Exploring the Relationship Between Public Service Motivation and Formal and Informal Volunteering

Richard M. Clerkin, North Carolina State University
Eric Fotheringham, North Carolina State University

In this paper, we apply public service motivation to the ongoing discussion of formal and informal volunteering and whether these are two distinct constructs or variations on the same theme. This exploratory research uses survey data of undergraduate students reporting their participation in both types of volunteering activities. Using structural equation modeling, these formal and informal volunteering activities show different influences on three dimensions of PSM. In addition to PSM, high school volunteering and religiosity have direct effects on rates of formal volunteering, which in turn positively influence the PSM dimensions of civic duty and self-sacrifice. Being an Evangelical Christian is associated with increased informal volunteering, which is positively related to the PSM compassion dimension. These results indicate that the different dimensions of PSM, and how formal and informal volunteering influences them, should be useful tools for scholars and practitioners seeking to understand these distinct types of pro-social behaviors.

Keywords: Volunteering, Public Service Motivation, Nonprofits

Recent research has begun to explore differences between formal and informal volunteering, attempting to parse the conceptual, empirical, and motivational differences between the two types of pro-social behaviors (Benenson & Stagg, 2015; Lee & Brudney, 2012; Piatak, 2014; Tang, 2015). In the public administration literature, the concept of public service motivation (PSM) has been developed to help explain what motivates people to work (and continue to work) in public service. This theory also has been used to understand giving and formal volunteering among elite volunteers as well as college students.

At its essence, PSM is based on the notion that, as Perry and Wise's (1990) seminal article defined PSM, "an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions or organizations" (p. 368). These motives include a mixture of rational (maximizing individual self-interest), normative (beliefs and values about what is proper), and affective (human emotion) motives that fluctuate in salience over an individual's lifetime (Perry & Wise, 1990; Taylor, 2007). As such, PSM is a possible tool to use in this conversation about the extent to which formal and informal volunteering are fundamentally different types of pro-social behavior.

Because PSM is grounded in public institutions and organizations, it is assumed that it would be positively associated with formal volunteering and unrelated to informal volunteering because such activities are, by definition, excluded from this formal public institutional setting. This paper explores data from a survey of undergraduate college students to test whether PSM is positively related to both formal and informal volunteering. If both types of volunteering sate the need to contribute to something bigger than one's self, we may be able to extend the insights of the vast literature on formal volunteering to informal volunteering. Definitions of formal and informal volunteering may simply be artifacts of researchers' needs to create barriers between public/private spheres of life rather than a distinction rooted in an individual's need to contribute to society.

Formal and Informal Volunteering

The concept of volunteering has varied meanings depending on the context of the research and operational definition employed, with research on the subject expanding beyond traditional definitions of providing service without remuneration. Cnaan, Handy, and Wadsworth (1996) suggest that the scope and variability of volunteering could contribute to confusion and differences among practitioners and scholars when it comes to defining volunteerism. One of the attempts to define and clarify terms to more accurately quantify volunteer activities has been to differentiate between formal and informal volunteering (Choi et al., 2007; Wilson, 2000).

Formal volunteering is largely considered to be volunteering activities conducted by individuals with legally organized entities, such as hospitals, nonprofit organizations, or churches (Choi et al., 2007; Clary et al., 1998). Formal volunteering among youth, university students, working adults, and retired adults has been studied in order to understand the motivations of volunteers in different settings (for example, see MacNeela, 2008). Coursey et al. (2011) suggest in their analysis that the commitment of volunteers and the intensity of their motivation vary across the types of formal volunteering in which they are engaged. Musick and Wilson (2008) offer multiple definitions of volunteering in their exhaustive discussion of volunteerism, including formal volunteering as a form of "bureaucratized help." Despite various efforts in the literature to develop a definition of informal volunteering, Musick and Wilson (2008) argue that informal "helping" should not be conflated with formal volunteering when it is generally part of a "generalized exchange network or cycle of reciprocity" and thus leave the discussion of informal volunteering out of their book.

There have been numerous efforts in the volunteer literature to incorporate concepts of informal volunteering into the growing cannon of research on volunteer activities and behavior. Choi et al. (2007) conceptualize informal volunteering in their study to include spousal caregiving within the home. Johnson and Schaner (2005) argue that older volunteers tend to volunteer in areas that benefit themselves (both formally and informally) and one of the most common informal activities being that of caring for an ailing spouse, family member, or neighbor. Choi et al. (2007) and Burr et al. (2005) emphasize that their data indicate informal volunteering, even when performing caregiving duties for family members, often leads to other informal or formal volunteering activities. In a national survey conducted for the independent sector, Toppe, Kirsch, and Michel (2002) define informal volunteering as "unpaid work done for people outside the household and not within the context of a formal service organization." Activities highlighted by respondents included helping a neighbor, shopping for an elderly person, or babysitting for a family friend (Toppe, Kirsch, & Michel, 2002). Even though the previously mentioned survey from the independent sector serves as a heavily relied-upon source for numerous academic discussions on volunteerism, the informal nature of "helping" or "caring" is frequently ignored or intentionally left out of discussions of volunteering (Musick & Wilson, 2008).

