


Article

Toward a Better Understanding of the Relationship Between Transformational Leadership, Public Service Motivation, Mission Valence, and Employee Performance: A Preliminary Study

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Abstract

The direct and indirect impact of transformational leadership on individual performance has often been studied. Yet scholars have failed to fully explore the degree to which two motivators (i.e., public service motivation [PSM] and mission valence) interact with this leadership practice to influence employee performance. To close this lacuna in the literature, a nationwide survey was administered to federal, state, and local government employees in the United States. The findings revealed that transformational leadership and PSM had a direct, positive effect on employee evaluations. They also revealed that mission valence strengthened the positive relationship between transformational leadership and performance. However, PSM did not have the same influence on the association between transformational leadership and performance. The implications these findings have for theory and practice are discussed in the article.

Keywords

organization theory, performance management, performance appraisal

Organizations have long sought ways to improve the performance of workers. To assist, scholars have developed and tested theories to predict performance in work

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environments. While there is much variation among these scholarly theories, the consensus is that leadership practices are vital and that they can improve the performance of workers by taking advantage of the right mix of motivators.

Concerning transformational leadership (the most often studied leadership practice), scholars view it as having a direct, positive impact on the performance of workers (Bass, Jung, Avolio, & Berson, 2003; Howell & Avolio, 1993; Lowe, Kroeck, & Sivasubramaniam, 1996; Waldman, Bass, & Einstein, 1987; Walumbwa, Avolio, & Zhu, 2008). Research also indicates that it has an indirect influence on performance through such factors as efficacy (Walumbwa et al., 2008; Walumbwa & Hartnell, 2011), affective commitment (Barling, Weber, & Kelloway, 1996), beneficiary contact (Grant, 2012), support for innovation (Howell & Avolio, 1993), and optimism (McColl-Kennedy & Anderson, 2002).

Although transformational leadership's impact on individual performance has been often studied, there are two motivators (i.e., public service motivation [PSM] and mission valence) that might also interact with this leadership practice to influence individual performance. For instance, transformational leadership, PSM, and mission valence are all rooted in the motivational influence of organizational goals (Wright, Moynihan, & Pandey, 2012) and goal setting theory suggests that such goals can induce performance (Locke & Latham, 2002). Despite this, we know little about the interaction between transformational leadership and both PSM and mission valence. Park and Rainey (2008), for instance, examined the relationship between transformational leadership and PSM and found that PSM moderated the relationship between transformational leadership and performance. Although informative, the study was limited in that the authors used indirect measures of transformational leadership and PSM. Next, Wright et al. (2012) examined the relationship between transformational leadership, PSM, and mission valence and found that transformational leadership had an impact on mission valence through PSM. Furthermore, mediation was investigated and mission valence was the dependent variable. Therefore, no study to date was found to examine the *direct*, moderating impact of either PSM or mission valence on the relationship between transformational leadership and performance.

The present study aims to close that lacuna in the literature by examining the aforementioned moderating effects on the transformational leadership–performance relationship. First, the extant of literature is reviewed concerning transformational leadership, PSM, mission valence, and employee performance. Hypotheses are then derived from the literature. Next is the method section, which explains the survey administration and the variables included in the model. Last are the results of the model, followed by the discussion and conclusion.

Review of Literature

Transformational Leadership

James Burns (1978), a political scientist, was the first to conceptualize transformational and transactional leadership, while chronicling the traits of world leaders. In 1985, Bass extended Burns's conceptualization by operationalizing transformational

leadership. Nowadays transformational leadership is presumed to be comprised of four dimensions or components. The first component is idealized influence and it occurs when leaders emphasize a collective vision and earn respect and trust from employees through their actions. Second, inspirational motivation is when leaders establish high expectations, thus providing challenge and meaning to employee roles and responsibilities. Third, individualized consideration is when leaders provide special attention to each employee's need (especially the need for achievement) by serving as a mentor or coach. The final component is intellectual stimulation. Under this component leaders encourage rational thought, challenging the status quo, and ultimately creativity and innovation (Bass & Riggio, 2006).

Transformational leadership can be distinguished from traditional styles of leadership, namely, transactional leadership. Whereas transformational leadership refers to the practice of inspiring subordinates to rise above their own self-interests for the good of the organization and its goals (Yukl, 1999), transactional leadership refers to the practice of motivating followers through an exchange process involving extrinsic rewards, rules, and compliance (MacKenzie, Podsakoff, & Rich, 2001). Thus, both leadership styles have the same aim, to motivate employees, but differ in the manner in which it is done. And, because these styles utilize different methods, they also differ in the level of employee needs that are supported. For instance, transactional leaders are those who lead by exchanging or offering a reward for a desired outcome (e.g., financial rewards or promotional opportunities for attaining performance targets), therein appealing to such lower level needs as pay and security. Such exchange processes are also illustrated in public choice theory, the norm of reciprocity, and social exchange theory, which are replete in administrative literature (e.g., Gould-Williams & Davies, 2005). Transformational leaders, however, inspire employees to commit to the collective vision of the organization or leader through mentoring, challenging assignments, and problem solving (Bass & Riggio, 2006). The net result is that these leaders appeal to higher order needs—that is, self-actualization (Srithongrung, 2011). Thus, transformational leadership influences the long-term behavior of employees, in that it increases internal motivation in lieu of extrinsic incentives that only motivate when they are awarded, which obviously occurs infrequently (Srithongrung, 2011). As a result, leaders have been found to achieve greater success when using transformational practices (Bass & Riggio, 2006).

