM in exploring this issue. Separate plots were drawn for employees whose scores on the PSM moderator were one standard deviation below the mean, at the mean, and one standard deviation above the mean. Results are presented in Figures 2a and 2b. For the leadership-OCBI relationship, the slope coefficients were larger for employees lower in PSM ($\beta=0.405, t=9.413$), and smaller for employees higher in PSM ($\beta = 0.212, t=5.130$), while employees at the mean were in-between ($\beta = 0.308, t=9.736$). Similar results were found for OCBOs. Taken together, these results suggest that transformational leadership matters for all employees yet, to a lesser extent, for those higher in PSM.

FIGURES 2a AND 2b ABOUT HERE

Summary

Our findings show that the effects of transformational leadership on followers' OCBs were contingent on their level of PSM, with respondents higher in PSM, compared to those lower in PSM, being less influenced by leaders' motivational behaviours. Thus, as followers higher in PSM already desire to serve the public, they were less reliant on leaders' motivation. Next, we describe a follow-up replication study with private sector employees to establish the validity of these results.

Follow-up study: Mexico Private Sector

The objectives of this follow-up study are twofold. First, we establish the validity of the results of Study 1 by demonstrating that private sector employees' PSM is lower than public sector employees. Second, we examine whether the interactive effect of PSM on the transformational leadership – OCB relationship is contingent on sector (public/private). We test these propositions using a sample of Mexican private sector employees.

Employees higher in PSM are assumed to be more likely to fulfil their desire to help others and contribute to society in the public rather than private sector, and many studies appear to support this (e.g., Crewson 1997; Lewis and Frank 2002). However, after controlling for occupational differences across the public/private divide and prior organisational socialisation by examining the destination of graduates within a specific profession, results are less clear cut (Kjeldsen and Jacobsen 2013; Wright and Christensen 2010). Given our follow-up study comprises private sector employees (discussed below), evidence of lower PSM than public sector employees helps provide convergent validity for Study 1's results.

The organisational values and nature of the jobs offered by the public sector are more likely to be consistent with higher PSM in which serving society and the community is core. In contrast, not only does the market environment of private sector organisations 'imply an

entirely different focus on effective production and low-cost operations' (Kjeldsen and Jacobsen 2013, p.902), but the beneficiaries of prosocial behaviours are narrower (the client/customer rather than the community at large). Thus, the overlap of PSM with private sector values and jobs should be notably reduced. From a leadership perspective, private sector managers' are likely to exhibit different role modelling behaviours as they place more emphasis on serving the customer rather than the public. Consequently, if developing employees with higher prosocial motives for the community or public rather than specifically for the customer is both less consistent with private sector environments and considered of lesser importance by managers within such organisations, then PSM is unlikely to act as a substitute for leadership. Thus, the magnitude of the transformation leadership-PSM interaction should be weaker (if not eliminated) in private sector organisations.

Methods and approach

This follow-up study is a replication of Study 1 using a sample of 1000 Mexican private sector employees from the Guadalajara metropolitan area. The survey instrument was the same as that used before, with the exception of organisational tenure (control variable) which was omitted following a printing 'oversight'. In the interests of brevity, and given the similarity of two studies, only the main findings will be summarised here (detailed SEM results available upon request).

INSERT TABLE 2 ABOUT HERE

Table 2 shows means, standard deviations and correlations among the variables in study 2. In line with study 1, transformational leadership and PSM were positively related, and both

were associated with OCBO and OCBI. We conducted independent sample t-tests to determine whether PSM was higher amongst public sector employees compared with private sector employees. The results revealed that PSM was significantly higher in the public than private sector ($M = 3.69$ versus 3.45 , $t = 6.90$, $p < 0.001$). Thus our findings are consistent with earlier studies (Crewson 1997; Lewis and Frank 2002) and strengthen the validity of our study.

