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International Comparison of Public and Private Employees' Work Motives, Attitudes, and Perceived Rewards

Abstract: This article presents a conceptual perspective on the distinctive characteristics of public organizations and their personnel. This perspective leads to hypotheses that public organizations deliver distinctive goods and services that influence the motives and rewards for their employees. These hypotheses are tested with evidence from the International Social Survey Programme in order to compare public and private employees in 30 nations. Public employees in 28 of the 30 nations expressed higher levels of public-service-oriented motives. In all of the countries, public employees were more likely to say they receive rewards in the form of perceived social impact. In most of the countries, public employees placed less importance on high income as a reward and expressed higher levels of organizational commitment.

Practitioner Points

- The findings presented here add to previous evidence that public employees seek and attain more altruistic and public-service-oriented rewards than private sector employees. In particular, we add evidence that these differences hold in many different nations and cultural contexts.
- Compensation and incentive system reforms in many governments have often concentrated on financial incentives and streamlining procedures for discipline and removal. Such matters are important but should not drive out concerns with showing public employees the impact of their work on the well-being of others and on the community and society. Leaders and managers should invest in incentive systems that emphasize such motives and rewards.
- Leaders and managers should invest in the use of altruistic and socially beneficial motives and rewards in recruiting systems.

cholars in public administration, political science, and economics have written that the distinctive characteristics of public organizations and the people in them have significant implications for public administration and for governance (e.g., Dahl and Lindblom 1953; Downs 1967; Lindblom 1977; Wamsley and Zald 1973). Organization theorists, however, have usually downplayed the importance of public sector distinctiveness (e.g., Daft 2012; Simon 1995; Thompson 1962). Additionally, more and more empirical research in public administration represents authors and samples from different nations (among many examples, see Andersen and Kjeldsen 2013; Andersen and Pedersen 2013; Dur and Zoutenbier 2014; Kim et al. 2013; Vandenabeele 2008). The differing perspectives about public distinctiveness, coupled with the growing interest in international research, raise two questions of theoretical and practical importance: Do public organizations and their personnel have characteristics that make them different from other types of organizations such as business firms? Are such distinctions generalizable across nations?

In this article, we propose a conceptual perspective on the institutional context and societal roles of public organizations, the public and quasi-public goods and services they provide, and the governmental functions they discharge. This perspective leads to hypotheses that public organizations deliver distinctive goods and services that influence the motives, work attitudes, and rewards for their employees. We test these hypotheses across 30 nations using evidence from the International Social Survey Programme (ISSP).

While organizational theorists have tended to place little emphasis on a distinction between public and private organizations, public administration researchers have provided numerous theoretically based empirical analyses of the distinction. The many examples include studies of public and private employees' motivations (e.g., Buelens and Van den Broeck 2007; Crewson 1997), sector values (e.g., Boardman, Bozeman, and Ponomariov 2010), leadership (e.g., Andersen 2010; Trottier, Van Wart, and Wang 2008), and organizational performance (e.g., Amirkhanyan 2010; Meier and O'Toole 2011).1

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More than 100 published comparisons of public and private organizations (Rainey 2014) provide evidence of the distinctive characteristics of public organizations. In addition, the evidence increasingly comes from nations not previously studied. This is particularly interesting because national context can have important implications for the roles of public and private organizations (Dur and Zoutenbier 2014; O'Toole and Meier 2015). Obviously, government plays a larger role in the political economy in some countries, and nations differ in their state welfare regimes (Houston 2011; Kjeldsen and Andersen 2013). Reward systems in government and business resemble each other more in some nations than in others—for example, in most nations, executive compensation levels are not as different as the compensation levels for public and private sector executives in the United States (Donahue 2008). Can one identify distinctive characteristics of public organizations and the people in them that apply across numerous countries?

Many of the studies of public and private differences in work motives, attitudes, and perceived rewards focus on only one country. This begs the question of whether the differences generalize internationally. Scholars have turned to international data sets, including the International Social Survey Programme (Battaglio and Legge 2009; Bullock, Wenger, and Wilkins 2014; Houston 2011; Taylor and Taylor 2011; Van de Walle, Steijn, and Jilke, forthcoming; Van Ryzin 2011) and the World Values Survey (Dur and Zoutenbier 2014; Gilman and Lewis 1996; Van de Walle, Van Roosbroek, and Bouckaert 2008), to study public employees' work motives, attitudes, and perceived rewards.

In this article we focus on whether respondents who are actually in government jobs (as distinguished from those who express a preference for government jobs) express stronger altruistic and societal benefit motives than respondents in private sector employment. We also examine the differences between public and private employees' levels of organizational commitment. In addition, no study to date has analyzed whether public sector employees report that their jobs actually provide rewards in the form of opportunities to help other people and to do work that benefits society. We present the first evidence that they do in 30 nations. This suggests a theoretically and practically relevant commonality among governmental contexts in multiple nations and a fundamental generalization about public administration.

No Distinctive Characteristics of Public Organizations and Their Personnel?

For many reasons, one might predict no significant differences between public and private employees' survey responses about motives, rewards, and attitudes in different nations. Many organization theorists have emphasized commonalities among public, private, and nonprofit organizations. These commonalities, they contend, make those categories of little value for predicting dif-

ferences among the people in the organizations (e.g., Thompson 1962). Organization theorists also emphasize the greater influence on organizational characteristics of many factors other than public or private auspices, such as technology, task, size, and environmental uncertainty. Obviously, for example, a

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railroad operated by government will resemble a privately operated railroad more than the government-operated railroad will resemble a government-operated electric utility. Texts in organization theory and organizational behavior typically apply general organizational concepts and theories to business, government, and nonprofit organizations (e.g., Daft 2012; Uhl-Bien, Schermerhorn, and Osborn 2014).

Experts and observers have repeatedly emphasized the "blurring" of the public, private, and nonprofit sectors (e.g., Bozeman 1987; Musolf and Seidman 1980). These experts argue that the sectors are mingled and overlapping, making simple distinctions impossible. The contexts of organizations, moreover, can vary widely within and across nations (Houston 2011; Kjeldsen and Anderson 2013; O'Toole and Meier 2015). The contexts of government organizations can vary in the degree to which power is dispersed among political institutions, as in the United States, or is concentrated in a more unitary system (e.g., the United Kingdom), and contexts can differ between adversarial and corporatist systems. Countries differ in the wage differential between the public and private sectors, in other labor market conditions, and in the general preference for public employment among the population (Dur and Zoutenbier 2014; Taylor and Taylor 2011; Van de Walle, Steijn, and Jilke, forthcoming). Individuals vary in their motives, of course, with some people preferring government employment not for publicservice-oriented reasons but for secure employment and benefits, especially in less developed countries (Donahue 2008; Dur and Zoutenbier 2014).

The variations among respondents to large sample surveys such as the ISSP might also reduce the probability of finding public and private differences. The samples include people from multiple organizational levels—employees, supervisors, managers—and respondents from many types of organizations with different functions and tasks and with a wide variety of professional and occupational categories. The wide variations reduce the likelihood of finding differences between public and private sector samples in work attitudes, motives, and rewards in multiple nations. Indeed, one might be surprised to find any differences.