Volunteer Motivation and Public Service Motivation

Identifying volunteer motivations and the influence of motivations on rates of volunteerism is the foundation of functional approaches to volunteer studies (Clary & Snyder, 1999; Cnaan, Handy, & Wadsworth, 1996; Musick & Wilson, 2008). This research finds positive correlations between volunteer activities and increased civic engagement, ongoing volunteerism as an adult, and careers in public service (Astin, Sax, & Avalos, 1999; Hart et al., 2007; Perry et al., 2008). Clary, Snyder, and collaborators (Clary & Snyder, 1999; Clary et al., 1998; Clary et al., 1994;

Stukas, Snyder, & Clary, 1999) suggest volunteer motivations are purposeful and that "people can and do perform the same actions in the service of different psychological functions" (Clary & Snyder, 1999). Clary and Snyder (1999) identify six "functions" potentially served by volunteering (values, understanding, enhancement, career, social, protective) and argue that there are "specific motivational functions underlying behavior and attitudes" (Clary & Snyder, 1999) and the choice of volunteer activities and host organizations (Coursey, et al, 2011). This is a popular explanation of volunteer motivation in the literature and influences the discussions of formal and informal volunteering.

A concept introduced to explore why individuals choose to serve in the public sector, public service motivation (PSM) also has been applied to the study of volunteer motivation. PSM is defined as "an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions or organizations" (Perry & Wise, 1990, p. 368). These motives may be rational, normative, or affective and their influence varies throughout an individual's lifetime (Perry & Wise, 1990; Taylor, 2007). PSM has largely been applied in studies seeking to understand the "direction, intensity, and persistence of work-related behaviors" on the job and in the choice of a career in public service (Wright, 2001).

PSM was developed as an explanatory variable useful in understanding why individuals would choose careers in the public sector when other opportunities may be available. Empirical evidence and theoretical developments led Perry (1996) to develop a measurement of PSM. Four dimensions were identified that tend to lead individuals to search for opportunities in public service: attraction to public policymaking, commitment to the public interest and civic duty, compassion, and self-sacrifice (Perry, 1996). In a variety of studies, PSM has been shown to explain statistically significant differences between public and private sector employees with respect to variances in compensation, attitudes toward helping others, and job status (Perry, 1997; Wittmer, 1991).

These four dimensions of PSM (attraction to public policy making, commitment to the public interest and civic duty, compassion, and self-sacrifice) are the theory's core elements. Perry and Wise (1990) argue that attraction to public policymaking is a rational, utility-maximizing dimension of PSM that appeals to workers searching for dramatic and exciting professional opportunities, reinforcing the individual's image of self-importance. Related rational motivations contributing to this dimension of PSM include a personal identification with the particular public program or because there is a desire to advocate for a particular special interest that can only be addressed in the public policy arena. Despite scholars finding attraction to public policy as an indicator of PSM, the face validity of this dimension recently has been called into question in the literature (Kim, 2011).

The second PSM dimension introduced is commitment to the public interest and civic duty. This normative approach to employment argues that a desire to serve the public interest is altruistic and patriotic (Downs, 1967). Even though the definition of "public interest" may vary among individuals, displaying a commitment to the ideal of civic duty differentiates other rational approaches to motivation focused on the maximizing of self-interest. Perry and Wise (1990) argue that working in the public sector, due to a sense of civic duty or a commitment to a particular issue relevant to the public interest, draws on the normative ideals common in American culture that public service can be a "noble" pursuit. Going forward in this discussion and application to the data used in the present analysis, this dimension will be referred to simply as "civic duty."

Perry and Wise (1990) argue that the third dimension, compassion, is an affective motivation for employment that may represent a particular moral position. While this element of PSM may be seen as an emotional state that drives individuals to engage in specific work activities that may not be as financially significant as private sector employment, it is a key element of the PSM model. This dimension helps to explain not only the choice of public sector employment but also the specific career field within the public sector.

The fourth dimension of PSM is self-sacrifice. Perry (1996) describes this dimension as "the willingness to substitute service to others for tangible personal rewards" (p. 7). While this definition may seem closely related to the compassion dimension discussed previously, this element combines rational and affective motivations when examining career choices. The rewards of public service that come through sacrificing potentially lucrative careers still provide psychological rewards that may be equally as important to the individual. The more salient argument for this dimension, however, is that the worker openly acknowledges the fewer personal rewards in order to provide some form of public service.

Perry (1997) and others (see Whittmer, 1991; Perry et al., 2008) argue that PSM is a needs-based (rational, affective, and normative) approach to understanding work motivation and sector choice. In discussing factors that contribute to PSM, Perry (1997) argues that PSM can be fostered by parental socialization, religious socialization, professional identification, political ideology, and demographic characteristics (socioeconomic status). These "antecedents" to PSM are defined as experiences prior to service in the public sector that encourage individuals to pursue careers in public policymaking and satisfy feelings of civic duty, compassion, and self-sacrifice (Perry, 1996). In their discussion of PSM antecedents, Perry and colleagues (2008) find that volunteering, along with parental socialization, religious socialization, and specific socioeconomic variables (gender, level of education, and income), directly and indirectly influences the levels of PSM in individuals.

While PSM was initially developed and utilized in the literature to understand the use of pay-for-performance compensation structures in the public sector, it has been expanded to understand nonprofit workers (Perry, 2000), volunteers (Coursey et al., 2008; Houston, 2005; Perry, et al., 2008), and donating behavior (Clerkin, Paynter, & Taylor, 2009; Houston, 2005). As argued above, volunteering has been found to be an antecedent to PSM[1] (Perry et al., 2008).

Critics of PSM, such as Bozeman and Su (2015), are rightly concerned that the concept as theorized and studied is not always clearly delineated from similar other-regarding concepts such as altruism. However, they do suggest that the "public-focused concept seems to us to have the most promise to provide a concept that is distinctive" (p. 704). While we are not able to "cage-match" PSM versus other pro-social motivations in this study, we are able to examine a pro-social activity, volunteering, in a public context (the public sphere of formal volunteering) and in a private context (the private sphere of informal volunteering). If the public context is important to PSM, then we should expect a different relationship between PSM and formal volunteering than between PSM and informal volunteering.