Our proposed structural model provided a good fit (χ^2 (df = 248) = 739.869, $p < 0.001$; CFI = 0.966, RMSEA = 0.040, and TLI = 0.955). In this model, the predictor variables explained 44.4 percent of the variance in OCBO ($R^2=0.444$) and 36.7 percent of the variance in OCBI ($R^2=0.367$). The analysis revealed that transformational leadership had significant positive associations with OCBO ($\beta = 0.679$, $p < 0.001$), and OCBI ($\beta = 0.436$, $p < 0.001$). This suggests that transformational leadership enhances citizenship behaviours directed towards both the individual and organisation in the private sector. PSM also had significant positive associations with both types of OCBs ($\beta = 0.219$, $p < 0.001$ for OCBO, and $\beta = 0.394$, $p < 0.001$ for OCBI). Thus, increased levels of public service motivation also contribute to citizenship behaviours in the private sector. However, the effect sizes differed in magnitude between the two sectors, in that PSM had a greater effect on OCBs in the public sector, whereas transformational leadership had a greater effect in the private sector. More importantly, in contrast to our public sector employees model, the analysis revealed that the interaction between transformational leadership and PSM was non-significant for both OCBO and OCBI ($\beta = 0.000$, $p = 0.974$ and $\beta = -0.007$, $p = 0.943$ respectively), suggesting that PSM has no influence on the association between transformational leadership and follower OCBs. Thus, when collective and individual goals aligned only weakly, PSM did not reduce followers' reliance on transformational leadership; the two influences acted independently of each other.

Discussion

This paper advances current research by considering whether the role of transformational leadership is contingent on followers' individual characteristics. Our main contribution is introducing public service motivation (PSM) as an important moderator of the influence of transformational leadership on followers' organisational citizenship behaviours (OCBs), particularly among public sector employees. Though prior research attests to the independent contribution of transformational leadership and PSM on beneficial employee outcomes, their roles together in combination have not been examined. This is a little surprising given the centrality of prosocial motivation, as evident by PSM, coupled with the plaudits that transformational leadership has received from public sector scholars.

Our primary and follow-up studies provide convergent evidence that the relationship between transformational leadership and followers' OCBs is conditioned by the role of employees' PSM. In the primary study, with Mexican public sector employees, the positive association between transformational leadership and OCBs was stronger for those lower in PSM while this positive association was weaker for those higher in PSM. In the follow-up study with private sector employees, the positive association between leadership and OCBs was again evident, but no longer contingent on whether individuals had higher or lower PSM.

So consistent with prior public and private research (Judge and Piccolo 2004; Trottier et al. 2008; Oberfield 2012), transformational leadership appeared to motivate followers to exert discretionary effort. In our case, such discretionary efforts were directed at both the organisation (OCBO) and co-workers (OCBI). More importantly, PSM moderated the strength of this relationship in public sector organisations, consistent with substitutes-for-leadership logic. In Kerr and Jermier's (1978) classic study, situational factors (e.g., highly-standardised tasks) were assumed to reduce the reliance on leadership behaviours by providing followers with the necessary direction to effectively undertake their work. We also

found a 'trade-off'. In the public sector, for individuals with higher PSM, work is assumed to have a greater sense of purpose as individual and organisational goals are more consistent, thereby reducing the reliance on leadership behaviours. In contrast, for individuals with lower PSM, work has a lower sense of purpose, as individual and organisational goals are less consistent, thereby increasing the motivational reliance on leadership. Finally, in the private sector, again leadership and PSM motivated employee performance, but because such organisations are assumed to have less concern for the communities in which they operate, and leaders exhibit prosocial behaviours that are more in line with customer service, there was no longer an interaction.

More broadly, this study responds to calls for a more nuanced understanding of the positive role of leadership (e.g. Wang et al. 2013; Li et al. 2012). Prior studies on followers' characteristics have found that leadership is less effective at promoting cooperation among those inclined to be civil (De Cremer 2002), innovation among those naturally creative (Gilmore et al. 2012), and effectiveness among those self-efficacious (Den Hartog and Belshack 2012). We also found that leadership in the public sector is less effective at promoting prosocial behaviours (OCBs) when followers are higher in prosocial motivations directed at the community (PSM). Thus followers are less reliant on the motivation provided by leadership when their goals align with those of their organisations, as is the case of PSM with the public (but not private) sector.

