

# Service, Career and Other Needs: Testing the Importance of PSM and the Volunteer Motives to Volunteering Commitments

(Version 2.0/March 13, 2013)

Roger P. Rose  
University of Minnesota, Morris

Paper prepared for presentation at the annual meeting of the Western Political Science Association, March 28-31, 2013, Los Angeles, CA.

*The author gratefully acknowledges the assistance of Marc Musick, Mark Snyder, Mary Rose and Engin Sungur and financial support from the University of Minnesota's Grant-in-Aid program for data collection.*

*NOTE: An earlier version of this paper was developed for the 2012 American Political Science Association meeting that was cancelled.*

**Abstract:** Research in Public Service Motivation (PSM) has begun to explore the construct's influence upon volunteer work. But PSM studies of volunteering have not sufficiently incorporated non-altruistic motives (Clary et al., 1998; Musick & Wilson, 2008). This research compares the relative importance of PSM with that other motives found in the Volunteer Functions Inventory. Specifically, this paper tests three research questions. First, do overall commitments to volunteering reflect PSM, after controlling for group influence, socialization and personal resources. Second, does the existence of career, social and other personal motives behind volunteering crowd out the importance of PSM? Third, how does the influence in PSM vary across areas of volunteering, particularly between political, policy and advocacy efforts versus more people-oriented education and social service volunteering?

Data to test these hypotheses comes from an internet survey of advanced undergraduates (90+ credit hours) at a major upper-Midwest university. Models of volunteering incorporate the revised PSM scale (Kim et al., 2011) and demonstrate that, in comparison to the overwhelming influence of social influences and previous volunteering experience, Self-sacrifice (SS) and Attraction to Public Service (APS) have a modest influence on the range and depth of volunteering, whereas Compassion and Commitment to Public Values have a slightly negative effect on areas of volunteering. In the domains of political-policy-advocacy volunteering and education-social service volunteering, SS and APS are strongly associated with volunteering commitments, even after accounting for non-altruistic motives from the Volunteer Functions Inventory, as well as the control variables. Compassion, however, is not more prominent in the education and social service areas where people-to-to contact is greater.

In recent years, scholars examining public service motivation (PSM) have extended PSM research beyond career interest and employee behavior in the government and nonprofit sectors to unpaid or minimally paid volunteer work (Coursey, Brudney, Littlepage, & Perry, 2011; Taylor & Clerkin, 2011; Clerkin Paynter, & Taylor, 2009; Perry & Hondeghem, 2008; Steen, 2006; Mesch, Tschirhart, Perry, & Lee, 1998; Tschirhart, 1998). The connection of PSM to volunteering is theoretically sound given that the PSM construct is defined broadly as a “general altruistic motivation to serve the interest of a community of people, a state, a nation or humankind” (Rainey and Steinbauer, 1999:20). It also follows the call to examine the motivational foundation of service outside the formal workplace (Perry, et al. 2008). From a practical view, an examination of public service-oriented volunteering reflect the discipline’s concern with the role of nonprofits in delivering social services (Light 2000; Brudney & Kellough 2000). This may prove critical as governments with stagnant or declining budgets have looked to volunteers to assist their civil workforce in service provision (Quirk, 2011).

Studies using PSM have shown that the construct does predict volunteering (Clerkin et al.,2009). However, they have not captured the influence of other non-altruistic motivations. Both PSM and psychological constructs on volunteering (Clary, et al. 1998; Batson, 2011) share the common framework of service being influenced by psychological and personal needs. One of the important questions is whether self-oriented needs, such as social and career, crowd out altruistic motivations. The ability to differentiate between altruism and other motives to volunteering would increase the utility of PSM to explain prosocial behavior outside the work place. It would also assist organizations that seek to recruit and retain volunteers. Knowing the relative influence of various motives should allow nonprofits groups to better tailor their recruitment appeals.

Nonetheless, our current understanding of PSM and volunteering is limited. Most studies of PSM and volunteering involve groups identified as highly committed (e.g. Perry et.al., 2008; Coursey et al., 2011) or who are stipended (Mesch, 1998; Tschirhart, 1998). Some work has used an experimental approach (Clerkin et al., 2009) to gauge interest in contributing to organizations, or has examined a more narrow range of political and community activism (Taylor & Clerkin, 2011). No study has tried to assess the role of PSM, as a measure of values, alongside other motivations in reported volunteering. Nor has any study utilized the recently revised PSM scales that offer a more valid and reliable dimensions of PSM (Kim, et al., 2011).

Using data from an internet survey of nearly 500 upper-division undergraduates, this paper tests the relative importance of PSM and five motivational dimensions found in the Volunteer Functions Inventory (VFI) in the total hours and areas of volunteering. Specifically, this paper tests three questions: (1) whether PSM influences greater volunteering commitments, after controlling for group influence, socialization and personal resources; (2) whether high career and social motives crowd out the importance of PSM; and (3) whether the dimensions of PSM vary in their association with political-policy oriented volunteering, which task or goal-centered, compared to people-oriented volunteering in areas such as education and social services. Variation in the prominence of specific dimensions may be valuable for specific organizations as they look for service themes to recruit new volunteers.

### **Resources, Social Influence and Motives for Volunteering<sup>a</sup>**

A variety of distinct and overlapping factors explain why individuals choose to volunteer and then commit to a more or less service. In explaining why people do not become politically

---

<sup>a</sup> Portions of this section come from a previous paper, "Public Service Motivation and Unpaid Work: Testing the Influence of PSM on the Breadth, Depth and Domains of Volunteering."

active, Verba and colleagues (1995) offered a pithy set of answers: people won't, can't or weren't asked (p. 269). Their civic voluntarism model is analogous to other comprehensive analyses of volunteering (Wilson & Musick, 1997a; Musick & Wilson, 2008) which identify a role for motivations, personal resources and ability, as well as opportunities created by social context.

While volunteering is productive and often enjoyable work, the lack of financial compensation makes it difficult for people without personal resources to bear the cost of unpaid work. People with high levels of personal resources – particularly income, good health, time available, and educational attainment – are attractive to volunteering organizations and will be recruited more often by organizations (Wilson and Musick 1997a:698). Apart from resources, social context affects volunteering in a number of ways. If one interacts daily with people who volunteer, that person is more likely to be asked to assist, or will seek to emulate those who are more engaged. Opportunities to volunteer emerge through the size of informal and formal social networks, most prominently employment and group membership (Rossi 2001; Wilson and Musick 1997a; Wilson and Musick 1997b; Wuthnow 1991). For example, studies consistently show greater church attendance, where the call to serve the church community and society is front and center, increases volunteering (Lam 2002; Becker and Dzinga, 2001; Wuthnow, 1991; Wilson and Janoski, 1995). Finally, the social context of volunteering also includes socialization from family and friends who provide role models and an encouraging environment (Wilson and Musick 1997a; Janoski, Musick and Wilson 1998). Research shows that parental influence appears more dependent upon parents modeling volunteering behavior (Fletcher et al. 2000) and participating with a young person than on parents expressing values (Gage and Thapa 2011; Clerkin, Paynter and Taylor 2009). Finally,

students may be “dragged” into the habit of volunteering when their high school requires service learning projects.

In a university setting, personal resources of income and health are less prominent, while involvement in service-oriented groups (e.g., Greek organizations, honor societies, service societies) greatly increase the chances of being asked, pressured or required to volunteer. Time constraints are important. Some students may be forced to work more hours than others and/or choose to dedicate more time to their studies. Gage and Thapa (2011) reported that college students view “structural” constraints—lack of time, too many other commitments and being unaware of opportunities—as the primary obstacles to volunteering.