PSM

PSM refers broadly to “an individual's orientation to delivering services to people with a purpose to do good for others and society” (Perry & Hondeghem, 2008, p. vii). Hence, PSM is viewed as an individual predisposition to perform such services. PSM is also a theory of human motivation which is comprised of three dimensions: affective, norm-based, and rational motives (Perry & Wise, 1990). The affective motives involve an emotional response to community and societal contexts. The norm-based motives refer to a commitment to serve society. And, the rational motives refer to actions aimed at maximizing individual utility (Perry, 1996).

Although PSM is present in all sectors, it is especially important in government agencies (Pandey, Wright, & Moynihan, 2008). This is because public agencies have social-oriented missions, allowing workers to fulfill these altruistic impulses as a part of their job. As a result, it is commonly assumed that PSM is more prevalent in the public sector than the private sector (Perry, Hondeghem, & Wise, 2010; Rainey & Steinbauer, 1999) and that it is important in explaining the motivation of workers in government agencies (Anderfuhren-Biget, Varone, Giauque, & Ritz, 2010; Kim, 2012). For instance, PSM has been linked to such outcomes as retention (Naff & Crum, 1999), whistle-blowing behaviors (Brewer & Selden, 1998), and performance (Camilleri & Van Der Heijden, 2007; Naff & Crum, 1999), though the latter findings are mixed (Bright, 2007; Caillier, 2010). In addition, although the concept of PSM was developed in the United States, researchers have also found it to be applicable in explaining the motivation of public sector workers in various cultures and countries (see Kim et al., 2013).

Mission Valence

Expectancy theory was introduced by Vroom (1964). It posits that a worker's motivation is dependent on how much they desire a reward (valence), their perception that greater effort will lead to expected performance (expectancy), and their perception that higher performance will lead to a reward (instrumentality). Thus, valence refers to the degree of significance an individual assigns to an expected outcome.

Drawing upon expectancy theory, Rainey and Steinbauer (1999) developed the concept of mission valence, which refers to the degree of importance employees place in an agency's mission. They posited that employees will be motivated to perform well when they are attracted to the salience of their employing agency's purpose or mission (i.e., mission valence). In other words, the more appealing a mission is to an employee, the higher their work motivation. In addition to Rainey and Steinbauer, others have also emphasized the importance of having an attractive and engaging mission. Barnard (1938) posited that an organization's mission could energize employees. Clark and Wilson (1961) suggested that attaining an organization's mission is rewarding. And, more recently, Goodsell (2012) stressed the importance of a mission in recruiting, retaining, and motivating employees.

Theory and Hypotheses

In this article, it is argued that PSM and mission valence moderate the relationship between transformational leadership and performance (see Figure 1). The rationale behind that argument is discussed below.

The goal setting theory has proven beneficial in explaining the motivation of workers in government agencies (Moynihan & Pandey, 2007; Paarlberg & Lavigna, 2010; Wright, 2004, 2007). This is because it does not rely on monetary incentives but rather on individual importance, which is consistent with the motivational triggers of public sector workers (Rainey, 1982; Wittmer, 1991). Since transformational leadership,

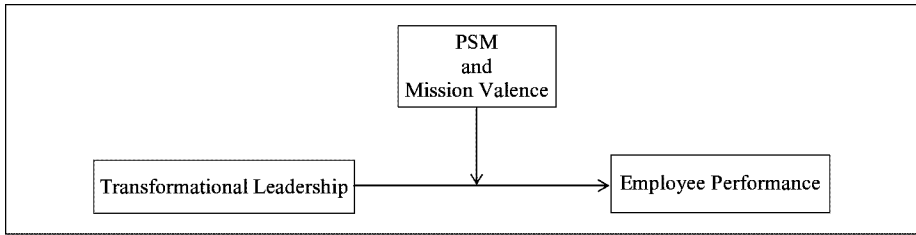


Figure 1. Theoretical research model.

PSM, and mission valence all emphasize the motivational influence of goals (Wright et al., 2012), goal theory is also beneficial in understanding the connection between these theories.

The goal theory argues that specific and difficult goals induce performance (Moynihan & Pandey, 2007; Paarlberg & Lavigna, 2010), for several reasons. First, difficult goals challenge workers, causing them to put more effort into attaining them than lower goals (Locke & Latham, 2002). Pursuing difficult goals also gives individuals a greater sense of achievement, pride, and self-respect. Furthermore, individuals believe pursuing higher goals will enhance their career prospects (Mento, Locke, & Klein, 1992). Next, specific goals reduce role ambiguity, causing workers to know the steps needed to achieve goals. Consistent with this theory, Wright (2007) found that public workers had higher levels of work motivation when their tasks were challenging and clearly defined.

Setting goals that are both difficult and specific is consistent with the nature of transformational leaders. For instance, transformational leadership theories have long suggested that such leaders are known for not only establishing clear goals but also for establishing challenging ones by providing employees with inspirational motivation and intellectual stimulation. Furthermore, Bass and Riggio (2006) suggested that transformational leaders are able to increase performance because of their ability to set challenging and clear goals; a position that has received empirical support. Grant (2012) surveyed government employees and found that transformational leadership had a positive and direct effect on the performance ratings of employees. Gong, Huang, and Farh (2009) surveyed insurance agents in Taiwan and found that transformational leadership positively impacted the performance ratings of agents. And, Walumbwa et al. (2008) surveyed employees in banking organizations and found a direct relationship between transformational leadership and employee performance. Therefore, the following hypothesis is proposed:

Hypothesis 1: Transformational leadership practices will be positively associated to employee performance.

