Journal of Public and Nonprofit Affairs Vol. 6, No. 1

Maybe They're Not So Different After All: Personality and Job Satisfaction Among Government and Non-Government Workers

Christopher A. Cooper - Western Carolina University

It is becoming increasingly clear that individual personality traits explain a variety of outcomes in public management. There is, however, no extant evidence about whether personality traits vary between public and non-government workers or whether personality affects job outcomes in distinct ways across sectors. This study, therefore, seeks to fill this gap in the literature. Using a series of bivariate and multivariate tests on a large sample of Americans employed in the public and non-government sectors, this study examines the relationship between employees' personality and their level of job satisfaction. In the study, I find that a five-factor model of personality can help explain variation in job satisfaction of public and non-government workers. I also find that workers employed by public sector organizations display similar profiles to those who work in non-government sectors. Thus, the effects of personality on job satisfaction is not contingent on employment sector. These findings offer important lessons for our understanding of public personnel management, public service motivation, and the intersection of psychology and public administration.

Keywords: Personality, Job Satisfaction, Behavioral Public Administration

Are public employees distinct from their counterparts in other sectors? This question lies at the heart of public management inquiry. It is, therefore, not surprising that scholars have focused a great deal on sector level similarities and differences among employees. Despite considerable progress concerning this line of research, however, scholars remain divided about the sources and extent of individual differences among employees across employment sector. Therefore, in this article, I take advantage of the emerging literature on personality in public administration as a precursor to public service motivation (e.g., Van Witteloostuijn, Esteve, & Boyne, 2016) to test theories of public and non-government sector differences.

Personality refers to "important and relatively stable aspects of behavior" that originate "within the individual" (Ewen 2010, p. 3). If public and non-government employees are distinct from one another, they should have different personality profiles that reflect attraction to one sector or another. Indeed, personality types that fit with the characteristics of public sector employment should result in more job satisfaction in the public sector, whereas personality traits that fit better with non-government sectors should result in higher levels of job satisfaction in these sectors.

Cooper, C. A. (2020). Maybe they're not so different after all: Personality and job satisfaction of government and non-government workers. *Journal of Public and Nonprofit Affairs*, 6(1), 63-78. https://doi.org/10.20899/jpna.6.1.63-78

To assess this, I explore two research questions in this study: 1) Do public and non-government employees have distinct personality profiles? 2) Does personality affect job satisfaction in public and non-government employees in distinct ways? While these questions are key to our theoretical and practical understanding of public management, there is no extant study that uses a single dataset to answer these questions. Yet, these are questions that are core to the emerging literature on personality in public administration and the robust literature on public and non-government differences.

To properly contextualize and subsequently answer these questions, I first assess the literature on public and non-government worker differences. Next, I introduce personality theory as the theoretical framework that I use to guide this study. I then briefly review the literature on job satisfaction, i.e., the primary job-related outcome that I use to explore personality-related differences across sectors. After this review of pertinent literature, I discuss the methodology that I use to address these questions. I then review findings and discuss what these findings mean in the context of extant literature in public administration. Finally, I reflect on limitations of this study and offer suggestions for potential directions for future research.

Sector Employee Differences

For more than 40 years scholars of public management have pondered whether public workers are best described as more similar or different than their counterparts in other sectors (Rainey, Backoff & Levine, 1976). Among the broad swath of individual level studies of sector differences, some scholars differentiate between studies relating to 1) individual employees' "generic values," 2) individual employees' relation to their job, 3) individual employees' relation to "the team," and 4) individual employees' relation to the organization (Baarspul & Wilderom, 2011). It is the first two of these four areas that are the most important to this study; as such, it is within these two areas that we find a divided literature.

Individual Employees' "Generic Values": Values and Motivations of Public Sector Employees

When compared with their counterparts in the private sector public employees have been shown to be more charitable (Houston, 2006), have higher levels of social capital (Brewer, 2003), and are more likely to engage in a host of prosocial behaviors. Public sector employees have also been shown to have different values—and these values become more distinct the longer they remain in their job (Becker & Connor, 2005). There is also evidence that public sector employees have higher markers of occupational stress, leading to poorer physical and mental health (Bogg & Cooper, 1995). These are all important findings that point to potential deep-seated differences between public employees and employees in other sectors. These differences could be a result of differences in core personality traits that structure many other of life choices.

Despite these findings of differences between the value orientations of public and nongovernment employees, there are a number of studies that provide alternative perspectives, particularly relating to risk acceptance. For example, while Nutt (2006) has found that public managers are more risk-acceptant than their private sector counterparts, Belante and Link (1981) have found the opposite relationship. Moreover, Barton and Waldron (1978) have concluded that there is no relationship between employment sector and risk aversion.

In sum, then, the literature is divided on whether public employees have fundamentally different values and motivations than their counterparts in other sectors. Further, the work that has been conducted, while rigorous and productive, does not provide a theoretically unified theory for the sources of these differences. As a result, more work is needed to address these issues.

Individual Employees' Relation to Their Job: How Public Employees Relate to Their Jobs

An investigation into the second category of public worker differences also reveals a productive but ultimately contradictory research landscape. For example, on the one hand, many studies have found that public employees tend to overly focus on intrinsic rewards. Private employees, on the other hand, are often more motivated by extrinsic rewards (Buelens & Van den Broeck, 2007; Houston, 2000). Still, Karl and Sutton (1998, p. 523) concluded that even though public employees are more likely to value "interesting work," they do not differ from their private sector counterparts on the importance of job security.

In the end, studies of sector differences in the workplace do not suggest a clear, unified set of findings. It is probably safe to assume, though, that public and non-government workers likely differ (in some way) in how they relate to their jobs. Yet, the empirical evidence is divided on exactly when and why these differences, when they are found to exist, are present. A better understanding of these differences should help us to recruit, motivate, and retain employees who are suitable for public service.

The Emerging Literature on Personality

The concept of personality has been a mainstay in the public administration literature since Robert Merton (1940) discussed the bureaucratic personality more than 75 years ago. Since then, scholars have taken issue with the concept of a distinct bureaucratic personality (e.g., Bozeman & Rainey, 1998; Williams, Sjoberg & Sjoberg, 1980). Although these studies have been key to highlighting the importance of personality in public administration, there remains a dearth of empirical or theoretical literature focusing on the construct of personality in public administration.