### ***Motivations: VFI & the place of PSM***

Beyond resources and social context, personal motivations are one of several subjective dispositions that predict volunteering (Clary et al., 1998; Clary, Snyder, & Stukas, 1996; Wuthnow 2004; Burns et al., 2005; Musick & Wilson, 2008; Omoto, Snyder & Hackett, 2010). A range of motives appear to influence a willingness to volunteer, the level of commitment, and the areas of activity (Clary et al. 1998; Musick and Wilson, 2008; Gage and Thapa, 2011) and the best known depiction of these motivations is the Volunteer Functions Inventory (VFI) developed by Gil Clary, Mark Snyder and colleagues. They developed a set of scale items and, through factor analysis, put forth six motives as fulfilling an individual’s personal and social needs that encourage volunteering. These include (1) expressing values, (2) gaining personal understanding, (3) having social experiences, (4) developing career skills, (5) seeking psychological growth or positive affect, and (6) having protective experiences to address personal problems or issues (see Clary et.al, 1998:1517-1518). Extensive empirical testing of the VFI has generally supported their relationship to initiating and sustaining volunteer

commitments, though not all six dimensions emerge among college students (see Gage & Thapa, 2011 and Francis, 2009). Scholars, though, do not agree on one configuration of motives (see Baston, et al., 2002), or how much motives vary with different situations, social structures or processes (Tilly, 2001). Nonetheless, there is a consensus that various altruistic, intrinsic and extrinsic concerns have an independent and significant impact on reported volunteering. Importantly, extrinsic or instrumental motives do not necessarily compete with or “crowd out” altruistic and intrinsic motives (Clary et al., 1998; Musick & Wilson, 2008; Baston, 2011; Handy et al., 2012).

Public administration scholars are keen to extend PSM to voluntarism because, as Coursey et al. note, the altruistic nature of volunteering and public sector work means that “many of the same theoretical questions and issues apply to both PSM and... volunteering motivation” (2011:50). The core tenet of the PSM construct is that public-oriented individuals possess a set of motives that drive prosocial behavior in the workplace and beyond. In Perry & Wise’s (1990) formulation, two motives, norm-based and affective, are highly relevant to volunteering. A norm-based motive generates a sense of serving the public interest, or of duty toward a particular group or cause. Those with affective motives express a sense of emotional attachment to a program’s goal or to the group served (Perry and Wise, 1990:368-69). A third motive, a person’s rational motive, involves a desire to be part of policymaking process, to promote a particular policy outcome, or personal identification with a particular public program and has a narrower application to a range of political, advocacy and policy-oriented volunteering.

Perry developed and tested (1996) four PSM dimensions for use in empirical studies—commitment to the public interest, self-sacrifice, compassion and attraction to policy making--

and the vast majority of PSM studies have used some combination of the scale items to test career attraction and selection, the role of workplace incentives, and the behavior and views of public sector employees (see Perry, Hondeghem & Wise (2010) for a review of PSM's development). Further theoretical and empirical testing ensued, largely driven by uneven results across studies and by recognition of the need to apply PSM across nations and cultures. The most recent revisions change the commitment and attraction subscales (Kim, 2009; Kim & Vandenberg, 2010; Ritz, 2011; Kim, et al. 2011). Kim and colleagues tested a large set of PSM items across 12 countries and settled upon four dimensions. The first, Attraction to Public Service (APS), features a willingness to dedicate oneself to the common good, participate in community development and public policy, and to value service toward the general public. Self-sacrifice (SS) emphasizes incurring personal cost or forgoing gain to serve others and the less fortunate. Compassion centers on the "affecting bonding with identified objects" and expression of distress over the mistreatment or poor conditions of others (Kim, et al. 2011:8). The final dimension, Commitment to Public Values (CPV), reflects one's values towards equal opportunities, the equitable provision of government services and ethical behavior in government. The CPV's focus on views about how processes should work and the provision of services distinguishes it from the other dimensions, which emphasize acting and needing to help individuals and community.

The essence of PSM is, thus, altruism driven by public values. In a framework of the VFI, it holds approximately the same role as the values motive (or in Baston's four dimension framework, the personal and "collective" altruistic motives (2002)). Because PSM largely neglects self-directed motives like personal growth, skill development and social goals, it can be tested alongside the other motives in the VFI.

## **The Potential Contribution of PSM to Volunteering Research**

If scholars of volunteering have considered motivations extensively, what value does applying PSM add to the literature? Two contributions are possible. First, the PSM construct contains a more nuanced measure of altruistic motives than is currently employed in volunteering studies. Importantly, it treats the norm-based and affective dimensions as distinct. In contrast, the VFI's scale representing the values motive has items combining compassion with a desire to serve a larger a cause and organization. Their analysis of value scale items verified their connection to each other ( $\alpha=.80$ ) and the scale distinctness from the other five motives (Clary, et al. 1996:1520). A singular values dimension, though, may not adequately explain what drives greater commitments to volunteering in areas like political, environmental and community advocacy--areas where the focus is upon a cause or task rather than directly serving people. For example, Musick and Wilson's (2008) analysis of independent sector data found that people's rating of compassion as a motive varied by volunteering areas (with religious and human services volunteers rating compassion higher than education, advocacy and development volunteers). Second, the PSM items provide more context and tradeoffs than other scales representing values; this makes for a more rigorous test of values. For example, the VFI value item, "I can do something for a cause that is important to me," is easy to agree with; PSM asks whether individuals are willing "to make sacrifices," pay more money or "risk personal loss" to serve that cause. The construct's Compassion dimension extends concern for the less fortunate to ask how upsetting it is to see "people being treated unfairly." <sup>1</sup> For organizations seeking to attract highly committed people, specifying sacrifices, focusing on



social problems, and highlighting a sense of duty may be important in separating a one-time or short-term volunteer from one who will contribute more meaningfully.

Underlying the notion that the dimensions of PSM could contribute differentially to prosocial behavior is recent theoretical and empirical work that sees the PSM subscales as “first order reflective, second order formative” (Wright, 2008; Kim, 2011). Those who see PSM dimensions as formative argue that each dimension is reflective of subscale items, but that the respective dimensions and subscales are largely distinct from one another. Variations in one level of the dimension do not alter the level of the other dimensions, though changes raise or lower the overall PSM measured. Empirical analysis by Kim (2011) has also indicated through structural equation modeling that the formative approach represents a better fit of the data to his sample of almost 2500 public employees. Following Kim (2011), this study theorizes that each PSM dimension is formative of overall PSM and has a unique contribution to understanding the motives to serve others.

### ***Research on PSM in Volunteering Work***

Existing PSM research into voluntarism has largely explored the presence of PSM and shown some limited effects in subject behavior. PSM research on stipended volunteers by Tschirhart (1998) and Mesch et al. (1998) used a single-scale version of Perry’s PSM instrument among Americorps participants. The former found differing PSM values between older and younger members, while Mesch et al. did not find that PSM explained longer commitments to the same program. Perry et al. (2008) analyzed nationally recognized volunteers and confirmed that several social and demographic variables were predictive of higher PSM. A second study of the same population examined whether overall and subscale PSM values varied by the domains of volunteering (Coursey et al., 2011), finding principally that

PSM is highest among religious volunteers compared to education and human services volunteers. In the only study that tests PSM dimensions on volunteering and non-volunteering decisions, Clerkin et al. (2009) employed a discrete choice survey experiment among college students to test a willingness to serve two types of non-profit organizations—social services and arts-based. Their analysis showed that students with higher scores of commitment to the public interest were significantly more likely to choose to donate and volunteer, while compassion was associated with donations and nearly significant ( $p=.053$ ) to volunteering. Self-sacrifice, though, had no influence, and the attraction subscale negatively predicted willingness to volunteer—a finding that suggests the limited applicability of this motive to voluntarism outside the political-policy world.

The results of previous PSM studies generally complement existing volunteering research that show associations of altruistic values to a person's commitment to volunteering (Musick & Wilson, 2008; Wuthnow, 2004; Clary et al., 1998; Wilson & Musick, 1997a) and particularly among young adults (Handy et al., 2012; Gage and Thapa, 2011; Burns et al., 2005). Thus, the core altruistic dimensions of PSM—APS, SS and COM—should have a significant relationship to one's overall commitment to volunteering.

**H<sub>1</sub>:** The higher the level Attraction to Public Service, Self-sacrifice and Compassion, the more extensive will be a student's overall commitment to volunteering.