Reasons to Hypothesize Differences: A Conceptual **Perspective on Public Organizations**

Perry and Rainey (1988) pointed out that while many organization theorists usually do not treat public organizations as distinct, major organization theorists have sometimes referred to public organizations as if they do have distinctive characteristics (e.g., Blau and Scott 1962; Cohen, March, and Olsen 1972; Mintzberg 1979). These authors suggest that public status can be an important factor in determining some organizational characteristics.

Given the variations among nations in governmental contexts, however, can we conceive a general explanation of why public

> organizations and personnel would show similar distinctions from private sector counterparts in many different nations? People in all countries face decisions about the governance of their societies and political economies, including how to organize for the production of goods and services and how to achieve

national security, public safety, and legal order. Two fundamental modes of organizing include economic markets and governmental authority (see Dahl and Lindblom 1953; Lindblom 1977).² These modes of organizing involve organizations, including business firms that produce and sell goods and services and government agencies that render services as directed by government authorities. As observers have repeatedly pointed out, in contemporary political economies, these two populations of organizations, business firms and government agencies, mingle together in many ways (e.g., Bozeman 1987; Musolf and Seidman 1980). Nevertheless, the blurring of a distinction does not obviate the need for the distinction and its value for certain purposes.

The institutional, legal, and political traditions of a country determine the extent to which products and services can be exchanged

on decentralized economic markets. In the United States and other democratic republics, a large scope of economic activity is organized through markets. Markets often do not adequately provide public and quasi-public goods, nor do they discharge functions such as stabilization and redistribution. Most organizations that governments authorize to provide such goods are not subject to the information and incentives of economic mar-

kets. They must be governed by politically constituted governmental authorities. Economists, political scientists, and public administration scholars, in contrast to many organization theorists, contend that public organizations are distinctive because of the characteristics and conditions described earlier. They contend that those conditions lead to distinctive behaviors, structures, and processes in public organizations (e.g., Dahl and Lindblom 1953; Downs 1967; Wamsley and Zald 1973; Warwick 1975).3

The analysis presented here examines predictions that these conditions influence work attitudes and behaviors in government organizations. Because external governmental authorities govern government organizations, they will be subject to constraints on

extrinsic rewards such as financial rewards. Also, because they produce public and quasi-public goods, alternative rewards and incentives, such as opportunities to feel that one is benefiting others or benefiting broader communities, should play a stronger role in individual motivation and work attitudes. In their analysis of public service motivation (PSM), Perry and Wise (1990) conceived of PSM as associated with governmental institutions,4 and they posited that those with higher PSM will be more likely to seek employ-

ment in a public organization. Researchers have found in multiple nations that stronger public service motives tend to be associated with stronger attraction to government service (Dur and Zoutenbier 2014; Vandenabeele 2008). While altruistic and public-regarding motives may not be the exclusive province of government, one can hypothesize that public organizations have distinctive characteristics, especially compared with private firms, that relate to their members' motives, attitudes and rewards, and especially public service motives and rewards.

Public-Service-Oriented Motives

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Public-service-oriented motives should serve as a motivational force for those who choose employment in the public sector (see Brewer and Selden 1998; Perry 1996; Perry and Wise 1990). According to Wright, Moynihan, and Pandey (2012), PSM predisposes individuals to motives focused on public service and drives them to work for organizations with strong service- and community-oriented missions. Public service motivation has been examined in a number of country contexts, including the United States, Korea (Christensen et al. 2013; Kim 2009), Australia (Taylor 2008), China (Liu and Tang 2011), and Italy (Bellé 2013), among many others. Recently, public administration scholars have even sought to create a measurement instrument of the PSM constructs that is valid cross-nationally (Kim et al. 2013).

> Because the ISSP data do not provide a full PSM index of the sort developed by Perry (1996) and other researchers (Kim employees on what Park and Rainey motives. Scholars have argued that prosocial or public-service-oriented motives can be better fulfilled by employment in the public sector (Perry and Wise 1990). If

this is indeed a characteristic of public organizations in different countries, government organizations should show an international tendency to attract individuals with other-regarding motives and motives oriented to serving others and society. Public employees should also be more likely to be motivated by organizational missions that they regard as beneficial to society and to citizens (Goodsell 2011).

Recent research using international survey responses indicates that those who express altruistic motives and motives for jobs that benefit society tend prefer government jobs (e.g., Norris 2003; Ritz and Waldner 2011; Van de Walle, Steijn, and Jilke, forthcoming; Vandenabeele 2008). Across many countries, survey

respondents who actually work in the public sector (as opposed those who simply prefer such work) express higher levels of altruistic and public-service-oriented work motives (Dur and Zoutenbier 2014; Van de Walle, Steijn, and Jilke, forthcoming; Vandenabeele 2008: Vandenabeele and Van de Walle 2008). While these and similar studies provide important international evidence, they analyze aggregated data that do not distinguish and examine

individual countries. International comparisons that also analyze individual countries will make valuable contributions to this stream of research.

Given our conceptual perspective on public organizations as well findings from previous research, we test the following hypothesis:

Hypothesis 1: Public employees will have higher levels of public-service-oriented motives than their private sector counterparts.

et al. 2013), we compare public and private (2008) described as public-service-oriented

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Perception of Social Impact

There has been much less international comparative research on whether public and private sector personnel report different reward opportunities in their jobs. A search locates no such comparative studies before the present one.

This analysis uses a perception of social impact construct. The construct draws on earlier work on task significance, a concept that is strongly related to job satisfaction and job performance. Hackman and Oldham defined task significance as "the degree to which the job has a substantial impact on the lives or work of other people" (1976, 257). More recently, researchers have focused on task significance as it pertains to employees' positive impacts on society through their work (see Grant 2008).

We hypothesize differences among sectors in employees' perceptions of the social impact of their work. Individuals with strong public-service-oriented motives might be more likely to emphasize the prosocial aspects of their work (Stritch and Christensen 2014). In addition, public organizations provide public goods and services to a community, whereas private sector employees are more likely to be involved in market-driven exchanges of goods and services with individual customers. Therefore, public employees should recognize a broader social importance of their work.

Hypothesis 2: Public employees will identify their work as having a greater prosocial impact than their private sector counterparts.

High-Income Motives

Extrinsic benefits are externally mediated rewards or opportunities that a job or an organization provides an employee. While an individual might have many extrinsic motives, we will focus on highincome motives. Interestingly, there have been relatively few studies comparing the relative importance of money as a job motivator for public and private employees. With respect to sector choice, Frank and Lewis (2004) found that people who placed a high value on personal income were more likely to work in the private sector, although those in core public administration positions did not differ from private sector respondents. In his study of public service motives, Crewson (1997) found that public sector employees expressed lower concern for monetary incentives than for other benefits. Langbein and Lewis (1998) reported that electrical engineers employed in government placed less emphasis on the importance of pay as a reward compared with private sector electrical engineers. The perception that public sector employment pays less than the private sector persists in many nations, even among precareer individuals. Feeney (2008, 468) cited a 2005 Partnership for Public Service survey in which low pay and poor benefits were the common response from college students asked why they would not work in the public sector.