---

[1] We thank an anonymous reviewer for pointing out that the relationship between PSM and volunteering is not quite this simple. PSM might actually motivate someone to volunteer, thus volunteering should be considered as a consequence of rather than an antecedent to PSM. Indeed, we would expect to see a normatively virtuous cycle between volunteering and PSM. However, given the causal ordering of the variables in our data, volunteering in the past 12 months and a current measure of PSM, we choose to position our research in the volunteering as antecedent to PSM literature so as to be consistent in our argument and analysis.

Harkening back to Perry and Wise's (1990) seminal definition of PSM and the insights from VFI research (e.g., Coursey et al., 2011) that there is a relationship between the organization where someone volunteers and their motivations, we should expect there to be differences in formal and informal volunteering on PSM. If PSM is grounded in an individual's need to contribute to the public good through public institutions or organizations, we suspect that formal volunteering, because it takes place in legal, formalized public-benefiting organizations, plays a more prominent role in developing an individual's PSM than informal volunteering. Participating in these sorts of formal formative experiences should increase an individual's PSM. Therefore, we hypothesize:

> H_1: *Formal volunteering increases each dimension of an individual's PSM.*

Conversely, because informal volunteering takes place in the private sphere of familial and neighborhood relationships, engaging in these activities should not have an impact on an individual's need to contribute to the public good. Therefore, we hypothesize:

> H_2: *Informal volunteering is not related to each dimension of an individual's PSM.*

Data and Methods

To test these hypotheses, we conducted a survey of 329 (70% response rate) undergraduate students taking introductory American politics courses at a large southeastern university. We collected 290 usable responses (effectively a 62% response rate) with complete information for each of the variables used in this study. Even though this is not a random sample, because the participants are fulfilling university general education requirements, the sample is fairly representative of the university's undergraduate population. Given this university's demographics, our sample of convenience has a greater proportion of males and most likely a smaller proportion of African Americans, than a random sample drawn from all American colleges and universities. Nonetheless, this study provides valuable information and insight into using the PSM construct as a way to strengthen our understanding of formal and informal volunteering.

We use structural equation modeling (SEM) to test our hypotheses about the impact of formal and informal volunteering on the dimensions of PSM. This technique allows us to explore the direct and indirect effects of demographic characteristics that are antecedents to both volunteering and PSM. Our structural model consists of six latent variables (three PSM dimensions [civic duty, compassion and self-sacrifice]; formal volunteering; informal volunteering; family socialization) and seven observed control variables (gender; religiosity; evangelical religious tradition; income; work; high school volunteering; and mandated high school volunteering). Because all of our data are captured as either Likert-scale or dichotomous variables, we estimate the model using WLSMV (weight least-squares with mean and variance adjustment, using the diagonal of the weight matrix) estimator in MPlus6 to create our latent variables and to regress the observed variables on our latent constructs. We describe the elements of our measurement and structural models below. Because our structural equation model produces a large amount of statistical output, we have broken the output into a number of different tables to make the detailed results more readable. The tables that contain the measurement portion of our model (the factor analysis that generates the latent PSM, volunteering, and family socialization variables used in the structural part of our analysis) can be found in the appendix. The table containing the structural portion of the model (our

Table 1. Dichotomous Description of Volunteer Variables Used in Measurement Model

	n	Proportion Doing any Volunteering (%)
Formal Volunteering: Overall	274	87
Formal Volunteering: Religion	164	52
Formal Volunteering: School	212	68
Formal Volunteering: Advocacy	68	22
Formal Volunteering: Human Service	174	56
Formal Volunteering: Other	117	38
Informal Volunteering: Overall	296	95
Informal Volunteering: Transportation	254	81
Informal Volunteering: Housework	241	77
Informal Volunteering: Childcare	158	50
Informal Volunteering: Other	267	85

regression analysis) and the related path diagram figure are shown in text below.

Measurement of Model Variables

Our measurement model consists of six latent constructs. Three dimensions of PSM (civic duty, compassion, and self-sacrifice) are our ultimate dependent variables. The two forms of volunteering, formal and informal, are our penultimate dependent variables; they are both regressed on our independent variables and are used as independent variables in the regressions of the PSM dimensions. Also, based on the literature reviewed above, indicating that there is a relationship between formal and informal volunteering, we allow formal and informal volunteering to co-vary. Finally, family socialization to engage in public service is an independent variable used in the regressions of both types of volunteering and all three PSM dimensions.

PSM. Given recent discussions in the literature (e.g., Kim, 2011) raising concerns over the face validity for the indicators of attraction to public policy dimension, we do not include that dimension or its indicators in our analysis. Each of the remaining 21-indicator variables from Perry's (1996) PSM construct were restricted to loading on only the latent PSM dimensions indicated by Perry's research: civic duty, self-sacrifice, and compassion. See Appendix table A1 for the questions and standardized factor loadings and regression weights for our model.

Family Socialization. Perry (1996) argues that one way individuals develop PSM is through being socialized into these values in their families. He captures six types of activities that can lead to increasing levels of PSM in individuals; the extent to which 1) parents actively participated in volunteer organizations; 2) the family always helped each other; 3) concerning others in distress, my family showed no interest; 4) my parents told me I should be willing to lend a helping hand; 5) my parents often urged me to get involved with volunteer organizations; and 6) my parents frequently discussed moral values with me. See Appendix table A2 for the questions and standardized factor loadings and regression weights for our model.