Although there was briefly a movement toward the Myers Briggs Type Indicator (MBTI) as a potential theoretical and empirical construct that could guide the literature (Coe, 1991; 1992; Hubbell, 1991), this research agenda faded quickly. Indeed, personality psychologists have long questioned the validity and reliability of the MBTI (e.g., McRae & Costa, 1989).

In recent years public administration scholars have, like psychologists a decade before them, increasingly focused on the five-factor model (FFM) of personality (e.g., Cooper, Carpenter, Reiner & McCord, 2014; Cooper, Knotts, McCord & Johnson, 2013; Filiz & Bagglio, 2017; Hamidullah, Van Ryzin & Li, 2016). The FFM holds that there are five personality traits that describe human differences. These traits are continuous rather than dichotomous and can be measured using a variety of accepted scales. These five traits, in order of their explanatory value, are extraversion (E), agreeableness (A), conscientiousness (C), neuroticism (N)¹, and openness to new experiences (O).

Agreeableness refers to "the extent to which one is trusting and helpful or suspicious and uncooperative" (Ewen 2010, p. 281). Conscientiousness is "the extent to which one is hardworking and reliable or lazy, unreliable, and careless" (Ewen, 2010, p. 281). Extraversion focuses on how "social and outgoing or more aloof, retiring, reserved, and introspective" one is (Ewen, 2010, p. 281). Neuroticism refers to "the extent to which one is nervous and insecure as opposed to calm and secure" (Ewen, 2010, p. 281). Finally, Openness to New Experiences is "the extent to which one is creative and nonconformist or conventional and down-to-earth" (Ewen 2010, p. 281). Table 1 includes brief descriptions of each factor along with how it is measured in this study.

Unlike the MBTI, which places individuals into categories, the FFM places individuals at a place on a scale between two opposite extremes. For example, whereas the MBTI would identify an individual as either introverted or extraverted, the FFM recognizes that there are

Table 1. Describing the Five Factor Model

Factor	Traits Associated with the Factor	BFI-10 Questions
Extraversion (E)	Suspicious and uncooperative	• Is reserved*
	versus hardworking and reliable.	 Is outgoing, sociable
Agreeableness (A)	Suspicious and uncooperative	 Is generally trusting
	versus trusting and helpful.	 Tends to find fault with others*
Conscientiousness (C)	Lazy and unreliable versus	 Does a thorough job
	hardworking and reliable.	 Tends to be lazy*
Neuroticism (N)	Calm and secure versus nervous	 Gets nervous easily
	and insecure.	• Is relaxed, handles stress well*
Openness (O)	Conventional and down-to-earth	 Has an active imagination
	versus nonconformist and creative.	• Has few artistic interests*

Notes: * indicates a reverse-coded item. Items in middle column are quoted directly from Ewen (2010, p. 281). The stem of the question described in column three is "To what extent do you agree or disagree with the following statements? I see myself as someone who..." BF1-10= Big Five-Inventory-10.

degrees of introversion and extraversion. This is important for both theoretical and practical reasons. Imagine, for instance, two people (persons "A" and "B") on a scale of introversion—extraversion that ranges from 1 to 10 with a line of demarcation between introversion and extraversion at 4.5. If person "A" is a 4 on this scale and person "B" is a 5 on the scale, the MBTI would indicate that they have different personality types. The FFM, however, would conclude that these two individuals are more similar than different.

While personality does not determine behavior, personality traits can shape how a person sees the world; thus, personality can "influence one's actions...particularly...in situations where fewer social rules guide behavior" (Davis, Stazyk, & Klingeman, 2017, p. 8). Accordingly, the five factors have been shown to provide powerful explanations for concepts as divergent as vote choice (Mondak, 2010) and body weight (Sutin & Terracciano, 2016).

Thus, while psychologists have criticized the MBTI for its lack of validity and reliability, the FFM has been shown to perform better on these standards (McRae & Costa, 1989). The structure of the FFM also holds across ages (see e.g., Grist, Socha, & McCord, 2012), cultures (see e.g., McRae, Costa, Del Pilar, Rolland & Parker, 1998),² and even species (see, e.g., Gosling & John, 1999).³ For these reasons, the FFM has great promise for the field of public administration.⁴

Job Satisfaction

Job satisfaction can be defined as "the pleasurable or positive emotional state resulting from the appraisal of one's job or job experience" (Locke, 1976, p. 1300, cited in Wright & Davis, 2003). It is considered an important concept for both practitioners and theoreticians of administrative behavior. After all, people who are satisfied with their jobs are less likely to seek a job at another organization (Tett & Meyer, 1993). These employees, thus, reduce the transaction cost of employment for organizations.

In general, an organization with satisfied employees is a productive one (Wright & Davis, 2003). Job satisfaction, therefore, is beneficial not only for the worker, but for the employer as well. In the context of the public sector specifically, job satisfaction is even more important, since public money is spent on any transition costs created by increased turnover.

Job satisfaction has been used to explain individual and organizational performance; and, much has been written about the factors that affect job satisfaction in a variety of employment sectors. Increasingly, this work has focused on the effects of individual factors. For example, those with more organizational tenure tend to be more satisfied with their jobs (Brush, Moch, & Poooyan, 1987). Public employees, in particular, who work in higher prestige jobs are often more satisfied with their employment (Van Ryzin, 2012). Counter to popular sentiment, however, there is scant evidence demonstrating that pay affects job satisfaction in any appreciable way (Judge, Piccolo, Podsakoff, Shaw, & Rich, 2010).

Potential differences in attitudes and behaviors between workers in different sectors also have clear implications for our understanding of job satisfaction. For example, some studies have found that private sector managers tend to be more satisfied with their jobs than their public sector counterparts (Bogg & Cooper, 1995; Soloman, 1986). Other studies, however, have found public sector employees often report the highest levels of satisfaction with their jobs (e.g., Steel & Warner, 1990). Desantis and Durst (1996) provided additional nuance to these findings by demonstrating that satisfaction varies as much by level of government as it does by employment sector. Importantly, they also note that patterns predictive of job satisfaction are similar across the two groups.