Implications, Limitations, and Directions for Future Research

So, what do these results mean for public and private sector organisations? By presenting a compelling vision and aligning individual with organisational goals, transformational leaders engender followers with a sense of collective pride linked to organisational membership (Shamir et al. 1993). Consistent with these theoretical notions, leader behaviours appeared to

motivate employees to 'go the extra mile', measured here in terms of OCBs, in both private and public sectors. An alternative way to motivate and imbue work with meaning and purpose is to recruit individuals who have already 'seen the light'. Employees with higher PSM, whose values align more closely to organisational goals, should place less reliance on the motivational behaviours of leaders. As followers' characteristics substitute, to some extent, for the motivational behaviours of transformational leadership, public managers should not anticipate receiving double the benefits when investing in both leadership training programmes and sophisticated employee recruitment and selection processes. In essence this may be considered a trade-off between recruitment and socialisation.

However, there was no such trade-off among private sector workers. Here organisations and leaders within are less likely to stress prosocial motivation directed at the community, but the customer. While the interaction of leadership with PSM was absent, each still independently enhanced desirable employee outcomes (OCBs). So, public sector organisations might wish to recruit employees with high PSM as they are likely to have more consistent goals, but private sector organisations might also wish to hire such individuals as they are inherently 'other-focused'. Their concern for the wellbeing of citizens and society will include the segments of society important to private organisations, namely customers and clients. Indeed, there is good empirical evidence among service-sector workers to suggest that those higher in OCBs are more customer-orientated (Donovan, Brown and Mowen 2004), and by inference, more pro-social and other-focused.

As always, these insights must be discussed in light of the study's limitations which, in turn, highlight avenues for future research. First, the cross-sectional nature of the data precludes any definitive conclusions regarding causality. Hence, it is possible that followers who were more likely to help colleagues and the organisation (OCBs) came to view leaders as more transformational. Future research with longitudinal or experimental designs could address

this issue. That said, the casual direction proposed is consistent with the majority of prior studies (e.g., Trottier et al. 2008; Oberfield 2012; Li et al. 2013).

Perhaps more important are questions about the source and stability of followers' prosocial motivation (PSM). Recently, public sector scholars, including Wright and Grant (2010), have begun to debate the degree to which PSM should be conceptualised as a trait-like construct that remains relatively stable over time, or a state-like process that continually fluctuates in response to situational and managerial influences. We suspect PSM is malleable, as even personality (archetypal trait), evolves with age and life-role transitions (Trzesniewski et al. 2003; Orth et al. 2012), as does the importance employees place on work values (Johnson 2001). So, if PSM slowly waxes-and-wanes, our results suggest that on occasions when an individual is 'feeling' more prosocial, leadership will have less of a motivational role to play, while on occasions when an individual is 'feeling' less prosocial, leadership will have more of a motivational role to play. Similarly, an individual's current level of PSM may be the result of prior socialisation by the transformational leader rather than socio-historical reasons. If so, leaders' behaviours and associated influence may be particularly important during the initial phases of the leader-follower relationship. These dynamic issues and model extensions await longitudinal analysis.

Next, common method bias is a concern to the extent that the same individuals completed measures of transformational leadership, PSM, and OCBs. While, we found evidence of only limited influence, the effect when present is more likely to enhance the 'main effects' of the model, rather than their interaction, our primary focus (Podsakoff et al. 1993). Nevertheless, collecting performance data from multiple sources would strengthen the research design and reduce such concerns. In keeping with the logic of '360 degree' feedback, supervisors might provide more accurate measures of OCBO, given their organisational interests, while peers might provide more accurate measures of OCBI as individuals may behave differently toward

colleagues, helping some more than others. Li et al. (2013) found that collective identification with colleagues and the team can provide an alternative source of motivation and reduce the reliance placed on transformational leader behaviours. Thus, future studies should examine both individual and collective levels of PSM. Knowing that PSM values form part of a shared culture, an '*esprit du corps*', may further diminish the reliance placed on transformational leadership as this role is naturally provided 'horizontally' by colleagues.