Formal and Informal Volunteering. As reported in table 1, the respondents were asked about the number of hours they were involved in six types of formal volunteering (volunteering for religious, school, advocacy, human services, political party, and other formal nonprofits) and four types of informal volunteering (helping an unrelated person with transportation,

Table 2. Descriptive Statistics of Categorical Independent Variables

	n	Proportion (%)
Male	175	57
Evangelical Protestant	151	51
Family Income > 75K	146	66
Frequent Church Attendance	100	32
Volunteered in High School	274	88
Mandatory High School Volunteering	111	36
Work During School Year	177	58

housework, child care, and other types of service). We use these observed measures to capture an individual's depth of formal and informal volunteering. See appendix table A3 for the questions and standardized factor loadings and regression weights for our model.

Control Variables for Structural Model

To account for demographic and experiential antecedents to volunteering and PSM, we include a number of control variables. In particular, we control for whether a respondent is working, his family income is greater than $75,000, male, religiously active, an Evangelical Protestant, and he volunteered in high school and if that experience was mandated to meet a graduation requirement. Descriptive statistics for these variables are reported in table 2. Working and family income are included because they represent potential barriers/facilitators for those engaging in volunteer activities. Sex is controlled because women are more likely to volunteer than men (Einolf, 2011). We included two measures of religion that are related to volunteering: religiosity and faith tradition. Previous research indicates that religiosity is positively associated with volunteering (Musick & Wilson, 2008). Other research indicates that individuals from an Evangelical Protestant faith tradition volunteer differently (more often and typically within their own faith community rather than the broader society) than people of other religious traditions (Musick & Wilson, 2008). Finally, we include a student's experience with volunteering in high school to examine the impact of this past behavior and socialization on current choices. Youth service has a strong and significant impact on the likelihood that young adults will continue charitable behaviors after high school by giving at higher levels and volunteering more frequently (Perry et al., 2008; Toppe et al., 2002).

Results

Using structural equation modeling (SEM) allows the testing of direct and indirect effects of various variables on volunteering and PSM. We report the results of structural model in table 3. This table contains the results of two models: the full model and the final model. While the RMSEA (0.05) of the initial model indicates a good fit between the model and our data, the CFI (0.89) and TLI (0.88) indicate a less than good fit. Therefore, we dropped indicator variables for the latent constructs in the measurement model that had a standardized factor loading of less than or equal to 0.55. This improved the overall fit measures for the model. The results for the final model are used to generate the results of the structural model depicted in figure 1. The model goodness of fit measures commonly reported in SEM (RMSEA, CFI, TLI) all indicate that this is model is a good fit for the data. The RMSEA (0.05) of the final model indicates a good fit and the CFI and TLI goodness of fit measures (0.92 and 0.90, respectively) are improved, and, with exploratory research, these measures are acceptable (Garson, 2012). What SEM presents with these data is the formation of two distinct constructs that influence PSM differently: formal

Table 3. Structural Models

	Initial Model		Final Model	
	StdYX	*P*-value	StdYX	*P*-value
Formal Volunteering	ON		ON	
Family Socialization	0.310	0.000	0.373	0.000
Male	-0.112	0.114	-0.123	0.109
Working	0.034	0.680	0.066	0.456
Family Income > 75K	-0.071	0.373	-0.091	0.281
Religiously Active	0.379	0.000	0.362	0.000
Volunteered in High School	0.263	0.004	0.261	0.010
HS Volunteering was Mandatory	-0.234	0.003	-0.238	0.004
Evangelical Protestant	-0.031	0.716	-0.027	0.769
Informal Volunteering	ON		ON	
Family Socialization	0.033	0.627	0.046	0.510
Male	-0.020	0.764	0.005	0.934
Working	-0.031	0.646	-0.027	0.689
Family Income > 75K	-0.018	0.797	-0.006	0.932
Religiously Active	0.070	0.318	0.062	0.376
Volunteered in High School	0.072	0.281	0.068	0.320
HS Volunteering was Mandatory	-0.068	0.327	-0.049	0.487
Evangelical Protestant	0.177	0.010	0.171	0.015
Civic Duty	ON		ON	
Formal Volunteering	0.443	0.000	0.485	0.000
Informal Volunteering	-0.002	0.972	-0.014	0.811
Family Socialization	0.224	0.02	0.188	0.017
Male	-0.037	0.547	-0.026	0.680
Religiously Active	0.122	0.071	0.115	0.093
Volunteered in High School	0.187	0.005	0.177	0.014
HS Volunteering was Mandatory	-0.163	0.023	-0.152	0.035
Compassion	ON		ON	
Formal Volunteering	0.133	0.261	0.232	0.136
Informal Volunteering	0.178	0.007	0.162	0.034
Family Socialization	0.215	0.009	0.228	0.023
Male	-0.222	0.002	-0.082	0.316
Religiously Active	-0.091	0.222	-0.138	0.102
Volunteered in High School	0.091	0.247	0.085	0.3789
HS Volunteering was Mandatory	-0.122	0.101	-0.182	0.039
Self-Sacrifice	ON		ON	
Formal Volunteering	0.279	0.015	0.310	0.021
Informal Volunteering	0.069	0.287	0.057	0.367
Family Socialization	0.210	0.004	0.184	0.027
Male	0.085	0.189	0.105	0.110

Religiously Active	0.137	0.074	0.124	0.113
Volunteered in High School	0.116	0.113	0.116	0.126
HS Volunteering was Mandatory	-0.089	0.210	-0.082	0.262

and informal volunteering. These two forms of volunteering intermediate the relationship between PSM and the antecedents of PSM. The significant relationships are displayed in figure 1.