We posit that public organizations face different constraints with respect to employee benefits. For instance, numerous surveys and other evidence indicate that public sector managers and employees feel that formalized systems of compensation in the public sector prevent managers from being able to provide employees with monetary compensation in exchange for performance (e.g., Feeney and Rainey 2010; OPM 2013). In a Belgian sample, Buelens and

Van den Broeck (2007) found that public sector employees were less extrinsically motivated than their private sector counterparts. These findings reinforce those of Karl and Sutton (1998), who found that public sector employees placed less emphasis on economic rewards than their private sector counterparts. We will test the following hypothesis:

Hypothesis 3: Private sector employees will place higher importance on high income from their work than public sector employees.

Organizational Commitment

We also examine sector differences in organizational commitment. In using data from completed surveys such as the ISSP, a researcher must use the questions on the survey, which may not represent concepts and variables in the way the researcher would prefer. We were able to use some questions to represent respondents' commitment to the employing organization, even though the resulting index does not fully represent organizational commitment in the way many researchers measure the concept (e.g., Mowday, Porter, and Steers 1982). Nevertheless, it is useful to examine organizational commitment because it represents a variable distinct from the others in the analysis in ways that reflect on the differences in public and private respondents' orientations toward their work and organizations. If public employee respondents express the motives of helping others and having work useful to society, does this mean that they will show stronger commitment to their employing organizations? There are reasons both to predict that they will and to predict that they might not.

Mowday, Porter, and Steers (1982) defined organizational commitment as the strength of an individual's identification with a particular organization and involvement in it. This organizational commitment construct has been used in a number of studies of public employees (Balfour and Wechsler 1996; Choi 2009; Crewson 1997; Liou and Nyhan 1994; Yang and Pandey 2009). Additionally, the organizational commitment construct has been tested and used internationally (Coyle-Shapiro and Kessler 2003; Steijn and Leisink 2006; Zeffane 1994).

Past findings on the public and private differences with respect to organizational commitment paint a complex picture. Balfour and Wechsler (1990) found that public employees were more committed to the goals and values of their organizations than private sector employees; public sector employees, however, derived fewer feelings of affiliation from membership in the organization.

On the other hand, Steinhaus and Perry (1996) found no differences among public and private sector employees. Studies have also found lower levels of organizational commitment among public employees than among employees of private organizations. Buchanan (1974) found lower organizational commitment among federal managers compared with private managers. Zeffane (1994) found that employees of Australian private organizations have higher levels of organizational commitment than their public sector counterparts. In an American sample, Goulet and Frank (2002) found that among public, private, and nonprofit employees, the public employees demonstrated the lowest level of organizational commitment.

These mixed findings coincide with reasons to expect either higher or lower organizational commitment on the part of government employees. Government personnel might regard their organizations as venues for the fulfillment of altruistic and socially beneficial motives. On the other hand, public employees might have lower organizational commitment because they have a diminished sense of control as a result of external constraints placed on the organiza-

tion and the general "public" ownership of the organization (see Buchanan 1974, 1975). In their study comparing public and private schools, Chubb and Moe (1990) found that administrators and teachers in public schools had a lower sense of control of the organization as a consequence of external controls placed on. Public employees might also have lower organizational commitment because they identify with the clients of the organization or the general public. As a consequence, the formal rules and procedures commonly attributed to bureaucratic organizations might lower organizational commitment because they make the organization a barrier to providing services. We will test the following hypothesis:

Hypothesis 4: Private sector employees will demonstrate higher levels of organizational commitment than their public sector counterparts.

Data and Methods

We use data collected by the International Social Survey Programme. We analyze the Work Orientation 2005 module, which consists of 32 countries and 43,400 respondents. We limit the analysis to those who are currently employed and those who either work for the government or the private sector. We exclude those who self-report as working for a nationalized firm, self-employed, or other.⁵ This exclusion focuses the analysis on those who work for the government and those who work for private organizations.⁶ Table 1 presents summary statistics.

Dependent Variables

The previous section described our interest in four dependent variables: public-service-oriented motives, perception of social impact, high-income motives, and organizational commitment. The ISSP survey asked questions that can be used to measure these constructs. These data give us an opportunity to confirm whether the hypothesized differences among public and private sector employees hold across countries. The dependent variables were constructed using

Table 1 Summary Statistics

Variable	Obs.	Mean	SD	Min.	Max.
Public-service-oriented motives	17,916	7.98	1.54	2	10
Perception of social impact	17,763	7.61	1.79	2	10
Importance of high income	18,110	4.12	0.79	1	5
Organizational commitment	17,031	9.84	2.55	3	15
Government worker	18,267	0.26	0.44	0	1
Male	18,258	0.5	0.5	0	1
Age	18,189	40.43	12.15	16	90
Education	17,808	15.01	13.77	0	96
Married	18,150	0.6	0.49	0	1
Supervisor	17,872	0.3	0.46	0	1

The formal rules and procedures commonly attributed to bureaucratic organizations might lower organizational commitment because they make the organization a barrier to providing services.

summative indices. Here we list and briefly explain each of the four dependent variables and the measures used to construct them.^{7,8}

Public-service-oriented motives. These motives include the perceived importance of having a job that both helps others and is useful to society. The responses to the following two questions were summed to construct the measure:

- "How important do you personally think it is in a job that the job allows someone to help other people?" ("not important at all" = 1, "very important" = 5)
- "How important do you personally think it is in a job that the job is useful to society?" ("not important at all" = 1, "very important" = 5

Perception of social impact. This measures the degree to which individuals perceive that their work benefits society. The responses to the following questions were summed to construct the measure:

- "In my job I can help other people." ("strongly disagree" = 1, "strongly agree" = 5)
- "My job is useful to society." ("strongly disagree" = 1, "strongly agree" = 5)

Importance of high-income motives. The response to the following question was used to measure the importance of highincome motives:

"How important do you personally think it is in a job that the job provides a high income?" ("not important at all" = 1, "very important" = 5

Organizational commitment. To examine organizational commitment, we constructed an index using the following three questions:

- "I am willing to work harder than I have to in order to help the firm or organization I work for succeed." ("strongly disagree" = 1, "strongly agree" = 5)
- "I am proud to be working for my firm or organization." ("strongly disagree" = 1, "strongly agree" = 5)
- "I would turn down another job that offered quite a bit more pay in order to stay with this organization." ("strongly disagree" = 1, "strongly agree" = 5)

Independent Variables

Public sector employment. As discussed in the hypotheses, the main independent variable is the individual's sector of employment. This variable gives the respondent a value of 1 if the respondent works for government and a value of 0 if the respondent works for a private firm.

Controls. In all of our models, we control for sex, age, education, marital status, and whether the individual is in a supervisory position.

Method

To test the hypotheses about the nature of public versus private differences in this international sample, we use *t*-tests and ordinary least squares (OLS) regressions. For the regression analysis, four models are generated to explain each of the following variables: public-service-orientated motives, perception of social impact, importance of high-income motives, and organizational commitment. Instead of using country fixed effects, as some researchers have done, we estimate the full model separately for each country. Doing so allows us to demonstrate country-level differences among the sectors and variables and to control for variables such as gender, age, education, and supervisory role. In addition, we examine differences between public and private employees on the work attitudes and motives previously discussed. To our knowledge, such comparisons have not previously been studied for such a large sample of countries.