Transformational leadership does not bear sole responsibility for influencing individual performance. It has also been proven to indirectly influence performance by

interacting with other factors (e.g., Bass & Riggio, 2006). One promising motivator that could interact with transformational leadership to influence employee performance is PSM.

In the goal setting theory, the goal–performance relationship is the strongest when goal commitment is high (Locke & Latham, 2002, 2006). The rationale is employees are more determined to reach goals when they are committed to them, making the positive relationship that goals have on performance much greater when employees are committed to attaining them than when they are not as committed to attaining them. In a similar manner, PSM may strengthen the relationship between goals and performance in public agencies. For instance, PSM theories suggest high PSM individuals are committed to the mission-related goals of public agencies, for the reason that these goals are congruent with their values (Park & Rainey, 2008; Perry & Wise, 1990). Hence, given that transformational leaders establish difficult/specific goals and given that the goals of public agencies are often related to the mission, transformational leaders may find it much easier in the public sector to increase the performance of individuals with high PSM in comparison with those with low PSM (Park & Rainey, 2008). Although Park and Rainey (2008) tested that hypothesis, they did so with questionnaire items from a federal government survey. In the authors' own admission, these items were not precise measures of transformational leadership and PSM, like the ones established by Perry (1996) and Bass (1985), respectively. Consequently, the relationship between transformational leadership, PSM, and performance is still unclear. That leads to the following hypothesis:

Hypothesis 2: PSM moderates the effect of transformational leadership on performance, such that the higher the PSM, the stronger the positive impact of transformational leadership on performance.

The other motivator that may interact with transformational leadership to impact performance is mission valence. In the goal setting theory, two critical factors that enhance goal commitment are self-efficacy and goal importance, with the latter referring to the degree of importance placed on an expected outcome of a goal (Locke & Latham, 2006). While goal importance is often viewed as an antecedent to goal commitment, goal importance is directly related to performance in its own right. Wright (2007) posited that “[i]f individuals do not perceive performance objectives as meaningful or important, they have little reason to strive to achieve them” (p. 56). Accordingly, Wright found a direct, positive relationship between goal importance and work motivation. This suggests goals may have a stronger impact on performance as individuals perceive them as important.

In addition, there are similarities between goal importance and mission valence. Both concepts refer to the value individuals place on attaining a work-related or organizational outcome. The items in both constructs are also somewhat similar, with the major difference being that goal importance is more related to the individual. Nevertheless, individual goals often overlap with those of the organization. Indeed, Wright (2007) found a fairly strong correlation between goal importance and mission

valence (i.e., .64), further suggesting that these variables are not too dissimilar. I argue that this line of reasoning is sufficient to propose that mission valence may moderate the goal–performance relationship. In other words, goals may have a stronger impact on the performance of employees when they believe strongly in attaining the purpose of the organization (i.e., high mission valence) than when they do not have such a conviction. Since transformational leadership satisfies the necessary goal conditions to induce performance, as mentioned above, I further argue that mission valence will moderate the relationship between transformational leadership and performance. Furthermore, no article was found to examine this moderating relationship. The proposed hypothesis is,

Hypothesis 3: Mission valence moderates the effect of transformational leadership on performance, such that the higher the mission valence, the stronger the positive impact of transformational leadership on performance.

Method

Data to test the hypotheses came from a web-based survey. Although web-based surveys have lower response rates, are sometimes discarded as spam, and do not always reach their intended targets—that is, some are undeliverable (Hoonakker & Carayon, 2009), they have a quicker response time and are more easily distributed to individuals en masse than are other survey forms (Saunders, 2011). Hence, a web-based design was chosen due to the ease in which it could be distributed to individuals nationwide.

In terms of survey distribution, the author contracted with SurveyMonkey, an Internet survey company, to perform the analysis.¹ This entailed developing a 49-item web-based questionnaire and then emailing it to local, state, and federal government employees who were listed in SurveyMonkey's database. Furthermore, the survey was emailed on November 8, 2012, and employees were given until November 14, 2012, to complete it. After the initial email invitation was sent, no email reminders were sent to employees who did not respond. To increase the response rate, participants were provided with nominal benefits by SurveyMonkey. Such benefits included a small donation to a charity of their choice and an entry in a sweepstakes. It is important to mention that contracting with a survey company in this manner is not unique in transformational, leadership, and PSM studies, appearing in such journals as the *International Public Management Journal*, *Academy of Management Journal*, *Human Relations*, and *Journal of Leadership & Organizational Studies* (Anderson & Kjeldsen, 2013; Piccolo & Colquitt, 2006; Resick, Hargis, Shao, & Dust, 2013; Zhu, Riggio, Avolio, & Sosik, 2011). Additional results derived from this survey can be found in Caillier (2013; in press-a; in press-b).

