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## Determinants of job satisfaction and turnover intentions of public employees: evidence from US federal agencies

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The purpose of this study is to probe the main determinants of job satisfaction (JS) and turnover intention (TI) in the public sector, as identified in the relevant literature: goal congruence, intrinsic and extrinsic work motivation, and interpersonal trust. Drawing on Simon's two-factor theory, as well as employing a systematic conceptual and empirical model, this research analyzes two dimensions of TI among public employees (conflictual TI and developmental TI) to identify important antecedents and mediating conditions (pull factors and push factors) of TI. Large data sets from the Merit Principles Survey (MPS) are used to develop an 'antecedent-mediator-outcome' model that empirically analyzes and tests the direct and indirect effects of a set of attitudinal and behavioral influences on JS and two types of TI within US federal agencies. The research finds that certain predictors and mediators play major roles in meaningfully diminishing the levels of conflictual TI and developmental TI while significantly boosting JS. Based on a discussion of the main findings, research and practical implications for public management theory and practice are provided.

**Keywords:** turnover intentions; job satisfaction; interpersonal trust; intrinsic and extrinsic motivation; goal congruence; public human resource management; US federal agencies

### Introduction

Regardless of the types of organizations, human resources are important organizational assets determining core organizational capability, effectiveness and performance, together with other sorts of resources such as material or intellectual resources. The logistics and paradigms of managing people in organizations have evolved over the years in three different stages: (1) more traditional models of public personnel management, (2) result-based human resource management (HRM) and (3) strategically positioned human capital management (OPM et al., 2005). Public management reforms all over the world have been driven by different philosophical components, including managerial, political and technical motivations. In regard to HRM function in the public arena, especially under the rubric of new public management, result-oriented and market-based reforms have been radically initiated in order to respond to cost pressures, increased attention to customer satisfaction, and emphasis on recruitment, retention and productivity, all of which serve to heighten awareness and scrutiny of the significant role HRM plays in advancing the mission and performance of public agencies and in

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responding to 'increased competition for talent' and 'changing worker values and expectations in federal agencies' (OPM et al., 2005, pp. 5–7).

Performance and accountability enhancement are enabled when internal competition based on human resources, as well as external competition based on physical resources, is secured. In order to secure internal competition, certain environmental conditions should be created where organizational members can demonstrate their full capability through satisfaction in job performance. The satisfaction of members in job performance is embodied in job attitudes like 'organizational commitment' and 'job satisfaction.' When the attitudes of organizational members towards their jobs are not satisfactory, members are tempted to bear grievance against the organization and their jobs and incubate an intention to leave their current workplace. This means that positive job attitudes like job satisfaction, organizational commitment and involvement are significant factors influencing turnover intentions. Turnover acts as a hindrance to organizational performance in the following ways. The first is the generation of costs for new human resource recruitment and training. The second is the problem of productivity decline due to the loss of skilled labor. The final ways are structural damage to communication and the problem of declining trust among members. As such, turnover may be considered to be a very important determinant of human resources management on both an organizational level and an individual level for organization members. Light (2002) pointed out that a strong civil service has five characteristics: members are (1) motivated by the chance to accomplish something worthwhile on behalf of their country, (2) recruited from the top of the labor market, (3) given tools and the organizational capacity to succeed, (4) rewarded for a job well done and (5) respected by the people and leaders they serve (cited in Soni, 2000). However, there are many circumstances in which public agencies do not embody such strong civil service traits and rather emphasize the imminent threat for more serious human resource crises.<sup>1</sup>

Against this backdrop and drawing upon scholarly works from several disciplines, such as Simon's two-factor theory, as well as employing a systematic conceptual and empirical model, this study analyzed and verified the direct and indirect effects of a set of attitudinal and behavioral influences on job satisfaction (JS) and on two types of turnover intentions (TI), conflictual TI and developmental TI, within US federal agencies. Specifically, as predictors and mediators, this study examined the effects of goal congruence, work motivation (intrinsic and extrinsic motivation) and interpersonal trust (trust of supervisors and managers) on JS and TI. Therefore, the following set of research questions and hypotheses were proposed. First, what are the main predictors that affect JS and TI on an individual or organizational level? Can we confirm the dimensionality of TI, both conflictual and developmental? Second, how do intrinsic and extrinsic motivations differently affect trust, JS and the two types of TI? Can we observe disparate impacts of each type of motivation in the public sector? How might employees' perceptions of goal congruence affect their motivations? Third, what is the managerial role of interpersonal trust in increasing or decreasing JS and TI? Is it statistically significant? In our attempt to answer these research queries, we provide the theoretical and managerial implications of research on JS and TI for public management scholars and practitioners.

This research utilized data collected as part of the Merit Principles Survey 2005, conducted by the US Merit Systems Protection Board (MSPB) to identify the main determinants of JS and TI in the public sector. In order to test these hypotheses, the present study employed exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and a structural equation model (SEM) to operationalize and confirm latent constructs, as well as to examine the relationships among variables. This paper

concludes with an explanation of the findings and a discussion of research implications for the enhancement of JS and reduction of TI of federal employees. We also reveal the limitations of the study and offer suggestions for future research.

## **Theoretical framework**

### ***The concepts of job attitudes***

Previous research indicates that various types of organizational, managerial and individual-level antecedent factors are associated with different types of job attitudes

Specifically, job attitudes, such as JS and TI, are critical elements defined as emotions and reactions felt by organizational members while performing their jobs (Petty & Cacioppo, 1986). In other words, job attitudes can be understood as aspects of the job itself and the work environment on a cognitive, evaluative and behavioral level among organizational members. Job attitudes are presented as important elements determining the behavior of organizational members with regard to job performance, turnover and absenteeism. For example, Locke (1976, p. 1394) defined the concept of JS as a 'pleasant and positive state of mind obtained by assisting job value or achieving it actually' and Weiss (2002, p. 6) defined it as 'an evaluative judgment based on positive or negative assessment for job situation or job.' In other words, JS is a positive state of mind obtained through personal job experiences or assessments.

TI is recognized as a main factor in reducing job performance and entails a negative result for the development of an organization, but also has important significance because it can be utilized as a forecasting tool for minimizing negative factors. TI is defined in various ways, depending on each scholar's perspective. Mobley (1982), for example, defined TI as an individual receiving monetary compensation from an organization for giving up a role as an organizational member, while Allen and Meyer (1990) defined it as an organizational member's intention to leave the current workplace and give up membership in the organization either voluntarily or against his or her will.

As shown in the definition of Allen and Meyer (1990), turnover can be characterized as voluntary or involuntary. Voluntary turnover is related to conflicts with seniors or colleagues and dissatisfaction with the company in terms of self-growth and development, wages and working conditions. Voluntary turnover decisions are driven by personal reasons, including marriage, pregnancy and parenthood. On the other hand, involuntary turnover includes layoff, dismissal by disciplinary action, retirement due to age limits and death.

Voluntary turnover that is generated by individual intention could be controlled and managed if some factors affecting the intention could be identified and rectified. Thus, the main research themes of this study center on the voluntary TI of public employees and relevant preconditions. While the majority of previous empirical research on TI has probed one dimension of TI, this study divided the constructs of TI into two sub-dimensions and analyzed both dimensions: (1) turnover intentions caused by human resource development (HRD) opportunities or by desire to make more of a difference (developmental TI) and (2) turnover intentions caused by organizational and interpersonal conflicts within an organization (conflictual TI).

### ***Theoretical background***

This study explored TI, drawing upon March and Simon's (1958) two-factor theory. The two-factor theory explains the determinants of TI using two factors, an individual's

Table 1. A summary of research on JS and TI.

Variables	Research	Independent variables and parameters	Dependent variable(s)	Samples	Statistical methods/ analyses
Goal congruence and clarity	Wright (2004)	Work context (organizational goal conflict, procedural constraints, <u>organizational goal specificity</u> ), job characteristics (job goal difficulty, <u>job goal specificity</u> ), feedback, job attitude (self-efficacy)	Work motivation	Public sector (New York State)	SEM (CSM)
	Wright & Pandey (2011)	<u>Goal clarity</u> , public service motivation, work impact, mission valence, job satisfaction	Absenteeism	Public sector (federal agencies)	SEM
Work motivation	Jung & Rainey (2011)	<u>Goal ambiguity</u> (program evaluation, time specification, target specification), goal perceptions (job-goal commitment, job-goal importance, job-goal specificity, mission specificity), control variables (pay satisfaction, promotion satisfaction, training satisfaction, supervision satisfaction, job satisfaction, internal collaboration, gender, education, grade)	Public service motivation	Public sector (federal agencies)	Multinomial logistic regression
	Cho & Perry (2011)	<u>Intrinsic motivation</u> , managerial trustworthiness, goal directedness, <u>extrinsic reward expectancy</u> , control variables (individual resources, female, minority, supervisory status, age, agency experience)	Employee attitudes (employee satisfaction, intent to leave)	Public sectors (federal agencies)	OLS and logistic regression
	Word & Park (2009)	Demographic factors (gender, age, ethnicity), managerial factors ( <u>intrinsic motivation</u> , <u>extrinsic motivation</u> , job tenure), institutional factors (red tape, hierarchical culture, organization size)	Job involvement	Public sector vs. nonprofit sector	HRM
Interpersonal trust	Schnake, Bushardt & Spottswood (1984)	Goal clarity, goal difficulty, participation, task complexity	<u>Internal work motivation</u> , job satisfaction	Private sector	ANOVA
	Park & Rainey (2012)	Intrinsic and extrinsic motivation, shared and supervisory leadership	Affective and cognitive trust	US federal agencies	HLM