T-Tests of Group Means¹⁰

To begin the analysis of the differences between sectors by country, we run a *t*-test on the country-level means of each of our constructs. This initial analysis serves three purposes: (1) to see, for each construct, whether there is a sector difference in the mean response at the country level that occurs consistently across countries; (2) to see whether there are trends in the direction of the difference, and if so, whether they are statistically significant; and (3) to determine whether we can easily identify the "extreme" where the means have the greatest difference and begin to consider the cultural dynamics of why this might be so.

Public-Service-Oriented Motives

In 28 of the 30 countries we analyze (the exceptions being the Dominican Republic and South Korea), government workers have higher levels of public-service-oriented motives. Furthermore, among these 28 countries, 17 of the differences are statistically significant at the .05 level, and 23 of them are statistically significant at the .10 level. This provides strong initial evidence for hypothesis 1, that public employees have higher levels of public-service-oriented motives than their private sector counterparts.

Perception of Social Impact

In 30 of the 30 countries we analyze, government workers have stronger perceptions of the social impact of their jobs. Twenty-eight of these relationships are significant at the .05 level, and 29 of the 30 relationships are statistically significant at the .10 level or higher. We believe that this provides very strong initial evidence for hypothesis 2, that public employees will identify their work as having a greater positive social impact than their private sector counterparts.

High-Income Motives

In 24 of the 30 countries, government workers report lower levels of high-income motives than their private sector counterparts. Among these 24 countries, only seven of the relationships are statistically significant at the .05 level, and 10 of the relationships are statistically significant at the .10 level or higher. While there is some evidence for hypothesis 3, that public employees place less importance on high income than their private sector counterparts, the hypothesis did not receive the same level of statistical support as hypotheses 1 and 2.

Organizational Commitment

In 22 of the 30 countries, government workers report higher levels of organizational commitment than private sectors workers. Of these 22 relationships, 15 are statistically significant at the .05 level, and 16 are statistically significant at the .10 level or higher. These initial findings run contrary to our initial hypothesis 4, that private sector employees will demonstrate higher levels of organizational commitment than their public sector counterparts. Tables 2 and 3 show that in most countries (22 out of 30), public employees reported higher levels of organization commitment than the private employees. The nations where public sector respondents reported lower organizational commitment than the private sector respondents all fall into two groups, one including the Scandinavian countries (Denmark, Finland, Norway, and Sweden) and Switzerland and another including the Anglophone nations (Canada, Great Britain, and New Zealand).

Ordinary Least Squares Results

We complement these initial findings with a set of results using ordinary least squares regression to control for other factors that might influence a respondent's response to our constructs. In these models, we control for sex, age, education, marital status, and supervisory role. Next we discuss these more robust findings to see whether the initial findings hold while controlling for multiple covariates. We also estimate robust standard error to address concerns of heteroscedasticity.

Public-Service-Oriented Motives

In 27 of the 30 models, the coefficient for the government worker variable is positive, and in 17 of these models, the coefficient is statistically significant at the .05 level or greater. The coefficient is only negative and statistically significant in one model (Dominican Republic). The magnitude of the coefficient is greatest in Sweden, Denmark, and Norway, with coefficients of .920, .836, and .813, respectively. This provides additional strong evidence to support hypothesis 1.

Perception of Social Impact

The multivariate model for perception of social impact also provides strong evidence in support of hypothesis 2. The coefficient for government worker is positive in 29 of the 30 models, and it is statistically significant in 27 of these 29 models at the .05 level or greater and in 27 models at the .01 level. Only one coefficient is negative (Mexico), and it is not statistically significant. The only other country that is not both positive and statistically significant is Slovenia. The two countries with the largest coefficients are Spain and Denmark, with coefficients of 1.898 and 1.685, respectively.

Importance of High-Income Motives

In 22 of the 30 models, the coefficient for government employees is negative, and three of these coefficients are significant at the .05 level or greater. While the statistical evidence is not as strong as that for hypotheses 1 and 2, we believe this still provides reasonable evidence to support hypothesis 3. The largest negative coefficient is Slovenia, with a coefficient of –.339, while the largest positive coefficient is for Cyprus at .151.

Organizational Commitment

As with the *t*-test analysis, 22 of the 30 models have a positive coefficient. In these models, 13 of the 22 coefficients are statistically

 Table 2
 T-Test Results across Sector by Country

Country	Public-Service-Oriented Motives		Perception of Social Impact		Importance of High Income		Organizational Commitment	
	t-score	<i>p</i> -value	<i>t</i> -score	<i>p</i> -value	<i>t</i> -score	<i>p</i> -value	<i>t</i> -score	<i>p</i> -value
Australia	2.038**	.042	8.303***	.000	-1.049	.294	1.662*	.097
Bulgaria	1.664*	.097	5.547***	.000	1.02	.308	4.333***	.000
Canada	1.179	.239	4.794***	.000	0.0956	.924	-0.845	.399
Cyprus	2.870***	.004	5.740***	.000	2.400**	.017	7.280***	.000
Czech Republic	1.392	.165	2.655***	.008	-0.0985	.922	1.455	.146
Denmark	10.36***	.000	15.12***	.000	-1.320	.187	-5.238***	.000
Dominican Republic	-1.787*	.074	2.755***	.006	-2.179**	.030	1.06	.289
Finland	5.829***	.000	9.904***	.000	-1.101	.271	-1.503	.133
Flanders/Belgium	6.188***	.000	8.309***	.000	-2.899***	.004	2.822***	.005
France	5.366***	.000	10.78***	.000	-2.166**	.031	1.041	.298
Great Britain	4.867***	.000	8.792***	.000	-1.104	.270	-0.146	.884
Hungary	1.881*	.061	2.820***	.005	-0.250	.803	2.538**	.012
Ireland	3.872***	.000	8.442***	.000	-2.086**	.038	0.22	.826
Israel	1.766*	.078	6.330***	.000	1.692*	.091	5.230***	.000
Japan	1.673*	.095	3.901***	.000	-0.393	.694	2.872***	.004
Latvia	1.671*	.095	5.271***	.000	-2.033**	.0426	3.438***	.001
Mexico	0.866	.387	1.495	.136	0.939	.348	2.759***	.006
New Zealand	3.717***	.000	8.534***	.000	-0.872	.384	-0.865	.387
Norway	9.123***	.000	13.65***	.000	-0.485	.628	-0.374	.708
Philippines	0.549	.584	4.920***	.000	-1.348	.179	2.788***	.006
Portugal	4.566***	.000	7.116***	.000	-0.0174	.986	1.13	.259
Russia	2.568**	.011	5.389***	.000	-1.992**	.047	4.100***	.000
Slovenia	1.109	.268	1.773*	.077	-1.904*	.058	2.202**	.029
South Africa	2.934***	.003	5.786***	.000	0.565	.572	4.057***	.000
South Korea	-0.953	.341	3.795***	.000	-1.626	.105	3.178***	.002
Spain	1.660*	.098	7.148***	.000	-1.464	.144	1.15	.251
Sweden	9.360***	.000	12.90***	.000	0.44	.660	-3.230***	.001
Switzerland	3.778***	.000	6.627***	.000	-1.832*	.068	-1.474	.141
Taiwan	3.011***	.003	4.578***	.000	-1.872*	.062	3.155***	.002
United States	2.817***	.005	8.048***	.000	-1.973**	.049	2.177**	.030

Note: Positive *t*-scores represent a higher public sector mean.

