A Closer Look at the Difference Between Public and Nonprofit Employees' Volunteering

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**A CLOSER LOOK AT THE DIFFERENCE BETWEEN PUBLIC AND
NONPROFIT EMPLOYEES' VOLUNTEERING**

ABSTRACT

Research generally reports that both public and nonprofit employees have higher levels of altruistic motivation, and attributes the difference in volunteering between these workers and for-profit employees to altruism. However, altruism may be limited in explaining the discrepancy in volunteering between public and nonprofit employees, as both groups are considered more altruistic than for-profit workers. Using the National Administrative Studies Project-III data, this study examines various individual characteristics and work contexts that may contribute to the differences in the rate of participation and intensity of volunteering by public and nonprofit employees. The results of the mediation test suggest that the value of job-related self-determination to an individual, membership in political organizations, and interaction with external actors between public and nonprofit employees result in gaps in volunteering. These findings go beyond the oversimplified altruism-nonprofit link and add evidence to the literature of “sector matters.”

INTRODUCTION

The literature suggests that individuals who work in the public and the nonprofit sectors have more altruistic motivations, such as serving the public and helping the needy, than for-profit workers (De Cooman et al. 2011; Lyons, Duxbury, and Higgins 2006; Steijn 2008; Houston 2006; Wright and Christensen 2010; Perry and Hondeghem 2008). Research also finds that such altruistic motivations may transcend an individual's job and lead to participation in prosocial behaviors such as volunteering and donation of blood and money (Brewer 2003; Houston and Cartwright 2007; Perry et al. 2008; Lee 2012). That is, because of a high degree of prosocial inclinations among public and nonprofit workers, they are more likely to participate in helping activities than for-profit employees. Indeed, scholars report that government and nonprofit workers are more willing to donate their time to charitable organizations compared to their for-profit counterparts, controlling for socio-demographic characteristics (Lee 2012; Houston 2006; Wilson and Musick 1997).

If prosocial motivation influences volunteering, and public and nonprofit-sector workers are equally altruistic, we should expect little public-nonprofit difference with respect to their propensity for volunteering. However, recent studies generally indicate that the propensity to volunteer is higher among nonprofit than among government workers (Lee 2012; Light 2002; Rotolo and Wilson 2006), implying a limitation of altruistic motivation in comprehending different volunteering propensities of public and nonprofit employees. Unfortunately, reasons leading to the public-nonprofit difference in volunteering have been left unexplored in contemporary public and nonprofit

management literature. To fill this gap, the present study examines the following two questions: Is the volunteering propensity, including participation itself and the amount of time, really higher among nonprofit-sector workers than among public-sector workers, as earlier evidence shows? If a difference exists, what are the causes of the difference?

Limited empirical evidence notwithstanding, scholars have proposed possible reasons for the gap in volunteering between public and nonprofit employees. First, Smith (1994) suggests that volunteering is a result of a person's internal locus of control (i.e., one's belief that he or she has control over consequences of his or her behaviors), and an individual's locus of control is a reflection of self-determination (Ryan and Deci 2000; Vallerand and Ratelle 2004). According to the literature, nonprofit workers place more value on job-related self-determination than their government counterparts mainly due to public employees' stronger external motivation and amotivation (Chen and Bozeman 2013). A discrepancy in the criticality of job-related self-determination can lead to a gap in volunteering between the two groups.

The second approach investigates public-nonprofit difference in volunteering through the lens of political participation. In modern democratic regimes, government employees are required to be obedient to laws, impartial, and neutral in their political stance (Van der Wal, De Graaf, and Lasthuizen 2008), whereas nonprofit employees have no such constraints. The requirement of political neutrality may discourage government employees from participating in political parties and clubs, and accordingly may reduce their likelihood to volunteer for them. Finally, the approach proposed by Rotolo and Wilson (2006) emphasizes the varying opportunities to volunteer across the sectors.

Compared to governmental agencies, nonprofits tend to rely on external resources that are more variable and uncertain. Hence, nonprofit workers may have to invest more time in managing the organization's external networks, which in turn, increases their likelihood of volunteering.

The discrepancy in volunteering between individuals working in the public and nonprofit sectors has long been a conundrum. Solving this puzzle helps researchers understand distinctive behavioral patterns for public and nonprofit-sector workers and adds evidence to the literature suggesting that "sector matters." By using data from the National Administrative Studies Project-III (NASP-III), this study examines whether a gap in volunteering exists between public and nonprofit-sector workers, and possible factors leading to such gap. These factors include workers' job-related self-determination in a non-for-profit context, membership in political parties, and interaction with external actors.

JOB-RELATED SELF-DETERMINATION AND INTERNAL LOCUS OF CONTROL

An individual's internal locus of control (i.e., self-efficacy) captures "the extent to which people think their own actions and behaviors are important in determining what happens" (George and Jones 2012, 172), or more precisely, the extent to which people believe they have control over their lives and circumstances. Existing literature shows that individuals who feel self-efficacious are more likely than others to be engaged in volunteering, partly because of their greater spontaneity and competent use of time (Allen and Rushton 1983; Smith 1994). Locus of control is often reflected in an individual's

overall levels of self-determination (Ryan and Deci 2000; Gagné and Deci 2005). In the present study, we speculate that nonprofit employees have a more internal locus of control and value job-related self-determination more in their work context, and accordingly volunteer more than government employees. We elaborate on this view below.