The FFM and Job Satisfaction

Given the ubiquity of the FFM in a variety of social science fields, it is perhaps not surprising that it has recently been applied to studies of organizational behavior and, more specifically, to job satisfaction. In a meta-analysis of these results in the private sector, Judge, Heller, and Mount (2002) found that individuals higher in extraversion and conscientiousness and lower in neuroticism tended to be more satisfied with their jobs. They also found a weak relationship between agreeableness and job satisfaction. Openness to new experiences, they found, had no effect in the vast majority of studies. All of these findings reflect theories and expectations about how personality should structure job satisfaction.

In one of the few studies to explore the connection between personality and job satisfaction in the public sector, Cooper et al. (2013) concluded that higher levels of agreeableness, and conscientiousness and lower levels of Neuroticism were related to public employee job satisfaction. As their only departure from the Judge, Heller, and Mount (2002) meta-analysis, Cooper et al. found that extraversion had no effect on job satisfaction in their sample of public managers.

Although the Cooper et al.'s (2013) study is instructive, it has two limitations suggestive that more research is necessary. First, the authors relied on a fairly limited sample, i.e., town and county managers who were located in only three southeastern states. While we can speculate that this study applies to local managers' job more generally, it is uncertain if their findings generalize to public employees who are not local government managers. Further, the differing results on extraversion leaves us unable to determine whether extraversion affects job satisfaction among public and non-government employees.

More importantly, because Cooper et al. (2013) only examined public employees and Judge et al. (2010) only examined private employees, there has been no single study that compares public and non-government employees using a single metric. This leaves us uncertain about the applicability, similarities, and differences of the FFM across sectors.

Theory and Hypotheses

The preceding review of the literature on sector differences, personality, and job satisfaction leads us to remaining questions and clear hypotheses. As reviewed, voluminous literature

suggests that public employees have distinct values and motivations than their counterparts in other sectors. However, an equally voluminous literature suggests that those differences are overstated.

One problem with these studies is that they do not have a uniform, testable theoretical rationale for these differences. The closest intellectual tradition is, of course, the ubiquitous literature on public service motivation (PSM), which suggests public sector employees have an intrinsic motivation for public service—a motivation that is a result of distinct values that produce different job-related outcomes (Perry & Wise, 1990).

In this study, I argue that if public and private worker differences are present they should also be present at an even more innate level, i.e., the level of personality. The PSM literature would imply that public and private workers do have distinct personality profiles. After all, if PSM is a naturally occurring set of individual attributes, it makes sense that it would be related to personality. In fact, Van Witteloostuijn et al. (2016) and Hamidullah et al. (2016) found that PSM can be accurately summarized by personality. If PSM is higher among public employees, and if personality can explain variation in PSM, it follows then that personality traits should differ across employment sectors. Thus, I propose the following hypothesis:

Hypothesis₁: Public and non-government employees display distinct personality profiles.

Regardless of whether I find evidence for this hypothesis, or whether the null hypothesis of no difference can be embraced, these findings should provide a more theoretically grounded and empirically robust understanding of the nature of public employees, as suggested by Baarspul and Wilderom (2011).

Second, if public employees are motivated by distinct factors, or hold distinct values, it stands to reason that these factors should affect outcomes differently in public and non-government contexts. For example, if public sector jobs are truly more bureaucratically governed, and mired in greater red tape, then we might expect respondents who score higher on Openness to New Experiences to report higher levels of job satisfaction in non-government sectors and lower levels in the public sector. Thus, the second hypothesis is:

Hypothesis₂: The influence of personality on job satisfaction is different for public employees than for employees of other sectors.

Data

One potential reason that these hypotheses may not have been tested previously is that it is difficult to find a single dataset that includes data on public and non-government workers, a reliable personality inventory, and a vetted and accepted question about job satisfaction. Indeed, I could only identify one dataset that meets all of these criteria: the 2006 General Social Survey (GSS). The GSS is a well-established biennial general population survey that asks more than 1,000 Americans ages 18 and older a host of questions ranging from vote choice to whether the respondent enjoys reggae music.

Studies using data from the GSS have frequently been used in public administration (e.g. Cooper & Reinagel, 2015; Houston, 2000, 2006; Van Ryzin, 2012); and, most of these studies accept that the GSS's sampling strategy and empirical approach conform to the highest social scientific standards. While we would ideally rely on the most recent iteration of the GSS, 2006 is the only year that includes personality and job sector measures. (For more on the GSS and its sampling strategy, see the GSS Cumulative Codebook [1977–2014].)

Table 2. Description of Variables

Variable	Base Variables from GSS (before recoding)	Min Max.	Mean
Extraversion (E)	BIG5A1, BIG5A2	2-10	5.37
Agreeableness (A)	BIGFIVEB1, BIG5A2	2-10	4.46
Conscientiousness (C)	BIGFIVEC1, BIG5CS	2-8	3.46
Neuroticism (N)	BIGFIVED1, BIG5D2	2-10	7.10
Openness (O)	BIGFIVE1, BIGFIVEE2	2-10	4.75
Occupational Prestige	PREST80	o-86	41.82
Education (in years)	EDUC	0-20	13.29
Female	SEX	0-1	0.56
Hours Worked	HRS1	0-84	41.65
Government Worker	WRKGOV	0-1	0.19
Job Satisfaction	JOBSAT	1-7	2.53

Note: All data come from the 2006 GSS. All variables were recoded to eliminate "don't know" and "no response." Responses were also recoded to standardize direction. For example, in the base coding for JOBSAT, higher scores were associated with lower job satisfaction; JOBSAT and all other variables were recoded to ensure that higher responses indicated more of the quantity in question. Similarly, all of the personality factors included one reverse coded item that was recoded before creating the index.