<b>Job satisfaction</b>	Nyhan (2000)	Feedback, participation, empowerment, organizational trust	Productivity, organizational commitment	South Florida municipal government	SEM
	De Jong & Elfving (2010)	Team trust, team monitoring, and team effort	Organizational performance	Tax consulting teams	SEM
	Kim (2002)	Performance appraisal fairness, utilization of skills/knowledge/abilities, supervisor's support of career development, participation in mentoring programs, participation in succession planning	<u>Job satisfaction</u>	Public sector (Nevada State)	Regression analysis
	Park & Rainey (2007)	TOL, goal clarity, empowerment, public service-oriented motivation, objective performance appraisal systems, procedural equity perceptions, commitment (affective, normative, continuance)	<u>Job satisfaction</u> , perceived performance, perceived quality of work	Public sector (federal agencies)	SEM
	Wright & Pandey (2008)	Pay satisfaction, public service motivation, value congruence	<u>Job satisfaction</u>	Public sector (state and local level)	SEM
<b>Turnover intention</b>	Bright (2008)	Public service motivation, <i>job satisfaction</i> , P-O fit, control variables (age, education, gender, race, tenure)	<u>Turnover</u>	Public sector (Indiana State)	SEM
	Park (2010)	Knowledge incentive system, monetary incentive system, discretionary controlling system, performance monitoring system, work motivation, job satisfaction	<u>Turnover intention</u>	Public sector (Georgia State)	SEM
	Lee & Jimenez (2011)	organization-level variables (performance management: performance-based reward system, performance-supporting supervision), individual-level control variables (work-related variables: job satisfaction, training, job position, years of employment, salary, union membership/socio-demographic variables: gender, race, age, education)	<u>Intention to leave</u>	Public sector (federal agencies)	Logistic regression

Note: SEM: Structural Equation Model; OLS: Ordinary Least Square; HRM: Hierarchical Regression Model; HLM: Hierarchical Linear Model; ANOVA: Analysis of Variance.

internal (push) factors and external (pull) factors. It describes how the following two essential factors work in individuals' decisions on whether they leave or stay in their present job: (1) the perceived desirability of movement from one's present organization and (2) the perceived ease of movement from one's present organization. Similarly, March and Simon's (1958) theory posits that TI is motivated by 'whether an individual wants to leave the organization' and 'whether there exists the possibility that an individual can leave by external factors.' In particular, it points out that the influential factors in the perceived desirability of movement and ease of movement differ in each case.

Desirability of movement is mainly influenced by job attitudes such as JS and commitment to the organization. In addition, March and Simon (1958) suggested the possibility of intraorganizational transfer as an important determinant of turnover desirability. Jackofsky and Peters (1983) also pointed out that as internal and external rewards are essential factors in determining job satisfaction, there is the possibility that the two types of rewards could be indirect influential factors on the desirability of movement as well. Accordingly, desirability of movement is a concept that has been dealt with extensively, and previous research has found that JS is a core factor in desirability of movement. Thus, desirability of movement is decided by the feelings an individual has while performing his or her job in an organization. Therefore, this study designates TI incurred by an individual's internal factors as a 'push factor,' and addresses conflictual TI as a push factor. In short, conflictual TI is defined as turnover intention occurring due to a negative state of feeling towards carrying out an individual task, such as the conflict generated by the relationship between superiors and colleagues and the conflict generated by unfair treatment in an organization.

On the other hand, ease of movement is mainly influenced by extraorganizational factors such as job market conditions and labor market mobility. March and Simon (1958), addressing influential factors in ease of movement, examined individual characteristics like job ability as well as extraorganizational factors. They argued that individuals with better job abilities are most likely to be attractive in the job market and that this situation may function as an essential factor in ease of movement. In addition, job performance puts its focus mainly on person-job fit, and fit is the most important factor in JS. Therefore, March and Simon (1958) argued that job ability level could be an indirect influential factor in desirability of movement.

It can be said that ease of movement is determined by external factors, such as the environment and job market mobility, as well as an individual's job ability value in the job market. Therefore, the present study designates the turnover intention incurred by individuals' external factors as a 'pull factor' and addresses developmental turnover intention by this pull factor. Developmental TI is defined as the turnover intention occurring due to cases where an individual is given an opportunity to make better use of his or her job abilities and where there are opportunities available for better working conditions. Drawing upon scholarly works from several disciplines, such as Simon's two-factor theory, as well as employing a systematic conceptual and empirical model, the present study analyzes and verifies the direct and indirect effects of a set of attitudinal and behavioral influences on JS and two types of turnover intentions, conflictual TI and developmental TI, within US federal agencies.

### A research model

Based upon a review of previous research models and findings, a heuristic research model was constructed as shown in Figure 1, illustrating the relationships among



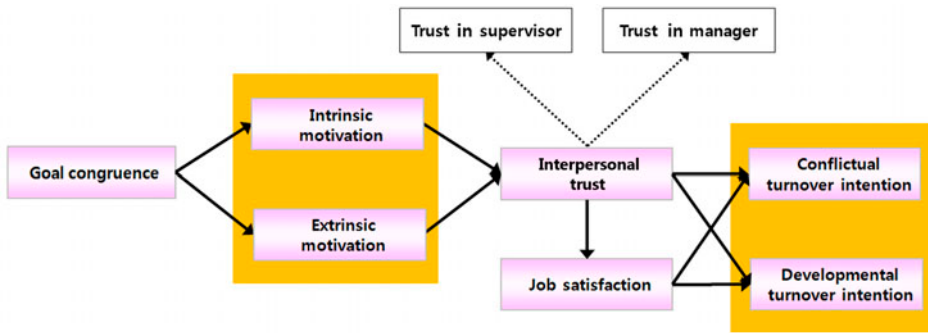


Figure 1. Research model: antecedents and mediators of JS and TI of federal employees.

predictors, mediators and consequences in US federal agencies. Antecedents comprise goal clarity/congruence, intrinsic motivation and extrinsic motivation. Interpersonal trust (including trust in supervisors and trust in managers) and job satisfaction are designated as mediators in this study. In regard to outcome variables, turnover intention of federal employees is categorized into two different constructs: (1) TI caused by pull factors (e.g., desire to make more of a difference or increased opportunities for advancement) and (2) TI due to push factors (e.g., organizational or interpersonal conflicts within agencies).

### *Interpersonal trust, JS and TI*

Trust can be classified in many ways, depending on the analysis unit and the perspective. For example, it can be viewed as organizational trust (members' attitudes about their organization) or interpersonal trust within relationships among the members of an organization (Kiffin-Petersen & Cordery, 2003). Recently, it has often been classified as vertical trust, which is formed in the hierarchical relationship between supervisor and supervisee, lateral trust among colleagues, and institutional trust between members and their organization. Recent studies have also divided trust into organizational trust, supervisor trust, peer trust and interpersonal trust by considering the multi-level aspects of targets and emphasizing diversity in the members and duties of an organization, in addition to individual, group and organizational analysis units (Butler & Cantrell, 1984; Mishra, 1996; Park & Rainey, 2012). The current study probes into interpersonal trust, with a focus on trust in the behavior and attitudes of supervisors and managers.

Interpersonal trust is a cognitive or perceptual concept by which organizations can facilitate informal and formal processes to motivate their employees and to attain high performance on a voluntary basis. Hence, well-established, trustworthy relationships among organizational constituents may accommodate and promote a higher sense of mutual responsibility, accountability and cultural diversity, and a higher level of organizational civic perceptions and behaviors within organizations (J.W. Graham, 1991). Because specific organizational outcomes can be formed after trust has been built among the members of an organization, people have become interested in how to build trust and how trust can be a mechanism to overcome administrative and procedural shortcomings. Thus, trust can be understood as a critical social capital factor in bureaucracy where centralized, relationship-oriented, formalized and rule-based cultures might prevail more than in the private sector (Park et al., 2013; Rainey, 2009).

Table 2. Measurement of variables.