PSM and formal volunteering

Much of the discussion surrounding PSM and volunteering focuses on the influence of formal volunteering on the primary latent constructs of PSM: civic duty, self-sacrifice, and compassion. Our data indicate that formal volunteering indeed does influence PSM, but only in the civic duty and self-sacrifice dimensions. As shown in figure 1, formal volunteering is influenced by family socialization, volunteering in high school, and the religiosity of the survey participants. The latent variable formal volunteering then influences the civic duty and self-sacrifice PSM latent variables. In this model, formal volunteering has no direct effects on the third PSM variable, compassion.

Taken together, these results provide moderate support for hypothesis 1, that formal volunteering increases each dimension of an individual's PSM. Formal volunteering leads to increased levels of civic duty and self-sacrifice dimensions of PSM.

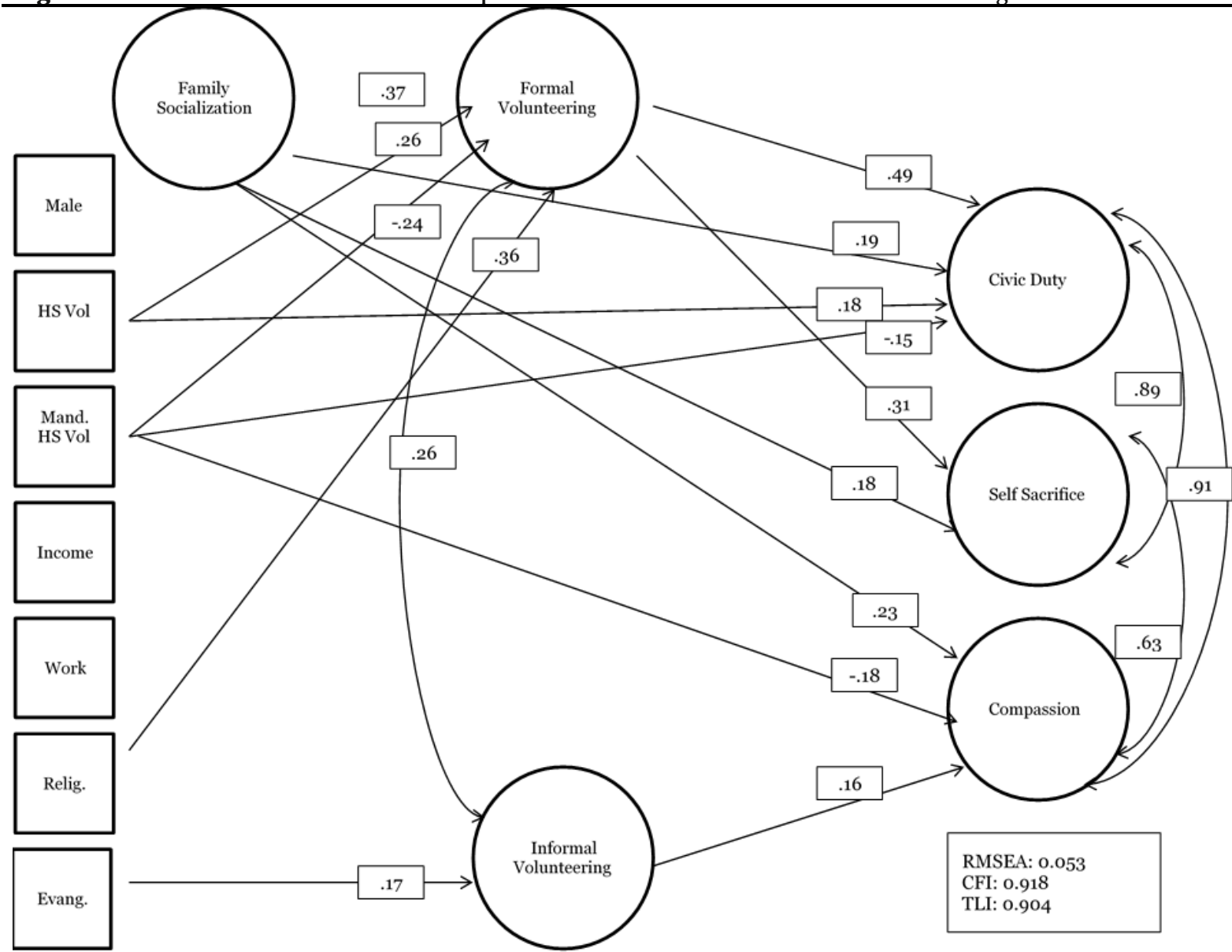*PSM and informal volunteering*

In this model, informal volunteering does operate as a separate construct, influencing one of the PSM latent variables. The only antecedent that influenced informal volunteering was whether the respondent belonged to an Evangelical Protestant faith group, which was not related to formal volunteering. Being an Evangelical Protestant increases the amount of informal volunteering. The construct of informal volunteering had a relatively weak influence on PSM's compassion variable, but formal volunteering was not related at all to compassion.

In regard to hypothesis 2, that informal volunteering is not related to the dimensions of an individual's PSM, our data indicate we need to reject this null hypothesis; informal volunteering is indeed related to one of the dimensions of PSM, Compassion. While this relationship is unexpected, the effect was weak, and, given that formal volunteering does not impact this PSM dimension, these data indicate that we should keep discussions of formal and informal volunteering operating as different constructs. They seem to sate different psychological needs.