An individual's overall level of self-determination is a sum of intrinsic motivation (performing an activity as an internal reward), identified motivation (performing an activity that is judged to be valuable or useful), introjected motivation (performing an activity in order to avoid shame, pressure, and anxiety), external motivation (performing an activity to obtain external rewards or to avoid sanctions), and amotivation (having no motive to perform a task). While intrinsic motivation and identified motivation enhance self-determination, introjected motivation, external motivation, and amotivation undermine self-determination.¹ Figure 1 shows the five motivations in the theory of self-determination. Researchers have measured these five motivations in a work context (Gagné et al. 2010; Chen and Bozeman 2013).

[Insert Figure 1 Here]

According to one recent empirical study, nonprofit employees value job-related self-determination more than their public counterparts (Chen and Bozeman 2013). The reasons that account for this discrepancy are multi-dimensional and require discussion. First, we consider the effect of service motivation as a type of intrinsic motivation in determining public and nonprofit employees' job selection. Existing literature on motivation generally hints that behaviors of both public and nonprofit-sector workers are

more likely than their business counterparts to be characterized by public service motivation (PSM) and prosocial motivation (Gregg et al. 2011; De Cooman et al. 2011; Wright and Christensen 2010; De Cooman and Pepermans 2012). In the limited studies that compare public and nonprofit employees' service motivation, Borzaga and Tortia (2006) find little difference between these two groups of people with respect to their interest in contributing to the society. On the other hand, Light (2002) finds that nonprofit workers are far more likely than their peers in the public sector to be willing to serve and help people. Lyons, Duxbury, and Higgins (2006) also indicate that nonprofit workers value doing work that contributes to the well-being of society more highly than their public-sector counterparts. Christensen and Wright (2011) find that PSM increases the likelihood of accepting a job in the nonprofit sector, but not the public sector. This implies that nonprofit workers are more likely to work for "ideological currency" (Thompson and Hart 2006).

Second, identified motivation matters. Identified motivation in a work context is often characterized by an individual's desire for career development and responsibility (Chen and Bozeman 2013; Gagné et al. 2010). Public servants, compared to nonprofit employees, may not differ too much on the desire for career development, but they exhibit less concern for responsibility (Chen 2012). Literature shows that moral responsibility is insufficient to manage public organizations, as the structural complexity encourages government workers to shirk and be averse to responsibility (Romzek and Dubnick 1987). The presence of multiple control systems such as hierarchical control, political control by elected officials and the general public, and legal control by mandates

and laws reflects the necessity to hold bureaucrats accountable through external forces (Kettl and Fesler 2005; Dull 2009). Empirical evidence also shows that professionals and managers view working for the government as more rule-constraining with less independence and responsibility (Brewer and Walker 2010; Bozeman and Feeney 2011). By contrast, Onyx and Maclean (1996) show that nonprofit workers choose their job in part based on the opportunities for challenging work and the opportunities to work independently. Therefore, individuals who seek increased responsibility and autonomy are more likely to work in the nonprofit sector.

The third factor is external motivation, generally referring to an individual's desire for instrumental compensation such as job security, fringe benefits, and salary. Public servants are more likely than nonprofit employees to choose their current job for these external factors. Why? Government jobs in the United States include not only merit protection but also several monetary and non-monetary benefits including paid vacation days, routine pension increases, and other fringe benefits (Cox and Brunelli 1994). By contrast, the nonprofit sector generally lags behind the public and private sectors in terms of fringe benefits, pension, and retirement plans (Emanuele and Higgins 2000). In addition, according to the theory of labor donation (Preston 1989), nonprofit employees are aware of their low pay but are willing to accept it in exchange for social benefits.²

Finally, we consider amotivation, a factor that implies that individuals have a sense of hopelessness and helplessness and possess a feeling of nonintentionality. A stark example of amotivation related to work is individuals choosing a job with few

alternatives. They show no care except for the job *per se*. People falling into this category could either be less adaptive (i.e., reluctant to adjust oneself to fit into a new environment) or less skillful (Chen 2012). The mechanical nature of work in the public sector may be a more appropriate choice for individuals with lower levels of adaptability.

Based on the aforementioned analysis, nonprofit workers may value job-related self-determination more than their public-sector counterparts. This contributes to more prevalent volunteering by nonprofit workers.

H1: Compared to public-sector workers, individuals working in the nonprofit sector volunteer at a higher participation rate and for a longer time because they value job-related self-determination more.

MEMBERSHIP IN POLITICAL ORGANIZATIONS

The second cluster of variables that may account for the potential difference of volunteering between government and nonprofit employees is membership in political organizations. Membership in such organizations may indicate an individual's interests in community issues, thereby implying that he or she is more prone to actively engage in community affairs through volunteering. In addition, participation in political parties and/or clubs increases one's interaction with like-minded individuals and facilitates collective action, which may well expand their social networks. Expanding social networks, in turn, contributes to the increased participation in volunteering. If nonprofit employees are indeed more likely to be members of political parties and clubs than government employees, such membership may contribute to the differences in volunteering between the two groups.