The CPV subscale measures beliefs about fairness in political processes and the role of government in society to reduce social inequities, but these concerns are somewhat distant from volunteering and may not correspond with engaging in greater voluntarism. This intuition is buttressed by two areas of volunteering research. First, some studies of volunteering in a European context have shown that the strength of the welfare state, measured by higher service

provision, corresponds with lower overall volunteering (Stadelmann-Steffen, 2011). Second, studies in the U.S. do not show that liberals, who believe in a more active government, volunteer more frequently than conservatives (Brooks & Lewis, 2001). Thus,

**H2:** Higher levels of Commitment to Public Values will have no relationship with overall volunteering efforts.

### ***Motives, PSM and Volunteer Work in Two Broad Domains.***

In examining the link of motives to areas of volunteering, scholars frame decisions in terms of how a volunteering environment or organization fits one's psychological motives (Coursey et al., 2011, p. 51). Tests of the predominant theory of motives in volunteering research, functional theory, showed that recruitment messages matching an individual's motives appealed more (Clary et al., 1996). Further, a good "fit" between motivations and organizational characteristics predicted students reporting a better volunteering experience (Clary et al., 1998; Stukas, Worth, Clary, & Snyder, 2009) and intention to remain at the organization (Stukas et al., 2009). Other work has linked different values to areas of volunteering. Sundeen's analysis of a Gallup survey on volunteering found that various personal goal statements influenced reported service in different sectors. He speculated that the personal goal of public involvement was associated with belonging to groups where citizen participation is embedded (1992, p. 284). Similarly, Coursey et al.'s (2011) analysis of highly committed individuals showed some modest differences across volunteer domains, with religious-based volunteers having the highest overall PSM and highest PSM within the Commitment to Public Interest, Compassion and Self-sacrifice dimensions. Human service volunteers, however, scored lower on the compassion and self-sacrifice dimension than those in the education and "other" categories. In an analysis of civic engagement among

undergraduates, Taylor and Clerkin's (2011) found associations between the attraction and compassion dimensions of PSM and three scales of political activities (campaign participation, contributions and communal activity). They also found Commitment to Public Interest dimension (labeled "Civic") significant for community-oriented political participation and volunteering.

Though studies of motives and volunteering domain are limited and their findings are not definitive, it is logical that the APS and SS dimensions should be more pronounced in volunteering that takes place in the political, policy-oriented, and advocacy fields. These are areas that would invoke activity connected to government and fulfilling motives expressed in these dimensions. However, since this activity does not center on helping people, COM should not be a significant influence. The second set of areas—social services and education—does involve service to people in need of assistance. In these two areas, one is likely to see a more pronounced influence of compassion. In all these areas of volunteering, the influence of PSM should be more pronounced in predicting the hours of commitment, as opposed to low levels of such volunteering, which is likely to be determined by social connections and group influence.

**H<sub>3</sub>:** Political-Policy-Advocacy: Higher levels of Attraction to Public Service and Self-sacrifice will be associated with higher hours of political, policy and social service volunteering.

**H<sub>4</sub>** Social Service-Education: Higher levels of Compassion, Attraction to Public Service and Self-sacrifice will be associated with more hours of education-social service volunteering

## **Data & Method**

This study surveys traditional undergraduate students at a major Midwestern university. Understanding the motivations and other predictors of volunteering by college students is important. Students contribute a great deal of service; some 3.1 million U.S. students participated in 312 million hours of service in 2010 (Corporation, 2011)—and they volunteer significantly more than non-college young adults, even when controlling for socioeconomic factors (Boraas, 2003). Moreover, college volunteering raises individual commitments many years later—and promotes academic achievement as well as social understanding while in school (Astin, Sax, & Avalos, 1998). Beyond the amount of labor given to nonprofit organizations, students represent a critical pool from which organizations will eventually hire much of their entry-level staff (Shields, 2009). This is especially true among the most active volunteers. Thus, the way that organizations link their missions to the high levels of altruism in young adults (Gage & Thapa, 2011; Burns et al., 2005) will influence both staff and volunteer recruitment success.

The study's data comes from a web-based survey administered in February-April of 2012. To obtain a wide cross-section of student respondents, the survey used Dillman's tailored-design method in which students are contacted multiple times (Dillman, 2007). An initial letter or email invitation was sent to 2500 randomly selected undergraduates who met the criteria of having completed at least 90 credit hours. The invitation offered a \$5.00 gift card to the university bookstore and entry into a lottery for prizes as incentives; students who had not participated were sent periodic electronic reminders. A total of 606 students, approximately 24% of the eligible students, responded to the survey, resulting in 589 usable

surveys. The sample is representative of the academic disciplines; compared to campus statistics, there are about 7% more females and 8% fewer minority students.

[Table 1 here]

### ***Dependent Variables***

The first set of dependent variables measure the overall “amount” of volunteering reported by a student. Like Wilson and Musick (1997a), this study is concerned not just with a respondent’s total hours of service, but how broadly a student volunteered among the various areas of service. The *total areas* variable measures a general commitment to service, whereas total hours may reflect an individual’s dedication to a narrow range of organizations or sectors. The array of categories presented to respondents included the following: (1) advocacy group (to influence government or community issues); (2) environmental (Sierra Club, state or local environmental group); (3) health & elderly services (e.g., hospital, clinic, nursing home, senior center); (4) social/community services (e.g., food bank, housing, homeless shelter, volunteer fire or safety service); (5) political organization or campaign; (6) international group or cause (e.g., human rights, foreign relief, country-specific cause); (7) adult or youth recreation (coaching, scouting, outdoor club); (8) church, synagogue, mosque, other religious institution; (9) education, tutoring or mentoring (in a school or through outside organization); (10) student government or academic club; (11) work-related (in work place or connected to your work); and (12) other. The measure for *total areas* is the sum of the categories in which any volunteering was recorded. For purposes of analysis, the few students who reported between 8 and 12 areas of service are collapsed into a single category of 8+ areas.

To record hours of volunteering, the survey asked students to record the hours they volunteered in a “typical month” using the following response set for each of the 11 categories:

0/none, 1, 2, 3, 4, 5, 6, 7-8, 9-10, or 11+ hours (and the midpoint for the 7-8 and 9-10 ranges was used). *Total areas* is sum of all recorded hours across the categories. Importantly, the question instructed them not to include service projects required by courses or as part of a university job in their estimate of hours.

The second set of dependent variables records volunteering in two clusters of categories. The first, *political-policy-advocacy* is the reported efforts in community advocacy, political organization or campaign, and environmental work. The second set of areas, *social service-education*, combines volunteering in social services and education. These areas are combined because few students did volunteering in any one area—especially in the political and advocacy areas--making analysis sensitive to skewed data. For each cluster, both “any” and “hours” of volunteering are modeled. “Any” is a dichotomous measure that indicates students who engaged in any volunteering in the respective combined areas. Hours represents the extent of a volunteer’s service and is captured by an 4 category ordinal measure of hours reported for the areas (range 0 to 3).<sup>2</sup> For all models, I compare volunteers in the respective clusters to those who did no volunteering in any area. This is done to eliminate potential overlap in factors for areas like health-elderly or youth volunteering that might be close to aspects of either grouping of volunteering. This restriction limits the sample size, with the N dropping from 479 to 359 for social service-education and to 198 for political-policy-advocacy, when volunteers outside the broad domains are removed.

### ***Independent Variables***

***Public Service Motivation:*** The study uses a revised set of 16 PSM scale items developed by Kim et al. (2011). The scale alters of two dimensions from Perry’s version, commitment to the public interest/civic duty and attraction to policy making, resulting in the APS and CPV

subscales. In the new CPV subscale, though, two of the subscale's items are not reasonable to apply to volunteering (CPV6 on looking out for future generations and CPV7 on public servants acting ethically) and were not included in factor analysis. Another item the COM subscale (on containing feelings when seeing people in distress) was omitted due to an error in wording. The items presented a 5 point Likert response set (strongly agree to strongly disagree) and items were rotated randomly. As the revised PSM scale has not previously been tested on a broad cross-section of undergraduates in an internet survey form, analysis began with principal component factor analysis using oblique rotation. Four dimensions emerged, with one item (SS7 on making a good plan to help the poor) moving from the Self-sacrifice to CPV dimension.<sup>3</sup> (Table 2 shows the specific wording of the PSM items used.) Cronbach's alpha measures for internal consistency produced good to satisfactory scores for the Attraction ( $\alpha=.81$ ), Self-sacrifice ( $\alpha=.84$ ), Compassion ( $\alpha=.78$ ) and the Commitment to Public Values ( $\alpha=.76$ ) subscales. To provide an additional check on the PSM measures and ensure that the four factors emerging were not a product of using one form of analysis, confirmatory factor analysis was performed using LISREL 8.80 statistical package. The overall factor model fits the data well (RMSEA = .048; CFI= .98; AGFI = .98), and the items loaded upon the four dimensions sufficiently well to include in our models of volunteering. The mean score of each group is used in the analysis, with higher scores indicating greater public service motivation.