Discussion and Conclusion

In this article, we review the application of public service motivation and its applicability to the ongoing discussion of formal and informal volunteering. Much of the discussion surrounding the two types of volunteering focuses on whether these are two distinct constructs or variations on the same theme. The exploratory research presented in this discussion uses survey data of university undergraduate students and reporting their participation in volunteering activities. As noted previously, surveying a sample of undergraduate students limits the generalizability of our study to the general U.S. adult population. While the sample is relatively representative of its university population, it precludes us from examining the impact of workplace on

Figure 1. Standardized Results: Structural Equation Model of Formal and Informal Volunteering on PSM

volunteering and PSM. Research (e.g., Ertas, 2014; Lee, 2012; Rotolo & Wilson, 2006) shows that the sector people work in impact their level of volunteering and/or their level of PSM. Further studies examining the relationship between formal volunteering, informal volunteering, and PSM in the broader adult population is needed before drawing firm conclusions based only on this one study of undergraduates.

Our exploratory research, using structural equation modeling, indicates that formal and informal volunteering activities show different influences on the three dimensions of PSM. High school volunteering and religiosity have direct effects on rates of formal volunteering; those, in turn, influence the PSM attitudes of civic duty and self-sacrifice. The faith community of the respondents, belonging to an Evangelical Christian faith tradition, influences the construct of informal volunteering, which is related to the PSM compassion dimension.

Our data also provide some interesting findings regarding two of our control variables. If the respondent volunteered in high school and whether this was a mandated activity have different and significant effects not only on their current formal volunteering but also on their level of PSM. One of the goals of high school volunteering programs is to develop a norm of community engagement in young adults. In our data, having volunteered in high school increases current volunteering and the civic duty PSM dimension. Because this activity is not related to the other PSM dimensions, these volunteering experiences seem to be meeting their intended purpose. However, if students were mandate to volunteer in high school, the impact on current levels of formal volunteering and the civic duty and compassion PSM dimensions is negative. Further, the negative influence of being mandated to volunteer is almost as large as the positive effect of having volunteered on current formal volunteering and the civic duty PSM dimension. This finding suggests that, while providing high school students with opportunities to volunteer can lead to future civic engagement, mandating these experiences have the potential to wipe out any positive impacts the volunteering experiences may engender.

In sum, the findings from the survey indicate that formal and informal volunteering seem to sate different needs. The influence of formal volunteering on civic duty and self-sacrifice, referred to as normative and affective motivations for public service (Perry & Wise, 1990), suggests that these types of formal activities might perform different psychological roles in the lives of volunteers. Conducting further research on the role of formal volunteering in the choice of public service careers will strengthen the empirical discussion of formal volunteering as well as PSM. Similarly, informal volunteering was only associated with the compassion dimension of PSM. Going forward, it will be useful to overcome some of the limitations on the generalizability of this study by expanding the research population beyond undergraduate students. While formal and informal volunteering are related to different motivational needs in our sample of undergraduates, more work on a diverse array of subject pools is needed to more fully understand the potential for PSM to help us understand formal and informal volunteering.

Implications for Practice and Theory

These initial findings indicate that further exploration of formal and informal volunteering should continue to distinguish between these two types of volunteering, exploring them as distinct constructs. These two types of volunteering may serve different functions in the lives of volunteers and deserve to be studied separately. For scholars, this linkage between PSM and volunteering may provide the motivational pathway for the positive interrelationship between formal and informal volunteering (Lee & Brudney, 2012). The different dimensions of PSM, and how they are influenced by formal and informal volunteering, should continue to be an area of

research for scholars and practitioners seeking to understand pro-social behaviors. It also highlights the need for continued measurement development of PSM. If the unique contribution of PSM to the many ways that scholars think about pro-social motivations is that is it grounded in the public realm, work on refining how we measure PSM dimensions needs to continue to ensure we are capturing motivations grounded in our public institutions and organizations and not in the public and private spheres of our lives.

The positive relationship between formal volunteering and the civic duty and self-sacrifice dimensions of PSM in our sample of undergraduate students has interesting implications for public service managers in the hiring process. The formal volunteering activities on a job applicant's résumé may be a useful signal of the applicant's level of civic duty and self-sacrifice PSM. All else being equal between two candidates, more and deeper formal volunteering experiences of one candidate may be indicative of his or her commitment to be a highly engaged and motivated public servant.

While the positive relationship between informal volunteering and the compassion dimension of PSM was not hypothesized, and potentially presents us with theoretical challenges, this finding may be of practical use to local government and nonprofit leaders interested in increasing the social capital and sense of community in their neighborhoods. Developing public service messages and programs that trigger an individual's PSM need for compassion may lead to an increase in the informal helping behaviors that strengthen communities.

Disclosure Statement

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

References

Astin, A. W., Sax, L., & Avalos, J. (1999). Long-term effects of volunteerism during the undergraduate years. *Review of Higher Education. 22*(2), 187-202.