Finally, our results are based on Mexican public and private sector employees and may not be generalizable to other contexts. Nevertheless, studies of leadership are broadly consistent across different national contexts (Avolio et al. 2009). Further empirical evidence is needed to determine whether our results apply in other collectivistic societies or individualistic countries, beyond. Likewise, in the spirit of substitutes-for-leadership theory, scholars should investigate other organisational factors linked with the public sector, such as red tape, bureaucracy and hierarchical structure, to gain a more nuanced understanding of the effects of transformational leadership.

In spite of these limitations, the present study shows that transformational leadership and PSM provide *alternative* means to motivate employees and imbue work with meaning and purpose, at least in the public sector where individual and collective goals broadly align. However, the motivational benefits of transformational leadership and higher PSM amongst followers should be considered in combination, as their interplay suggests that ' $1 + 1 \neq 2$ '.

References

- Aiken, L. S., and S. G. West (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park: Sage.
- Anderson, J. C., and D. W. Gerbing (1988). 'Structural equation modelling in practice: A review and recommended two-step approach', *Psychological Bulletin*, 103(3), pp. 411-423.
- Armstrong, J. S., and T. S. Overton (1977). 'Estimating nonresponse bias in mail surveys', *Journal of Marketing Research*, 14(3), pp. 396-402.

- Avolio, B. J., F. O. Walumbwa, and T. J. Weber (2009). 'Leadership: Current theories, research, and future directions', *Annual Review of Psychology*, 60, pp. 421–449.
- Bagozzi, R. P. and Y. Yi (2012). 'Specification, evaluation and interpretation of structural equation models', *Journal of the Academy of Marketing Science*, 40(1), pp. 8-34.
- Bass, B. M. (1985). *Leadership and performance beyond Expectations*. New York: Free Press.
- Bass, B. M. (1996). 'Is there universality in the full range model of leadership?', *International Journal of Public Administration*, 19, pp. 731–761.
- Bass, B. M. (1999). 'Two decades of research and development in transformational leadership', *European Journal of Work and Organizational Psychology*, 8(1), pp. 9–32.
- Bass, B. M., and B. J. Avolio (2000). *Technical report for the MLQ* (2nd edn). Redwood, CA: Mind Garden.
- Bolino, M. C. (1999). 'Citizenship and impression management: Good soldiers or good actors?', *Academy of Management Review*, 24(1), pp. 82-98.
- Borman, W. C., and S. J. Motowidlo. (1993). 'Expanding the criterion domain to include elements of contextual performance'. In N. Schmidt and W. C. Borman (Eds.), *Personnel selection in organizations*. San Francisco, CA: Jossey-Bass.
- Brislin, R. W. (1970). 'Back-translation for cross-cultural research', *Journal of Cross-Cultural Psychology*, 1(3), pp. 185-216.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Cole, M. S., A. G. Bedeian, and H. Bruch (2011). 'Linking leader behaviour and leadership consensus to team performance: Integrating direct consensus and dispersion models of group composition', *Leadership Quarterly*, 22(2), 383-398.
- Coursey, D. H., and S. K. Pandey. (2007). 'Public service motivation measurement: Testing an abridged version of Perry's proposed scale', *Administration and Society*, pp. 39(5), 547-568.
- Crewson, P. E. (1997). 'Public-Service Motivation: Building Empirical Evidence of Incidence and Effect', *Journal of Public Administration Research and Theory*, 7(4), pp. 499 – 518.
- De Cremer, D. (2002). 'Charismatic leadership and cooperation in social dilemmas: A matter of transforming motives?', *Journal of Applied Social Psychology*, 32(5), pp. 997-1016.
- Den Hartog, D. N., and F. D. Belschak. (2012). 'When does transformational leadership enhance employee proactive behaviour? The role of autonomy and role breadth self-efficacy', *Journal of Applied Psychology*, 97 (1), pp. 194-202.
- Dumdum, U. R., K. B. Lowe, and B. J. Avolio. (2002). 'Meta-analysis of transformational and transactional leadership correlates of effectiveness and satisfaction: An update and extension'. In *Transformational and charismatic leadership: The road ahead*, eds. Bruce J. Avolio and Francis J. Yammarino. New York: JAI Press.