We speculate that nonprofit employees are more likely to participate in political parties because of the nature of the nonprofit sector. Historically, nonprofits have represented the interests of their constituencies in mediating between citizens and government (Guo and Musso 2007). Accordingly, they are often involved in policy advocacy for specific issues, such as environmental protection and human rights (Jenkins 2006; Zhan and Tang 2013). While nonprofits' involvement in policy advocacy varies greatly depending on their tax-exempt status, nonprofits may share some similar ideologies with certain political parties and rely on them. For example, pro-life groups may work closely with conservative parties (e.g., Republicans) and women's rights groups tend to agree with policies proposed by liberal political parties (e.g., Democrats). Therefore, it is not very surprising that some nonprofit employees may have a vivid political stance and strong identification with certain political parties.

By contrast, government employees are expected to maintain high professional ethics, including obedience to law, impartiality, and neutrality (Van der Wal, De Graaf, and Lasthuizen 2008; De Graaf and van Der Wal 2008; Weber 1991). Although civil servants may be allowed to join a political party, they are still highly restricted with respect to further political activities. Public service work is thus less attractive to those who have a strong party identification or those enthusiastic for political party activities. In sum, comparatively, without the same restriction of neutrality required for government employees, nonprofit-sector individuals enjoy more leeway to join political organizations, and accordingly, participate more in volunteering.

H2: Compared to public-sector workers, individuals working in the nonprofit sector volunteer at a higher participation rate and for a longer time because they are more likely to be a member in political clubs or political parties.

INTERACTION WITH EXTERNAL ACTORS

Research shows that individuals with more associational networks and diverse social ties are exposed to more opportunities to volunteer and are more frequently asked to volunteer (Brown and Ferris 2007; Janoski, Musick, and Wilson 1998; Paik and Navarre-Jackson 2011). Network theory posits that a greater number of network ties grants an individual informational advantages by connecting the person to more sources of information, increasing the level of social capital. In particular, a person's interaction with outside organizations other than one's own contributes to one's bridging social capital (Putnam 2000), which in turn enhances the likelihood of volunteering (Paik and Navarre-Jackson 2011).

Most organizations, regardless of the sector of society, need to rely on other organization for necessary resources. Organizations must meet the requirements of their resource providers under the pressures of uncertainty and scarcity of resources (Froelich, 1999). Nevertheless, the extent of resource dependence may vary significantly across the sectors due to the variability and uncertainty of the external resources for each type of organization. Nonprofit organizations rely on a variety of activities and resource providers, including government agencies, private and public foundations, and individual donors, to support their work. While government agencies rely on relatively stable tax

revenue, private contributions to nonprofits tend to fluctuate depending on economic ups and downs, and government allocation of funding also swings with changes in political leadership and public policy (Froelich 1999). Although commercial income has become a more critical source of income for many nonprofits, private donation and government funding are still significant sources of nonprofit revenue, as they account for 22 percent of the total revenue in the nonprofit sector in 2011 (National Center for Charitable Statistics 2012).

Nonprofits' strong reliance on external resources can also be attributed to their smaller size, compared to public agencies (Berman 2006; Jason 2005). Organizational ecological theory (Hannan and Freeman 1989) suggests that small organizations have a higher death rate than large ones. The liability of smallness stems from the organization's lack of resources, capital, and reputation. To counteract this inherent disadvantage, small organizations are more likely than large ones to reach out for resources and cooperation. Scholars have applied the concept of liability of smallness to study nonprofit survival, and have found that large organizations are less likely to perish (Hager, Galaskiewicz, and Larson 2004). As a result, inter-organizational networks are particularly critical to nonprofit operation (Galaskiewicz, Bielefeld, and Dowell 2006), and a higher survival rate and better performance are expected outcomes of extensive inter-organizational networks (Johnson, Honnold, and Stevens 2010). In sum, nonprofits have a higher degree of resource dependence than public organizations, and the greater resource dependence suggests that managing external ties of the organization, whether it

is with government funding organizations, private foundations, or individual donors, is even more critical in nonprofit organizations (Froelich 1999).

Research suggests that individuals in organizations undertake strategic actions based on existing and anticipated resource dependences (Greening and Gray 1994; Hodge and Piccolo 2005). We expect that nonprofit workers dedicate more of their time to managing their ties with other organizations. Frequent contacts with other organizations, in turn, may contribute to a higher level of bridging social capital of individuals. With a higher level of bridging social capital, we expect that nonprofit employees will volunteer more than their public-sector counterparts (Brown and Ferris 2007; Paik and Navarre-Jackson 2011).

H3: Compared to public-sector workers, individuals working in the nonprofit sector volunteer at a higher participation rate and for a longer time because they interact more frequently with external actors.

Figure 2 shows the variable relationships of these hypotheses.