Table 2 lists the measurement characteristics of all of the relevant variables in the study. Most of the variables are self-explanatory and are commonly used in studies of job satisfaction. Three of the variables, however, deserve further discussion. First, there are scores of potential measures of the FFM. The GSS however, like many surveys, relies on the Big Five-Inventory-10 (BFI-10). This scale, as the name suggests, includes 10 questions (representing two questions per factor). While this scale does not provide the nuance and reliability of more indepth scales, it is frequently used in the literature. This scale is often ideal when respondent fatigue is a concern (Raamstedt & John, 2007).⁵

Although job satisfaction may seem like a fairly straightforward concept, organizational psychologists argue that job satisfaction is actually made up of three individual constructs: "overall evaluative judgements about jobs, affective experiences at work, and beliefs about jobs" (Weiss, 2002, p. 202). As a result, the ideal measure of job satisfaction would include a relatively in-depth scale that maximizes reliability and validity. In this study, however, we are limited by the questions on the GSS.

To measure job satisfaction in 2006, the GSS used a single question: "On the whole, how satisfied are you with the work you do—would you say you are very satisfied, moderately satisfied, a little dissatisfied, or very dissatisfied." While the use of a single question is certainly a limitation, it is not unprecedented. Indeed, this same question has been used by other studies in the literature (e.g. Van Ryzin, 2012). There is also good reason to believe that this single item measure can provide a satisfactory measure of job satisfaction (Wanous, Reichers, & Hudy, 1997).

A number of GSS questions have been used to assess employment sector throughout the years. In 2006, the sole question that addressed this concept was "WRKGOV," which codes respondents as working in the public sector (coded "1") or not working in the public sector (coded "0"). It is worth noting that this code only accounts for those who indicated that they were working full-time. Consistent with Van Ryzin (2012), I concluded that the size and scope of the GSS does not allow us to differentiate between jobs within the government sector. Overall, though, the 2006 GSS represents the best extant dataset to answer the research questions in this study.

Table 3. Government and Non-Government Employees Personality Profiles

Personality Factor	Non-Government Worker	Government Worker
Extraversion (E)	5.33 (1.68)	5.39 (1.75)
Conscientiousness (C)	4.47 (1.21)	4.41 (1.18)
Agreeableness (A)	3.45 (1.47)	3.45 (1.32)
Neuroticism (N)	7.12 (1.82)	7.03 (1.74)
Openness (O)	4.76 (1.66)	4.72 (1.61)

Note: Entries are mean scores. Numbers in parentheses are standard deviations. None of these differences approach statistical significance using a two-sample *t*-test with equal variances. All data are from the 2006 GSS. Sample sizes range from 1,141 to 1,147 for non-government workers and from 284 to 286 for government workers.

Results

To answer the first question in this study (i.e., Do public and non-government employees have distinct personality profiles?), I first conducted bivariate tests. Table 3, which displays these findings, shows the means for public and non-government employees on each of the five factors of personality. As shown, the means are almost identical for each factor. In other words, there were no statistically significant differences among any of the five factors..

Table 4 shows that these findings also hold in multivariate regression models controlling for sex and age (i.e., two demographic factors that are likely to affect personality). These findings showing that personality profiles are statistically indistinguishable from one another in public and non-government employees, could indicate that these employees, at least in terms of personality, are not so different after all.

Despite the similarities in the distributions of personality, remains unclear whether personality affects job satisfaction differently in each sector. Thus, to answer this question, I rely on a series of ordinal logistic regression models (presented in Table 5). The dependent variable in these models is the response to the job satisfaction question. The model in the left-hand column of Table 5 is a reduced model that only includes the five factors of personality, a measure of occupational prestige, deducation, gender, and the number of hours worked per week. This model provides a sense of the overall relationship between personality and job satisfaction, without consideration of the sector of employment.

The model on the right side of Table 5 presents all variables from the previous model but also includes a base term indicating whether respondents are public employees along with five interaction terms—each representing a different personality factor interacted with employment sector. This model answers the second question, i.e., Does the effect of personality on job satisfaction differ between public and non-government sector employees?

When considering both models in Table 5, it appears the five factors of personality provide a consistent explanation for understanding what leads to job satisfaction. In every model, those who are higher in extraversion, agreeableness, and conscientiousness, while lower in neuroticism and openness to new experiences, tend to report higher levels of job satisfaction. This is consistent with broader literature in the private sector (Judge et al., 2002) as well as in the public sector (Cooper et al., 2013). These findings also reinforce the idea that personality is key to understanding variation in job satisfaction among public and non-government employees. Thus, scholars of public management and organizational behavior would be well-advised to focus increased attention to the role of personality in public organizations.

The final notable finding, found in the model on the right side in Table 5, relates to the inclusion of the five interaction terms, i.e., employment sector interacted with each of the five personality factors. As shown, none of these variables are statistically significant nor is the base term (i.e., employment sector).

Table 4. Government and Non-Government Employees Personality Profiles

Table 4. Government and	tion covernment	Limployees.	1 croomanty 1	1011100	
	(E)	(A)	(C)	(N)	(O)
Government Worker	0.14	0.01	0.03	0.07	-0.03
	(0.13)	(0.10)	(0.09)	(0.13)	(0.12)
Age	0.01	-0.01***	-0.01**	0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Female	-0.39***	-0.13	-0.05	-0.63***	0.08
	(0.10)	(0.09)	(0.07)	(0.11)	(0.11)
Constant	5.27***	4.93***	3.81***	7.25***	4.87***
	(0.16)	(0.13)	(0.13)	(0.17)	(0.18)
\mathbb{R}^2	0.02	0.01	0.01	0.03	0.00
N	1,414	1,422	1,423	1,424	1,418

Note: *p < 0.05, **p < 0.01, ***p < 0.001. All two-tailed tests. Data are from the 2006 GSS. Entries are Ordinary Least Squares regression coefficients. Numbers in parentheses are robust standard errors.