Benenson, J. & Stagg, A. (2016). An asset-based approach to volunteering: Exploring benefits for low-income volunteers. *Nonprofit and Voluntary Sector Quarterly, 45*, 131S-149S. doi:10.1177/0899764015604739

Bozeman, B. & Su, X. (2015). Public service motivation concepts and theory: A critique. *Public Administration Review, 75*, 700-710. doi:10.1111/puar.12248

Burr, J. A., Choi, N. G., Mutchler, J. E., & Caro, F. G. (2005). Caregiving and volunteering: Are private and public helping behaviors linked? *Journal of Gerontology, 60*, 247-256. doi: 10.1093/geronb/60.5.S247

Choi, N. G., Burr, J. A., Mutchler, J. E., & Caro, F. G. (2007). Formal and informal volunteer activity and spousal caregiving among older adults. *Research on Aging, 29*, 99-127. doi: 10.1177/0164027506296759

Clary, G. E. and Snyder, M. (1999). The motivations to volunteer: theoretical and practical considerations. *Current Directions in Psychological Science, 8*, 156-160. doi:10.1111/1467-8721.00037

Clary, G. E., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J. A., & Miene, P. K. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology, 74*, 1516-1530. doi:10.1037/0022-3514.74.6.1516

Clary, G. E., Snyder, M., Ridge, R. D., Miene, P. K., & Haugen, J. A. (1994). Matching messages to motives in persuasion: A functional approach to promoting volunteerism. *Journal of Applied Social Psychology*, *24*, 1129-1149. doi:10.1111/j.1559-1816.1994.tb01548.x

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. doi:10.1177/0275074008327512

Cnaan, R. A., Handy, F., & Wadsworth, M. (1996). Defining who is a volunteer: conceptual and empirical considerations. *Nonprofit and Voluntary Sector Quarterly*, *25*, 364-383. doi:10.1177/0899764096253006

Coursey, D., Brudney, J. L., Littlepage, L., & Perry, J. L. (2011). Does public service motivation matter in volunteering domain choices? A test of functional theory. *Review of Public Personnel Administration*, *31*, 48-66. doi:10.1177/0734371X10394405

Coursey, D., Perry, J. L., Brudney, J. L., & Littlepage, L. (2008). Psychometric verification of Perry's public service motivation instrument: Results from volunteer exemplars. *Review of Public Personnel Administration*, *28*, 79-90. doi:10.1177/0734371X07309523

Downs, A. (1967). *Inside bureaucracy.* Boston, MA: Little, Brown and Company.

Einolf, C. (2011). Gender differences in the correlates of volunteering and charitable giving. *Nonprofit and Voluntary Sector Quarterly*, *40*, 1092-1112. doi:10.1177/0899764010385949

Ertas, N. (2014). Public service motivation theory and voluntary organizations: Do government employees volunteer more? *Nonprofit and Voluntary Sector Quarterly*, *43*, 254-271. doi:10.1177/0899764012459254

Garson, D.G. (2012). *Structural equation modeling.* Retrieved from http://faculty.chass.ncsu.edu/garson/PA765/statnote.htm

Hart, D., Donnelly, T. M., Youniss, J., & Atkins, R. (2007). High school community service as a predictor of adult voting and volunteering. *American Education Research Journal*, *44*, 197-219. doi:10.3102/0002831206298173

Houston, D. (2005). Walking the walk of public service motivation: Public employees and charitable gifts of time, blood and money. *Journal of Public Administration Research and Theory*, *16*, 67-86. doi:10.1093/jopart/mui028

Johnson, R. W., & Schaner. S. G. (2005). *Value of unpaid activities by older Americans tops $160 billion per year.* Washington, DC: Urban Institute Retirement Project.

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. doi:10.1093/jopart/muq048

Lee, Y. (2012). Behavioral implications of public service motivation: Volunteering by public and nonprofit employees. *American Review of Public Administration*, *42*, 104-121. doi:10.1177/0275074011398120

Lee, Y., & Brudney, J. L. (2012). Participation in formal and informal volunteering: Implications for volunteer recruitment. *Nonprofit Management and Leadership*, *23*, 159-180. doi:10.1002/nml.21060

MacNeela, P. (2008). The give and take of volunteering: Motives, benefits, and personal connections among Irish volunteers. *Voluntas*, *19*, 125-139. doi:10.1007/s11266-008-9058-8

Musick, M. A., & Wilson, J. (2008). *Volunteers: A social profile.* Bloomington, IN: Indiana University Press.

Musick, M. A., Wilson, J., & Bynum, W. B. (2000). Race and formal volunteering: The differential effects of class and religion. *Social Forces*, *78*, 1539-1570. doi:10.1093/sf/78.4.1539

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. doi:10.1093/oxfordjournals.jpart.a024303

Perry, J. L. (1997). Antecedents of public service motivation. *Journal of Public Administration Research and Theory* 7, 181-197. doi:10.1093/oxfordjournals.jpart.a024345

Perry, J. L. (2000). Bringing society in: Toward a theory of public service motivation. *Journal of Public Administration Research and Theory*, *10*, 471-488. doi:10.1093/oxfordjournals.jpart.a024277

Perry, J. L., Brudney, J. L., Coursey, D., Littlepage, L. (2008). What drives morally committed citizens? A study of the antecedents of public service motivation. *Public Administration Review*, *68*, 445-458. doi:10.1111/j.1540-6210.2008.00881.x

Perry, J. L., & Wise, L. R. (1990). The motivational bases of public service. *Public Administration Review*, *50*, 367-373. doi:10.2307/976618

Piatak, J. S. (2014). Altruism by Job Sector: Can public sector employees lead the way in rebuilding social capital? *Journal of Public Administration Research and Theory*, *25*, 877-900. doi:10.1093/jopart/muu013

Rotolo, T., & Wilson, J. (2006). Employment sector and volunteering: The contribution of nonprofit and public sector workers to the volunteer labor force. *Sociological Quarterly*, *47*, 21-40. doi:10.1111/j.1533-8525.2006.00036.x

Stukas, A. A., Snyder, M., & Clary, E. G. (1999). The effects of "mandatory volunteerism" on intentions to volunteer. *Psychological Science*, *10*, 59-66. doi:10.1111/1467-9280.00107