[Table 2 here]

***Volunteer Functions Inventory:*** Students responded to 22 items from the Volunteer Functions Inventory developed by Clary and colleagues (1998). Each item contained a 7 point response set (1 being "not important or accurate at all" to 7 being "extremely important or accurate"). As PSM replaces the values dimension of the VFI, no items from that dimension



were included. Confirmatory factor analysis showed that items all items loaded upon the expected dimensions in a five-factor model. Cronbach's alpha values showed strong internal consistency for the Career ( $\alpha=.88$ ), Social ( $\alpha=.88$ ), Understanding ( $\alpha=.90$ ), Enhancement ( $\alpha=.93$ ) and Protective ( $\alpha=.89$ ) dimension. The model displayed a good fit of the data (RMSEA=.043; CFI=.99; AFGI=.98). Again, the mean score for each group of items is used, with higher scores representing greater identification of the respective motive to volunteering.

**Control Variables:** A series of control variables represent personal characteristics, social network, and previous volunteering experiences. Socialization to volunteering comes from three variables that measure individual initiative (*high school volunteering—own*), parental influence (*high school volunteering with parents*), and peer socialization (*high school volunteering with friends*). For each of these, a respondent estimated hours of volunteering during a typical month and each estimate was recorded from 0-3 (“none”, “a little”, “some”, “a lot”). Categorizing their reported hours was appropriate since respondents were being asked to remember back 3-5 years. The parental variable captures direct encouragement and modeling of behavior compared to a set of statements about the family values (which had no meaningful correlation with reported volunteering and were omitted from this analysis). Volunteering alone and with friends should also capture high school service learning requirements. The variable *student groups* is the sum of three categories of groups and organizations --on-campus, off-campus and Greek-- to which the respondents claim they belong; for purposes of analysis, the small number of students reporting 7-16 groups were coded as 7. The measure reflects the extent of a subject's social opportunities to volunteer since more group memberships generate more requests and opportunities to volunteer. *Religious attendance* both captures an additional social group and suggests the respondent participates in an environment where altruistic

values are reinforced; respondents selected from nine responses (“never” to “more than once a week”). The first of several variables addressing personal characteristics is a measure of *extraversion-enthusiasm* from the well-known Big-Five index, where respondents registered agreement on this element of personality on a scale of 1 to 7. Other variables account for a subject’s sex (1=female), minority status (with two groups, Asian/Mixed and African-American/Latino/Native American, recorded as 1) and political ideology (using the mean of five issue questions regarding government’s role in financial and social issues).<sup>4</sup> Finally, a dummy variable *service required* was included for whether a respondent participated in a mandatory service assignment. While students were asked to not count service requirements in their estimate of volunteering, this variable accounts for the possibility they may have included required service in their estimate of volunteering.

### ***Analytical Approach***

Two sets of analyses are performed. The first focuses on the total areas and hours of volunteering—in essence, the overall breadth and depth of a student’s volunteering experience—using regression for areas and zero-inflated negative binomial regression (ZINB) for hours. For areas, the data is somewhat positively skewed, but not so much to suggest bias in the estimators; thus, regression is utilized.<sup>5</sup>

Zero-inflated negative binomial regression is appropriate for *total hours* reported; the variable can be represented as discrete, non-negative count data that contains a disproportionate number of zero observations. ZINB regression combines a logistic (or inflation) model and a negative binomial model to estimate the probability of a student volunteering a particular number of hours. The procedure first incorporates a presumed source of over-dispersion, i.e., a theoretical or practical reason why a student would not

volunteer. In a campus setting, the presumption is that the number of groups to which a student belongs provides the social opportunity for volunteering since reporting no group memberships means both a far less chance of being asked and a higher degree of social isolation. Hence, the ZINB model uses the number of student group memberships to predict the probability of non-volunteering (and should display a significant negative coefficient). The negative binomial equation then incorporates the rest of the variables to estimate the number of volunteering hours in which students would engage. The diagnostic test, the Vuong test, points to the correct use of a ZINB technique for total hours rather than negative binomial regression ( $p < .05$ ).

The second group of analyses tests predictors of any and hours of volunteering committed in the combined political-policy-advocacy and social service-education areas. The “any” volunteering models use a dichotomous measure and therefore employ logistic analysis. For the ordinal measure of “hours” of volunteering ordered logistic regression is conducted. In all models, robust standard errors are reported.

## **Results**

Summary statistics in table 1 indicate that the students performed some 13-plus hours of service per month and averaged nearly 3 areas of service. In the combined area of political-policy-advocacy, 27% of students reported to have done volunteering, while 54% volunteered in either the education or social services areas. The rate of total hours volunteered is close to 11.26 hours found in Handy et al.’s (2011) survey of several US universities. A slightly higher volunteering effort is not unexpected given the location of the university in the upper Midwest, a high volunteering region.<sup>6</sup>

The models analyzing the breadth (areas) and depth (hours) of reported volunteering are found in table 3. Overall, the areas model explains some 46% of the variance in the number of areas in which students volunteered; the ZINB model for total hours is also significant overall (Wald  $\chi^2=145.19$ ,  $p<.001$ ).

The two models show an uneven influence for PSM. In explaining total areas, the SS subscale is positively associated ( $p<.01$ ) with more areas. Rather unexpectedly, COM and CPV subscales are negatively associated at the trend level ( $p<.10$ ). The model of total hours, though, shows no influence of PSM upon the depth of volunteering commitment. SS and APS are positive and COM and CPV are negative, but none are significant. Though neither SS nor APS were predictive of total hours of volunteering, it is worth noting that the two dimensions do correlate highly enough ( $r=.53$ ), and that a combined SS-APS dimension is a trend in the overall hours model ( $p<.10$ ). Overall, hypothesis 1, that the core altruistic dimension of PSM would support greater volunteering is partially supported.

[table 3 here]

As with PSM, the respective VFI motives have an uneven role in these models. The Protective motive was positive and significant ( $p<.05$ ) in areas, while Understanding was positively associated with more hours ( $p<.05$ ) and the social motive was a trend ( $p<.10$ ). Interestingly, the Enhancement motive was negatively associated with both more overall areas and hours. As expected, the measures for social opportunity and socialization are important predictors of total volunteering. Students who belong to more groups and who volunteered on their own or with friends in high school are more likely volunteer in more areas and for more hours. Among the other control variables, respondents with a service requirement reported

more volunteering in both models. Those attending religious services reported volunteering in more areas ( $p < .05$ ) and Asian-mixed race students volunteered more hours ( $p < .05$ ).

Table 4 presents the models for the same independent variables upon “any” and “hours” of volunteering in the combined political-policy-advocacy area. The logistic model of “any” volunteering performs well and shows a strong reduction in predicted errors (50.1%). Respondents with higher levels of the APS and SS subscales were significantly more likely to volunteer in the area ( $p < .05$  and  $p < .01$ , respectively) and, notably, COM and CPV are not significant. None of the VFI items was associated with a higher probability of volunteering. The impact of social groups ( $p < .01$ ), earlier volunteering with parents ( $p < .10$ ) and alone ( $p < .01$ ) remains significant. Having a service learning requirement was also significant ( $p < .01$ ).