[Insert Figure 2 Here]

METHODOLOGY

Data

In order to test our hypotheses, we employ the National Administrative Studies Project-III (NASP-III) data. NASP-III includes data on *public and nonprofit* managers in the states of Georgia and Illinois.³ The public-sector sample in Georgia was drawn from the list of people who had been on a state agency's payroll during 2003-2004 fiscal year, provided by the Department of Audit (DoA). The researchers drew a random sample of

1,000 individuals from the population of 6,161 Georgia public managers. For the public-sector sample in Illinois, the researchers requested from the State of Illinois a list of all state employees designated as either “senior public service administrators” or “public service administrators.” This list included information on 5,461 state employees, including name, agency, and county. From the population a random sample of 1,000 was drawn. After deleting those who had retired and not in the address in both samples, the sample size became 1850.

For the nonprofit-sector sample, the NASP-III researchers purchased a list from Infocus Marketing, Inc. This list includes members of the American Society of Association Executives (ASAE) with titles of Administration/Operations Manager, Executive Director/VP, Company President/Owner, Development Manager/Director, Education Manager/Director, Government Relations, Marketing, Personnel, Public Relations/Public Affairs, Sales/Marketing, Financial/Bookkeeping, Information systems, Legal Counsel-Internal, and Chief Executive Officer. This list provides 280 nonprofit managers from Georgia and 1048 from Illinois. After deleting those who had retired and not in the address in both samples, the sample size was 1307.

After the researchers shortened the questionnaire based on the results of a pretest, the survey was sent out in three waves in 2005 and 2006. Seven hundred and ninety responses were received (545 from the 1st wave, 132 from the 2nd wave, and 113 from the 3rd wave), a response rate of 43% (47% in Georgia and 38% in Illinois) from the public-sector sample, and 430 responses (266 from the 1st wave, 72 from the 2nd wave, and 92

from the 3rd wave), a response rate of 33% (39% in Georgia and 31% in Illinois), from the nonprofit-sector sample. In total, the overall response rate reached 39%.⁴

Variables

This study first examines whether volunteering participation (first dependent variable, DV) and amount of time (second DV) differ between public and nonprofit employees, and in addition, explores the factors contributing to public-nonprofit difference in volunteering. The main independent variable (IV) is sector of employment, whose value is 1 if an individual works in the nonprofit sector and 0 otherwise (i.e., the public sector). The NASP-III survey included a question on an individual's volunteering: "In the last four weeks, how many hours, if any, did you engage in volunteer activities?" The first DV measures whether the respondent participated in any volunteering activities in the last four weeks, which takes a value of 1 if one volunteered (regardless of the number of hours), 0 otherwise. For the amount of volunteering, this study uses hours of volunteer work. Because the survey asked whether managers volunteered in the four previous weeks, the distribution of volunteering hours is extremely skewed with a significant number reporting no volunteering at all. With the high skewedness, treating the hours of volunteering as continuous will result in a non-normal distribution, and accordingly, not suitable for OLS regression. Logging the DV to reduce skewedness may help solve the problem of non-normal distribution, but directly logging the DV can result in a significant shrinkage in the sample size, given that 40 percent of respondents reported zero hour of volunteering. To avoid these problems, we replace all missing observations with a value slightly smaller than the minimum non-censored value of log

(y), following Cameron and Trivedi (2009). Because the minimum non-censored value of $\log(y)$ is 0, we assign -0.000001 ($-1.00e-06$) to all log-generated missing observations. The logged DV is more normally distributed than the original DV.⁵ The logged continuous DV will be used for Tobit regression modeling later with the left-censored value at -0.000001 . Regarding the dichotomous (0/1) DV, we use logit regression instead of OLS as normal distribution, a prerequisite for OLS, is absent.

In the present study, there are three mediating variables used to examine why public and nonprofit employees differ in volunteering. The first mediating variable is how much an individual values job-related self-determination. This study adopts Chen and Bozeman's (2013) self-determination index (SDI), which sums multiple ordinal items (1 if it is not important, 2 if somewhat unimportant, 3 if somewhat important, and 4 if very important) asking respondents the main reasons that determine their job selection.⁶ The second mediating variable is the membership in political organizations. This is measured by a dichotomous variable (1 if a member, 0 otherwise). Finally, this study also tests if interaction with external actors results in public-nonprofit differences in volunteering. The level of interaction is measured by respondents' answer to the question, "During the last five working days, what percentage of work-related mail, email, and phone calls did you send to persons not within this organization?" In addition to the mediating variables, this study controls for several socio-demographic characteristics that affect an individual's propensity to volunteer (Smith 1994). These variables include age, educational attainment, gender, number of children, marital status,

parents' education, number of sick days, and work hours. We report descriptive statistics in Table 1.

[Insert Table 1 Here]

Mediation analysis

Mediation analysis is employed to examine whether the public-nonprofit difference in volunteering is a result of the discrepancies in how much an individual values self-determination on the job, in their membership in political organizations, and in their interaction with external actors between individuals working in these two respective sectors. Variables may be deemed mediating variables (mediators) when they carry the influence of the IV to the DV (Kenny 2013). Mediation occurs when the following conditions are met (Preacher and Hayes 2004). First, the relationships between mediators and the DV are statistically significant. Second, the relationships between the main IV and mediators are statistically significant. Third, a statistically significant relationship between the main IV and the DV exists in the absence of mediators, but the impact of the IV on the DV shrinks with the appearance of mediators. The effect of mediation equals the decreased percentage of the coefficient of the main IV. Full mediation occurs if the inclusion of mediators drops the DV-IV relationship to zero, whereas partial mediation maintains that the mediators account for some, but not all, of the DV-IV relationship.