Significance levels: *** .01; **.05; * .10.

 Table 3 OLS Results for Sector Impact on Motivations across Countries

Country	Public-Service-Oriented Motives		Perception of Social Impact		Importance of High Income		Organizational Commitment	
	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE
Australia	0.190*	(0.106)	1.003***	(0.117)	-0.045	(0.061)	0.177	(0.163)
Bulgaria	0.223	(0.157)	0.854***	(0.181)	0.043	(0.045)	0.915***	(0.286)
Canada	0.120	(0.158)	0.700***	(0.161)	-0.001	(0.079)	-0.253	(0.251)
Cyprus	0.399**	(0.176)	0.631***	(0.143)	0.151**	(0.067)	1.455***	(0.273)
Czech Republic	0.326	(0.303)	0.927***	(0.254)	-0.008	(0.168)	0.903**	(0.440)
Denmark	0.836***	(0.106)	1.685***	(0.122)	-0.038	(0.059)	-1.014***	(0.206)
Dominican Republic	-0.270*	(0.138)	0.323*	(0.170)	-0.147*	(0.081)	0.184	(0.195)
Finland	0.568***	(0.140)	1.358***	(0.161)	-0.033	(0.066)	-0.330	(0.234)
Flanders/Belgium	0.697***	(0.126)	1.166***	(0.142)	-0.140**	(0.055)	0.450**	(0.188)
France	0.575***	(0.114)	1.386***	(0.128)	-0.082*	(0.049)	0.118	(0.183)
Great Britain	0.685***	(0.157)	1.458***	(0.161)	-0.045	(0.076)	-0.174	(0.250)
Hungary	0.369	(0.294)	0.676***	(0.252)	0.038	(0.132)	0.975*	(0.500)
Ireland	0.490***	(0.135)	1.414***	(0.145)	-0.134	(0.092)	0.019	(0.254)
Israel	0.217	(0.171)	1.207***	(0.201)	0.117*	(0.070)	1.516***	(0.327)
Japan	0.369**	(0.181)	1.219***	(0.271)	-0.092	-0.129	1.169***	(0.392)
Latvia	0.137	(0.168)	0.655***	(0.143)	-0.131**	(0.058)	1.003***	(0.292)
Mexico	0.0849	(0.166)	-0.041	(0.212)	0.047	(0.087)	0.736**	(0.321)
New Zealand	0.410***	(0.131)	1.252***	(0.143)	-0.048	(0.079)	-0.339	(0.226)
Norway	0.813***	(0.111)	1.367***	(0.116)	-0.028	(0.056)	-0.132	(0.166)
Philippines	-0.018	(0.234)	0.741***	(0.201)	-0.086	(0.092)	0.389	(0.293)
Portugal	0.448***	(0.0912)	0.910***	(0.130)	0.031	(0.053)	0.070	(0.189)
Russia	0.291**	(0.145)	0.812***	(0.159)	-0.096*	(0.051)	1.060***	(0.257)
Slovenia	0.333	(0.211)	0.572	(0.383)	-0.339**	(0.151)	1.012***	(0.389)
South Africa	0.325**	(0.141)	0.834***	(0.193)	0.061	(0.069)	0.670**	(0.277)
South Korea	-0.159	(0.196)	0.967***	(0.224)	-0.143	(0.105)	1.224***	(0.339)
Spain	0.398*	(0.231)	1.898***	(0.282)	-0.104	(0.130)	0.351	(0.464)
Sweden	0.920***	(0.131)	1.403***	(0.146)	0.021	(0.062)	-0.617***	(0.190)
Switzerland	0.419***	(0.123)	0.846***	(0.120)	-0.104	(0.073)	-0.236	(0.201)
Taiwan	0.273***	(0.105)	0.453***	(0.114)	-0.131*	(0.073)	0.486**	(0.194)
United States	0.304***	(0.110)	0.934***	(0.114)	-0.025	(0.072)	0.333	(0.216)

Notes: Results are from an OLS model with the following control variables: sex, age, education, marriage status, and supervisory role. The reported standard errors are robust to a heteroscedastic error distribution.

Significance levels: ***.01; **.05; *.10.

significant at the .05 level or higher. This complements the earlier evidence that suggests that hypothesis 4 was in the wrong direction. It appears that higher levels of organizational commitment are more likely to be expressed by government workers than private sector workers, and this finding seems to be relatively consistent throughout our sample. There are two notable exceptions to this generalization: in both Denmark and Sweden, government

workers expressed significantly lower levels of organizational commitment than their private sector counterparts. However, there are several countries in which the coefficient is particularly large and positive. These countries include Cyprus, Israel, and South Korea, with coefficients of 1.455, 1.516, and 1.224, respectively. Again, the results show the same pattern described earlier for the *t*-tests. The Scandinavian countries and Switzerland, and the same Anglophone nations, are those where public sector respondents reported lower organizational commitment.

Discussion

The analysis supports some of our hypotheses about public and private differences in survey responses in an international context. Across the 30 countries, we find strong evidence that public sector workers have higher levels of public-service-oriented motives and greater perceptions of their job's social impact. We find evidence that public sector workers are less motivated by monetary gain than their private sector counterparts, although the differences are often not large enough to show statistical significance. Finally, contrary to our expectations, in many nations, public sector personnel have higher levels of organizational commitment than their private sector counterparts. The organizational commitment findings, however, show an interesting pattern: the countries where public sector respondents expressed lower organizational commitment fall into one of two categories. One category includes the Scandinavian nations and Switzerland, and the other set includes the Anglophone nations of Canada, Great Britain, and New Zealand.

As discussed earlier, it would be easy to predict no consistent patterns across nations in comparisons of public and private employees' survey responses on work motives, rewards, and attitudes. The consistent differences in almost all the nations on the public-serviceoriented motives index and in all the countries on perception of social impact are striking. They suggest a pattern of differences between public employees and private sector employees across many nations. The differences are consistent with the literature on public organizations that we have cited and with the conceptual perspective that we have advanced. These findings add to the stream of research on the motives and reward preferences of public versus private employees that we have cited. They add original findings about public employees' perceptions, compared with private employees, that their jobs actually provide the rewards of having work that helps others and that benefits society. These differences have seldom, if ever, been examined in a country-by-country analysis in 30 nations.