Table 5. Personality and Job Satisfaction of Government and Non-Government Workers

	Model 1	Model 2
Extraversion (E)	0.12**	0.11*
	(0.04)	(0.05)
Agreeableness (A)	0.15*	0.17**
	(0.06)	(0.06)
Conscientiousness (C)	0.12*	0.13
	(0.07)	(0.08)
Neuroticism (N)	-0.08#	-0.08
	(0.05)	(0.05)
Openness (O)	-0.13*	-0.15*
	(0.05)	(0.06)
Job Prestige	-0.01	-0.01#
_	(0.01)	(0.01)
Education (in years)	0.02	0.02
•	(0.03)	(0.03)
Female	0.04	0.04
	(0.15)	(0.15)
Hours Worked	0.00	0.00
	(0.01)	(0.01)
Age	-0.01	-0.01*
	(0.01)	(0.01)
Government Worker		0.86
		(1.55)
Government Worker * (E)		0.04
		(1.11)
Government Worker * (A)		-0.14
		(0.11)
Government Worker * (C)		-0.12
		(0.19)
Government Worker * (N)		-0.04
		(0.13)
Government Worker * (O)		0.09
		(0.16)
$N_{\underline{}}$	907	907
Chi-Square	46.00***	48.13
Pseudo R ²	0.03	0.03

Note: p<0.1, p<0.05, p<0.01. All two-tailed tests. Data are from the 2006 GSS. Entries are Ordinal Logistic regression coefficients. Numbers in parentheses are robust standard errors.

Discussion

The analysis presented here suggests that public servants, while clearly different on many dimensions previously explored in the literature, are indistinguishable from workers who do not work for the government on perhaps the most important marker of individual difference, i.e., personality. Employing the widely accepted and empirically verified five-factor model of personality, this analysis reveals no appreciable difference between public and non-government workers on Extraversion, Agreeableness, Conscientiousness, Neuroticism, or Openness to New Experiences. Thus, public workers, on average, do not have different personalities than their non-government counterparts.

This is, to the best of the author's knowledge, the first time this question has been explored in the literature; and it has important implications for our understanding of the role of personality in public administration and, more generally, for human resources management more generally. Indeed, this likely means that work on sector differences should begin from the assumption that there is nothing innately unique about public workers in terms of personality.

Just as importantly, this analysis reveals that the effects of personality on job satisfaction are identical for public and non-government employees. This provides additional fodder for the debate over employment sector differences and also suggests that personality provides a consistent framework with which to understand job satisfaction, regardless of an individual's sector of employment.

Given that researchers have often struggled to find "a coherent theory or framework of what determines job satisfaction" (Rainey, 2009, p. 300), it is noteworthy that the FFM significantly predicts job satisfaction across sectors. As the findings in this study show, workers who are extraverted, agreeable, conscientious, and not as open to new experiences are more satisfied with their jobs than their counterparts, regardless of employment sector. Employers seeking to hire and retain employees would be well-advised to consider the five FFM personality profiles. Scholars, however, should consider personality profiles beyond the generic five factor model in order to establish the robustness of these findings (Boone, DeBrabander, & van Witteloostuijn, 1999).

Unlike the MBTI, FFM instruments and results are open-source; and, thus feasible for even the most resource-poor public organizations. For scholars, the finding that the FFM can provide a reliable and consistent framework to understand employee satisfaction suggests that public administration scholars should increase their attention to personality as an important explanatory variable in public management. Further, researchers and practitioners who wish to match incentives and motivations to individual employees would be well-served by exploring how different personality traits may require different motivation strategies.

The fact that the effects of personality are constant for public and non-government employees also suggests that there are limits to the extent to which public employees are different than their counterparts in non-government sectors. There are also likely limits to the degree to which public sector employees have unique motivations. While one explanation for these findings may be that public sector employees do not have unique motivations, another may explanation may be that we need to question the degree to which NPM has affected recruitment, hiring, and retention practices in the United States. After all, if government institutions are meant to be run more like a business, then perhaps potential employees are receiving this signal and employees who previously would not be drawn to the public sector are now drawn to it.

Future studies should continue to explore the nature of these differences to formulate a more consistent theory of when, and in what way(s), we might expect public servants to be distinct

from employees in other sectors. This line of research could augment the work on PSM that has sought to ascertain the causal mechanism for motivation in public sector employees.

Limitations

This particular study is limited by its cross-sectional design. Additionally, the time period that the data were collected (i.e., 2006) is also a limitation. Concepts like job satisfaction can, and do, vary over time (Van Ryzin, 2012), and there are possibly a number of changes that could affect these findings. Unfortunately, large omnibus datasets either have not consistently collected personality data (like the GSS) nor do not usually collect data on job and occupation-related variables (e.g., the American National Election Studies). The 2006 GSS is the most comprehensive, recent, and defensible existing dataset. Hopefully, future researchers will include these same variables in large-scale studies, so the findings here can be tested with more recent data.

This study also contains important measurement limitations. For one, job satisfaction is measured with a single question. While this question has been used in the past and has been defended by a number of studies, it is possible that a scale of job satisfaction questions might produce different outcomes. A similar critique can be levied against the measure of the FFM employed here. While the BFI-10 has broad support and is used frequently, even its most ardent supporters would acknowledge that it is a suboptimal substitute for longer scales that may produce more reliable and nuanced responses (Crede, Harms, Niehorster & Gaye-Valentine, 2012; Gosling, Rentfrow, & Swan, 2003; Rammstedt & John, 2007). Some scales, for instance, even produce responses at multiple levels (e.g., Lord, 2007). These levels can be used to uncover nuances in job satisfaction that were not explored here and have not been explored in the literature.

The measure of sector employment employed in this version of the GSS and used in this study is also limited in important ways. First, and most obviously, the measure does a poor job differentiating between types of sectors outside of the public sector. Using this measure, non-profit and for-profit employees are included in the same group (non-government employees). This measure also does virtually nothing to differentiate employees working in hybrid organizations (e.g., semi-publics). Even within these categories, all full-time workers are treated the same. Whether a public sector employee is a janitor or a manager, they are coded as a public employee. Likewise, regardless of whether someone is a bellhop or the CEO of a large corporation, that person is coded as a nongovernment worker.

Similarly, because the GSS includes no information about the type of organization a person is employed in (outside of the sector), this study cannot consider well-established theories of organizational homophily that would suggest that organizations tend to focus on hiring certain types of people who fit with their organizational culture (Boone, Olffen, van Witteloostujn, & Debrabander, 2004). While these limitations apply to numerous studies in the literature, they should not to be ignored. Indeed, it is possible that many of the findings in this study would change if we had a more nuanced version of employment sector and workplace context.