In the current study, the first step of the mediation analysis is to test if the value of self-determination, membership in political organizations, and interaction with external actors predict volunteering using regression. Regarding this test, we employ logit and

Tobit regressions respectively for two DVs, participation in volunteering and volunteering hours, given their dichotomous and censored nature. Next, we examine whether public and nonprofit managers report distinctive self-determination, membership in political organizations, and interaction with external actors. Logit regression is used for membership in political organizations (dichotomous) and OLS regression is used for self-determination as well as interaction with external actors (continuous). Upon meeting these two conditions, this study tests how adding mediators changes the coefficients for the main IV (the sector of employment) in regression models of volunteering.

FINDINGS

According to descriptive statistics reported in Table 1, nonprofit managers are not only more likely to volunteer, but also volunteer more hours than public managers. While 54 percent of public managers reported that they had participated in volunteering in the last four weeks, 69 percent of nonprofit managers did so ($p < .001$ in the proportional test). Nonprofit managers spent more hours (7.73) in volunteering than their government counterparts (6.97) as well. In addition, we also find that nonprofit managers value job-related self-determination more highly, show greater likelihood of joining political organizations, and have more frequent interaction with external actors. Descriptive statistics provide preliminary support for mediation preconditions (i.e., all mediators and volunteering differ between public and nonprofit managers). However, statistical significance of these preconditions is required for the completion of mediation tests.

To obtain statistical significance of mediation preconditions, this study employs bivariate regression to examine (i) whether various mediators predict participation in volunteering and hours of volunteering as the main DV and (ii) whether nonprofit employment as the main IV predicts mediators (i.e., the first and second steps of mediation tests). Results of the first test are reported in Table 2. As hypothesized, all mediating variables positively and significantly predict the participation and hours of volunteering.

[Insert Table 2 Here]

The second step of the mediation analysis is to examine whether nonprofit employment as the main IV predicts mediators. Findings from bivariate regression models in Table 3 suggest that nonprofit managers place more value on job-related self-determination, show greater propensity to participate in political organizations, and have more frequent interactions with external actors compared to public managers, as hypothesized.

[Insert Table 3 Here]

The last step of the mediation analysis is to examine how effective mediators influence the predictability of nonprofit employment on volunteering. More precisely, we look at how the coefficients of nonprofit employment change before and after mediators are entered into regression models with volunteering as the main DV. We first model participation in volunteering with logit regression and report the results in Table 4. Because coefficients in logit regression cannot be interpreted directly, we calculate marginal effects. The results in Model 1 show that even with the presence of all control

variables, nonprofit employment still has a positive and statistically significant impact on volunteering participation with a marginal effect of 0.114 ($p < 0.00$), meaning that nonprofit managers are 11.4 percentage points more likely than public managers to participate in volunteering, a result in line with the existing literature (Lee and Wilkins 2011; Rotolo and Wilson 2006). When all effective mediators are entered into the regression model, as Model 2 shows, the marginal effect of nonprofit employment drops from 0.114 to 0.073 ($p < 0.05$) with a mediation effect of $(0.114 - 0.073) / 0.114 = 36\%$, implying that self-determination, membership in political organizations, and interaction with external actors together explain about 36% of the public-nonprofit difference in volunteering participation. In regard to volunteering hours, we employ Tobit regression with the left-censored value at -0.000001 and report the results in Table 5. The coefficient of nonprofit employment in Model 1 is 0.239 ($p < 0.09$), meaning that volunteering hours are about 23.9 percent longer among nonprofit managers than among public managers even after the effects of control variables included in this study are considered. With the appearance of effective mediators in Model 2, the coefficient drops from 0.239 to 0.079 ($p < 0.59$) with a mediation effect of $(0.239 - 0.079) / 0.239 = 67\%$. In sum, we found partial mediation effects in both cases of volunteering participation and volunteering hours.

[Insert Table 4 Here]

[Insert Table 5 Here]

Concerning control variables, we find that age, parents' education, personal education, and number of children positively (and significantly) predict volunteering.

The number of sick days as a negative predictor is more significant in the models predicting volunteering hours than the models predicting participation in volunteering. Volunteering is related to work hours in an inverse U-shape (more significant in the model of volunteering hours). Both gender and marital status are not statistically significant predictors in most models.