Tang, F. (2016). Retirement patterns and their relationship to volunteering. *Nonprofit and Voluntary Sector Quarterly*, *45*, 910-930. doi:10.1177/0899764015602128

Taylor, J. (2007). The impact of public service motives on work outcomes in Australia: a comparative multidimensional analysis. *Public Administration*, *85*, 931-959. doi:10.1111/j.1467-9299.2007.00686.x

Toppe, C. M., Kirsch, A. D., & Michel, J. (2002). *Giving and volunteering in the United States.* Retrieved from http://www.independentsector.org/giving_volunteering

Wilson, J. (2000). Volunteering. *Annual Review of Sociology*, *26*, 215-240. doi:10.1146/annurev.soc.26.1.215

Wittmer, D. (1991). Serving the people or serving for pay: Reward preference among government, hybrid sector, and business managers. *Public Productivity and Management Review*, *14*, 369-383. doi:10.2307/3380953

Wright, B. E. (2001). Public-sector work motivation: a review of the current literature and a revised conceptual model. *Journal of Public Administration Research and Theory*, *11*, 559-586. doi:10.1093/oxfordjournals.jpart.a003515

Author Biographies

Richard M. Clerkin is executive director of the Institute for Nonprofits and associate professor in the Department of Public Administration at North Carolina State University. His research interests focus broadly on the nonprofit sector. In particular, he studies motivations for public service and public benefiting activities. His is a coauthor of the leading public administration textbook, *Public Administration Understanding Management, Politics, and Law in the Public Sector*, and research has been published in journals such as *Public Administration Review, American Review of Public Administration, Armed Forces & Society, Nonprofit and Voluntary Sector Quarterly,* and *Nonprofit Management and Leadership.*

Eric Fotheringham earned his doctoral degree from the Department of Public Administration at North Carolina State University. His dissertation focused on the role of nonprofit

organizations in Latino immigrant incorporation in North Carolina. He currently serves as Senior Data & Analytics Associate with University of North Carolina General Administration in Chapel Hill, NC.

Appendix

Table A1. Public Service Motivation Measurement Model

		Initial Model		Final Model	
		StdYX	*P*-value	StdYX	*P*-value
		BY		BY	
	I unselfishly contribute to my community	0.687	-	0.706	-
	Meaningful public service is very important to me	0.816	0.000	0.812	0.000
Civic Duty	I consider public service my civic duty	0.754	0.000	0.756	0.000
	I would prefer seeing public officials do what is best for the community, even if it harmed my interests	0.572	0.000	0.550	0.000
		BY		BY	
	I seldom think about the welfare of people I don't know personally. (REVERSED)	0.586	-	0.507	-
	Most social programs are too vital to do without	0.498	0.000		
	It is difficult for me to contain my feelings when I see people in distress	0.502	0.000		
Compassion	I am often reminded by daily events about how dependent we are on one another	0.703	0.000	0.629	0.000
	I am rarely moved by the plight of the underprivileged. (Reversed)	0.529	0.000		
	To me, patriotism includes seeing to the welfare of others	0.699	0.000	0.658	0.000
		BY		BY	
	Much of what I do is for a cause bigger than myself	0.701	-	0.718	-
	I am one of those rare people who would risk personal loss to help someone else	0.586	0.000	0.6	0.000
	Making a difference in society means more to me than personal achievements	0.685	0.000	0.689	0.000
	I think people should give back to society more than they get from it	0.599	0.000	0.592	0.000
Self-Sacrifice	I believe in putting duty before self	0.671	0.000	0.671	0.000
	Doing well financially is definitely more important to me than doing good deeds.(Reversed)	0.434	0.000		
	Serving citizens would give me a good feeling even if no one paid me to for it	0.637	0.000	0.636	0.000
	I am prepared to make enormous sacrifices for the good of society	0.726	0.000	0.736	0.000

N = 290; Data captured using a 5-point Likert scale from agree to disagree for each statement

Table A2. Family Socialization Measurement Model

	Initial Model		Final Model	
	StdYX	*P*-value	StdYX	*P*-value
	BY		BY	
My parents actively participated in volunteer orgs	0.682	-	0.693	-
In my family, we always helped one another	0.616	0.000	0.570	0.000
Concerning strangers experiencing distress, my parents generally thought that it was more important to not get involved (REVERSED)	0.151	0.046		
My parents frequently discussed moral values with me	0.557	0.000		
When I was growing up, my parents told me I should be willing to lend a helping hand	0.820	0.000	0.800	0.000
When I was younger, my parents very often urged me to get involved with volunteer projects for children	0.724	0.000	0.739	0.000

Notes: N = 290; Data captured using a 5-point Likert scale from agree to disagree for each statement

Table A3. Volunteering Measurement Model

		Initial Model		Final Model	
		StdYX	*P*-value	StdYX	*P*-value
		BY		BY	
	Religion	0.576	-	0.528	-
	School	0.522	0.000		
Formal Volunteering	Advocacy	0.561	0.000	0.581	0.000
	Human service	0.647	0.000	0.678	0.000
	Other	0.668	0.000	0.674	0.000
		BY		BY	
	Transportation	0.830	-	0.869	-
Informal	Housework	0.875	0.000	0.887	0.000
Volunteering	Childcare	0.506	0.000		
	Other	0.721	0.000	0.722	0.000

Notes: N = 290; Data captured categorically -- 0 hours, 1 - 19 hours, 20-39 hours, 40-79 hours, 80 - 159 hours, 160+ hours.