Conclusion

The norm in the social sciences is to publish statistically significant results. The findings in this study, however, run counter to that norm. Thus, I am asking the reader to go against the norm and to find these findings of difference not only interesting but important (at least as it relates to employment sector). I believe that this will ultimately benefit the field and our knowledge of public management.

As scores of studies have indicated, the "file drawer problem" (Wagner, 2019, p. 1) biases our view of the world and suggests differences that may not always be apparent in the real world (e.g., Franco, Malhotra, & Simonovits, 2014; Gerber & Malhotra, 2008; Scargle, 2000). Van Witteloostuijn (2016, p. 489) urges us to fight against this "pro-positives bias" in order to achieve a more complete picture of human and organizational behavior (see also Meyer, Witteloostuijn & Beugelsdijk, 2017; Walker, Brewer, Lee, Petrovsky, & van Witteloostuijn, 2018). As a result, it is important to publish various types of research that can move our knowledge of public personnel administration forward, even if some of the findings accept the null.

In this study, the non-findings provide an important challenge to the (often untested) assumption that public employees are fundamentally different than employees in other fields. All told, this paper does not purport to offer the final word but rather represents an important step on a longer path toward understanding 1) the applicability of personality to our understanding of public sector administrative behavior; 2) when, how, and why public and non-government sector employees differ; and 3) how to maximize job satisfaction in the public sector.

Notes

- 1. This factor is often reversed and referred to as emotional stability.
- 2. While this statement is generally true, there is some evidence that the FFM does not apply to every culture. For example, Gurven, Von Reudon, Massenkoff, Kaplan and Vie (2013, p. 354) found that the "Tsimane forager-horticulturalist men and women of Bolivia" may not confirm to the FFM, thus raising questions about the applicability of the FFM to small, isolated, rural societies. See McCrae (2013, p. 563), however, for a different interpretation of these findings.
- 3. Aspects of the five factor model have been identified in chimpanzees, gorillas, rhesus monkeys, vervet monkeys, hyenas, dogs, cats, donkeys, pigs, rats, guppies, and octopi (Gosling & John, 1999).
- 4. While the FFM remains the preeminent theory of personality, variations such as the HEXACO model (honesty-humility, emotionality, extraversion, agreeableness, conscientiousness, openness to experience) suggest that, in addition to the big five personality traits, there is an additional factor (honesty-humility) that can help explain human behavior (Ashton & Lee, 2005). While the HEXACO model helps explain outcomes in public administration (e.g., Van Witteloostuijn et al., 2016), it is substantively similar to the FFM. As a result, the big five remains the predominant theoretical and empirical construct in personality psychology.
- 5. The other popular short instrument is the 10-item personality inventory (Gosling et al., 2003). Although the two are similar, the BFI-10 has preferable measurement characteristics (Rammstedt & John, 2007).
- 6. An alternative measurement strategy would be to create personality types, consisting of the various combinations of personality (see Semeijn, Boone, van der Velden, & van Witteloostuihn, 2005).
- 7. Occupational prestige is a frequently used measure in the GSS that ranks hundreds of occupations from the lowest prestige level to the highest prestige level using averages of respondent assessments of "prestige." See Hodge, Siegel, and Rossi (1964) for the original rating protocol.

Disclosure Statement

The author declares that there are no conflicts of interest that relate to the research, authorship, or publication of this article.

References

- Ashton, M. C., & Lee, K. (2005). Honesty-humility, the Big Five, and the Five-Factor Model. *Journal of Personality*, 73, 1321-1354. https://doi.org/10.1111/j.1467-6494.2005.00351.x
- Baarspul, H. C., & Wilderom, C. P. (2011). Do employees behave differently in public-vs. private-sector organizations? *International Public Management Journal*, *18*, 3-30. https://doi.org/10.1080/14719037.2011.589614
- Barton, M. F., & Waldron, D. G. (1978). Differences in risk preferences between the public and private sectors. *Human Resource Management*, 17, 2-4. https://doi.org/10.1002/hrm.3930170402
- Becker, B. W., & Connor, P.E. (2005). Self-selection or socialization of public-and private-sector managers? A cross-cultural values analysis. *Journal of Business Research*, *58*, 111-113. https://doi.org/10.1016/S0148-2963(02)00481-2
- Belante, D. & Link, A. N. (1981). Are public sector workers more risk averse than private sector workers? *Industrial and Labor Relations Review*, *34*, 408-412. https://doi.org/10.2307/2522787
- Bogg, J., & Cooper, C. (1995). Job satisfaction, mental health, and occupational stress among senior civil servants. *Human Relations*, 48, 327-341. https://doi.org/10.1177/001872679504800306
- Boone, C., DeBrabander, B., & van Witteloostuihn, A. (1999). The impact of behavior in five prisoner's dilemma games. *Journal of Economic Psychology*, *20*, 343-377. https://doi.org/10.1016/S0167-4870(99)00012-4
- Boone, C., Olffen, W. V., van Witteloostuijn, A., & DeBrabander, B. D. (2004). The genesis of top management team diversity: Selective turnover among top management teams in Dutch newspaper publishing, 1970-94. *Academy of Management Journal*, *47*, 633-656. https://doi.org/10.5465/20159609
- Brewer, G. A. (2003). Building social capital: Civic attitudes and behavior of public servants. *Journal of Public Administration Research and Theory*, 13(1), 5-26.
- Buelens, M., & Van den Broek, H. (2007). An analysis of differences in work motivation between public and private sector organizations. *Public Administration Review*, *7*, 65-74. https://doi.org/10.1111/j.1540-6210.2006.00697.x
- Bozeman, B. & Raney, H. G. (1998). Organizational rules and the bureaucratic personality. *American Journal of Political Science*, 42, 163-189. https://doi.org/10.2307/2991751
- Brush, D. H., Moch, M. K. & Poooyan, A. (1987). Individual demographic differences and job satisfaction. *Journal of Organizational Behavior*, *8*, 139-155. https://doi.org/10.1002/job.4030080205
- Coe, C. K. (1991). The MBTI: A tool for understanding and improving public management. *State and Local Government Review*, *23*(1), 37-46.
- Coe, C. K. (1992). The MBTI: Potential uses and misuses in personnel administration. *Public Personnel Management*, *21*, 511-522. https://doi.org/10.1177/009102609202100407
- Cooper, C. A., Knotts, H. G. McCord, D. M. & Johnson, A. (2013). Taking personality seriously: The Five Factor Model and public management. *American Review of Public Administration*, 42, 397-415. https://doi.org/10.1177/0275074012446509
- Cooper, C. A., Carpenter, D., Reiner, A. & McCord, D. M. (2014). Personality and job satisfaction: Evidence from a sample of street-level bureaucrats. *International Journal of Public Administration*, *37*, 155-162. https://doi.org/10.1080/01900692.2013.798810
- Cooper, C. A., & Reinagel, T. (2015). The limits of public service motivation. *Administration and Society*, 49, 1297-1317. https://doi.org/10.1177/0095399715581039
- Crede, M., Harms, P., Niehorster, S. & Gaye-Valentine, G. (2012). An evaluation of the consequences of using short measures of the Big Five personality traits. *Journal of Personality and Social Psychology*, 102, 874-888. https://doi.org/10.1037/a0027403