Our findings also suggest three important lessons for public managers. First, with an increase in international collaboration among government and private sector entities, it is important to know that the differences in public and private employee

Public sector personnel consistently place higher emphasis on work rewards that involve helping others and serving society and not as much emphasis on income.

motivations and attitudes are often consistent across workers from different cultures and institutional contexts. Specifically, our study provides evidence for public managers that public sector workers, throughout most nations, are more motivated to serve the public, highlight the importance of their work for society, and are less motivated by financial rewards than their private sector counterparts. Internationally, public managers can

use these lessons in the day-to-day management of their employees. Second, public sector personnel consistently place higher emphasis on work rewards that involve helping others and serving society and not as much emphasis on income. Internationally, leaders in public organizations need to strive to provide such rewards. One way in which leaders can do this is to closely tie public employees' tasks to obvious benefits to society. Demonstrating public employees' prosocial impact is an important procedure for maintaining and increasing their motivation. Third, public managers should be particularly conscious of the cultural context in which they operate with respect to utilizing commitment to the organization as a motivation tool. Managers should consider highlighting how an employee's work benefits society and how the organization's mission benefits society rather than just appealing to the employee's sense of commitment to the organization.

Conclusion

The findings presented here help explain why research on public service motivation has become an active international movement. Researchers have found that public service motivation and ethos appear to vary in different cultures and nations (Kim et al. 2013). Nevertheless, while public institutions may not be the sole repositories of public service motivation, the evidence reported here indicates that public institutions tend to attract and reward individuals with such motives.

Do the responses of the government employees in the many nations surveyed simply represent a social desirability response or a pro forma response? (For example: "I work for government, so I guess I must benefit society"). Even if they do, the consistent responses across many nations, languages, and cultures make it remarkable that such a social desirability or pro forma response to the survey questions would recur across all these settings.

The findings on high income are consistent with previous research showing that public sector respondents tend to place lower valuation on monetary compensation, but not always, and that the differences compared with private employees are not always statistically significant (e.g., Crewson 1997). Pay differentials between the public and private sectors vary among nations, and in some nations, government positions pay more than private sector jobs (Norris 2003; Vandenabeele and Van der Walle 2008). In the United States and other nations, the pay differentials are highest at the higher executive and professional levels but comparable or higher for the public sector below those levels (e.g., Donahue 2008). These conditions complicate the relationship between income preferences and sector employment choices and demonstrate the need to take additional variables into account in analyzing such differences.

The less consistent differences between public and private respondents on organizational commitment indicate that the distinctive characteristics of public and private organizations that we discussed in the conceptual perspective can often relate to differences in commitment to the employing organization, but not always. This suggests that organizational commitment can be influenced by more proximal conditions such as leadership and organizational policies as opposed to the institutional locus of the organization. Public sector employees may in some cases show strong organizational commitment, but they may show weaker commitment when they focus their commitment on clients they serve or on broader societal impacts.

Still, the question of what difference such responses make points to an important next steps, which include relating the responses to other variables in the survey, such as work satisfaction. Of course, reliance on responses to the same survey has obvious limitations, so the quest for dependent variables outside the available surveys represents a major challenge. In addition, while sample sizes place some limits on how many ways the samples can be parsed, analyses can compare responses at different organizational levels and can compare different types of organizational and work settings in the sample. The general sector differences may come from certain settings in the two sectors, while there are settings in the two sectors that are highly similar and where differences are smaller.

Additional research can cluster the nations into categories based on cultural dimensions, such as those of Hofstede (Hofstede, Hofstede and Minkov 2010) and the international GLOBE study (House et al. 2004). Such variations, by cultural dimensions, are suggested by the findings on commitment and the distinctiveness of the Scandinavian and Anglophone nations on these responses. Norris (2003) and Vandenabeele and Van der Walle (2008) have reported evidence that preferences for public sector employment vary widely among survey respondents from different countries. Interestingly, Norris found that respondents from Scandinavian and Anglophone nations showed the lowest tendencies to prefer public sector employment. This supports the hypothesis that respondents in countries who prefer public employment will be those who place particularly high value on work that helps others and benefits society; such an interpretation is consistent with our findings. Additional quantitative and qualitative research can pursue questions about whether higher levels of egalitarianism or orientation toward a more extensive welfare state influence such responses.

These and many other questions offer opportunities for future research. A first step, however, is to determine whether there are differences between public and private sector respondents internationally in each of many nations. This analysis provides that step. The evidence of consistent differences internationally on important variables, coupled with interesting patterns where the results are more mixed, adds to the international research we have cited on questions about the nature of public organizations and the people in them as contrasted with organizations and people in other sectors.

Notes

- 1. For a more complete discussion of the differences between public and private organizations, see Rainey (2014).
- There are, of course, other ways of organizing activities. For an alternative model of organization, see Elinor Ostrom's (1990) theory of collective action.

- 3. For example, one can posit that because external political authorities exert stronger influences on government agencies, those agencies tend toward higher levels of formalization and centralization of their structures. Empirical research supports this proposition (e.g., Feeney and Rainey 2010; Kalleberg et al. 1996).
- "Public service motivation may be understood as an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations" (Perry and Wise 1990, 368).
- These categories represent 10.1 percent, 15.1 percent, and 1.1 percent of the sample, respectively.
- We also excluded two countries because of data constraints. The ISSP differentiates between East and West Germany. Both East and West Germany are left out of this analysis because those surveys do not differentiate between public and private workers.
- 7. In a factor analysis, each group of items (survey questions) loaded significantly on only one factor. Additionally, we report the Cronbach's alpha coefficient for each of the indexes: public-service-oriented motives = .80; perception of social impact = .74; organizational commitment = .69.
- It is important to note that these indexes are slightly skewed toward the higher responses and have ranges from 2 to 15 depending on the index. This may create concerns for our choice of OLS as an estimator, but we find very similar results when we run the models using an ordered logit.
- A single item, five-point response dependent variable is not continuous and, in this instance, is heavily weighted to the top three responses. This should present us with difficulties in our estimation. However, we estimated this model using an ordered logit estimator, and the results were not substantively different from those we provide here. We report OLS results for ease on interpretation.
- 10. The t-tests are reported to present simple and straightforward results that demonstrate a consistent difference in responses by public and private employees.

References

- Amirkhanyan, Anna A. 2010. Monitoring across Sectors: Examining the Effect of Nonprofit and For-Profit Contractor Ownership on Performance Monitoring in State and Local Contracts. Public Administration Review 70(5): 742-55.
- Andersen, Jon Aarum. 2010. Public versus Private Managers: How Public and Private Managers Differ in Leadership Behavior. Public Administration Review 70(1):
- Andersen, Lotte Bøgh, and Anne Mette Kjeldsen. 2013. Public Service Motivation, User Orientation, and Job Satisfaction: A Question of Employment Sector? International Public Management Journal 16(2): 252–74.
- Andersen, Lotte Bøgh, and Lene Holm Pedersen. 2013. Does Ownership Matter for Employee Motivation When Occupation Is Controlled For? International Journal of Public Administration 36(12): 840-56.
- Balfour, Danny L., and Barton Wechsler. 1990. Organizational Commitment: A Reconceptualization and Empirical Test of Public-Private Differences. Review of Public Personnel Administration 10(3): 23-40.
- -. 1996. Organizational Commitment: Antecedents and Outcomes in Public Organizations. Public Productivity and Management Review 19(3): 256-77.
- Battaglio, R. Paul, Jr., and Jerome S. Legge, Jr. 2009. Self-Interest, Ideological/ Symbolic Politics, and Citizen Characteristics: A Cross-National Analysis of Support for Privatization. Public Administration Review 69(4): 697–709.
- Bellé, Nicola. 2013. Experimental Evidence on the Relationship between Public Service Motivation and Job Performance. Public Administration Review 73(1):
- Blau, Peter M., and W. Richard Scott. 1962. Formal Organizations. Novato, CA:
- Boardman, Craig, Barry Bozeman, and Branco Ponomariov. 2010. Private Sector Imprinting: An Examination of the Impacts of Private Sector Job Experience on Public Managers' Work Attitudes. Public Administration Review 70(1): 50-59.