- Fong, K. H. and E. Snape. (2013). 'Empowering Leadership, Psychological Empowerment and Employee Outcomes: Testing a Multi-level Mediating Model', *British Journal of Management*, doi: 10.1111/1467-8551.12048.
- Fornell, C., and D. F. Larcker. (1981). 'Evaluating structural equation models with unobservable variables and measurement error', *Journal of Marketing Research*, 18(1), pp. 39-50.
- Geldhof, G. J., S. Pornprasertmanit, A. M. Schoemann and T. D. Little. (2013). 'Orthogonalizing through residual centering: Extended applications and caveats', *Educational and Psychological Measurement*, 73 (1), pp. 27-46.
- Gilmore, P. L., X. Hu, F. Wei, L. E. Tetrick, and S. J. Zaccaro. (2012). 'Positive affectivity neutralizes transformational leadership's influence on creative performance and organizational citizenship behaviours', *Journal of Organizational Behaviour*, doi: 10.1002/job.1833.
- Gould-Williams, J. S., A. M. Mostafa, and P. Bottomley. (2013). 'Public service motivation and employee outcomes in the Egyptian public sector: Testing the mediating effect of person-organization fit', *Journal of Public Administration Research and Theory*, doi: 10.1093/jopart/mut053
- Grindle, M. S. (2007). *Going local: Decentralization, democratization, and the promise of good governance*. Princeton: Princeton University Press.
- Herrmann, D. and J Felfe. (2014). 'Effects of leadership style, creativity technique and personal initiative on employee creativity', *British Journal of Management*, 25, pp. 209-227.
- Hoffman, B. J., B. H. Bynum, R. F. Piccolo, and A. W. Sutton. (2011). 'Person-organization value congruence: How transformational leaders influence work group effectiveness', *Academy of Management Journal*, 54(4), pp. 779-796.
- Judge, T. A., and R. F. Piccolo. (2004). 'Transformational and transactional leadership: A meta-analytic test of their relative validity', *Journal of Applied Psychology*, 89, pp. 755-768.
- Jung, D. I., and B. J. Avolio. (1999). 'Effects of leadership style and followers' cultural orientation on performance in groups and individual task conditions', *Academy of Management Journal*, 47(2), pp. 208-218.
- Kerr, S., and J. M. Jermier. (1978). 'Substitutes for leadership: Their meaning and measurement', *Organizational Behaviour and Human Performance*, 22, pp. 375-403.
- Kidder, D. L. (2002). 'The Influence of Gender on the Performance of Organizational Citizenship Behaviours', *Journal of Management*, 28(5), pp. 629-48.
- Kim, S. (2006). 'Public service motivation and organizational citizenship behaviour in Korea', *International Journal of Manpower*, 27 (8), pp. 722-740.
- Kim, S. (2009). 'Testing the Structure of Public Service Motivation in Korea: A Research Note', *Journal of Public Administration Research and Theory*, 19(4), pp. 839-851.