- Davis, R. S., Stazyk, E. C. & Klingeman, C. M. (2017). Accounting for personal disposition and organizational context: Connecting role ambiguity, public service motivation, and whistle-blowing in federal agencies. *The International Journal of Human Resource Management*, 1-27. https://doi.org/10.1080/09585192.2017.1402360
- DeSantis, V. S., & Durst, S. L. (1996). Comparing job satisfaction among public and private sector employees. *American Review of Public Administration*, *26*, 327-343. https://doi.org/10.1177/027507409602600305
- Ewen, R. B. (2010). *An introduction to theories of personality* (7th ed.). New York, NY: Psychology Press.
- Filiz, E., & Battaglio, Jr. R. P. (2017). Personality and decision-making in public administration: The Five-Factor Model in cultural perspective. *International Review of Administrative Sciences*, 83, 3-22 https://doi.org/10.1177/0020852315585062
- Franco, A., Malhotra, N., & Simonovits, G. (2014). Publication bias in the social sciences: Unlocking the file drawer. *Science*, *345*, 1502-1505. https://doi.org/10.1126/science.1255484
- General Social Surveys (1972-2014). *Cumulative codebook*. Conducted for the National Data Program for the Social Sciences at NORC. Chicago, IL: University of Chicago. http://gss.norc.org/Documents/codebook/GSS_Codebook.pdf
- Gerber, A. S., & Malhotra, N. (2008). Publication incentives and empirical research:
 Do reporting standards distort the published results? *Sociological Methods and Research*, *37*, 3-30. https://doi.org/10.1177/0049124108318973
- Gosling, S. D., & John, O. P. (1999). Personality dimensions in nonhuman animals: A cross-species review. *Current Directions in Psychological Science*, *8*, 69-75. https://doi.org/10.1111/1467-8721.00017
- Gosling, S. D., Rentfrow, P. J. & Swann, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, *37*, 504-528. https://doi.org/10.1016/S0092-6566(03)00046-1
- Grist, C. L., Socha, A. & McCord, D. M. (2012). The M5-P5-35: A Five-Factor personality questionnaire for preschool children. *Journal of Personality Assessment*, *94*, 287-295. https://doi.org/10.1080/00223891.2011.653063
- Gurven, M. C., Von Reudon, M., Massenkoff, H. Kaplan, & Vie, M. L. (2013). How universal is the Big Five? Testing the Five-Factor model of personality variation among forager-farmers in the Bolivian amazon. *Journal of Personality and Social Psychology*, 104, 354-370. https://doi.org/10.1037/a0030841
- Hamidullah, M. F., Van Ryzin, G. G., & Li, H. (2016). The agreeable bureaucrat: Personality and PSM. *International Journal of Public Sector Management*, 29, 582-595. https://doi.org/10.1108/IJPSM-12-2015-0218
- Hodge, R. M., Siegel, P. M., & Rossi, P. H. (1964). Occupational prestige in the United States, 1925-1963. *American Journal of Sociology*, *70*, 286-302. http://dx.doi.org/10.1086/223840
- Houston, D. J. (2000). Public service motivation: A multivariate test. *Journal of Public Administration Research and Theory*, *4*, 713-727. https://doi.org/10.1093/oxfordjournals.jpart.a024288
- Houston, D. J. (2006). Walking the walk of public service motivation: Public employees and charitable gifts of time, blood, and money. *Journal of Public Administration Research and Theory*, 16, 67-86. https://doi.org/10.1093/jopart/mui028
- Hubbell, L. (1991). Integrating the Myers-Briggs Type Indicator into public administration curriculums. *Public Administration Quarterly*, *15*(2), 149-153.
- Judge, T. A., Heller, D., & Mount, M. K. (2002). Five-Factor Model of Personality and job satisfaction: A meta-analysis. *Journal of Applied Psychology*, *87*(3), 530-541
- Judge, T. A., Piccolo, R. G. Podsakoff, N. P., Shaw, J. C., & Rich, B. L. (2010). The relationship between pay and job satisfaction: A meta-analysis of the literature. *Journal of Vocational Behavior*, 77, 157-167. https://doi.org/10.1016/j.jvb.2010.04.002