- Bozeman, Barry. 1987. All Organizations Are Public: Bridging Public and Private Organizational Theories. San Francisco: Jossey-Bass.
- Brewer, Gene A., and Sally Coleman Selden. 1998. Whistle Blowers in the Federal Civil Service: New Evidence of the Public Service Ethic. *Journal of Public Administration Research and Theory* 8(3): 413–39.
- Buchanan, Bruce, II. 1974. Government Managers, Business Executives, and Organizational Commitment. *Public Administration Review* 34(4): 339–47.
- 1975. Red Tape and the Service Ethic: Some Unexpected Differences between Public and Private Managers. Administration & Society 6(4): 423–38.
- Buelens, Marc, and Herman Van den Broeck. 2007. An Analysis of Differences in Work Motivation between Public and Private Sector Organizations. *Public Administration Review* 67(1): 65–74.
- Bullock, Justin B., Jeffrey B. Wenger, and Vicky M. Wilkins. 2014. Attitudes about Hard Work: A Global Perspective on the Beliefs of Government Employees. *International Public Management Journal* 17(1): 25–44.
- Choi, Sungjoo. 2009. Diversity in the U.S. Federal Government: Diversity Management and Employee Turnover in Federal Agencies. *Journal of Public Administration Research and Theory* 19(3): 603–30.
- Christensen, Robert K., Steve W. Whiting, Tobin Im, Eunju Rho, Justin M. Stritch, and Jungho Park. 2013. Public Service Motivation, Task, and Non-Task Behavior: A Performance Appraisal Experiment with Korean MPA and MBA Students. *International Public Management Journal* 16(1): 28–52.
- Chubb, John E., and Terry M. Moe. 1990. Politics, Markets, and America's Schools. Washington, DC: Brookings Institution.
- Cohen, Michael D., James G. March, and Johan P. Olsen. 1972. A Garbage Can Model of Organizational Choice. Administrative Science Quarterly 17(1): 1–25.
- Coyle-Shapiro, Jacqueline A.-M., and Ian Kessler. 2003. The Employment Relationship in the U.K. Public Sector: A Psychological Contract Perspective. *Journal of Public Administration Research and Theory* 13(2): 213–30.
- Crewson, Philip E. 1997. Public-Service Motivation: Building Empirical Evidence of Incidence and Effect. *Journal of Public Administration Research and Theory* 7(4): 499–511.
- Daft, Richard L. 2012. Organization Theory and Design. 11th ed. Mason, OH: South-Western/Cengage.
- Dahl, Robert A., and Charles E. Lindblom. 1953. Politics, Economics, and Welfare: Planning and Politico-Economic Systems Resolved into Basic Social Processes. Chicago: University of Chicago Press.
- Donahue, John D. 2008. *The Warping of Government Work*. Cambridge, MA: Harvard University Press.
- Downs, Anthony. 1967. Inside Bureaucracy. Boston: Little, Brown.
- Dur, Robert, and Robin Zoutenbier. 2014. Working for a Good Cause. *Public Administration Review* 74(2): 144–55.
- Feeney, Mary K. 2008. Sector Perceptions among State-Level Public Managers. Journal of Public Administration Research and Theory 18(3): 465–94.
- Feeney, Mary K., and Hal G. Rainey. 2010. Personnel Flexibility and Red Tape in Public and Nonprofit Organizations: Distinctions Due to Institutional and Political Accountability. *Journal of Public Administration Research and Theory* 20(4): 801–26.
- Frank, Sue A., and Gregory B. Lewis. 2004. Government Employees Working Hard or Hardly Working? *American Review of Public Administration* 34(1): 36–51.
- Gilman, Stuart C., and Carol W. Lewis. 1996. Public Service Ethics: A Global Dialogue. *Public Administration Review* 56(6): 517–24.
- Goodsell, Charles T. 2011. *Mission Mystique: Belief Systems in Public Agencies*. Washington, DC: CQ Press.
- Goulet, Laurel R., and Margaret L. Frank. 2002. Organizational Commitment across Three Sectors: Public, Non-Profit, and For-Profit. *Public Personnel Management* 31(2): 201–10.
- Grant, Adam M. 2008. Employees without a Cause: The Motivational Effects of Prosocial Impact in Public Service. *International Public Management Journal* 11(1): 48–66.