In all, 3,500 email invitations were sent and 964 questionnaires were returned for a response rate of 27.5%. However, many respondents did not receive job evaluations yet, reducing the number of usable surveys to 778 or 22.2%. The latter response rate was still well within the range of what was found for previous web-based studies (Hoonakker & Carayon, 2009; Shih & Fan, 2008).

Table 1. Description of Dependent Variable and Control Variables.

| | <i>M</i> reporting |
|--|--------------------|
| Employee evaluation | |
| Unsatisfactory | 1.00 |
| Satisfactory | 15.20 |
| Excellent | 32.90 |
| Outstanding | 31.20 |
| NA | 19.70 |
| Male | 59.31 |
| Minority | 19.17 |
| Education attainment | |
| High school/GED | 5.06 |
| Some college | 18.81 |
| Associate degree/technical certificate | 11.66 |
| Bachelor's degree | 34.99 |
| Master's degree or higher | 29.48 |

Note. Respondents reporting NA were subsequently removed from the sample, as they did not report a performance category. $M_{Age} = 48.42$; $M_{Tenure} = 13.54$.

Table 1 demonstrates that the characteristics of the respondents revealed that the mean age was 48.42, while respondents mean tenure was 13.54 years. Most respondents were male (59.31%) and 19.17% identified themselves as a minority. Employees in the sample were highly professional. For instance, 64.47% had at least a bachelor's degree. While aggregate data for the public workforce (i.e., local, state, and federal) were not found, the federal government reported that 56.43% and 34.43% of its workforce were males and minorities, respectively.² In comparison, 59.50% of federal employees in this sample were males and 19.40% were minorities. Therefore, this juxtaposition indicates that females and minorities were underrepresented in the sample. Regarding the level of educated respondents, it is not uncommon for government agencies to have a highly educated workforce (e.g., Caillier, 2011). That means the findings should be viewed as preliminary and not as established. However, research does suggest that the negative effects of such bias are overstated (e.g., Abraham, Maitland, & Bianchi, 2006). Although not in the table, 30.99% of respondents were employed by the federal government, 28.24% were employed by state government agencies, and 40.77% were employed by local government agencies.

Dependent Variable

While there are many ways to measure performance, I measured it with evaluation criteria managers used to rate employees in the state of Vermont.³ These criteria are shown in Table 1 and were measured using an ordinal scale (i.e., unsatisfactory = 1, satisfactory = 2; excellent = 3, outstanding = 4, and NA). Therefore, instead of utilizing arbitrary ratings and numbers in a scale (e.g., rate your performance from 1 to 7),

workers were asked to select the rating they received from their supervisor as a way to minimize bias from self-reporting.

An obvious caveat is that although this scale is used in Vermont, other government entities may utilize a different rating scale. This caveat is tempered by the fact that employees were specifically asked to select the actual rating they received, with NA as an option. Thus, employees who did not receive any of the choices were to select NA. With the lack of a clear bottom line in government agencies, another caveat is that performance appraisals are not entirely based on performance. Hassan and Rohrbaugh (2009), for instance, found that ratings were incongruent in public organizations. While this is the case, performance appraisals are critically important in agencies. For instance, appraisals are used to determine salary increases, promotions, and long-term career prospects, as they usually are a permanent record in personnel files (Christensen et al., 2013). That said, performance appraisals seem to be a reasonable measure of performance in government agencies.

Independent Variables

Several independent variables were included in the model. These variables can be further categorized as employee characteristics, job satisfaction, leadership, and intrinsic motivators. The first category of variables is employee characteristics. Employee characteristics are usually included as control variables in leadership models to ensure that findings hold regardless of these traits (e.g., Pieterse, Knippenberg, Schippers, & Stam, 2010). These variables include gender (1 = male; 0 = female), minority status (1 = minority; 0 = non-minority), educational attainment (1 = some high school; 2 = high school/General Educational Development (GED); 3 = some college; 4 = associate degree/technical certificate; 5 = bachelor's degree; 6 = master's degree or higher), tenure with current agency (actual), and age (actual). In the case of educational attainment and tenure, it is reasonable to expect that they would have a positive influence on employee performance evaluations.

Second, job satisfaction, an employee's appraisal of their job, was measured using a multi-item scale developed by Seashore et al. (1982). Job satisfaction was included because it has long been assumed to be associated with employee performance (e.g., Petty, McGee, & Cavender, 1984). Each job satisfaction item consisted of a Likert-type scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), and the entire job satisfaction scale was averaged. The Cronbach's alpha was .90.

The next variable is transformational leadership. Although Bass (1985) initially developed the transformational scale, it has been modified and shortened by several scholars (Avolio & Bass, 2004; Carless, Wearing, & Mann, 2000; Conger & Kanungo, 1994; Hartog, Van Muijen, & Koopman, 1997; Kouzes & Posner, 1990). With that in mind, this article uses the transformational scale developed by Carless et al. (2000) called Global Transformational Leadership (GTL). GTL was chosen over the others because (a) it is much shorter (in some cases it has 17 fewer items), making it easier for respondents to complete, and (b) it has been found to be just as valid as the Multifactor Leadership Questionnaire (MLQ; Avolio, Bass, & Jung, 1995).

Furthermore, all of the dimensions of transformational leadership are represented in the GTL. Each GTL item consisted of a Likert-type scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), and the multi-item scale was averaged.