In the ordered logistic model of hours committed to the political-policy-advocacy area, SS is significant ( $p < .05$ ) but APS is no longer associated with more volunteering. However, this is likely due to overlap between SS and APS; combining them into one scale and rerunning the model shows the APS-SS measure is highly significant ( $p < .001$ ) and produces larger changes in probabilities. The Career VFI motive is significant and the Social motive is negative at the trend level ( $p < .10$ ). The variables for groups, service requirements, and earlier volunteering on one’s own are significant. In sum, hypothesis 3 about the positive influence of the SS and APS dimensions was supported.

[table 4 here]

Table 5 shows the “any” and “hours” models for the combined areas of social service-education volunteering. Both models are significant, though they appear to somewhat less effective in predicting the overall outcomes (only a 15.5% reduction in error and a weaker pseudo-R<sup>2</sup>). A similar pattern emerge in the PSM subscales. APS and SS are significant for any

volunteering and both are associated at the level of a trend in the ordered logistic model; the combined APS-SS dimension attains high significance ( $p < .001$ ) and much larger changes in probabilities than either dimension alone. However, the expected contribution of Compassion did not emerge. The variable is insignificant and in a negative direction. Hypothesis 4, thus, is only partially supported. Again, the role of groups ( $p = .011$ ), earlier volunteering (on one's own or with friends,  $p < .001$ ,  $p < .01$ ), and service requirement ( $p < .01$ ) are prominent in explaining this combined area. No VFI scale, however, is significant.

[Table 5 here]

## **Discussion**

This study of the influence of PSM and other motives to predict volunteering showed that the Self-Sacrifice dimension positively influenced total areas of volunteering. SS was highly significant in the models of areas of volunteering and in the three models for combined areas of political-policy-advocacy and social service-education. A second dimension, the norm-based Attraction to Public Service was also significant in the logistic models of "any" volunteering in the two combined areas and for hours reported of political-policy-advocacy. The significant role of altruistic and norm-based motives toward overall volunteering, alongside social and personal factors, generally follows the pattern seen in previous studies of college-level volunteering (e.g., Gage & Thapa, 2011, Handy et al., 2012) and of voluntarism more broadly (Wilson & Musick, 1997a; Musick & Wilson, 2008). Given that SS and APS demonstrate a stronger impact when combined into one dimension, they should be seen as highly complementary items. More generally, the two subscales tap into the idealism of college

Millennials and, given the absence of any positive relationship of the Career variable, indicate that altruism generates greater levels of service.

The Compassion dimension, however, had no positive impact in any model and unexpectedly emerged as a negative predictor, at the level of a trend, in the model for breadth (areas) of volunteering. The result for total areas has some logic and it points to the possibility that the compassion dimension has distinct properties that do not explain one's overall volunteering effort. Two theoretical explanations are possible. Following Baston's (2011) logic that the role of empathy does not extend to "abstract collectives," the compassion may not be part of a person's willingness to engage in a great deal of volunteering since that would extend well beyond helping those to which one has a connection. The affective basis of the COM dimension—a general sense of sympathy for others and feeling upset over their plight—may lead one to selective involvement in organizations that serve people in need, but not to participate broadly in domains of activity that do not evoke these feelings. A second explanation is that higher levels of affective emotions, such as empathy for others in need, may deter volunteering that raises personal distress as one comes in contact with those in need (Baston, 2011; Omoto et al., 2010). The negative relationship, weak as it is, stands as the second instance of a negative finding of the PSM COM subscale in reported college volunteering (Rose, 2011). Importantly, the dimension's emphasis upon the affective emotion of anger differs from the more general item for compassion—"I have compassion for others in need"—found in the VFI values scale or used in multiple volunteering studies (Musick & Wilson, 2008). While PSM's Compassion does appear linked to volunteering decisions for specific causes (Clerkin et al., 2009), it is questionable whether it influences a more general commitment to voluntarism.

The negative association between CPV and area served suggests that a belief in strong government role in service provision and promoting equality leads to less overall volunteering. People who expect government to provide services and are willing to pay for it (agreeing “to a good plan to make life better for the poor even if it costs money or more taxes”) may not feel as much need to volunteer actively. The bivariate relationship between CPV and the dependent variable for total areas served is only slightly negative ( $r = -.057$ ); but once the shared variance among the PSM items is accounted for, the negative connection to assisting others appears to emerge. Whether higher levels of the CPV actually discourage voluntarism in more specific situations should be explored further; if so, this would suggest that beliefs about strong government presence do crowd out willingness to volunteer. However, this dimension was not intended for voluntarism, but rather for the workplace. As noted, two items of the CPV scale were not included since they dealt with how public servants should behave and considering future generations in policymaking. The alteration of the subscale here, including the unexpected loading of one SS item onto CPV, means this subscale has a narrower focus than intended by Kim and colleagues.

The results across all models do confirm, in general, that other motives do not crowd out the influence of PSM on volunteering. The five VFI motives utilized here do have an uneven impact on volunteering. The negative relationship of the Enhancement motive to greater volunteering is surprising, given the variable has a positive bivariate correlation with our dependent variables. Tests of multicollinearity among the VFI scales did not point to significant bias; attempts to combine Enhancement with Protective and/or Understanding scales created no significant result. More intriguing is the positive relationship of the Understanding motive to total hours. This dimension has the highest correlation of any VFI motive with APS and SS



dimensions ( $r=.50$  and  $r=.32$ , respectively). The items in the scale focus upon the “opportunity for volunteerism to permit new learning experiences and the chance to exercise knowledge, skills, and abilities that might otherwise go unpracticed.” Building upon this volunteering connection, Understanding may also be linked to why people would be attracted to careers in the nonprofit sector and some areas of government. Studies have shown those seeking a creative workplace are more likely favor the nonprofit work sector (Rose, 2012). Future career attraction studies may wish to consider incorporate the Understanding motive more formally.

From a perspective of college volunteering, the findings here underscore how much volunteering is driven by social factors. This survey included quite specific items about past volunteering and the data verify what Astin and Sax (1998) showed: that the critical variables in explaining college volunteering are past experiences. Data on student group membership, and indirectly through religious attendance, also show how much social settings generate opportunities to volunteer. As much as idealism and values are associated with Millennials, the amount of volunteering this student sample performed resulted far more from how much they were socially connected to other students and other groups as well as how strongly they had been socialized into the habit of volunteering.

Finally, the data from our college respondents did not allow for analysis of specific domains or of people who volunteered exclusively in a given domain. Coursey et al. (2011) did find some differences in PSM values among volunteers in specific domains, particularly in the religious domain, when they analyzed subsamples of exclusive volunteers. Testing the new PSM scales among respondents who work exclusively in specific areas would be a valuable addition to PSM research of voluntarism.

## **Conclusion**

Despite the predominance of social networks and earlier socialization in explaining volunteering among this group of undergraduates, two subscales of PSM are significant predictors of the extent of volunteering commitments. The data largely confirms that the need to act on one's values leads to greater volunteering commitments, especially in the areas of politics, advocacy, environment, social services, and education.

In addition to broadening the application of PSM to a more general adult population, future research should explore how the revised PSM subscales relate to specific characteristics of volunteering organizations. The primary theoretical contribution of PSM to work commitments is that people do have an interest and select organizations that fit their psychological needs. Hence, connecting PSM to nonprofit organizations' recruitment appeals is a natural extension of PSM research into the voluntary sector. Volunteering research is only beginning to explore how recruitment appeals and organizational settings influence volunteer choice and satisfaction (e.g., Stukas et al., 2009). As PSM research moves toward studies that differentiate types of sector characteristics (Vandenabeele, 2008) and organizational opportunities to serve others (Christenson and Wright, 2011), scholars should be able to provide valuable theoretical and empirical insights for nonprofit recruitment.

This research has implications for how volunteer organizations recruit volunteers. The strength of Self-sacrifice and Attraction to Public Service affirms that Millennials are highly likely to respond to appeals about serving the larger community and causes "bigger than myself." Analyses of actual volunteering in specific setting will be important if PSM research is

to contribute specifically to helping volunteer organizations better tap into this service-oriented generation.