IMPLICATIONS

The contribution of the present study is twofold. First, it adds empirical evidence to the literature of “sector matters” for volunteering. While existing research comparing business and nonprofit (or public) organizations attribute the difference to the divergence of employees’ altruistic or prosocial motivation in these two respective sectors, this study compares public and nonprofit employees and finds that nonprofit-sector workers have a higher propensity to volunteer, in terms of both participation and hours, than their government-sector peers. The findings suggest, firstly, that this discrepancy may be attributed to nonprofit employees placing higher value in job-related self-determination, so they have a more internal locus of control compared with public employees.⁷ In addition to self-determination, membership in political parties/clubs also contributes to the difference between nonprofit and public workers’ volunteering. While a higher chance for volunteering is accompanied by joining political organizations, the requirement of political neutrality prohibits government employees from being engaged in political activities, thus reducing their chances to volunteer for political reasons. The last cluster, the degree of interaction with external actors, also explains a portion of volunteering differences between these two groups. Nonprofit organizations’ relatively

smaller organization size and a lack of resources are possible underlying reasons. These findings imply that altruism alone may not explain the discrepancy in volunteering between public and nonprofit employees. Public-sector employees are often characterized by their public service motivation (PSM) (Perry, Hondeghem, and Wise 2010; Perry and Wise 1990), a type of altruism. If it is the altruism-based job choice that determines different volunteering across the sectors, we should expect little public-nonprofit difference.

Findings in the present study convey important practical implications for managers who work in the public sector. Although volunteering is often characterized as a virtue and a basis for the civil society, and as being part of organizational citizenship behavior (Podsakoff et al. 2000), public managers should not feel discouraged about their less frequent volunteering participation and shorter volunteering time. A lower level of volunteering does not necessarily signify that public servants are not as altruistic as their nonprofit peers. Instead, the results suggest that public servants adhere to political neutrality, a desirable and ethical behavior in public administration. The results also imply that, as an empirical matter, public organizations have more stable resources than many nonprofits, and as a result, public servants are exposed to fewer inter-organizational ties as well as fewer opportunities for volunteering.

Overall, the findings suggest that the higher level of volunteering among nonprofit employees is triggered by both individual-level factors (individuals' value of job-related self-determination in a not-for-profit work context) and organization-level factors (political constraints and inter-organizational network). These results imply that

scholars need to go beyond the scope of public-nonprofit comparison in the present study and reconsider a taken-for-granted proposition that for-profit workers volunteer less because of their weaker altruistic motivation. While this proposition is not entirely wrong, weak altruistic motivation may not be the only reason for their lower levels of volunteering, and research should examine how other individual and organizational characteristics influence the gap in volunteering between public (nonprofit) and for-profit-sector workers. For example, for-profit enterprises are less vulnerable than nonprofits in terms of resources, so for-profit employees are less likely than their nonprofit peers to be involved in an inter-organizational network and thus have fewer opportunities to volunteer. It is also possible that more prevalent monetary incentives in the for-profit sector crowd out their workers' service motivation (Chen and Hsieh, 2014; Jacobsen 2011; Frey and Jegen 2001) and lead to an external locus of control, and consequently, less volunteering. Apparently, the involvement in an inter-organizational network and monetary incentives are not directly related to altruism-based job selection, and the meaning of "sector matters in volunteering" could be more complicated than a simple sector-altruism link. In sum, findings in the present study significantly push forward the theoretical building of "sector matters."

SUGGESTIONS FOR FUTURE RESEARCH

Despite the contributions, limitations exist in the present study, and we call for more effort to improve the research quality in the future. First and foremost, the mediating variables included in this study are not exhaustive, as they account for only 36% of the public-nonprofit difference in volunteering participation and 67% of the

difference in volunteering hours (i.e., partial mediation). More mediating variables should be considered in the future. For example, the flexibility of work schedule, a variable predictive of volunteering but not available in the NASP-III dataset, may explain a portion of the public-nonprofit difference in volunteering. According to recently reported statistics in 2011, nonprofits are more likely than governmental agencies to provide various flexibility programs (WorldatWork 2011), partly due to government's rigid personnel system.

Second, regarding the earlier point about insufficient mediating variables, the present study uses SDI along with various motivation-at-work items to capture the effect of job choice, one of the mediating variables. This is not perfect. It should be admitted that individuals' job choice requires not only subjective motivations but also objective conditions such as organizational characteristics, salary, benefits, and many others. These objective variables are not available in the NASP-III dataset. Future studies should include them to more faithfully reflect the real impact of self selection. Third, this study assumes the homogeneity of nonprofit organizations when the term nonprofit includes various types of organizations serving different purposes (Boris 1999). Future studies should account for the institutional diversity within the nonprofit sector and examine how employees' behavior may vary across different types of organizations.⁸

Finally, the present study mainly focuses on non-altruistic reasons that result in public-nonprofit difference in volunteering as public employees, similar to their nonprofit peers, are often characterized by their prosocial motivation and altruism (Buurman, Dur, and Van den Bossche 2012). However, with minor exceptions (e.g., Light 2002; Lyons,

Duxbury, and Higgins 2006), the proposition that “public and nonprofit employees are equally altruistic” has seldom been examined. We should not deny the possibility that an even higher level of altruism among nonprofit employees causes their stronger willingness to volunteer. The only measure related to altruism in the present study is a SDI item asking respondents how much they cared about the ability to serve the public interest when they chose their current job. This is not enough. Scholars may wish to consider the use of the construct of PSM developed by Perry (1996) and revised by several others (Kim et al. 2013) to capture more precisely different dimensions of altruism and service motivation. Spirituality (Hill and Pargament 2008; Liu and Robertson 2011), a concept that captures one’s feeling of interconnection with a higher power, other human beings, and nature, is an alternative measure for altruism.⁹

In sum, the traditional approach for the study of “sector matters in volunteering” often fails to provide satisfactory empirical evidence explaining what causes the difference across the sectors. In addition, the traditional approach focuses too much on the comparison between nonprofit and for-profit employees. To fill the knowledge gap, the present study investigates public-nonprofit comparison and explains the difference with the mediation analysis as well as a few mediating variables. Treating the present study as a cornerstone, we expect that more research efforts will be oriented to discover behavioral differences between individuals working in different sectors.