It is important to point out that Avolio, Bass, and Jung (1999) and Wright and Pandey (2010) indicated that the transformational leadership scale is ideally measured as one factor. To make certain, a factor analysis was conducted and one factor was extracted, explaining 82% of the variation. As a result, the items in the GTL were combined to make one variable. In addition, the Cronbach's alpha for the scale was .96, demonstrating that it was internally consistent.

The last category of independent variables is intrinsic motivators, encompassing PSM and mission valence. As mentioned, Perry (1996) developed the first PSM scale. However, scholars have frequently used only five of the items subsumed under its affective and normative values, for the reason that they are more associated with commitment, compassion, and self-sacrifice (Alonso & Lewis, 2001; Brewer & Selden, 2000; Kim, 2005; Wright et al., 2012; Wright & Pandey, 2008). This five-item measure has also been validated as a global measure of PSM (see Wright et al., 2012). Furthermore, one factor was extracted in the factor analysis, with loadings ranging from 0.74 to 0.84, and the Cronbach's alpha was .85. Each PSM item consisted of a Likert-type scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), and the multi-item scale was averaged.

Mission valence is the other factor under motivation. To measure it, a multi-item, Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) was adopted from Wright and Pandey (2011). However, one of the items was removed because of a low factor loading. The remaining three items loaded on one factor and the Cronbach's alpha was .77. The items were averaged.

Finally, a principal component analysis with a Varimax rotation was conducted on the items. The results of the analysis are presented in Table 2. As demonstrated, the structural patterns of the items were predictable in that they matched their respective measures.

Results

Table 3 displays the correlations for the independent and dependent variables. The correlation coefficients indicate that none of the combinations of independent variables were correlated above .512. All variance inflation factors (VIF) (not detailed in the chart) were also below 2.0, ranging from 1.36 to 1.51, demonstrating that multicollinearity did not unduly influence the model. For instance, severe multicollinearity is when VIFs are near or above 10 (Neter, Wasserman, & Kutner, 1990). The correlation statistics in the table indicate that job satisfaction and transformational leadership had the highest correlation with employee evaluations (.32 and .29, respectively). PSM and mission valence, though not as strong, were also significantly correlated with employee evaluations ($p = .001$). However, all of the variables need to be controlled before a definitive determination can be made.

While not depicted in Table 3, descriptive statistics for the Likert-type measures indicated that the mean for job satisfaction, transformational leadership, PSM, and

Table 2. Principal Component Analysis With Varimax Rotation on Transformational Leadership, PSM, Job Satisfaction, and Mission Valence.

| | TL | PSM | JS | MV |
|---|--------------|--------------|--------------|--------------|
| In general, I like working here. | 0.359 | 0.041 | 0.827 | 0.219 |
| In general, I don't like my job. (Reversed) | 0.224 | 0.071 | 0.863 | 0.152 |
| All in all, I am satisfied with my job. | 0.300 | 0.053 | 0.804 | 0.262 |
| My supervisor communicates a clear and positive vision for the future. | 0.830 | 0.050 | 0.179 | 0.122 |
| My supervisor treats staff as individuals, supports and encourages their development. | 0.908 | 0.026 | 0.154 | 0.108 |
| My supervisor gives encouragement and recognition to staff. | 0.887 | 0.063 | 0.168 | 0.103 |
| My supervisor fosters trust, involvement, and cooperation among team members. | 0.914 | 0.038 | 0.201 | 0.070 |
| My supervisor encourages thinking about problems in new ways and questions assumptions. | 0.852 | 0.048 | 0.152 | 0.113 |
| My supervisor is clear about his or her values and practices what he or she preaches. | 0.886 | 0.042 | 0.131 | 0.100 |
| My supervisor instills pride and respect in others and inspires me by being highly competent. | 0.914 | 0.039 | 0.196 | 0.107 |
| Meaningful public service is important to me. | 0.021 | 0.751 | 0.125 | 0.186 |
| I am often reminded by daily events how dependent we are on one another. | 0.081 | 0.711 | -0.003 | 0.173 |
| Making a difference in society means more to me than personal achievements. | 0.024 | 0.845 | 0.062 | 0.011 |
| I am prepared to make enormous sacrifices for the good of society. | 0.064 | 0.838 | 0.003 | 0.071 |
| I am not afraid to go to bat for the rights of others even if it means I will be ridiculed. | 0.005 | 0.743 | 0.006 | 0.127 |
| I believe that the priorities of my employing organization are quite important. | 0.233 | 0.143 | 0.238 | 0.745 |
| My employing organization provides valuable public services. | 0.093 | 0.195 | 0.083 | 0.810 |
| For me, the mission of my employing organization is exciting. | 0.123 | 0.215 | 0.282 | 0.743 |

Note. Bolded coefficients indicate the items that loaded on PSM, TL, JS, and MV. PSM = public service motivation; TL = transformational leadership; JS = job satisfaction; MV = mission valence.

mission valence were 5.29, 4.74, 5.76, and 5.70, respectively. Transformational leadership therefore had a much lower mean relative to the other factors.