- Karl, K. A., & Sutton, C. L. (1998). Job values in today's workforce: A comparison of public and private sector employees. *Public Personnel Management*, *27*, 515-527. https://doi.org/10.1177/009102609802700406
- Locke, E. A. (1976). The nature and causes of job satisfaction. In M.D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297-1349). Chicago, IL: Rand McNally.
- Lord, W. (2007). *NEO PI-R-A guide to interpretation and feedback in a work context*. Oxford, UK: Hogrefe Ltd.
- McCrae, R. R. (2013). Exploring trait assessment of samples, persons, and cultures. *Journal of Personality Assessment*, *95*, 556-570. https://doi.org/10.1080/00223891.2013.821075
- McRae, R. R. & Costa, P. T. (1989). Reinterpreting the Myers-Briggs Type Indicator from the perspective of the Five-Factor Model of Personality. *Journal of Personality*, *57*, 17-40. http://dx.doi.org/10.1111/j.1467-6494.1989.tb00759.x
- McRae, R. R., Costa, Jr. P. T., Del Pilar, G. J., Rolland, P., & Parker, W. D. (1998). Cross-cultural assessment of the Five-Factor Model: The revised NEO Personality Inventory. *Journal of Cross-Cultural Psychology*, 29, 171-188. https://doi.org/10.1177/0022022198291009
- Merton, R. K. (1940). Bureaucratic structure and personality. *Social Forces*, *18*, 560-568. https://doi.org/10.2307/2570634
- Meyer, K. E., van Witteloostuijn, A. & Beugelsdijk, S. (2017). What's in a p? Reassessing best practices for conducting and reporting hypothesis-testing research. *Journal of International Business Studies*, 48, 535-551. https://doi.org/10.1057/s41267-017-0078-8
- Mondak, J. J. (2010). *Personality and the foundations of political behavior*. New York, NY: Cambridge University Press.
- Nutt, P. C. (2006). Comparing public and private sector decision-making practices. *Journal of Public Administration Research and Theory*, *16*, 289-318. https://doi.org/10.1093/jopart/mui041
- Perry, J. L., & Wise, L. R. (1990). The motivational bases of public service. *Public Administration Review*, *50*, 367-373. https://doi.org/367-373. 10.2307/976618
- Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five inventory in English and German. *Journal of Research in Personality*, 41, 203-212. https://doi.org/10.1016/j.jrp.2006.02.001
- Rainey, H. G. (2009). *Understanding and managing public organizations* (4th ed.). San Francisco, CA: John Wiley and Sons.
- Rainey, H. G., Backoff, R. W. & Levine, C. L. (1976). Comparing public and private organizations. *Public Administration Review*, *36*, 233-246. https://doi.org/10.2307/975145
- Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality*, 41, 203-212. https://doi.org/10.1016/j.jrp.2006.02.001
- Scargle, J. D. (2000). Publication bias: The 'file drawer' problem in scientific inference. *Journal of Scientific Exploration*, *14*(1), 94-106.
- Semeijn, J., Boone, C., van der Velden, R., & van Witteloostuihn, A. (2005). Graduates' personality characteristics and labor market entry: An empirical study among Dutch economics graduates. *Economics of Education Review*, *24*, 67-83. https://doi.org/10.1016/j.econedurev.2004.03.006
- Soloman, E. E. (1986). Private and public sector managers: An empirical investigation of job characteristics and organizational climate. *Journal of Applied Psychology*, *71*, 248-259. http://dx.doi.org/10.1037/0021-9010.71.2.247
- Stackman, R. W., Connor, P. E., & Becker, B. W. (2005). Sectoral ethos: An investigation of the personal values systems of female and male managers in the public and private sectors. *Journal of Public Administration Research and Theory*, *16*, 577-597. https://doi.org/10.1093/jopart/mui059

- Steel, B. S. & Warner, R. L. (1990). Job satisfaction among early labor force participants: Unexpected outcomes in public and private sector comparisons. *Review of Public Personnel Administration*, 10, 4-22. https://doi.org/10.1177/0734371X9001000302
- Sutin, S. R., & Terracciano, A. (2016). Five-Factor Model personality traits and the objective and subjective experience of body weight. *Journal of Personality*, 84, 102-112. https://doi.org/10.1111/jopy.12143
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, 46, 259-93. https://doi.org/10.1111/j.1744-6570.1993.tboo874.x
- Van Ryzin, G. G. (2012). The curious Case of the post-9-11 boost in government job satisfaction. *American Review of Public Administration*, 20, 1-16. https://doi.org/10.1177/0275074012461560
- Van Witteloostuijn, M. E. (2016). What happened to Popperian falsification? Publishing neutral and negative findings. *Cross Cultural and Strategic Management*, 23, 481-508. https://doi.org/10.1108/CCSM-03-2016-0084
- Van Witteloostuijn, A., Esteve, M., & Boyne, G. (2016). Public sector motivation ad fonts: Personality traits as antecedents of the motivation to serve the public interest. *Journal of Public Administration Research and Theory*, 1, 30-35. https://doi.org/10.1093/jopart/muw027
- Wagner, J.A. (2019). Does Organizational Reseach Have a File Drawer Problem? *Academy of Management Proceedings*, 1-19.
- Walker, R. M., Brewer, G. A., Lee, M. J., Petrovsky, N., & van Witteloostuin, A. (2018). Best practice recommendations for replicating experiments in public administration. *Journal of Public Administration Research and Theory*, 29, 1-19. https://doi.org/10.1093/jopart/muy047
- Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology*, 82, 247-252. http://dx.doi.org/10.1037/0021-9010.82.2.247
- Weiss, H. M. (2002). Deconstructing job satisfaction: Separating evaluations, beliefs, and affective experiences. *Human Resource Management Review*, *12*, 173-194. https://doi.org/10.1016/S1053-4822(02)00045-1
- Williams, N. M., Sjoberg, G. & Sjoberg, A. F. (1980). The bureaucratic personality: An alternate view. *The Journal of Applied Behavioral Science*, 16, 389-405. http://dx.doi.org/10.1177/002188638001600308
- Wright, B. E., & Davis, B. S. (2003). Job satisfaction in the private sector: The role of the work environment. *American Review of Public Administration*, *33*, 70-90. https://doi.org/10.1177/0275074002250254

Author Biography

Christopher A. Cooper is Robert Lee Madison Distinguished Professor and head of the Department of Political Science and Public Affairs at Western Carolina University. His work on state and local politics and behavioral public administration has appeared in a variety of journals, including *Public Administration Review*, *Administration & Society*, *American Review of Public Administration*, *State Politics and Policy Quarterly*, and *State and Local Government Review*.