- Kirkman, B. L., G. Chen, J-L. Farh, Z. X. Chen, K. B. Lowe. (2009). 'Individual power distance orientation and follower reactions to transformational leaders: A cross-level, cross culture examination', *Academy of Management Journal*, 52, pp. 744–764.
- Kjeldsen, A. M., and C. B. Jacobsen. (2013). 'Public service motivation and employment sector: Attraction or socialization?', *Journal of Public Administration Research and Theory*, 23(4), pp. 899-926.
- Kovjanic, S., S. C. Schuh, K. Jonas, N. Van Quaquebeke, and R. Van Dick. (2012). 'How do transformational leaders foster positive employee outcomes? A self-determination-based analysis of employees' needs as mediating links', *Journal of Organizational Behaviour*, 33(8), pp. 1031-1052.
- Lee, K., and N. J. Allen. (2002). 'Organizational citizenship behaviour and workplace deviance: The role of affect and cognitions', *Journal of Applied Psychology*, 87(1), pp. 131–142.
- Lewis, G. B., and S. A. Frank. (2002). 'Who wants to work for the government?', *Public Administration Review*, 62 (4), pp. 395-404.
- Li, N., D. S. Chiaburu, B. L. Kirkman, and Z. Xie. (2013). 'Spotlight on the followers: An examination of moderators of relationships between transformational leadership and subordinates' citizenship and taking charge', *Personnel Psychology*, 66, pp. 225–260.
- Little, T. D., J. A. Bovaird, and K. F. Widaman. (2006). 'On the merits of orthogonalizing powered and product terms: Implications for modeling interactions among latent variables', *Structural Equation Modeling*, 13(4), pp. 497-519.
- MacKenzie, S. B., P. M. Podsakoff, and G. A. Rich. (2001). 'Transformational and transactional leadership and salesperson performance', *Journal of Academy of Marketing Science*, 2, pp. 115–134.
- Marsh, H. W., Z. Wen, K-T. Hau, T. D. Little, J. A. Boivard, and K. F. Widaman. (2007). 'Unconstrained structural equation models of latent interactions: Contrasting residual and mean-centered approaches', *Structural Equation Modeling*, 14, pp. 570-580.
- Messersmith, J. G., P. C. Patel, D. P. Lepak, and J. S. Gould-Williams. (2011). 'Unlocking the Black Box: Exploring the Link between High-Performance Work Systems and Performance' *Journal of Applied Psychology*, 96(6), pp. 1105–1118.
- Miao, Q., A. Newman, G. Schwarz, and L. Xu. (2013). 'Participative Leadership and the Organizational Commitment of Civil Servants in China: The Mediating Effects of Trust in Supervisor' *British Journal of Management*, 24(Supplement S1), pp. S76-S92.
- Moynihan, D. P., and S. K. Pandey. (2007). 'The role of organizations in fostering public service motivation' *Public Administration Review*, 67(1), pp. 40–53.
- Nahum-Shani, I., and A. Somech. (2011). 'Leadership, OCB and individual differences: Idiocentrism and allocentrism as moderators of the relationship between transformational and transactional leadership and OCB', *The Leadership Quarterly*, 22, pp. 353–366.

- Ngunia, S., P. Slegers, and E. Denessen. (2006). 'Transformational and transactional leadership effects on teachers' job satisfaction, organizational commitment, and organizational citizenship behaviour in primary schools: The Tanzanian case', *School Effectiveness and School Improvement*, 17(2), pp. 145–177.
- Oberfield, Z. W. (2012). 'Public Management in Time: A Longitudinal Examination of the Full Range of Leadership Theory', *Journal of Public Administration Research and Theory* doi:10.1093/jopart/mus060.
- Paarlberg, L. E., and B. Lavigna. (2010). 'Transformational leadership and public service motivation: Driving individual and organizational performance', *Public Administration Review*, 70, pp. 710–718.
- Pandey, S. K., B. E. Wright, and D. P. Moynihan. (2008). 'Public service motivation and interpersonal citizenship behaviour in public organizations: Testing a preliminary model', *International Public Management Journal*, 11(1), pp. 89-108.
- Perry, J. L. (1996). 'Measuring public service motivation: An assessment of construct reliability and validity', *Journal of Public Administration Research and Theory*, 6(1), pp. 5-23.
- Perry, J. L. (2000). 'Bringing society in: Toward a theory of public-service motivation', *Journal of Public Administration Research and Theory* 10(2), pp. 471–488.
- Perry, J. L., and A. Hondeghem. (2008). 'Editors' introduction'. In James L. Perry and Annie Hondeghem (Eds.), *Motivation in public management: The call of public service* (pp. 1-14). Oxford: Oxford University Press.
- Piccolo, R. F., and J. A. Colquitt. (2006). 'Transformational leadership and job behaviours: The mediating role of job characteristics', *Academy of Management Journal*, 49 (2), pp. 327-340.
- Podsakoff, P. M., S. B. MacKenzie, and W. H. Bommer. (1996). 'Transformational leadership behaviours and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviours', *Journal of Management*, 22, pp. 259–298.
- Podsakoff, P. M., S. B. MacKenzie, J-Y. Lee, and N. P. Podsakoff. (2003). 'Common Method Biases in Behavioural Research: A Critical Review of the Literature and Recommended Remedies', *Journal of Applied Psychology*, 88(5), pp. 879–903.
- Rainey, H. G. (2003). *Understanding and managing public organizations*, 3rd ed. New York: Jossey-Bass.
- Ritz, A. (2009). 'Public Service Motivation and Organizational Performance in Swiss Federal Government', *International Review of Administrative Sciences*, 75(1), pp. 53- 78.
- Christensen, R. K., S. W. Whiting , T. Im , E. Rho, J. M. Stritch and J. Park . (2013). 'Public Service Motivation, Task, and Non-task Behaviour: A Performance Appraisal Experiment with Korean MPA and MBA Students', *International Public Management Journal*, 16 (1), pp. 28-52.