Variable	Item	No.
Goal congruence	1. I understand my agency's mission 2. My agency's mission is important to me 3. I understand how I contribute to my agency's mission	1-a 1-b 1-c
Motivation	Intrinsic motivation 1. Recognition from my coworkers 2. My duty as a public employee 3. Desire to help my work unit meet its goals 4. Personal pride or satisfaction in my work 5. Non-cash recognition (letter of appreciation, plaque)	16-e 16-g 16-i 16-j 16-l
	Extrinsic motivation 1. A cash award of \$100 2. A cash award of \$1000 3. Desire for a good performance rating 4. Increased chances for promotion 5. A time off reward of 8 hours	16-a 16-b 16-f 16-h 16-k
Interpersonal trust	Trust in supervisor 1. Fairly assess my performance and contributions 2. Listen fairly to my concerns 3. Apply discipline fairly and only when justified 4. Clearly communicate conduct expectations 5. Act with integrity 6. Refrain from favoritism 7. Keep me informed	33-a 33-c 33-d 33-e 33-f 33-g 33-h
	Trust in manager 1. Clearly communicate organizational performance expectations 2. Fairly assess my performance and contributions 3. Listen fairly to my concerns 4. Apply discipline fairly and only when justified 5. Act with integrity	34-a 34-b 34-c 34-d 34-e

Job satisfaction	6. Refrain from favoritism	34-f
	7. Keep me informed	34-g
	1. In general, I am satisfied with my job	2-m
	2. I am satisfied with my organization's performance appraisal system	12-g
	3. I am satisfied with the recognition and awards I receive for my work	20-c
	4. Overall, I am satisfied with my pay	20-d
Turnover intention	5. Overall, I am satisfied with my supervisor	35-n
	6. Overall, I am satisfied with managers above my immediate supervisor	35-o
	1. Problems with supervisor	43-b
	2. Problems with coworkers	43-c
	3. Unfair treatment or harassment	43-d
	1. Desire to make more of a difference	43-a
DTI	2. Opportunity to make better use of my skills and abilities	43-e
	3. Increased opportunities for advancement	43-f
	4. Opportunity to earn more money	43-g
	5. Improved opportunities for training	43-h
	6. Opportunity for recognition of performance	43-i
	7. Opportunity for greater organizational stability	43-k

Note: CTI: conflictual turnover intentions; DTI: developmental turnover intentions.

Employees within public agencies perform their work under close mutual relationships among supervisors and managers. Trust in leaders is considered to play a significant role in increasing work efficiency and organizational performance by narrowing the psychological and communicative gap between managers and staff within organizations. This situation results in the development of more flexible, rational and development-driven cultures. Also, organizational members with affective and relational trust in leaders are more likely to be satisfied with their jobs, work environments and other institutional arrangements. In particular, previous research indicates that praise and recognition of general staff by managers, as well as team- and task-skills training, strengthen the degree of trust among staff and managers and have a positive impact on individual organizational commitment and job satisfaction by raising the level of perceived support (Ashleigh & Prichard, 2011). Additionally, several studies have revealed that in many cases, job satisfaction mediates or moderates the relationship between trust and turnover intention by enhancing the negative impact of trust on turnover intention (e.g., see Cho & Perry, 2012; Tzafrir & Enosh, 2011). We may expect that the more employees possess a higher level of trust in leaders, the lower their level of turnover intentions, conflictual TI and developmental TI.

- H1: Interpersonal trust is directly and positively related to JS. That is, public employees with a high level of interpersonal trust will have a high level of JS.
- H2: Interpersonal trust is directly and negatively related to conflictual and developmental TI. That is, public employees with a high level of interpersonal trust will have a low level of conflictual TI and developmental TI.

### ***Motivation, trust, and outcomes***

Motivation means that either an individual or a group is desirous of doing work of their own accord. People not only have different levels of motivation, but also have varied types (or orientations) of motivation because it is a multidimensional concept (Ryan & Deci, 2000a, 2000b; Vandenabeele, 2007).<sup>2</sup> The distinction between intrinsic and extrinsic motivation has been introduced in academic disciplines to probe for discrete antecedents or consequences of the two kinds of motivation in social psychological processes. Intrinsic motivation is a motive that is vested by individual voluntary intention, not by external factors, and it is defined by a sense of interest, achievement and satisfaction, and a positive state of mind (Guay, Valleran, & Blanchard, 2000). On the other hand, extrinsic motivation is a motive generated involuntarily by external factors, and it is generated by a response to external requests or as a means of obtaining monetary or non-monetary compensation, not by voluntary desire.

Research studies on the meaning and role of public sector motivation or public service motivation (e.g., see Perry, Hondeghem, & Wise, 2010; Perry & Wise, 1990; Vandenabeele, 2007) and its influence on organizations have been conducted in various ways, but few have investigated a direct relationship between work motivation in the public sector (government employees' psychological state) and trust. However, it has been shown that, as antecedent factors, specific types of work motivation (e.g., intrinsically or extrinsically oriented motivation) are positively related to job satisfaction and organizational commitment (Vandenabeele, 2007) and affect performance and turnover intention (Park & Rainey, 2008). In addition, (Park & Rainey 2012) found that intrinsic work motivation has positive effects on cognitive and affective trust.

A variety of antecedent factors affecting trust have been studied, including the trusting person's characteristics, the trust period, the counterpart's characteristics like

capability and role, the organizational structure and the personnel system (Dirks & Ferrin, 2002). Among these, a number of studies have shown that work motivation is a key factor to improve organizational performance, job satisfaction, organizational commitment, turnover intention, and both organizational and interpersonal trust (organizational variables) (Hackman & Oldham, 1975; Moynihan & Pandey, 2007).

Drawing upon previous studies on work motivations, trust and other organizational outcomes, first, we posit that intrinsically or internally motivated employees are more willing to positively recognize the social values of streamlined communications, high standards of integrity, equitable treatment and psychological attachment and, hence, are more likely to have a higher level of trust among organizational constituents than extrinsically motivated employees, who are less attracted by relational or communicative factors within organizations. Second, drawing upon theories of work motivation and organizational trust, we also posit that interpersonal trust mediates the relationship between motivation and JS and TI outcomes. That is, highly motivated employees will be more satisfied and are less inclined to leave their organization if they develop and maintain interpersonal and relational trust configurations. We examine these effects separately, as follows:

- H3: Intrinsic work motivation is indirectly and positively related to JS through its direct influence on interpersonal trust. That is, public employees with a high level of intrinsic motivation will have a high level of interpersonal trust and JS.
- H4: Intrinsic work motivation is indirectly and negatively related to conflictual and developmental TI through its direct influence on interpersonal trust. That is, public employees with a high level of intrinsic motivation will have a high level of interpersonal trust and have a low level of conflictual and developmental TI.
- H5: Extrinsic work motivation is indirectly and positively related to JS through its direct influence on interpersonal trust. That is, public employees with a high level of extrinsic motivation will have a high level of interpersonal trust and JS.
- H6: Extrinsic work motivation is indirectly and negatively related to conflictual and developmental TI through its direct influence on interpersonal trust. That is, public employees with a high level of extrinsic motivation will have a high level of interpersonal trust and have a low level of conflictual and developmental TI.
- H7: Intrinsically motivated employees are likely to have a higher level of interpersonal trust and JS, and a lower level of TI, than extrinsically motivated employees.

### ***Goal congruence, motivation, trust and outcomes***

Research based on Vroom's (1964) expectancy (Valence, Instrumentality, Expectancy, VIE) theory suggests that motivation comes into existence when three elements are combined, such as 'valence, instrumentality, and expectation.' In other words, expectancy theory explains job satisfaction and organizational performance depending on how clearly the effort, outcomes, reward, and goal are linked with each other. In a similar context, path-goal theory (PGT) also begins with the argument that the path between the goal-effort-outcome should be clear. In other words, it maintains that great leadership can be achieved by a leader who can clearly outline and promote a path towards a goal to the organizational members. Thus, PGT suggests that a great leader is one who can clearly suggest a task goal and define a clear path to achieve the task goal, including necessary procedures, in order to increase positive job attitudes. When this situation is realized, organizational members can carry out their tasks on the basis of a higher level of motivation, which leads to an improvement in organizational effectiveness. In other words, it is imperative to define an easily-understood and clear goal

Table 3. Survey respondents.

Contents	Dimension	Frequency	Rate	Contents	Dimension	Frequency	Rate
Gender	Male	20,283	55.7%	Type of workplace	Headquarters	6477	18.0%
	Female	16,126	44.3%		Field	29,520	82.0%
Age	20~29	1246	3.4%	Department	Agriculture	2004	5.4%
	30~29	4433	12.6%		Air Force	3430	9.3%
	40~49	11,833	30.5%		Army	4919	13.4%
	50~59	14,811	41.3%		Commerce	1085	2.9%
	60~69	3270	9.1%		Defense	1568	4.2%
	70 or older	158	0.4%		Education	350	1.0%
Final education	High school	9601	26.3%		Energy	397	1.1%
	College	5619	15.4%		EPA	124	0.4%
	Bachelor's	11,950	32.8%		FDIC	136	0.4%
	Master's	6554	18.0%		GSA	307	0.8%
	PhD	2022	5.5%		HHS	2021	5.5%
	None	722	2.0%		HS	2258	6.2%
Years of public service	1~9	9092	24.9%		HUD	215	0.6%
	10~19	10,353	28.3%		Interior	1212	3.3%
	20~29	11,513	31.5%		Justice	1952	5.4%
	30~39	5276	14.4%		Labor	436	1.2%
	40~49	334	1.0%		NASA	294	0.8%
	50 or more	22	0.1%		Navy	3868	10.4%
Race	Indian	1537	4.2%		OPM	1450	3.9%
	Asian	1553	4.2%		SSA	419	1.1%
	Black	4596	12.4%		SD	1110	3.0%
	Hawaiian	383	1.0%		Transportation	2163	5.9%
	White	27,152	73.5%		Treasury	643	1.8%
	Hispanic	2567	7.0%		VA	4443	12.0%
Total			36,926			100%	

Note: EPA: Environmental Protection Agency; FDIC: Federal Deposit Insurance Corporation; GSA: General Services Administration; HHS: Health and Human Services; HS: Homeland Security; HUD: Housing and Urban Development; NASA: National Aeronautics and Space Administration; OPM: Office of Personnel Management; SSA: Social Security Administration; SD: State Department; VA: Veterans Affairs.

to organizational members and to provide them with the means to achieve it. Accordingly, the present study, on the basis of VIE theory and PGT, attempts to deal with 'goal congruence,' or how well organizational members understand a task goal, as an important variable in motivating employees.