## NOTES

1. The emphasis on the “underprivileged” and those mistreated may help shed light on an interesting contradiction in compassion’s role in volunteering. While most single items find that compassion increases overall volunteering, Omoto, Snyder and Hackett (2010) found a separate measure of a person’s empathetic orientation towards others actually was negatively associated with overall civic engagement (and not significant to AIDS work). Reviewing several psychological studies of empathy, Baston concluded that “our empathetic concern may be limited specific individuals in need and exclude abstract collectives such as ‘the poor’” (2011:115). The phrasing of Compassion in PSM may represent a test of whether compassion has limits in terms of how much volunteering individuals will undertake.
2. Ideally, these two clusters would allow comparisons and modeling of students who volunteered exclusively in these combined areas and no other (Coursey et al. 2011). However, while the data show that 32 students volunteered in either the social service or education categories, or both, exclusively, only 12 cases are exclusive to the political, environmental and advocacy areas, too few to establish confidence about statistical significance. As such, our domain variables contain those who volunteered in the respective cluster, regardless of the total areas or overall hours. The overlap among domains of volunteering may produce less distinctive results than if sufficient sample size of exclusive volunteers to each cluster had been available.
3. The movement of SS7 (“I would agree to a good plan to make life better for the poor, even if cost me more or taxes”) from the Self-sacrifice to the CPV dimension is logical in the context of college students. The item stresses providing for the poor and, since college students are not particularly sensitive to paying for public programs, the sacrifice aspect of the question likely did not emerge.
4. Another variable, family income, generated a large number of missing values (about 5%) and is not included. Both bivariate correlation and model analysis shows the variable has no effect.
5. A five-category version of the areas variable is not significant in a skewness test. The results using this version are again similar, save for a strengthening of the negative effect of CPV dimension from  $p < .10$  to  $p < .01$  and of the VFI Social dimension from  $p < .10$  to  $p < .05$ .
6. It is also possible that the internet survey format, using an array with 11 volunteering categories, led students to somewhat overstate their hours. There is no reason to assume that higher recorded hours biases the results.

## References

- Astin, A., Sax, L., & Avalos, J. (1998). Long-term effects of volunteerism during undergraduate years. *Review of Higher Education* 22, 187-202.
- Baston, , C. D., Thompson, E.R., & Chen H. (2002). Moral hypocrisy: Addressing some alternatives. *Journal of Personality and Social Psychology*, 83, 330-339.
- Batson, C. D., Ahmad, N., & Stocks, E. (2011). Four forms of prosocial motivation, in Dunning, D. (ed.), *Social Motivation*. London: Psychology Press.
- Becker, P. & Dhinga, P. (2001). Religious involvement and volunteering: implications for civil society. *Sociology of Religion* 62, 315-335.
- Borass, S. (2003). Volunteering in the United States. *Monthly Labor Review*, 126, 3-11.
- Bridgeland, J. & Reed, B. (2009). *The quiet crisis: The impact of the economic downturn on the nonprofit sector*. Washington, DC: Civic Enterprises/Democratic Leadership Council. Retrieved from [http://www.dlc.org/documents/Quiet\\_Crisis.pdf](http://www.dlc.org/documents/Quiet_Crisis.pdf)
- Brudney, J. L. and Kellough, J. E. (2000). Volunteers in state government: involvement, management, and benefits. *Nonprofit and Voluntary Sector Quarterly*, 29, 111-130.
- Burns, D. J., Toncar, M., Ried, J., Anderson, C., Wells, C., Fawcett, J., & Gruben, K. (2005). Volunteering: A comparison of collegiate students attending different types of institutions. *The Journal of Volunteer Administration*, 23, 31-40.
- Christensen, R. K. & Wright, B. (2011). Effects of public service motivation on job choice decisions: Disentangling the contributions of person-organization fit and person-job fit. *Journal of Public Administration Research & Theory*. doi:10.1093/jopart/muq085
- Clary, E. G., Snyder, M., & Stukas, A. (1996). Volunteers' motivations: Finding from a national survey. *Nonprofit and Voluntary Sector Quarterly*, 25, 485-505.
- Clary, E. G., Snyder, M., Ridge, R., Copeland, J., Stukas, A., Haugen, J. et al. (1998). Understanding and assessing the motivations of volunteers—A function approach. *Journal of Applied Social Psychology*, 24, 1129-1150.
- Clerkin, R. M., Paynter, S. R., & Taylor J. K. (2009). Public service motivation in undergraduate giving and volunteering decisions. *American Review of Public Administration*, 39, 675-698.
- Corporation for National and Community Service. (2011). *Volunteering in the U.S.* Retrieved from <http://www.volunteeringinamerica.gov/national>

- Coursey, D. H. & Pandey, S. K. (2007). Public service motivation measurement: Testing an abridged version of Perry's proposed scale. *Administration & Society* 39, 547-568.
- Coursey, D., Brudney, J., Littlepage, L., & Perry, J. (2011). Does public service motivation matter in volunteering domain choices? A test of Functional Theory. *Review of Public Personnel Administration*, 31(1), 48-66.
- DeHart-Davis, L., Marlow, J., & Pandey, S. K. (2006). Gender dimensions of public service motivation. *Public Administration Review*, 66, 873-887.
- Dillman, D. A. (2007). *Mail and internet surveys: The tailored design method*. New York, NY: Wiley.
- Fletcher, A., Edler, G., & Mekos, D. (2000). Parental influence on adolescent involvement in community activities. *Journal of Research on Adolescence*, 10, 29-48.
- Francis, J. (2009) The functions and norms that drive university student volunteering. *International Journal of Nonprofit and Voluntary Sector Marketing*, 16, 1-12.
- Gage, R. L. & Thapa, B. (2011). Volunteer motivations and constraints among college students: Analysis of the Volunteer Function Inventory and Leisure Constraints models. *Nonprofit and Voluntary Sector Quarterly*, 20, 1-26.
- Janoski, T., Musick, M., & Wilson, J. (1998). Being volunteered? The impact of social participation and pro-social attitudes on volunteering. *Sociological Forum*, 13 (3), 495-513.
- Kim, S. (2009). Revising Perry's measurement scale of public service motivation. *The American Review of Public Administration*, 39, 149-163.
- Kim, S. (2011). Testing a revised measure of Public Service Motivation: Reflective versus formative specification. *Journal of Public Administration Research and Theory*, 21, 521-546.
- Kim, S., Vandenberg, W., Andersen, L. B., Cerase, F. P., Christensen, R. K., Desmarais, C., Koumenta, M., Leisink, P., Liu, B., Paliduskaite, J., Pedersen, L. H., Perry, J. L., Ritz, A., Taylor, J., De Vivo, P., Wright, B. E. (2011). The development of an international instrument to measure public service motivation: A research note. Paper presented at the 11th National Public Management Research Conference at Syracuse University, Syracuse, NY, June 2-4, 2011.
- Knoke, D. & Wright-Isak, C. (1982). Individual motives and organizational incentive systems. *Research in the Sociology of Organizations*, 1, 209-254.
- Lam, P.-Y. (2002). As flocks gather: How religion affects voluntary association participation. *Journal for the Scientific Study of Religion*, 41, 405-422.