Since the dependent variable employee evaluations was ordinal, signifying that the distance between response categories is not the same, ordinal logit regression is deemed the most appropriate estimator, provided multicollinearity is not a problem and that the test of proportional odds is not violated (Norušis, 2005). As mentioned

Table 3. Correlations and Reliabilities of Employee Evaluations, Control Variables, Transformational Leadership, PSM, and Mission Valence.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------------------------------|---------|---------|----------|---------|---------|---------|---------|---------|---------|--------|
| 1 Employee evaluations | 1 | | | | | | | | | |
| 2 Male | 0.079* | 1 | | | | | | | | |
| 3 Minority | -0.013 | -0.057 | 1 | | | | | | | |
| 4 Education attainment | 0.053 | -0.007 | -0.005 | 1 | | | | | | |
| 5 Tenure | 0.061 | 0.096** | 0.030 | -0.064* | 1 | | | | | |
| 6 Age | -0.031 | 0.047 | -0.118** | 0.093** | 0.435** | 1 | | | | |
| 7 Job satisfaction | 0.324** | 0.081* | 0.019 | 0.004 | 0.120** | 0.078* | (.900) | | | |
| 8 Transformational leadership | 0.294** | 0.031 | 0.022 | 0.057 | -0.048 | -0.062* | 0.512** | (.960) | | |
| 9 PSM | 0.114** | -0.047 | 0.026 | 0.141** | 0.085** | 0.116** | 0.151** | 0.125** | (.850) | |
| 10 Mission valence | 0.162** | -0.036 | 0.020 | 0.076* | 0.049 | 0.060 | 0.508** | 0.341** | 0.364** | (.770) |

Note. Cronbach alpha's are in parentheses; PSM = public service motivation.

*Correlation is significant at the .05 level (two-tailed).

**Correlation is significant at the .01 level (two-tailed).

earlier, the VIF coefficients suggested that the former does not affect the model. Also, the proportional odds assumption (also called parallel lines assumption) was not violated, as the test for this violation was not significant ($p = .51$).

Recall that the aim was to investigate the moderating effects of several key factors. What may appear like a hurdle for ordinal logit regression in these models is that it is typically not utilized to perform moderation; ordinary least squares estimation is most commonly used. However, research does suggest that moderation can be performed by ordinal logit regression estimation (see Garnett, Marlowe, & Pandey, 2008). Hence, ordinal logit regression is suitable for this analysis.

Located in Table 4 are the results of the moderation. The odds ratio for each model provides the fullest understanding of the magnitude of the relationship. For instance, the further a factor is from 1 in either direction, the greater the impact, with greater than 1 representing a positive relationship and less than 1 a negative relationship. More specifically, the odds ratio indicates the following: For a one unit increase in the dependent variable, the odds of being rated outstanding on an employee evaluation were how many times greater or lesser (i.e., the odds ratio figure in Table 4) than it was for the combined lower evaluation categories, holding the other variables in the model constant.

As demonstrated in Table 4, Models 1 through 3, the level of explained variance in each of the pseudo R^2 (i.e., Cox and Snell, Nagelkerke, and McFadden) increased as transformational leadership, PSM, and mission valence, as well as their interactions, were added to the model. This demonstrates that these study variables added to the models overall fit.

Model 2 indicates that several variables had a positive impact on performance. Job satisfaction was positively related to employee evaluations ($p = .001$; odds

Table 4. The Impact of Control Variables, Transformational Leadership, PSM, and Mission Valence on Employee Evaluations Using Ordinal Regression as an Estimator.

| Study variables | Model 1 | | | Model 2 | | | Model 3 | | |
|--------------------------------|----------|------|------------|----------|------|------------|----------|------|------------|
| | Estimate | SE | Odds ratio | Estimate | SE | Odds ratio | Estimate | SE | Odds ratio |
| Male | 0.22 | 0.14 | 1.25 | 0.20 | 0.14 | 1.23 | 0.23 | 0.14 | 1.25 |
| Minority | -0.09 | 0.17 | 0.91 | -0.11 | 0.18 | 0.89 | -0.10 | 0.18 | 0.91 |
| Education attainment | 0.10 | 0.06 | 1.11 | 0.07 | 0.06 | 1.07 | 0.07 | 0.06 | 1.08 |
| Tenure | 0.01 | 0.01 | 1.01 | 0.02 | 0.01 | 1.02 | 0.01 | 0.01 | 1.01 |
| Age | -0.02** | 0.01 | 0.98 | -0.02** | 0.01 | 0.98 | -0.02** | 0.01 | 0.98 |
| Job satisfaction | 0.46*** | 0.05 | 1.58 | 0.37*** | 0.07 | 1.45 | 0.38*** | 0.07 | 1.46 |
| TL | | | | 0.20*** | 0.05 | 1.22 | 0.20*** | 0.05 | 1.23 |
| PSM | | | | 0.18* | 0.08 | 1.19 | 0.16* | 0.08 | 1.18 |
| MV | | | | -0.10 | 0.08 | 0.90 | -0.09 | 0.08 | 0.92 |
| PSM × TL | | | | | | | -0.06 | 0.05 | 0.94 |
| MV × TL | | | | | | | 0.08* | 0.04 | 1.08 |
| <i>n</i> | 778 | | | 778 | | | 778 | | |
| Pseudo <i>R</i> ² s | | | | | | | | | |
| Cox and Snell | .02 | | | .14 | | | .15 | | |
| Nagelkerke | .02 | | | .16 | | | .16 | | |
| McFadden | .01 | | | .07 | | | .07 | | |

Note. PSM = public service motivation; TL = transformational leadership; MV = mission valence.

*Statistically significant at .05.