As being displayed, it was confirmed that the organizational goals and missions in federal agencies play an important managerial role in boosting work motivation as Locke's goal setting theory suggests. For example, technically speaking, from Management By Objectives (MBO) points of view, when public employees are willing to accept goals and to make agreement with setting the goals with managers and supervisors, it is possible to draw employees' devotion to the standards, norms and values that must be followed within the organization. In other words, when the organization's goals are better accepted by its members, the level of cohesiveness and commitment to the organization would be much higher. The goals clarify directions of employees' decision-making processes and encourage employees to put their every effort to achieve and maintain their own goals. Further, the findings imply that the goal acceptance and

Table 4. Descriptive statistics.

Variable	Item	Mean	Std.D.
Goal congruence	1. I understand my agency's mission	1.544	0.6827
	2. My agency's mission is important to me	1.466	0.6401
	3. I understand how I contribute to my agency's mission	1.611	0.7361
Intrinsic motivation	1. Recognition from my coworkers	2.149	0.900
	2. My duty as a public employee	1.641	0.7115
	3. Desire to help my work unit meet its goals	1.620	0.6907
	4. Personal pride or satisfaction in my work	1.265	0.4966
	5. Non-cash recognition (letter of appreciation, plaque)	2.709	1.0984
Extrinsic motivation	1. A cash award of \$100	2.944	1.1046
	2. A cash award of \$1000	2.058	1.0121
	3. Desire for a good performance rating	1.825	0.8470
	4. Increased chances for promotion	2.031	1.0239
	5. A time off reward of 8 hours	2.512	1.1062
Trust in supervisor	1. Fairly assess my performance and contributions	2.155	1.0763
	2. Listen fairly to my concerns	2.165	1.1018
	3. Apply discipline fairly and only when justified	2.310	1.1223
	4. Clearly communicate conduct expectations	2.274	1.1010
	5. Act with integrity	2.105	1.1041
	6. Refrain from favoritism	2.473	1.2540
	7. Keep me informed	2.425	1.1970
Trust in manager	1. Clearly communicate organizational performance expectations	2.581	1.1125
	2. Fairly assess my performance and contributions	2.681	1.1437
	3. Listen fairly to my concerns	2.646	1.1532
	4. Apply discipline fairly and only when justified	2.650	1.1202
	5. Act with integrity	2.474	1.1229
	6. Refrain from favoritism	2.858	1.2250
	7. Keep me informed	2.676	1.1786
Job satisfaction	1. In general, I am satisfied with my job	2.252	1.0114
	2. I am satisfied with my organization's performance appraisal system	2.997	1.2393
	3. I am satisfied with the recognition and awards I receive for my work	3.002	1.1767
	4. Overall, I am satisfied with my pay	2.555	1.0753
	5. Overall, I am satisfied with my supervisor	2.339	1.1644
	6. Overall, I am satisfied with managers above my immediate supervisor	2.789	1.1887
CTI	1. Problems with supervisor	3.049	1.2264
	2. Problems with coworkers	3.321	1.1089
	3. Unfair treatment or harassment	2.900	1.3036
DTI	1. Desire to make more of a difference	2.294	1.0595
	2. Opportunity to make better use of my skills and abilities	2.111	1.0695
	3. Increased opportunities for advancement	2.049	1.1162
	4. Opportunity to earn more money	2.043	1.0893
	5. Improved opportunities for training	2.521	1.1014
	6. Opportunity for recognition of performance	2.448	1.1100
	7. Opportunity for greater organizational stability	2.586	1.1414

Note: CTI: conflictual turnover intentions; DTI: developmental turnover intentions.

Table 5. Verification of reliability.

Factor		Item	Conbach's $\alpha$
Goal congruence		3	0.857
Motivation	Intrinsic motivation	5	0.660
	Extrinsic motivation	5	0.762
Interpersonal trust	Trust in supervisor	7	0.959
	Trust in manager	7	0.960
Job satisfaction		6	0.821
Turnover intention (TI)	Conflictual TI	7	0.886
	Developmental TI	3	0.852

Table 6. Validity test (results of CFA).

Index	GFI	RMR	RMSEA	NFI	CFI	TLI	AGFI
Suggested cut-off values	> 0.90	< 0.08	< 0.08	> 0.90	> 0.90	> 0.90	> 0.85
Goal congruence	0.978	0.031	0.125	0.977	0.977	0.965	0.935
Intrinsic motivation	0.999	0.005	0.041	0.996	0.996	0.979	0.990
Extrinsic motivation	0.994	0.021	0.060	0.989	0.989	0.972	0.979
Interpersonal trust	0.940	0.024	0.079	0.972	0.972	0.964	0.912
Job satisfaction	0.989	0.027	0.065	0.981	0.981	0.964	0.970
CTI	0.960	0.126	0.171	0.958	0.958	0.936	0.880
DTI	0.989	0.021	0.059	0.989	0.989	0.980	0.973

Note: CTI: conflictual turnover intentions; DTI: developmental turnover intentions. (1) First-order CFA: goal congruence, intrinsic motivation, extrinsic motivation, job satisfaction, CTI, DTI. (2) Second-order CFA: trust.

congruence might lead to strong work motivation in a way that directs, intensifies and maintains motivation in the public sector.

Recently, person-environment (P-E) fit researchers have suggested that organizational outcomes are influenced by interactions between people and environments (Bretz & Judge, 1994; Kristof, 1996; Kristof-Brown, Zimmerman & Johnson, 2005; Munchinsky & Monahan, 1987; Vancouver & Schmitt, 1991). Specifically, P-E fit research highlights the importance of compatibility in person-organization (P-O) congruence by probing two dimensions of P-O congruence: supplementary and complementary.<sup>3</sup> One of the main hypotheses that can be drawn from P-O fit research is that a higher level of goal congruence is more significantly and positively associated with work attitudes and behaviors such as job satisfaction, trust, turnover intentions and performance than a lower level of goal congruence (Boxx, Odom & Dunn, 1991; Cable & DeRue, 2002; Lovelace & Rosen, 1996; Sims & Kroeck, 1994). These findings were also mirrored in some public administration studies that found significantly positive relationships between P-O fit and the work attitudes and behaviors of public employees (Bright, 2007, 2008, 2013).

From a supplementary fit perspective, for example, good person-organization goal fit is associated with shared organizational values and culture (Bright, 2013; B.E.Wright, 2004; B.E. Wright & Pandey, 2011). Such fit enhances positive beliefs and interpersonal trust, helping employees to overcome conflicts and problems when they occur, achieving a higher level of JS and a lower level of TI. The alignment of personal goals with those of an organization, such as organizational strategies and visions, is achieved through close interaction among the members. In this study, we posit that



sharing organizational goals and values intrinsically motivates people and builds trust.<sup>4</sup> That is, job attitudes of organizational members may differ depending on the strategic orientation and volition pursued by the organization, the core capability of the organization and organizational goals, objectives and missions. The importance of sharing goals and missions cannot be exaggerated because it plays a role in promoting the concerns and the capability of organizational members in one area. In order to create a consensus among organizational members about organizational direction and its importance, clear goal presentation is needed. Through presenting and visualizing clear goals, organizational members could be motivated either intrinsically or extrinsically by devoting themselves to the organization in significant ways and as a result, developing trustworthy relations, nurturing job satisfaction and deterring intentions to quit in the long run.

In recent years, various studies have found that individual and organizational trust plays an essential role in improving organizational performance. Trust improves organizational efficiency by reducing the transaction costs in the organization and helps members of an organization participate actively in the organization as organizational citizens who possess a great deal of responsibility, accountability and ownership. Moreover, organizational trust plays a key role in the formation of positive emotions between the members of an organization, which ultimately improves job satisfaction, reduces turnover intentions and ultimately increases organizational performance. Against this backdrop, the current study established the following two hypotheses:

- H8: Goal congruence is indirectly and positively related to JS through its direct influence on intrinsic and extrinsic work motivations and their positive impacts on interpersonal trust. That is, public employees with a high level of goal congruence will have a high level of work motivations, interpersonal trust and JS.
- H9: Goal congruence is indirectly and negatively related to conflictual and developmental TI through its direct influence on intrinsic and extrinsic work motivations and their positive impacts on interpersonal trust. That is, public employees with a high level of goal congruence will have a high level of work motivation and interpersonal trust and have a low level of conflictual and developmental TI.

### ***JS and TI***

In this study, as previously mentioned, voluntary TI was divided into developmental turnover intention (DTI) and conflictual turnover intention (CTI). CTI refers to turnover cases caused by conflicts with supervisors or colleagues or triggered by unfair treatment in an organization. On the other hand, DTI is usually generated when employees have a desire to develop and utilize personal abilities, skills or knowledge (KSA) in order to get promoted, pursue higher salaries or feel greater personal satisfaction.