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TABLES AND FIGURES

Table 1. Descriptive statistics (n = 1060)

	Mean (SD)		
	Full sample (n=1060)	Public (n=696)	Nonprofit (n=364)
Participation in volunteering*	0.60 (0.49)	0.54 (0.50)	0.69 (0.46)
Hours of volunteering	7.23 (12.11)	6.97 (12.37)	7.73 (11.59)
Self-determination index (SDI)	-0.04 (4.16)	-0.43 (4.12)	0.71 (4.12)
Political organization membership*	0.13 (0.34)	0.10 (0.30)	0.19 (0.39)
Interaction with external actors	0.39 (0.28)	0.31 (0.26)	0.52 (0.28)
Age	49.26 (8.88)	48.89 (8.52)	49.99 (9.50)
Parents having college degrees*	0.35 (0.48)	0.30 (0.46)	0.44 (0.50)
Marital status*	0.79 (0.41)	0.79 (0.41)	0.79 (0.41)
Educational attainment	4.88 (1.17)	4.77 (1.21)	5.08 (1.08)
Female*	0.45 (0.50)	0.43 (0.50)	0.49 (0.50)
Number of children	0.95 (1.13)	1.00 (1.14)	0.85 (1.09)
Number of sick days	3.34 (8.64)	4.03 (10.40)	2.03 (2.85)
Work hours (per week)	47.03 (7.84)	45.03 (6.46)	50.84 (8.78)

*Dichotomous variable

Table 2. The first step of mediation tests: Mediators predicting volunteering

Volunteering as DV	Hypothesis	Coef (<i>p</i>)		Results
Mediators as IVs				
		Logit model: Participation	Tobit model: Hours	
Political organization membership	+	1.092 (0.000)	0.810 (0.000)	Support
Self-determination index	+	0.065 (0.000)	0.057 (0.000)	Support
Interaction with external actors	+	1.091 (0.000)	0.950 (0.000)	Support
Left-censored point = -0.000001 for Tobit modeling				

Table 3. The second step of mediation tests: Sector of employment predicting mediators

Mediators as DVs	Hypothesis	Modeling	Coef (<i>p</i>)	Results
Nonprofit employment as IV				
Political organization membership	+	Logit	0.647 (0.000)	Support
Self-determination index	+	OLS	1.124 (0.000)	Support
Interaction with external actors	+	OLS	0.208 (0.000)	Support

Table 4. The last step of mediation tests: Modeling participation in volunteering
(n = 1060)

DV: Participation in volunteering	<i>Model 1</i>		<i>Model 2</i>	
	M.E.	<i>p</i> > z	M.E.	<i>p</i> > z
<u>Main IV</u>				
Nonprofit employment	0.114	0.002	0.073	0.054
Mediation/explanation effects	(0.114 - 0.073) / 0.114 = 36%			
<u>Mediating variables</u>				
Political organization membership	--	--	0.192	0.000
Self-determination index	--	--	0.009	0.024
Interaction with external actors	--	--	0.174	0.000
<u>Controls</u>				
Age	0.006	0.002	0.005	0.006
Parents having college degrees	0.081	0.019	0.071	0.040
Marital status	0.016	0.694	0.009	0.823
Educational attainment	0.036	0.008	0.027	0.049
Female	-0.027	0.428	-0.028	0.414
Number of children	0.060	0.000	0.061	0.000
Number of sick days	-0.004	0.080	-0.005	0.070
Work hours	0.026	0.095	0.025	0.109
Work hours^2	0.000	0.159	0.000	0.132
Constant	-4.982	0.003	-4.203	0.007
χ^2	81.82		108.64	
df	10		13	
McKelvey & Zavoina's pseudo R^2	0.097		0.137	

Logit regression employed; M.E. = marginal effect

Table 5. The last step of mediation tests: Modeling volunteering hours
(n = 1060)

DV: log (Volunteering hours)	Model 1		Model 2	
	Coef	p> t	Coef	p> t
<u>Main IV</u>				
Nonprofit employment	0.239	0.085	0.079	0.585
Mediation/explanation effects	(0.239 - 0.079) / 0.239 = 67%			
<u>Mediating variables</u>				
Political organization membership	--	--	0.525	0.003
Self-determination index	--	--	0.027	0.084
Interaction with external actors	--	--	0.639	0.007
<u>Controls</u>				
Age	0.022	0.004	0.018	0.015
Parents having college degrees	0.296	0.024	0.260	0.046
Marital status	-0.003	0.985	-0.018	0.909
Educational attainment	0.137	0.011	0.112	0.040
Female	-0.180	0.172	-0.178	0.175
Number of children	0.255	0.000	0.252	0.000
Number of sick days	-0.023	0.031	-0.024	0.025
Work hours	0.141	0.022	0.145	0.019
Work hours^2	-0.001	0.051	-0.001	0.032
Constant	-5.227	0.001	-5.077	0.002
χ^2	80.88		102.83	
df	10		13	
McKelvey & Zavoina's pseudo R^2	0.083		0.107	