**Statistically significant at .01.

***Statistically significant at .001.

ratio = 1.45). For a one unit increase in job satisfaction, the odds of being rated outstanding on an employee evaluation were 1.45 times greater than it was for the combined lower evaluation levels, holding the other variables in the model constant. Job satisfaction, unsurprisingly, had the most robust association with employee evaluations, as evidenced by the odds ratio. Employee evaluations were better when supervisors practiced transformational leadership than when they did not practice transformational leadership ($p = .001$; odds ratio = 1.22). That is, for a one unit increase in transformational leadership, the odds of being rated outstanding on a performance evaluation were 1.22 times greater than it was for the combined lower levels, when the other variables in the model were held constant. Support was therefore found for Hypothesis 1, which expected transformational leadership practices to be positively associated with employee job evaluations. PSM was positively associated with employee evaluations ($p < .05$; odds ratio = 1.19). This means a one unit increase in PSM makes the odds of being given a rating of outstanding 1.19 greater. And, the control variable age was associated with a decrease in employee evaluations ($p < .01$; odds ratio = 0.98).

To reduce the level of multicollinearity that occurs when variables and their interactions are entered in moderation models, the interaction terms were centered prior to conducting Model 3.⁴ Variance inflation factor coefficients indicate that multicollinearity was not a concern after the variables were centered, as they were all less than 1.7.

Model 3 indicates that transformational leadership did not moderate or strengthen the positive association between PSM and employee evaluations ($p > .05$). Thus, Hypothesis 2 which expected PSM to moderate the effect of transformational leadership on performance was not supported by the findings. However, mission valence did strengthen the relationship between transformational leadership and employee evaluations ($p < .05$; odds ratio = 1.08). For a one unit increase in this interaction, the odds of being given a rating of outstanding increased by 1.08 times, when the other factors were held constant. In fact, mission valence had no significant influence on employee evaluations absent transformational leadership. That finding supports Hypothesis 3, which expected mission valence to moderate the effect of transformational leadership on performance. To further explain this moderating effect, similar to Garnett et al. (2008), predicted probabilities were calculated based on model estimates. They indicate that at a mean level of mission valence, a shift from a mean level of transformational leadership to a high level transformational leadership increases the likelihood of receiving an outstanding performance from .402 to .480. Meanwhile, at high level of mission valence, a movement from mean transformational leadership to high level of transformational leadership increases the likelihood of receiving an outstanding evaluation from 0.379 to 0.614. That means as mission valence increased so did transformational leadership's impact on employee evaluations.

Discussion and Conclusion

The direct and indirect impact of transformational leadership on individual performance has often been studied. Yet scholars have failed to fully explore the degree to which PSM and mission valence might interact with this leadership practice to influence employee performance. To close this lacuna in the literature, a nationwide survey was administered to federal, state, and local government employees in the United States. Several important finding emerged from the results.

First, the results extend organizational research by finding that mission valence moderated—that is, strengthened—the relationship between transformational leadership and employee evaluations. That means transformational leaders were more likely to increase the performance of workers when they were attracted to an agency's mission than when they were not attracted to the mission. Transformational leaders are ostensibly able to affect the performance of individuals with high mission valence more because such leaders establish clear and challenging mission-related goals, which, thus motivates individuals who believe strongly in the mission to perform better (Bass & Riggio, 2006). This finding is consistent with the goal setting theory (Locke & Latham, 2002). It also lends support to those who have emphasized the importance of an agency's mission or purpose in motivating employees (Barnard, 1938; Clark & Wilson, 1961; Goodsell, 2012; Rainey & Steinbauer, 1999). Since the salience of an agency's mission is a tool that can be used by transforming managers to improve performance, organizations should seek to improve mission valence in organizations. Rainey and Steinbauer (1999) posited that the valence of an agency's mission can be enhanced by focusing on six conditions. That is, making it "difficult but

feasible,” “reasonably clear and understandable,” “worthy/worthwhile/legitimate,” “interesting/exciting,” “important/influential,” and “distinctive” (p. 3).

Second, PSM did not moderate the relationship between transformational leadership and performance. It appears that transformational leadership does not induce performance only among employees with high PSM. In other words, transformational leadership did not increase performance more for individuals with high PSM than it did for individuals with low PSM. There are two possible reasons why this finding did not occur. Given that transformational leaders increase performance by establishing clear and challenging goals (Bass & Riggio, 2006), and given that individuals with PSM have a desire to serve society (Perry & Hondeghem, 2008), the performance of high PSM individuals may not have been higher because such goals did not always coincide with their altruistic desires. For instance, transformational leaders establish many goals; some of which are not altruistic in nature. Because of this, individuals with high PSM may not have been stimulated. “Another possibility could be that PSM is sufficiently intrinsic to the worker [and] that it confers some resilience of performance, even in the absence of [transformational] leadership,” as mentioned by an anonymous reviewer. Nevertheless, these suggestions are merely possibilities, and more research is needed to fully understand exactly why PSM did not moderate the relationship between transformational leadership and performance.

Third, PSM was found to positively affect performance directly. This is not surprising. Although findings were mixed (see Bright, 2007, and Caillier, 2010, for non-significant findings), some scholars have found an association between PSM and performance (Camilleri & Van Der Heijden, 2007; Naff & Crum, 1999). This finding supports Perry and Wise’s (1990) seminal argument that, because they possess a greater motivation to serve society—the mission of public service organizations—employees with PSM have higher levels of performance than employees without these motives. However, the relationship between PSM and performance does not seem to be robust ($r = .114$ in Table 2). That explains why the results might have been mixed in previous research.