A number of research studies have shown that the antecedent factors that are most closely related to voluntary TI of organizational members are positive job attitudes like JS, organizational citizenship behavior and organizational commitment (e.g., see Farrell & Stamm, 1988; Kim, 2012; B.R. Pitts, Marvel & Fernandez, 2011; Stazyk, Pandey & Wright, 2011; Wright & Pandey, 2010). That is, the higher the level of positive job attitudes such as JS, the more voluntary TI could be mitigated or reduced. From a managerial perspective, this implies that maintaining a high level of JS in public employees may bring positive outcomes, such as a low level of TI caused by either push or pull factors, and may maintain a high percentage of employee retention rates in the long term.

Table 7. Results of model fit index.

Index	GFI	RMR	RMSEA	NFI	CFI	TLI	AGFI
Suggested cut-off values	> 0.90	< 0.08	< 0.08	> 0.90	> 0.90	> 0.90	> 0.85
Model	0.909	0.070	0.049	0.932	0.933	0.927	0.897

Table 8. Results of SEM.

Independent variable and dependent variable			Direction	Estimate	S.E.	C.R.
Goal congruence	→	Intrinsic motivation	+	0.271***	0.005	51.893
Goal congruence	→	Extrinsic motivation	+	0.076***	0.009	8.639
Goal congruence	→	Intrinsic motivation > Extrinsic motivation	+	0.271***	>0.076***	
Interpersonal trust	←	Intrinsic motivation	+	0.655***	0.015	42.956
Interpersonal trust	←	Extrinsic motivation	+	0.023***	0.005	4.615
Interpersonal trust	←	Intrinsic motivation > Extrinsic motivation	+	0.655***	>0.023***	
Interpersonal trust	→	Job satisfaction	+	0.911***	0.008	109.697
Interpersonal trust	→	Conflictual turnover intention	–	–0.470***	0.043	–11.039
Interpersonal trust	→	Developmental turnover intention	–	0.015	0.022	0.674
Interpersonal trust	→	Conflictual turnover intention > Developmental turnover intention	–	–0.470***	>0.015	
Job satisfaction	→	Conflictual turnover intention	–	0.088	0.044	2.022
Job satisfaction	→	Developmental turnover intention	–	–0.239***	0.022	–10.646
Job satisfaction	→	Developmental turnover intention > Conflictual turnover intention	–	–0.239***	>0.088	

\*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001.

H10: JS is directly and negatively related to CTI. That is, public employees with a high level of JS will have a low level of CTI.

H11: JS is directly and negatively related to DTI. That is, public employees with a high level of JS will have a low level of DTI.

## Research design

### Operationalization and measurement of main variables

Antecedent variables used for this study were composed of three questions on goal congruence, five questions on intrinsic motivation, five questions on extrinsic motivation, seven questions on trust in supervisors, seven questions on trust in managers and six questions on JS. TI, a dependent variable, was composed of seven questions based on development opportunity and three questions based on conflict. A total of 43 questions were used for this study. Each question was measured as a whole using a 5-Point Likert Scale (1 point: very positive; 5 points: very negative) with the exception of demographic questions. Questions used for the measurement of variables in this study are shown in Table 2.

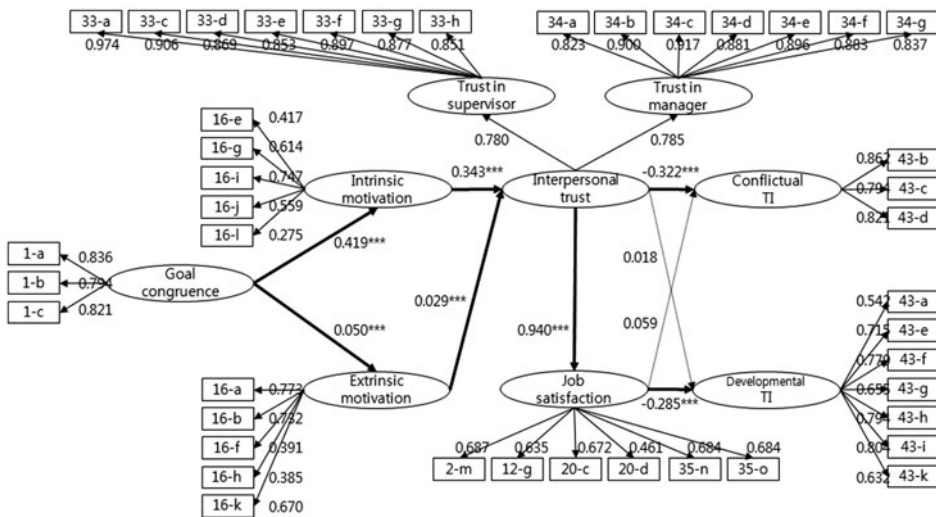


Figure 2. Results of SEM. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

### Data collection and research methods

Data used for this study were collected as secondary data. In particular, for the empirical analysis, survey data in the MSPB (2005) from the USA were utilized. Missing values of raw data were substituted with the mean value of each item and all of the data for a total of 36,926 responses were utilized for the empirical analysis. Moreover, as the preceding stage to hypothesis verification, reliability analysis and validation analysis of the measurement tools for survey questions were carried out. In order to verify reliability, intrinsic consistency analysis was applied, and confirmatory factor analysis was applied for validation verification. Finally, in order to analyze causal relationships among variables, structural equation modeling analysis was performed.

### Empirical analysis

The main characteristics of the samples utilized in this study are presented in Table 3.

### Descriptive statistics

Descriptive statistics for the variables are shown in Table 4. For goal congruence, it was revealed that the agreement level of members was high, and all three questions showed a mean value near 1.5. For motivation, descriptive statistics for intrinsic motivation were found to be more positive than extrinsic motivation and, in the case of trust in leaders, trust in supervisor was found to be higher than trust in manager. JS was found to be average (3 points). Finally, for TI, when comparing TI based on development opportunity with TI based on conflict, it was found that when more development opportunity was provided, turnover was considered more seriously than in the case of conflict.

## **Reliability and validity tests**

### *Reliability tests*

Reliability is defined as the possibility of being able to obtain identical measured values when measurement is repeated for identical concepts. Therefore, a reliable measured item means that in the case of repeated measurement of an identical subject, an identical or similar result should be found. Therefore, in this study, in order to verify the reliability of each variable that comprised the research model, internal consistency analysis was performed. In general, as shown in Table 5, the reliability of a measuring tool is considered to be high when the coefficient is over 0.6. In the results of the internal consistency analysis, Cronbach's  $\alpha$  value of all the constructs was over 0.6, which validates the reliability of the measuring tool.

### *Validity tests*

Validity confirms whether a measuring tool is properly measuring the intended concept. In this study, in order to analyze the validity of a measured item, a construct validity test was performed. Construct validity is defined as the consistency between a theoretical construct used for research and the tools that measure that construct. In the present study, confirmatory factor analysis (CFA) was used for verifying convergent and discriminant validity of constructs (See Table 6). In CFA, the measurement model of each construct is verified using a correlation matrix. In addition, in the confirmatory factor analysis, GFI, RMR, RMSEA, NFI, CFI, TLI and AGFI were used as assessment standards for deducing the optimal condition of individual measurement item constructs.

As a result of the CFA for constructs, the research model was confirmed to satisfy the suggested cut-off values of each fit index, and therefore construct validity was also confirmed.

### *Verification of hypotheses*

*Fit of study model and results of hypothesis verification.* In this study, in order to verify the study model and hypotheses, structural equation model analysis was performed. Maximum likelihood was applied for analyzing the structural equation model, and the results are shown in Table 7. For structural model fit, the GFI value was 0.909, RMR value was 0.070, RMSEA value 0.049, NFI value 0.932, CFI value 0.933, TLI value 0.927 and AGFI value 0.897. When summarizing the results of the fit analysis of the study model, as all the indexes satisfied suggested cut-off values, the model fit was confirmed.

*Results of a structural equation model (SEM).* The results of SEM analysis are shown in Table 8. Path coefficients indicated that goal congruence affects intrinsic motivation and extrinsic motivation by 0.271 (CR = 51.893) and 0.076 (8.639), respectively (statistically significant at the level of  $p < 0.001$ ). In addition, the effect of goal congruence on intrinsic motivation was more significant than extrinsic motivation. Path coefficients showed that both intrinsic motivation and extrinsic motivation affect interpersonal trust significantly and positively by 0.655 (CR = 42.956) and 0.023 (4.615), respectively (statistically significant at the level of  $p < 0.001$ ). The results also confirmed that intrinsic motivation is more significantly associated with interpersonal trust than extrinsic motivation. The path coefficients of the relationships among interpersonal trust, JS and CTI were determined to be 0.911 (CR = 109.697) and  $-0.470$  ( $-11.039$ ),

respectively. While these values were statistically significant at the level of  $p < 0.001$ , the path coefficient indicating the strength of association between interpersonal trust and DTI was 0.015 (0.674), which was not statistically significant at the level of  $p < 0.05$ . In addition, while the effect of interpersonal trust on CTI was statistically significant, the effect of interpersonal trust on DTI was not statistically significant. The path coefficient of job satisfaction on DTI was found to be  $-0.239$  ( $CR = -10.646$ ). While this was statistically significant at the level of  $p < 0.001$ , the path coefficient representing the effect of job satisfaction on CTI was found to be 0.088 ( $CR \text{ value} = 2.022$ ), which was not statistically significant at the level of  $p < 0.001$ . In a similar vein, the effect of JS on DTI was statistically significant, but the effect of interpersonal trust on CTI was not statistically significant.