Tobit regression employed; Left-censored point = -0.000001

Figure 1. Self-determination theory: self-determination and locus of control

Source: Chen and Bozeman (2013)

Figure 2. A conceptual model of variable relationships

NOTES

¹ The synergetic effect can be best captured by the Self-Determination Index (SDI). SDI roots in the assumption that people are simultaneously influenced by the five motivational styles. To create a SDI, a different weight is allocated to each motivational style. For example, intrinsic motivation carries the value of +3, identified motivation +1.5, introjected motivation -1, external motivation -2, and amotivation -3. A person's work SDI = $(3 \times \text{intrinsic}) + (1.5 \times \text{identified}) - (1 \times \text{introjected}) - (2 \times \text{external}) - (3 \times \text{amotivated})$. Researchers of educational psychology and generic behavioral science have used SDI to study various issues such as environmental behaviors, academic motivation, eating regulation, and work attitudes (Fortier, Vallerand, and Guay 1995, Green-Demers, Pelletier, and Ménard 1997, Pelletier et al. 2004, Tremblay et al. 2009).

² Although several later studies challenge this view by indicating that nonprofit managers do not earn significantly less than their business and government-sector counterparts (Ben-Ner, Ren, and Paulson 2009, Ballou and Weisbrod 2003), more studies suggests the existence of a nonprofit wage disadvantage (Leete 2000, Fong 2009, Narcy 2011). Scholars supporting wage differentials often argue that wage increase or high pay crowds out intrinsic motivation (Frey and Jegen 2001) and nonprofit organizations may end up hiring the "wrong people" (Heyes 2005). In addition, nonprofits are less likely to use promotion along with high pay as an incentive to motivate people because of their relatively small size and flattened hierarchy (DeVaro and Brookshire 2007). This reduces nonprofit workers' expectation on pay.

³ Although the implication of this study includes all employees in public and nonprofit organizations, we would like to point out that the sample includes managers only. Exclusion of non-managerial worker may limit the generalizability of the findings.

⁴ For detailed information about NASP-III, see Feeney (2008).

⁵ If we exclude the truncated value (-0.000001), the results of skewness/kurtosis tests for normality show that $p < .43$ for skewness and $p < 0.21$ for kurtosis, implying the presence of normal distribution.

⁶ Intrinsic motivation is measured by one item: the ability to serve the public interest (mean = 3.17). Identified motivation is the summation of the following three items divided by three: advancement in a hierarchy, career development and job training, and a desire for more responsibility (mean = 3.07). Introjected motivation is the summation of the following items divided by two: a desire for less bureaucratic red tape and a desire for a low conflict environment (mean = 2.40). External motivation is the summation of the following four items divided by four: job security, pension plans, benefits, and salary (mean = 3.24). Amotivation is the summation of the following three items divided by three: few alternative job offers, relatively low cost living in the region, and employment opportunity for spouse or partner (mean = 1.77). The method of generating a self-determination index (SDI) is addressed in an earlier endnote. The variation of SDI is huge in the present study, ranging between -13 and +12 in the whole sample. A value of zero refers to a perfect offset effect, meaning that a person's self-determination stemming from autonomous motivation (intrinsic motivation and identified motivation) is offset by controlled

motivation (introjected motivation, external motivation, and amotivation). A positive value implies that one's autonomous motivation is stronger than his/her controlled motivation, and a negative value implies that the controlled motivation is stronger than the autonomous motivation. On average, the mean value of SDI in a random sample could be close to zero. For example, in the present study, the mean value is 0.71 in the nonprofit sample and -0.43 in the public sample. The difference between them is statistically significant, according to the regression result in Table 3.

⁷ Public employees' lower levels of self-determination, according to previous studies using the same dataset (Chen 2012; Chen & Bozeman 2013), stem from their weaker desire for responsibility, stronger desire for instrumental rewards, and stronger amotivation when they choose their current job.

⁸ In order to check if volunteering behaviors differ across different types of organizations within the same sector, we compared the rates of volunteering between the organizations that provide human services mostly and the others. The results indicate little difference: 66 percent of the employees in charitable organizations (501(C)(3)s) volunteered while 69 percent of all nonprofit employees did so. Public employees in service-oriented agencies (education, community affairs, children's affairs, and human service) volunteered just as much as the rest of the public-sector employees (54 percent).

⁹ Liu and Robertson (2011) argue that spirituality is "the privatization of religion, informal, personal, universal, nondenominational, inclusive, tolerant, individualistic, less visible and quantifiable, subjective, emotionally oriented and inwardly directed, less authoritarian, little external accountability, and appropriate to be expressed in the workplace" (Liu and Robertson 2011, 35). To some extent, spirituality plays an important role in post-modern society because of religious individualism and secularization.