Fourth, transformational leadership was also found to have a direct effect on employee evaluations. This finding supports Waldman et al. (1987) whose conclusion was similar. It is also consistent with research that has long found that transformational leadership components are robust in engendering desirable work-related outcomes (Bass et al., 2003; Howell & Avolio, 1993; Lowe et al., 1996; Waldman et al., 1987; Walumbwa et al., 2008).

The evidence from these findings is strong enough to suggest that transformational leadership is critical to agencies. What can organizations do to increase the presence of transformational leadership? Barling et al. (1996) conducted a “pretest-posttest control group design” (p. 830) and found that managers who participated in a transformational leadership program were rated as having higher levels of intellectual stimulation and individualized influence by their subordinates than those who did not participate (Barling et al., 1996). Since inspirational motivation and intellectual stimulation (dimensions of transformational leadership that focus on setting goals) are likely to motivate employees with high mission valence, organizations may be able to enhance

the performance of individuals with high mission valence by incorporating transformational leadership training into their management's professional development programs.

When administering such training programs, however, organizations should carefully consider design and delivery. For instance, Abrell, Rowold, and Moenninghoff (2011) evaluated the effects of a leadership program at different time intervals and found that transformational leadership did not manifest itself in leaders until 6 months after training began. This suggests organizations should invest in long-term programs with weekly meetings, as managers do not change their ability to provide employees with transformational leadership overnight.

The further implication is that by enhancing the transforming qualities of supervisors, such transformational programs are likely to increase the performance evaluations of individuals who value the organization's mission. Therefore, the benefits of these leadership programs are likely to accrue to performance.

Finally, job satisfaction was positively associated to performance evaluations, while the control variable age had a negative impact. Of all the variables in the model, job satisfaction had the strongest relationship with employee evaluations. This demonstrates the robust connection between job satisfaction and employee evaluations.

Despite these results, this study has several limitations. First, the design was cross-sectional, preventing determinations to be made about causality. For instance, job satisfaction was positively associated with employee evaluations. Hence, it is not possible to detect whether job satisfaction leads to higher evaluations or whether high evaluations lead to higher job satisfaction—both positions that have been taken by management theorists (see Petty et al., 1984). Similar arguments could be made concerning employee evaluations and transformational leadership, PSM, and mission valence. That is, a positive evaluation could cause workers to perceive their supervisors as more transformational, their mission as more important, and it could positively trigger their PSM attitudes. However, the relationship between evaluations and transformational leadership, PSM, and mission valence were based on established theories. In addition to being limited by causality, self-reported surveys (such as this one) are limited by social desirability. That is, respondents may have answered the items in a way that they thought was socially acceptable (e.g., Fisher, 1993). Next, females and minorities were underrepresented in the sample. Underrepresentation is a concern because it limits generalizations outside of this sample. Even though this was the case, this study provides a beneficial starting point that other studies can use to build on. Therefore, the findings should be viewed as preliminary. Another limitation is that the geographical region of respondents is not known, as workers' attitudes about mission valence and PSM may vary across regions. The fact that a comprehensive model was not introduced is also limitation. This is because the aim was only to clarify the relationship between transformational leadership, PSM, mission valence, and employee evaluations. Such focused aims are not uncommon in leadership studies (e.g., Pieterse et al., 2010). The next limitation is that data were derived from one source. However, this was attenuated because employees were asked to indicate the actual rating they received from their supervisor, thus limiting the effect of common source bias. The last

limitation is that a unidimensional measure of PSM was employed, rather than the multi-dimensional scale developed by Perry (1996).

In the future, studies can improve upon this one by further exploring the interaction between mission valence and transformational leadership. For instance, given that transformational leadership interacted with mission valence, leaders may also be able to harness mission valence to enhance other desirable outcomes. Of particular importance would be to explore exactly how these two variables work together to influence turnover and extra-role behaviors. Next, research could examine the relationship between PSM and transformational leadership, as well as other factors, to further understand why the transformational leadership–performance relationship was not stronger when employees had high PSM. Moreover, and as mentioned earlier, this study examined PSM as a unidimensional construct. Since PSM is comprised of several dimensions (i.e., self-sacrifice, compassion, public interest, and public-policy making), researchers can further this study by examining how each dimension interacts with transformational leadership to impact performance. Finally, research should replicate this study to determine whether it is generalizable to other settings.

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Notes

1. Before the survey was conducted, permission was obtained from the author's employing university's Institutional Review Board.
2. The percentages of males and minorities were obtained by requesting that information on December 10, 2013, from the Office of Planning and Policy Analysis (PPA) located in the U.S. Office of Personnel Management. An email reply from PPA, with tables providing percentages of minorities and gender of the U.S. federal government workforce, was received on December 11, 2013.
3. The state of Vermont's performance evaluation rating criteria can be found by accessing the form titled, "Performance Evaluation Report" at <http://humanresources.vermont.gov/forms#P>.
4. Centering entails subtracting a factor's mean from each observation in the sample so that the factor's mean then becomes 0. Cohen, Cohen, West, and Aiken (2003) demonstrated that this reduces the level of multicollinearity in moderation models where interaction terms are included along with the variables from which they were derived.

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