The parameter estimate from SEM analysis is as shown in Figure 2. All path coefficients of the structure model indicated standardized path coefficients, showing the relative relationships of the influence of latent variables. Goal congruence significantly and positively affected not only intrinsic motivation (0.419), but also extrinsic motivation (0.050). However, this finding also supported the argument that goal congruence has a greater positive impact on intrinsic motivation than on extrinsic motivation. While both intrinsic and extrinsic motivation had a significant impact on interpersonal trust, the results also revealed that intrinsic motivation (0.343) was more positively related to interpersonal trust than extrinsic motivation (0.029). Therefore, interpersonal trust was significantly and positively associated with JS (0.940). In addition, whereas interpersonal trust was significantly and negatively associated with CTI only ( $-0.322$ ), job satisfaction was significantly and negatively associated with DTI ( $-0.285$ ).

*Results of path analyses.* Path analyses were performed in order to observe direct, indirect and total effects among latent variables presented in the structure model, and results are shown in Table 9. Zooming in on the indirect effects of CTI on intrinsic motivation ( $-0.092$ ), goal congruence ( $-0.039$ ) and extrinsic motivation ( $-0.008$ ), we

Table 9. Results of path analyses: indirect effects, direct effects and total effects.

Variables		Goal congruence	Intrinsic motivation	Extrinsic motivation	Interpersonal trust	Job satisfaction
Intrinsic motivation	Indirect effect	-	-	-	-	-
	Direct effect	0.419	-	-	-	-
	Total effect	0.419	-	-	-	-
Extrinsic motivation	Indirect effect	-	-	-	-	-
	Direct effect	0.050	-	-	-	-
	Total effect	0.050	-	-	-	-
Interpersonal trust	Indirect effect	0.145	-	-	-	-
	Direct effect	-	0.343	0.029	-	-
	Total effect	0.145	0.343	0.029	-	-
Job satisfaction	Indirect effect	0.136	0.323	0.027	-	-
	Direct effect	-	-	-	0.940	-
	Total effect	0.136	0.323	0.027	0.940	-
CTI	Indirect effect	$-0.039$	$-0.092$	$-0.008$	0.055	-
	Direct effect	-	-	-	$-0.322$	0.059
	Total effect	$-0.039$	$-0.092$	$-0.008$	$-0.267$	0.059
DTI	Indirect effect	$-0.036$	$-0.086$	$-0.007$	$-0.268$	-
	Direct effect	-	-	-	0.018	$-0.285$
	Total effect	$-0.036$	$-0.086$	$-0.007$	$-0.250$	$-0.285$

Table 10. Verification of mediating effects (result of Sobel's test).

Path					
X1		X2	X3	Statistic	p-value
Goal congruence	→	Intrinsic motivation	→ Trust	17.829	0.00
Goal congruence	→	Extrinsic motivation	→ Trust	5.959	0.00
Intrinsic motivation	→	Trust	→ Job satisfaction	34.397	0.00
Extrinsic motivation	→	Trust	→ Job satisfaction	15.842	0.00
Intrinsic motivation	→	Trust	→ Conflictual TI	-27.752	0.00
Intrinsic motivation	→	Trust	→ Developmental TI	-26.111	0.00
Extrinsic motivation	→	Trust	→ Conflictual TI	-7.967	0.00
Extrinsic motivation	→	Trust	→ Developmental TI	-15.696	0.00
Trust	→	Job satisfaction	→ Conflictual TI	-17.911	0.00
Trust	→	Job satisfaction	→ Developmental TI	5.876	0.00

Table 11. Hypothesis testing.

No.		Hypotheses		Directions	Results
H1	Trust	→	Job satisfaction	+	<b>Adopt</b>
H2	Trust	→	CTI	-	<b>Adopt</b>
H2	Trust	→	DTI	-	Reject
H3	Intrinsic motivation	→ Trust	→ Job satisfaction	+	<b>Adopt</b>
H4	Intrinsic motivation	→ Trust	→ CTI	-	<b>Adopt</b>
H4	Intrinsic motivation	→ Trust	→ DTI	-	Reject
H5	Extrinsic motivation	→ Trust	→ Job satisfaction	+	<b>Adopt</b>
H6	Extrinsic motivation	→ Trust	→ CTI	-	<b>Adopt</b>
H6	Extrinsic motivation	→ Trust	→ DTI	-	Reject
H7	Intrinsic motivation > Extrinsic motivation		→ Trust	+	<b>Adopt</b>
H7	Intrinsic motivation > Extrinsic motivation		→ Job satisfaction	+	<b>Adopt</b>
H7	Intrinsic motivation > Extrinsic motivation		→ CTI	-	<b>Adopt</b>
H7	Intrinsic motivation > Extrinsic motivation		→ DTI	-	Reject
H8	Goal congruence	→ Intrinsic motivation and trust	→ Job satisfaction	+	<b>Adopt</b>
H8	Goal congruence	→ Extrinsic motivation and trust	→ Job satisfaction	+	<b>Adopt</b>
H9	Goal congruence	→ Intrinsic motivation and trust	→ CTI	-	<b>Adopt</b>
H9	Goal congruence	→ Extrinsic motivation and trust	→ CTI	-	<b>Adopt</b>
H9	Goal congruence	→ Intrinsic motivation and trust	→ DTI	-	Reject
H9	Goal congruence	→ Extrinsic motivation and trust	→ DTI	-	Reject
H10	Job satisfaction	→	CTI	-	Reject
H11	Job satisfaction	→	DTI	-	<b>Adopt</b>

found that they had a significant and negative effect on CTI through mediation of trust in leaders.

On the other hand, when observing the indirect effects of DTI, interpersonal trust ( $-0.268$ ), intrinsic motivation ( $-0.086$ ), goal congruence ( $-0.036$ ) and extrinsic motivation ( $-0.086$ ), it was determined that these variables significantly and negatively affected DTI through mediation of interpersonal trust and job satisfaction. These results imply that goal congruence, intrinsic motivation, extrinsic motivation and interpersonal trust can significantly minimize CTI and DTI through the mediator of JS.

To assess whether work motivations, interpersonal trust and JS mediated the effects of a set of antecedent factors on outcome variables, we used Sobel's Z statistic test method. Each indirect path coefficient was calculated to determine whether the indirect effects (mediating effects) were statistically significant. As shown in Table 10, all the coefficients for the indirect paths of the SEM were significant (all the Sobel's Z statistics were statistically significant). In particular, intrinsic motivation most significantly affected JS (test statistic = 34.397) and CTI (test statistic =  $-27.752$ ) in an indirect way. In a similar vein, goal congruence was also indirectly but meaningfully related to interpersonal trust (via intrinsic motivation) whereas CTI was also indirectly but negatively influenced by interpersonal trust through employee JS (test statistic =  $-17.911$ ). We believe that an analysis of indirect effects clarifies and enriches the relationships among the antecedent and consequent variables of this study. Drawing upon the results of the path analyses and Sobel's test, we tested whether a set of research hypotheses were supported or not. Eleven hypotheses were advanced and the results are shown in Tables 10 and 11.

## Discussion

The present study was motivated by four main goals: (1) to conceptualize and operationalize the dimensionality and the construct of turnover intentions (DTI and CTI) identified in the key literature, (2) to empirically test the relationship between individual- and organizational-level characteristics, such as employees' intrinsic and extrinsic motivation, goal congruence and interpersonal trust, using a sample from US federal agencies and SEM, (3) to specifically investigate the direct and indirect effects of the study variables on DTI and CTI, and (4) to assess JS as a key mediator of the influence of interpersonal trust on federal employees' DTI and CTI. As the findings of this study imply, public employees are highly motivated when they understand their agency's mission very well and when they perceive a high level of mission compatibility between employees and an organization, which accordingly equips them with a high level of psychological, emotional attachment or normative commitment to their organization, helps them prepare for the potential of multiple career changes, and ultimately increases interpersonal trust and job satisfaction and decreases turnover intentions such as DTI and CTI. In this study, in order to analyze factors influencing TI in the public sector, influencing factors of trust and job attitudes and the structural influence between TI were analyzed based on MSPB survey data from 2005. As a result of hypothesis verification by structural equation modeling, 11 out of 15 hypotheses established in the study model were adopted. Major results and implications of the hypothesis verification performed in this study are presented below.

There were several important findings of the research. First, this study confirmed that intrinsic and extrinsic work motivations are positively and meaningfully associated with goal congruence in the public sector. The results support the hypotheses (H7 and



H8) and existing research and theory on the positive relationship between P-O fit, P-J fit and work motivation (Bright, 2013; Park & Rainey, 2012; Perry & Wise, 1990). Furthermore, the results imply that as public employees' level of goal congruence increases, they are more likely to be intrinsically or extrinsically motivated in a way that produces more positive organizational outcomes, such as trusted interpersonal relationships, increased JS and lower TI. Interestingly, goal congruence is more positively related to intrinsic motivation than extrinsic motivation, which suggests that goal compatibility between public employees and an organization could play a crucial role as a pre-incentive to be 'a highly and intrinsically motivated person' in the public sector.