- Light, P. C. (2000). *Making nonprofits work: A report on the tides of nonprofit management reform*. Washington, DC: The Brookings Institution.
- Long, J. S. (1997). *Regression models for categorical and limited dependent variables*. Thousand Oaks, CA: Sage Publications.
- Mesch, D. J., Tschirhart, M., Perry, J. L., & Lee, G. (1998). Altruists or egoists? Retention in stipended service. *Nonprofit Management & Leadership*, 9, 3-21.
- Musick, M.A. Dury, S., & Rose, R. (2012). Volunteering and willingness to serve. Paper presented at the 2012 Annual Meeting of the Law and Society Association, Honolulu, HI.
- Musick, M. A. & Wilson, J. (2008). *Volunteers: A social profile*. Bloomington, IN: Indiana University Press.
- Omoto, A., Snyder, M., & Hackett, J. (2010). Personality and motivational antecedents of activism and civic engagement. *Journal of Personality* 78:6, 1703-1734.
- Perry, J. L. (1996). Measuring Public Service Motivation: An assessment of construct reliability and validity. *Journal of Public Administration Research and Theory*, 6, 5-22
- Perry, J. L. & Hondeghem, A. (2008). *Motivation in public management: The call of public service*. London: Oxford University Press.
- Perry, J. L. & Wise, L. R. (1990). The motivational bases of public service. *Public Administration Review*, 50 (3), 367-373.
- Perry, J. L., Hondeghem, A., & Wise, L. R. (2010). Revisiting the motivational bases of public service: Twenty years of research and an agenda for the future. *Public Administration Review*, 71(3), 681-690.
- Pew Research Center. (2010). *Millennials: Confident, connected. ppen to change*. Retrieved from <http://pewsocialtrends.org/files/2010/10/millennials-confident-connected-open-to-change.pdf>
- Quirk, M. (2011). Tapping Volunteers for Results. *Minnesota Cities*, Nov-Dec., 3-5.
- Rainey, H. G. & Steinbauer, P. (1999). Galloping elephants: Developing elements of a theory of effective government organizations. *Journal of Public Administration Research and Theory*, 9, 1-32.
- Ritz, A. (2011). Attraction to policy-making: A qualitative inquiry into improvement in PSM measurement. *Public Administration* 89 (3), 1128-1147.

- Rose, R. (2012). Preferences for careers in public work: Examining the government-nonprofit divide among undergraduates through public service motivation. *American Review of Public Administration*, forthcoming.
- Shields, P. O. (2009). Young adult volunteers: Recruitment appeals and other marketing considerations. *Journal of Non-Profit and Public Sector Marketing*, 21, 139-159.
- Steen, T. (2006). Public sector motivation: Is there something to learn from the study of volunteerism? *Public Policy and Administration*, 21 (1), 49-62.
- Steen, T. (2008). Not a government monopoly: The private, nonprofit, and voluntary sectors. In Perry, J. L. & Hondeghem, A. (2008). *Motivation in public management: The call of public service*. London: Oxford University Press.
- Streiner, D. L. & Norman, G. R. (1989). *Health measurement scales: A practical guide to their development and use*. New York: Oxford University Press.
- Stukas, A., Worth, K., Clary, E. G., & Synder, M. (2009). The matching of motivations to affordances in the volunteer environment: An index for assessing the impact of multiple matches of volunteer outcome. *Nonprofit and Voluntary Sector Quarterly*, 38 (1), 5-28.
- Sundeen, R. (1992). Differences in personal goals and attitudes among volunteers. *Nonprofit and Voluntary Sector Quarterly*, 21 (3), 271-291.
- Taylor, J., & Clerkin, R. (2011). Public service motivation and political action in college undergraduates. *Politics & Policy*, 39(5), 715-740
- Tschirhart, M. (1998). Understanding the older stipended volunteer: Age related difference among Americorps members. *Public Productivity and Management Review*, 22(1), 35-48.
- Vandenabeele, W. (2008). Government calling: Public Service Motivation as an element in selecting government as an employer of choice. *Public Administration*, 86, 1089-1105.
- Verba, S., Scholzman, K., & Brady, H. (1995). *Voice and Equality*. Cambridge, MA: Harvard University Press.
- Wilson, J. & Janoski, T. (1995). The contribution of religion to volunteering. *Sociology of Religion*, 56, 137-152.
- Wilson, J. & Musick, M. 1997a. Who cares? Toward an interest theory of volunteering work. *American Sociological Review*, 62 (Oct), 694-713.
- Wilson, J. & Musick, M. 1997b. Working and volunteering: The long arm of the job. *Social Forces* 76, 251-272.
- Wright, B. (2008). Methodological challenges associated with public service motivation research. In Perry, J. L. & Hondeghem, A. (2008). *Motivation in public management: The*

*call of public service*. London: Oxford University Press

Wuthnow, R. (1991). *Acts of compassion: Caring for others and helping ourselves*. Princeton, NJ: Princeton University Press.

-----, 2004. *Saving society: Faith based services and the future of civil society*. Princeton, NJ: Princeton University Press.



**Table 1: Descriptive Information on Variables in Study**

<b>Dependent Variable</b>	<b>Mean</b>	<b>Std. Dev</b>	<b>Med</b>	<b>Min</b>	<b>Max</b>
<i>Total Hours of Volunteering</i>	15.03	15.31	8	0	104
<i>Total Areas of Volunteering</i>	2.68	2.06	2	0	8
<i>Pol-Policy-Advocacy Vol.--Any</i>	22.7%			0	1
<i>Pol-Pol-Advcy Vol.—Hours (4 cat)</i>	.41	.85	0	0	3
<i>Social Service-Education—Any</i>	54.1%			0	1
<i>Soc. Serv.-Educ— Hours 4 (cat)</i>	1.01	1.10	1	0	3
<b>Independent Variables</b>					
PSM—Attraction to Public Service	3.59	.78	3.60	1	5
PSM—Self Sacrifice	3.63	.73	3.50	1	5
PSM—Compassion	3.62	.90	3.63	1	5
PSM—Commitment to Public	2.74	.93	2.67	1	5
VFI—Career	4.51	1.59	4.6	1	7
VFI—Social	3.47	1.59	3.5	1	7
VFI—Understanding	5.11	1.42	5.4	1	7
VFI—Enhancement	4.36	1.57	4.6	1	7
VFI—Protective	3.17	1.60	3.0	1	7
Extrovert-Enthusiastic	4.53	1.63	5	1	7
Student Group Membership	2.96	2.12	3	0	7
High School Volunteering - Own	1.32	1.17	1	0	3
High School Volunteering - Parents	.55	.88	0	0	3
High School Volunteering – Friends	1.16	1.08	1	0	3
Ideology (mean 5 items)	2.25	1.49	2	0	6
Religious Attendance: #/Week	3.55	2.34	1/Mnth	Never	>1/Wk
<b>Categorical Independent Variables</b>					
	<b>Proportion</b>			<b>N</b>	
Service Required	51.1%			293	
Gender (Female)	58.1%			335	
Race—Asian & Mixed	13.2%			75	
Race—Afr. Amer , Latino & Native	6.3%			36	

†Internet survey administered March-April 2012. Missing values imputed for PSM & VFI scales using mean of majority items in each scale.

**Table 2: PSM Items & Confirmatory Factory Analysis**

	Mean	b	R <sup>2</sup>
<b>Attraction to Public Service (APS)</b>			
I admire people who initiate or are involved in activities to aid my community. (APP5)	4.30	.90	.64
It is important to me to contribute to activities that tackle social problems. (APP7)	3.77	1.00	.78
Meaningful public service is very important to me. (CPI1)	3.94	.97	.73
It is important for me to contribute to the common good. (CPI2)	4.23	1.0	.77
<b>Self-sacrifice</b>			
I am prepared to make sacrifices for the good of society. (SS2)	3.68	.99	.80
I believe in putting civic duty before self. (SS3)	3.25	.94	.71
I am willing to risk personal loss to help someone society. (SS4)	3.32	1.00	.81
<b>Compassion (COM)</b>			
I feel sympathetic to the plight of the underprivileged. (COM2)	4.01	.97	.76
I get very upset when I see other people being treated unfairly. (COM5)	4.25	.89	.64
Consider the welfare of others is very important. (COM6)	4.15	1.00	.81
<b>Commitment to Public Values (CPV)</b>			
I think equal opportunities for citizens are very important. (CPV1)	4.33	.92	.66
It is important that citizens can rely on the continuous provision of public services. (CPV2)	3.87	.95	.72
I would agree to a good plan to make a better life for the poor, even if it cost me money or more taxes. (SS7)	3.81	1.00	.79
	Alpha	Inter-factor correlations (DWLS)	
1. APS	.807	1. APS	2. SS
2. SS	.841	.60	3. COM
3. COM	.786	.69	.65
4. CPV	.764	.64	.79
			.70
Chi-square ( <i>d.f</i> )		136.86*** (59)	
Root mean square error of approximation (RMSEA)		0.048	
Comparative Fit Index		.98	
Adjusted Goodness of Fit Index (AGFI)		.98	