- Steen, T. (2008). 'Not a government monopoly: The private, nonprofit, and voluntary sectors'. In James L. Perry and Annie Hondeghem (Eds.), *Motivation in public management: The call of public service*. Oxford: Oxford University Press.
- Steinmetz, H., E. Davidov, and P. Schmidt. (2011). 'Three approaches to estimate latent interaction effects: Intention and perceived behavioural control in the theory of planned behaviour', *Methodological Innovations Online*, 6(1), pp. 95-110.
- Taylor, J. (2013). 'Goal setting in the Australian public service: Effects on psychological empowerment and organizational citizenship behaviour', *Public Administration Review*, 73(3), pp. 453-464.
- Tracey, J. B., and T. R. Hinkin. (1998). 'Transformational leadership or effective managerial practices?', *Group and Organization Management*, 23(3), pp. 220-236.
- Trottier, T., M. Van Wart, and X. Wang. (2008). 'Examining the nature and significance of leadership in government organizations', *Public Administration Review*, 68, pp. 319-333.
- van Knippenberg, D., and S. B. Sitkin. (2013). 'A critical assessment of charismatic-transformational leadership research: Back to the drawing board?', *The Academy of Management Annals*, 7(1), pp. 1-60.
- Van Wart, M. (2003). 'Public-sector leadership theory: An assessment', *Public Administration Review*, 63, pp. 214-228.
- Vigoda-Gadot, E., and I. Beerli. (2012). 'Change-oriented organizational citizenship behaviour in public administration: The power of leadership and the cost of organizational politics', *Journal of Public Administration Research and Theory*, 22, pp. 573-596.
- Villa, J. R., J. P. Howell, P. W. Dorfman, and D. L. Daniel. (2003). 'Problems with detecting moderators in leadership research using moderated multiple regression', *The Leadership Quarterly*, 14, 3-23.
- Walumba, F. O., J. J. Lawler, and B. J. Avolio. (2007). 'Leadership, individual differences, and work-related attitudes: a cross-cultural investigation', *Applied Psychology: An International Review*, 56(2), pp. 212-230.
- Wang, G., I-S. Oh, S. H. Courtright, and A. E. Colbert. (2011). 'Transformational leadership and performance across criteria and levels: A meta-analytic review of 25 years of research', *Group and Organization Management*, 36(2), pp. 223-270.
- Whittington, J. L., V. L. Goodwin, and B. Murray. (2004). 'Transformational leadership, goal difficulty, and job design: Independent and interactive effects on employee outcomes', *The Leadership Quarterly*, 15, pp. 593-606.
- Williams, L. J., and S. E. Anderson. (1991). 'Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviours', *Journal of Management*, 17(3), pp. 601-617.
- Wright, B. E., and R. K. Christensen. (2010). 'Public Service Motivation: A Test of the Job Attraction-Selection-Attrition Model', *International Public Management Journal*, 13(2), pp. 155-176.

Wright, B. E., and S. K. Pandey. (2010). 'Transformational Leadership in the Public Sector: Does Structure Matter?', *Journal of Public Administration Research and Theory*, 20(1), pp. 75-89.