A second implication of this study centers on the disparate impacts of intrinsic and extrinsic work motivations on interpersonal trust among federal employees. That is, more intrinsically motivated public employees are likely to maintain and develop more positive relationships among their colleagues and superiors. This finding is consistent with previous empirical studies that suggest that intrinsic motivation, as an antecedent or a moderator, plays a more critical role than extrinsic motivation in obtaining positive outcomes (Cho & Perry, 2012; Park & Rainey, 2012). Thus, from a managerial perspective, establishing 'intrinsic-oriented incentives' and securing and broadening 'intrinsic reward expectancy' in federal agencies is critical to increase the trust in an organization (Park & Rainey, 2012).

Third, the analyses demonstrate that interpersonal trust enhances JS and decreases CTI significantly, which partly confirms hypotheses 1 and 2. While the results generally endorsed the generic theory of JS in the public sector, we also found that conflictual turnover intention (CTI) is significantly tied with interpersonal trust, which implies that managerial or relational trustworthiness could nurture and foster more satisfied public employees and, more importantly, at the same time, trusted working environments could minimize interpersonal conflicts and employee attritions and therefore reach higher retention rates in the long run. That is, trust can be viewed as crucial 'explanatory factor or glue that binds the employment relationship together' (Crawshaw, 2011, p. 159). In this regard, we can infer that, as social exchange theorists argue, trust-building processes can be viewed as socialization or social identification, which plays numerous crucial roles in elevating the level of human and social capital within an organization in a way that attenuates the possibility of turnover and that bolsters positive job attitudes.

## Conclusion

While an economic crisis has prevailed in the US, it should be noted that there is still a critical shortage of skilled workers in some occupations and geographic areas. Moreover, in the face of increased competition for the same talent, the government is also challenged to become an employer of choice and remain competitive in attracting a skilled and talented workforce to serve the American people. This is particularly true because the government anticipates a wave of retirements during the next five to 10 years. Often those who leave government service have the most experience and expertise, resulting in a dramatic loss of capacity. In addition, employees are not content with simply earning a good salary, but are also looking for personal satisfaction and meaning in their work. Employees expect timely recognition for the contributions they make on the job. Therefore, research on JS and TI in the public sector is important.

The present study contributed to existing public management research, as it performed an analysis focused on the causes of turnover intentions by presenting two



perspectives based upon two-factor theory, DTI and CTI, contrary to existing studies that have measured TI as a single question or divided them into latent and firm TI depending on the level. Specifically, from a practical perspective, it was confirmed that interpersonal trust and JS exert a discriminatory influence over DTI and CTI. Interestingly, we found that JS is likely to have a more significant impact on preventing DTI than CTI. This means that members whose satisfaction with or loyalty to an organization is high do not seriously consider alternate job opportunities even if they are available. Interpersonal trust was found to have the effect of deterring CTI. This implies that members with a high level of trust in colleagues or leaders do not seriously react to conflict within an organization. As a managerial caveat, the results of this study suggest that, to mitigate employees' TI in the public sector, a set of diverse strategies is required depending on the personal causes of TI.

Moreover, through path analyses, it was also confirmed that as influencing factors on JS, goal congruence, intrinsic motivation and extrinsic motivation could reduce TI at least indirectly through a set of mediating factors. This finding illustrates that in order to reduce TI, a comprehensive managerial diagnosis of the components of internal working conditions that surround employees are a prerequisite. In particular, it was determined that the relative influence of trust in coworkers and leaders was the most important factor affecting JS. Therefore, strategic efforts and incremental steps are required to promote a culture of trust throughout an entire organization.

Despite the significance of this study, it has the following limitations. First, this study used secondary data for empirical analysis, its organizational effectiveness variables are limited to JS and TI only. Especially, as organizational commitment has been emphasized for the improvement of organizational effectiveness in recent studies (e.g., Park & Rainey, 2007), more studies should be necessary to address the pure relationships between the three types of organizational commitment and certain behavioral outcomes (e.g., performance and organizational citizenship behavior) in a public arena. Moreover, we expect that future research might examine the relationship between motivation, JS and TI in the nonprofit sector, and whether there are differences and similarities between sectors in the causal directions of the relations observed in this study. This research is not without limitations. Relying on the MSPB secondary data might have negatively affected the validity and reliability of measurements, modeling and findings. For example, a few researchers are not fully convinced that the variables of intrinsic and extrinsic motivation fully capture the original concept. The indicators for organizational trust could be improved. A second limitation of this research comes from investigating the relationships among perceived variables using self-reported data. That is, this study shares the potential problems of common method bias and positive response bias, which sometimes significantly increase the relationships among variables.<sup>5</sup>

Lastly, another limitation of this study is that it used a single research methodology. Therefore, future studies need to adopt qualitative research methods using in-depth interviews, comparative case studies, analytic hierarchy process (AHP) or simulations, to supplement the possible methodological shortcomings of this study. We anticipate that, through this processes, we can secure the reliability and validity as well as control or eliminate social desirability bias by using a set of multiple research methods.

As the cross-sectional design does not offer the clear cause-and-effect relationship examined in the present study, a few future research directions can be proposed. First, we need to gather more specific public sector-based cases to shed light on what happens among federal employees. Though we can make a number of observations here based on quantitative data, it would be greatly useful to take a closer look at the causal

mechanism to know more about the roles of crucial variables such as work motivations, interpersonal trust and JS. Second, to resolve the mono-method issues caused by a self-reported single data source, the MSPB 2005, future researchers might want to collect more of a series of multiple datasets (i.e., longitudinal designs), such as the MSPB 2007 and MSPB 2010, to reduce the potential bias. Generating and utilizing panel data for public employees' attitudes and behaviors under certain working environments would be another alternative. Finally, we should consider adding more exogenous and endogenous conditions that could explain more accurately the relationships among goal congruence, motivation, trust and specific outcomes. Leadership, person-organization fit, empowerment, organizational cultures and structures, or employee training and education systems, could be explored as critical variables in future research on JS and TI in the bureaucratic arena.

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### Notes

1. For example, in the United States, the 1989 report of the National Commission on the Public Service (also known as the Volcker Commission's Report) described the state of public service as a 'quiet crisis,' citing the slow weakening of public service in the 1970s and 1980s (Soni, 2000). This phenomenon continued through the 1990s to the present and has been made more severe by various human resource challenges to the federal government, such as the coming retirement wave over the next decade (Cho & Lewis, 2012; Lewis & Cho, 2011; Tobias, 2001) that will eventually result in mounting vacancies throughout government agencies and a high turnover rate, as evidenced by the fact that one quarter of the federal employees hired from 2006 and 2008 left within two years (Partnership for Public Service and Booz Allen Hamilton, 2010 cited in Cho & Lewis, 2012). As a result, US federal agencies are confronted with a shortage of younger people in the pipeline for government jobs (Soni, 2000) to fill those vacancies and increased competition for employees from the private and nonprofit sectors (French & Goodman, 2012).
2. For example, the Self-Determination Theory proposed by Ryan and Deci (2000) suggests that there is a motivation spectrum of amotivation, extrinsic motivation and intrinsic motivation. Amotivation is defined as the state where an individual is entirely void of a personal intention to do something. An extrinsic motivation is generated instrumentally and involuntarily in order to get an extrinsic reward, such as the acknowledgement of others, either monetary or nonmonetary. Accordingly, an extrinsic motivation could be understood as satisfaction with the result of activity. On the other hand, an intrinsic motivation is generated spontane-

- ously in order to generate feelings of interest, a sense of accomplishment, and satisfaction from performing one's task. Accordingly, an intrinsic motivation could be understood as satisfaction with the activity process.
3. Supplementary congruence can be formed when the values and goals of individuals and their organizations are similar to each other. Complementary congruence is achieved when the characteristics of individuals and environments add something that is missing to make each other whole (Munchinsky & Monahan, 1987; Vancouver & Schmitt, 1991).
  4. According to a study of influential factors on peer trust and performance by Ji et al. (2008), shared values among the members of an organization can have positive effects on organizational commitment, collaboration and job satisfaction, as well as on peer trust. Steffy et al. (1989) proposed that a high degree of fit between an organization and its members has a positive effect on members' long-term social relationships and career management. In addition, from an international perspective, while Park & Rainey (2012) found that matching in the organizational environment, such as among members, peers, supervisors, duties and organization, has positive effects on establishing social capital in the organization. In other words, trust formed when employees interact in an organization is very closely related to environmental factors.
  5. While Harman's single-factor test indicates no serious bias in measuring the relationships, the results should be cautiously interpreted. However, as Cho and Perry (2012) suggest, we strongly believe that having perceived variables in a structural equation model could be acceptable because 'employee satisfaction and intent to leave reflect employee cognitions so survey respondents can provide the most accurate data' and 'although the bias does exist, it is not sufficiently large to invalidate an analysis relying on a single data source' (p. 401).