**Table 3: Regression & Zero-Inflated Negative Binomial Regression Results: Total Areas and Total Hours of Volunteering**

<b>Independent Variables</b>	Volunteering Areas		Hours of Volunteering		
	Coefs.	S.E.	Estimate	S.E.	Impact
<b>Public Service Motivation Variables</b>					
Attraction to Public Service	0.201	0.178	0.094	0.106	
Self-sacrifice	0.359	0.126**	0.107	0.076	
(APS-SS combined)	0.610	0.21**	0.211	0.126+	1.57
Compassion	-0.370	0.207+	-0.154	0.105	
Commitment to Public Values	-0.289	0.153+	-0.117	0.087	
<b>Volunteer Functions Inventory</b>					
Career	-0.025	0.067	-0.014	0.041	
Social	0.093	0.067	0.063	0.036+	0.85
Enhancement	-0.207	0.080*	-0.112	0.047*	-1.67
Understanding	0.114	0.089	0.139	0.060*	1.55
Protective	0.149	0.075*	0.037	0.037	
<b>Social Opportunity/Proclivity</b>					
Big Five -- Extrovert	0.077	0.048	0.057	0.031+	0.72
# of Student Groups	0.246	0.046***	-0.643	.144***	0.77
<b>Youth Volunteering/Socialization</b>					
High School Volunteering --Own	0.296	0.078***	0.179	.038***	2.30
High School Volunteering -- Friends	0.432	0.091***	0.168	.046***	2.24
High School Volunteering -- Parents	0.271	0.114*	0.080	.044+	1.13
<b>Control Variables</b>					
Service Learning Required	0.780	0.170***	0.242	0.093**	3.09
Gender (Female)	0.058	0.178	-0.022	0.112	
Race Asian	0.524	0.320	0.394	0.161*	6.01
Race Afr-Amer/Latino	-0.382	0.371	-0.027	0.170	
Political Ideology (Fiscal & Social)	-0.048	0.077	-0.012	0.042	
Religious Attendance	0.097	0.045*	0.031	0.022	
Constant	.190 (.699)		1.396 (0.358)***		

N 479

Adjusted R<sup>2</sup> (Volunteer Areas) .460

Log Likelihood (Volunteer Hours) -1614.11

LR Chi Square (d.f.) (Volunteer Hours) 145.34 (19)\*\*\*

\* p < .05, \*\* p < .01, \*\*\*p < .001, + p < .10 (trend); Missing values imputed for PSM and VFI scales. Robust standard errors.

**Table 4:** Logistic & Ordered Logit Results: Any & Hours Political, Environmental & Advocacy Volunteering

<b>Independent Variables</b>	Any Pol-Env-Advc			Hours of Volunteering		
	Odds	S.E.	Impact	Estimate	S.E.	Impact <sup>^</sup>
<b>Public Service Motivation Variables</b>						
Attraction to Public Service	2.942	1.36*	16.9%	0.495	0.35	
Self-sacrifice	2.542	0.77**	18.0%	0.599	0.25*	6.3%
(APS-SS combined)	7.68	4.13***	30.6%	1.153	0.320***	9.5%
Compassion	0.523	0.22		-0.490	0.34	
Commitment to Public Values	0.647	0.32		-0.241	0.27	
<b>Volunteer Functions Inventory</b>						
Career	1.238	0.23		0.328	0.15*	6.1%
Enhancement	0.941	0.23		-0.036	0.13	
Understanding	1.360	0.38		0.160	0.18	
Social	0.622	0.13*	-2.1%	-0.250	0.13+	4.7%
Protective	1.203	0.28		0.087	0.13	
<b>Social Opportunity/Proclivity</b>						
Big Five -- Extrovert	0.838	0.12		-0.071	0.11	
# of Student Groups	1.487	0.20**	19.6%	0.310	0.10***	8.3%
<b>Youth Volunteering/Socialization</b>						
High School Volunteering --Own	2.111	0.62*	19.1%	0.640	0.20***	8.8%
High School Volunteering -- Friends	1.615	0.43+	11.4%	0.172	0.17	
High School Volunteering -- Parents	1.994	0.66*	12.8%	0.297	0.19	
<b>Control Variables</b>						
Service Learning Required	4.411	2.41**	31.8%	0.854	0.35*	10.1%
Gender (Female)	0.880	0.43		-0.001	0.36	
Race Asian	1.075	0.77		0.079	0.54	
Race Afr-Amer/Latino	0.401	0.52		-0.630	0.84	
Political Ideology (Fiscal & Social)	1.172	0.31		0.192	0.14	
Religious Attendance	1.114	0.19		0.008	0.09	
Constant	.001 (.002)**					
Cut 1/ Cut2/ Cut3 (std err.)				5.10(1.31)/6.96(1.35)/8.26(1.37)		
N	198			198		
PseudoR <sup>2</sup> (McFaddens)	.501			.262		
Log Likelihood (x2)	133.298			377.754		
Wald Chi2 Squire (d.f.)	87.76 (20)***			121.28(20)***		
% Correctly Classified / Reduced Error	85.6% / 50.6%					
* p < .05, ** p < .01, ***p < .001, + p < .10 (trend); Missing values imputed for PSM and VFI scales. Robust standard errors. Impact=% change in probabilities for one std. deviation change or 0/1change in IV. ^=Avg change in probability across levels of DV.						

**Table 5: Logistic & Ordered Logistic Results: Any & Hours of Social Services & Education Volunteering**

<b>Independent Variables</b>	Any Social-Education			Hours of Social-Education		
	Odds	S.E.	Impact	Estimate	S.E.	Impact <sup>^</sup>
<b>Public Service Motivation Variables</b>						
Attraction to Public Service	2.504	1.20*	5.4%	0.497	0.27+	3.9%
Self-sacrifice	2.177	0.62**	5.6%	0.348	0.18+	3.5%
(APS-SS combined)	5.58	2.6***	9.8%	.826	0.26***	6.4%
Compassion	0.735	0.30		-0.400	0.25	
Commitment to Public Values	0.549	0.22		-0.224	0.22	
<b>Volunteer Functions Inventory</b>						
Career	1.099	0.18		0.026	0.09	
Enhancement	0.852	0.17		-0.069	0.12	
Understanding	1.092	0.25		0.120	0.13	
Social	0.856	0.13		0.039	0.10	
Protective	1.217	0.20		0.016	0.10	
<b>Social Opportunity/Proclivity</b>						
Big Five -- Extrovert	0.862	0.09		0.005	0.07	
# of Student Groups	1.369	0.16**	5.8%	0.157	0.06*	3.9%
<b>Youth Volunteering/Socialization</b>						
High School Volunteering --Own	1.987	0.40***	7.0%	0.587	0.12***	8.1%
High School Volunteering -- Friends	1.641	0.35*	4.3%	0.297	0.12**	3.8%
High School Volunteering -- Parents	1.514	0.44		0.044	0.13	
<b>Control Variables</b>						
Service Learning Required	2.812	1.08**	9.5%	0.589	0.23**	6.9%
Gender (Female)	1.779	0.63		0.361	0.23	
Race Asian	1.176	0.78		0.532	0.36	
Race Afr-Amer/Latino	0.287	0.21		-0.709	0.55	
Political Ideology (Fiscal & Social)	0.978	0.19		-0.085	0.10	
Religious Attendance	1.239	0.14		0.111	0.06	
Constant	.012 (.018)**					
Cut 1/Cut2/Cut3 (std error)				2.21(.93)/4.24(.94)/5.56(.96)		
N	359			359		
PseudoR <sup>2</sup> (McFaddens)	.421			.181		
Log Likelihood (x2)	229.069			807.120		
Wald Chi2 Square (d.f.)	91.09 (20)***			139.79 (20)***		
% Correctly Classified / Reduced Error	86.35%/ 15.15%					
* p < .05, ** p < .01, ***p < .001, + p < .10 (trend); Missing values imputed for PSM and VFI scales. Robust standard errors. Impact=% change in probabilities for one std. deviation change or 0/1change in IV. ^=Avg change in probability across levels of DV.						