- Hackman, J. Richard, and Greg R. Oldham. 1976. Motivation through the Design of Work: Test of a Theory. Organizational Behavior and Human Performance 16(2): 250–79.
- Hofstede, Geert, Gert Jan Hofstede, and Michael Minkov. 2010. *Cultures and Organizations: Software of the Mind*. 3rd ed. New York: McGraw-Hill.
- House, Robert J., Paul J. Hanges, Mansour Javidan, Peter W. Dorfman, and Vipin Gupta. 2004. Leadership, Culture, and Organizations: The GLOBE Study of 62 Societies. Thousand Oaks, CA: Sage Publications.
- Houston, David J. 2011. Implications of Occupational Locus and Focus for Public Service Motivation: Attitudes toward Work Motives across Nations. *Public Administration Review* 71(5): 761–71.
- Kalleberg, Arne L., David Knoke, Peter V. Marsden, and Joe L. Spaeth. 1996.
 Organizations in America: Analyzing Their Structures and Human Resource Practices. Thousand Oaks, CA: Sage Publications.
- Karl, Katherine A., and Cynthia L. Sutton. 1998. Job Values in Today's Workforce: A Comparison of Public and Private Sector Employees. *Public Personnel Management* 27(4): 515–28.
- Kim, Sangmook. 2009. Testing the Structure of Public Service Motivation in Korea: A Research Note. Journal of Public Administration Research and Theory 19(4): 839–51.
- Kim, Sangmook, Wouter Vandenabeele, Bradley E. Wright, Lotte Bøgh Andersen, Francesco Paolo Cerase, Robert K. Christensen, and Céline Desmarais, et al. 2013. Investigating the Structure and Meaning of Public Service Motivation across Populations: Developing an International Instrument and Addressing Issues of Measurement Invariance. *Journal of Public Administration Research and Theory* 23(1): 79–102.
- Kjeldsen, Anne Mette, and Lotte Bøgh Andersen. 2013. How Pro-Social Motivation Affects Job Satisfaction: An International Analysis of Countries with Different Welfare State Regimes. Scandinavian Political Studies 36(2): 153–76.
- Langbein, Laura I., and Gregory B. Lewis. 1998. Pay, Productivity, and the Public Sector: The Case of Electrical Engineers. *Journal of Public Administration* Research and Theory 8(3): 391–412.
- Lindblom, Charles E. 1977. *Politics and Markets: The World's Political Economic Systems.* New York: Basic Books.
- Liou, Kuo-Tsai, and Ronald C. Nyhan. 1994. Dimensions of Organizational Commitment in the Public Sector: An Empirical Assessment. *Public Administration Quarterly* 18(1): 99–118.
- Liu, Bang-Cheng, and Thomas Li-Ping Tang. 2011. Does the Love of Money Moderate the Relationship between Public Service Motivation and Job Satisfaction? The Case of Chinese Professionals in the Public Sector. *Public Administration Review* 71(5): 718–27.
- Meier, Kenneth J., and Laurence J. O'Toole, Jr. 2011. Comparing Public and Private Management: Theoretical Expectations. Supplement 3, *Journal of Public Administration Research and Theory* 21: i283–99.
- Mintzberg, Henry. 1979. The Structuring of Organizations. Upper Saddle River, NJ: Prentice Hall.
- Mowday, Richard T., Lyman W. Porter, and Richard M. Steers. 1982. *Employee—Organization Linkages: The Psychology of Commitment, Absenteeism, and Turnover.*New York: Academic Press.
- Musolf, Lloyd D., and Harold Seidman. 1980. The Blurred Boundaries of Public Administration. *Public Administration Review* 40(2): 124–30.
- Norris, Pippa. 2003. Is There Still a Public Service Ethos? Work Values, Experience, and Job Satisfaction among Government Workers. In For the People: Can We Fix Public Service?, edited by John D. Donahue and Joseph S. Nye, Jr., 72–89. Washington, DC: Brookings Institution Press.
- Ostrom, Elinor. 1990. Governing the Commons: The Evolution of Institutions for Collective Action. New York: Cambridge University Press.
- O'Toole, Laurence J., Jr., and Kenneth J. Meier. 2015. Public Management, Context, and Performance: In Quest of a More General Theory. *Journal of Public Administration Research and Theory* 25(1): 237–56.

- Park, Sung Min, and Hal G. Rainey. 2008. Leadership and Public Service Motivation in U.S. Federal Agencies. International Public Management Journal 11(1): 109-42.
- Perry, James L. 1996. Measuring Public Service Motivation: An Assessment of Construct Reliability and Validity. Journal of Public Administration Research and Theory 6(1): 5-22.
- Perry, James L., and Hal G. Rainey. 1988. The Public-Private Distinction in Organization Theory: A Critique and Research Strategy. Academy of Management Review 13(2): 182-201.
- Perry, James L., and Lois Recascino Wise. 1990. The Motivational Bases of Public Service. Public Administration Review 50(3): 367-73.
- Rainey, Hal G. 2014. Understanding and Managing Public Organizations. 5th ed. San Francisco: Jossey-Bass.
- Ritz, Adrian, and Christian Waldner. 2011. Competing for Future Leaders: A Study of Attractiveness of Public Sector Organizations to Potential Job Applicants. Review of Public Personnel Administration 31(3): 291-316.
- Simon, Herbert A. 1995. Organization and Markets. Journal of Public Administration Research and Theory 5(3): 273-94.
- Steijn, Bram, and Peter Leisink. 2006. Organizational Commitment among Dutch Public Sector Employees. International Review of Administrative Sciences 72(2):
- Steinhaus, Carol S., and James L. Perry. 1996. Organizational Commitment: Does Sector Matter? Public Productivity and Management Review 19(3): 278-88.
- Stritch, Justin M., and Robert K. Christensen. 2014. Looking at a Job's Social Impact through PSM-Tinted Lenses: Probing the Motivation-Perception Relationship. Public Administration 92(4): 826-42.
- Taylor, Jeannette. 2008. Organizational Influences, Public Service Motivation and Work Outcomes: An Australian Study. International Public Management Journal 11(1): 67-88.
- Taylor, Jeannette, and Ranald Taylor. 2011. Working Hard for More Money or Working Hard to Make a Difference? Efficiency Wages, Public Service Motivation, and Effort. Review of Public Personnel Administration 31(1): 67-86.
- Thompson, James D. 1962. Common and Uncommon Elements in Administration. Social Welfare Forum 89: 181-201.
- Trottier, Tracey, Montgomery Van Wart, and XiaoHu Wang. 2008. Examining the Nature and Significance of Leadership in Government Organizations. Public Administration Review 68(2): 319-33.

- Uhl-Bien, Mary, John R. Schermerhorn, and Richard N. Osborn. 2014. Organizational Behavior. 13th ed. Hoboken, NJ: Prentice Hall.
- U.S. Office of Personnel Management (OPM). 2013. 2012 Federal Employee Viewpoint Survey: Employees Influencing Change. http://www.fedview.opm. gov/2012/Reports/ [accessed January 20, 2015].
- Van de Walle, Steven, Bram Steijn, and Sebastian Jilke. Forthcoming. Extrinsic Motivation, PSM and Labour Market Characteristics: A Multilevel Model of Public Sector Employment Preference in 26 Countries. International Review of Administrative Sciences.
- Van de Walle, Steven, Steven Van Roosbroek, and Geert Bouckaert. 2008. Trust in the Public Sector: Is There Any Evidence for a Long-Term Decline? International Review of Administrative Sciences 74(1): 47-64.
- Van Ryzin, Gregg G. 2011. Outcomes, Process, and Trust of Civil Servants. Journal of Public Administration Research and Theory 21(4): 745-60.
- Vandenabeele, Wouter. 2008. Government Calling: Public Service Motivation as an Element in Selecting Government as an Employer of Choice. Public Administration 86(4): 1089-1105.
- Vandenabeele, Wouter, and Steven Van de Walle. 2008. International Difference in Public Service Motivation. In Motivation in Public Management: The Call of Public Service, edited by James L. Perry and Annie Hondeghem, 223-44. Oxford, UK: Oxford University Press.
- Wamsley, Gary L., and Mayer N. Zald. 1973. The Political Economy of Public Organizations: A Critique and Approach to the Study of Public Administration. Lexington, MA: Lexington Books.
- Warwick, Donald P. 1975. A Theory of Public Bureaucracy: Politics, Personality, and Organization in the State Department. Cambridge, MA: Harvard University Press.
- Wright, Bradley E., Donald P. Moynihan, and Sanjay K. Pandey. 2012. Pulling the Levers: Transformational Leadership, Public Service Motivation, and Mission Valence. Public Administration Review 72(2): 206-15.
- Yang, Kaifeng, and Sanjay K. Pandey. 2009. How Do Perceived Political Environment and Administrative Reform Affect Employee Commitment? Journal of Public Administration Research and Theory 19(2): 335-60.
- Zeffane, Rachid. 1994. Patterns of Organizational Commitment and Perceived Management Style: A Comparison of Public and Private Sector Employees. Human Relations 47(8): 977-1010.