## References

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1–18.
- Ashleigh, M., & Prichard, J. (2011). Enhancing trust through training. In R. H. Searle, & D. Skinner (Eds.), *Trust and human resource management* (pp. 125–138). Northampton, MA: Edward Elgar Publishing.
- Boxx, R. W., Odom, R. Y., & Dunn, M. G. (1991). Organizational values and value congruency and their impact on satisfaction, commitment, and cohesion: An empirical examination within the public sector. *Public Personnel Management*, 20, 195–206.
- Bretz, R. D., & Judge, T. A. (1994). Person-organization fit and the theory of work adjustment: Implications for satisfaction, tenure, and career success. *Journal of Vocational Behavior*, 44, 32–54.
- Bright, L. (2007). Does person-organization fit mediate the relationship between public service motivation and the job performance of public employees? *Review of Public Personnel Administration*, 27(4), 361–379.
- Bright, L. (2008). Does public service motivation really make a difference on the job satisfaction and turnover intentions of public employees? *The American Review of Public Administration*, 38(2), 149–166.
- Bright, L. (2013). Where does public service motivation count the most in government work environments? A preliminary empirical investigation and hypotheses. *Public Personnel Management*, 42(5), 5–26.
- Burtler, J. K., & Cantrell, R. S. (1984). A behavioral decision theory approach to modeling dyadic trust in superiors and subordinates. *Psychological Reports*, 55, 19–28.
- Cable, D. M., & DeRue, D. S. (2002). The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology*, 87, 875–884.
- Cho, Y. J., & Lewis, G. B. (2012). Turnover intention and turnover behavior: Implications for retaining federal employees. *Review of Public Personnel Administration*, 32(1), 4–23.
- Crawshaw, J. R. (2011). Career development, progression and trust. In R. H. Searle, & D. Skinner (Eds.), *Trust and human resource management* (pp. 157–176). Northampton, MA: Edward Elgar Publishing.

- De Jong, B. A., & Elfring, T. (2010). How does trust affect the performance of ongoing teams? The mediating role of reflexivity, monitoring, and effort. *The Academy of Management Journal*, 53, 535–549.
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 87(4), 611–628.
- Farrell, D., & Stamm, C. L. (1988). Meta-analysis of the correlates of employee absence. *Human Relations*, 41(3), 211–227.
- French, P. E., & Goodman, D. (2012). An assessment of the current and future state of human resource management at the local government level. *Review of Public Personnel Administration*, 32(2), 62–74.
- Graham, J. W. (1991). Servant-leadership in organizations: Inspirational and moral. *Leadership Quarterly*, 2(2), 105–119.
- Guay, F., Vallerand, R. J., & Blanchard, C. (2000). On the assessment of situational intrinsic and extrinsic motivation: the situational motivation scale (SIMS). *Motivation and Emotion*, 24(3), 175–213.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60(2), 159–170.
- Jackofsky, E. F., & Peters, L. H. (1983). The hypothesized effects of ability in the turnover process. *Academy of Management Review*, 8(1), 46–49.
- Jung, C. S., & Rainey, H. G. (2011). Organizational goal characteristics and public duty motivation in US federal agencies. *Review of Public Personnel Administration*, 31(1), 28–47.
- Kiffin-Peterson, S., & Cordery, J. (2003). Trust, individualism and job characteristics as predictors of employee preference for teamwork. *The International Journal of Human Resource Management*, 14(1), 93–116.
- Kim, S. (2002). Organizational support of career development and job satisfaction: A case study of the Nevada Operations Office of the Department of Energy. *Review of Public Personnel Administration*, 22(4), 276–294.
- Kim, S. (2012). Does person-organization fit matter in the public-sector? Testing the mediating effect of person-organization fit in the relationship between public service motivation and work Attitudes. *Public Administration Review*, 72(6), 830–840.
- Kristof, A. L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49, 1–49.
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58(2), 281–342.
- Lee, G., & Jimenez, B. S. (2011). Does performance management affect job turnover intention in the federal government? *The American Review of Public Administration*, 41(2), 168–184.
- Lewis, G. B., & Cho, Y. J. (2011). The aging of the state government workforce: Trends and implications. *American Review of Public Administration*, 41(1), 48–60.
- Light, P. C. (2002). The content of their character: The state of the nonprofit workforce. *The Nonprofit Quarterly*, 9(3), 6–16.
- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of Industrial and Organizational Psychology* (pp. 1297–1343). Chicago: Rand McNally.
- Lovelace, K., & Rosen, B. (1996). Differences in achieving person-organization fit among diverse groups of managers. *Journal of Management*, 22, 703–723.
- March, J. G., & Simon, H. A. (1958). *Organizations*. New York: Wiley.
- Mishra, A. K. (1996). Organizational responses to crises: The centrality of trust. In R. M. Kramer & T. Tyler (Eds.), *Trust In Organizations* (pp. 261–287). Newbury Park, CA: Sage.
- Mobley, W. H. (1982). *Employee turnover, causes, consequences, and control*. Reading, MA: Addison-Wesley.
- Moynihan, D. P., & Pandey, S. J. (2007). Finding workable levers over work motivation: Comparing job satisfaction, job involvement, and organizational commitment. *Administration & Society*, 39(7), 803–832.
- Munchinsky, P. M., & Monahan, C. J. (1987). What is person-environment congruence? Supplementary verse complementary models of fit. *Journal of Vocational Behavior*, 31, 268–277.
- Nyhan, R. C. (2000). Changing the paradigm: Trust and its role in public sector organizations. *American Review of Public Administration*, 30(1), 87–109.

- Park, S. M. (2010). The effects of personnel reform systems on Georgia state employees' attitudes. *Public Management Review*, 12(3), 403–437.
- Park, S. M., & Rainey, H. G. (2007). Antecedents, mediators, and consequences of affective, normative, and continuance commitment: Empirical tests of commitment effects in federal agencies. *Review of Public Personnel Administration*, 27(3), 197–226.
- Park, S. M., & Rainey, H. G. (2008). Leadership and public service motivation in U.S. federal agencies. *International Public Management Journal*, 11(1), 109–142.
- Park, S. M., & Rainey, H. G. (2012). Work motivation and social communication among public managers. *The International Journal of Human Resource Management*, 23(13), 2630–2660.
- Park, S. M., Park, H. J., & Ryu, E. Y. (2013). Determinants of positive job attitude and behavior in the Asian work context: Evidence from Korean central government agencies. *Public Management Review*, 15(8), 1154–1184.
- Perry, J. L., Hondeghem, A., & Wise, L. R. (2010). Revisiting the motivational bases of public service: Twenty years of research and an agenda for the future. *Public Administration Review*, 70(5), 681–690.
- Perry, J. L., & Wise, L. R. (1990). The motivational bases of public service. *Public Administration Review*, 50, 367–373.
- Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer-Verlag.
- Pitts, D., Marvel, J., & Fernandez, S. (2011). So hard to say goodbye? Turnover intention among US Federal Employees. *Public Administration Review*, 71(5), 751–760.
- Rainey, H. G. (2009). *Understanding and managing public organizations* (4th ed.). Jossey-Bass.
- Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54–67.
- Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychological Association*, 55(1), 68–78.
- Schnake, M. E., Bushardt, S. C., & Spottswood, C. (1984). Internal work motivation and intrinsic job satisfaction: The effects of goal clarity, goal difficulty, participation in goal setting, and task complexity. *Group & Organization Studies*, 9(2), 201–219.
- Sims, R. L., & Kroeck, K. G. (1994). The influence of ethical fit on employee satisfaction, commitment and turnover. *Journal of Business Ethics*, 13, 939–948.
- Soni, V. (2000). A twenty-first-century reception for diversity in the public sector: A case study. *Public Administration Review*, 60, 395–408.
- Stazyk, E. C., Pandey, S. K., & Wright, B. E. (2011). Understanding affective organizational commitment: The importance of institutional context. *The American Review of Public Administration*, 41(6), 603–624.
- Tzafrir, S. S., & Enosh, G. (2011). Beyond attitudes and norms: Trust commitment and HR values as triggers of intention to leave. In R. H. Searle, & D. Skinner (Eds.), *Trust and human resource management* (pp. 289–308). Northampton, MA: Edward Elgar Publishing.
- US Office of Personnel Management (OPM), Office of Management & Budget (OMB), & Government Accountability Office (GAO). (2005). HCAAF Practitioners' Guide.
- US Office of Personnel Management (OPM). (2006). The Human Capital Assessment and Accountability Framework (HCAAF): Systems, Standards and Metrics.
- Vancouver, J. B., & Schmitt, N. W. (1991). An exploratory examination of person-organization fit: Organizational goal congruence. *Personnel Psychology*, 44, 33–352.
- Vandenabeele, W. (2007). Toward a public administration theory of public service Motivation. *Public Management Review*, 9(4), 545–556.
- Vroom, V. (1964). *Work and motivation*. New York: John Wiley & Sons.
- Weiss, H. M. (2002). Introductory comments: Antecedents of emotional experiences as work. *Motivation and Emotion*, 26(1), 1–2.
- Word, J., & Park, S. M. (2009). Working across the divide: Job involvement in the public and nonprofit sectors. *Review of Public Personnel Administration*, 29, 103–133.
- Wright, B. E. (2004). The role of work context in work motivation: A public sector application of goal and social cognitive theories. *Journal of Public Administration Research and Theory*, 14(1), 59–78.

- Wright, B. E., & Pandey, S. K. (2008). Public service motivation and the assumption of person-organization fit: Testing the mediating effect of value congruence. *Administration & Society*, 40(5), 502–521.
- Wright, B. E., & Pandey, S. K. (2011). Public organization and mission valence: When does mission matter? *Administration & Society*, 43(1), 22–44.
- Wright, B. R., & Pandey, S. K. (2010). Transformational leadership in the public sector: Does structure matter? *Journal of Public Administration Research and Theory*, 20(1), 75–89.