

Identifying Student Traits and Motives to Service-Learn: Public Service Orientation Among New College Freshmen

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Abstract

Among college students, public service motives influence choice of major or job. Although the link between public service motives and prosocial behavior has been established among working adults, researchers have not adequately examined how these motives affect the reported behavior of precareer students. In this article, the authors explored how public service motives and certain demographic characteristics were related to the service orientation of college freshmen. More specifically, they examined whether public service motivation was related to a student's proclivity to enroll in service-learning courses and volunteer frequently. Results indicated that public service motives were positively associated with both curricular and extracurricular public service activities among first-year college students. Race and gender were found to be key traits affecting engagement. The implications of these findings for public service research and education are discussed.

Introduction

Volunteering is a common activity among young adults (Lopez & Marcelo, 2004). Many colleges and universities team with student organizations focused on facilitating volunteer engagement as a part of campus life, helping college students find an extracurricular outlet to make a difference in the community and the world. Flanagan and Levine (2010) observed that "as the transition to adulthood has lengthened... colleges have become perhaps the central institution for civic incorporation of younger generations" (p. 159). Colleges and universities have also embraced public service engagement in their curricula. Service-learning courses are becoming a more common part of higher education throughout the country (Campus Compact, 2006; Steinberg, Bringle, & Williams, 2010). By infusing course curricula with opportunities for students to serve the community, colleges hope to enhance student learning, increase awareness of public problems, help alleviate such problems, and promote the university's general purpose (e.g., Buch & Harden, 2011; Fitzgerald, Bruns, Sonka, Furco, &

Swanson, 2012). Service-learning helps students connect classroom learning with the real and tangible benefits they can offer society.

Public service motivation is the desire to make a meaningful contribution to society (Perry & Hondeghem, 2008). The concept can consist of a “predisposition to respond to motives grounded... in public institutions” (Perry & Wise, 1990, p. 368) or a broader desire to perform public, community, and social service (Brewer & Selden, 1998). Public service motivation has been studied among employees of public and private organizations over the last 15 years; however, relatively little effort has been made to understand how public service motives emerge in precareer college students and influence their service-related behaviors.

Recently, scholars have identified the role of secondary education in socializing individuals toward public service and cultivating public service motivation within individuals (Kjeldsen & Jacobsen, 2012). Other scholars have examined public service motivation’s relationship with the giving and volunteering decisions of undergraduate students (Clerkin, Paynter, & Taylor, 2009). Despite these examples, public service motives remain understudied outside the context of employment (see Brewer, 2003; Houston, 2006). To the extent that public service motivation emerges over an individual’s lifetime and becomes a stable orientation, scholars might expect to see it emerge in individuals well before they enter their career or even graduate school. This study examined the relationship between public service motivation and public-service-related activities among college freshmen. The authors examined two ways that a public service orientation might manifest itself among college students: (a) *curricular*—students express their desire for service-learning in course selection and (b) *extracurricular*—students participate in volunteer organizations.

Public Service Motivation and Public Service

More than two decades ago, Perry and Wise (1990) expounded on the foundations of individual motivation to perform public service. They argued that this type of motivation would lead a person to seek a public service career, and they hypothesized that persons with higher levels of public service motivation would be more likely than others to seek membership in a public organization (Perry, 1996, 1997).

This early scholarship also suggested that public service motivation was multidimensional and comprised rational, norm-based,

and affective motives (*Knoke & Wright-Isak, 1982; Perry, 1996*). In short:

Rational motives (e.g., attraction to public service) involve actions grounded in individual utility maximization. Norm-based motives (e.g., commitment to public values and self-sacrifice) refer to actions generated by efforts to conform to norms. Affective motives (e.g., compassion) refer to those triggers of behavior that are grounded in emotional responses to various social contexts.” (*Perry, 1996, p. 6*)

These motives are manifested in various forms of public service motivation that are considered dimensions of the concept, such as (a) compassion, (b) self-sacrifice, (c) commitment to public values, and (d) attraction to public service (*Kim et al., 2013; Perry, 1996*). Over time, the definition of public service motivation has evolved to become more outward-looking. Although once conceived of as simply wishing to join a particular type of organization, public service motivation is now seen as a strong desire to perform public, community, and social service regardless of the institutional setting (*Brewer, 2003, p. 20*). Public service motivation is thus conceived of as a general prosocial motivation—“the desire to benefit other people” (*Grant, 2008a, p. 48*)—and reflects a broad concern for society (*Vandenabeele, 2008*). An employee’s public service motives can also be related to the content of a particular job or task (*Christensen & Wright, 2011*), regardless of organization type. As a consequence, public service motivation is commonly thought to drive prosocial behavior both inside *and* outside organizations.

Although relatively few scholars have looked at public service motivation as an emergent construct in adolescents and undergraduate students, a well-developed literature reflects research into public service motivation in adults and public service professionals. Many studies have found public service motivation to be a predictor of public-service-oriented behaviors including individual participation in volunteering (*Coursey, Perry, Brudney, & Littlepage, 2008*), donating blood and money (*Houston, 2006*), and other prosocial and organizational citizenship behaviors (*Pandey, Wright, & Moynihan, 2008*).

In short, there is a lack of research on precareer studies to help us understand the influence of public service motives. An important facet of our investigation is the belief that organizations and organizational experiences impart public service motivation to employees

through culture and socialization (*Grant, 2008b; Moynihan & Pandey, 2007*), which stands in contrast to speculation that such motives may be an intrinsic trait present at birth or shortly after—perhaps in the preschool years before children are typically integrated into organizations such as churches, daycares, or schools (*Brewer, 2006*). Perry (*1997*) and subsequent scholars started distinguishing among these issues in studies of the antecedents of public service motivation. The origin and development of these motives, however, remain elusive.

This study intentionally explored whether public service motivation and public-service-oriented behavior were already present and linked in young, precareer college students. The authors hypothesized that students with higher levels of public service motivation may demonstrate both stronger curricular (i.e., choosing to enroll in service-learning elective courses) and extracurricular (i.e., frequency of volunteering) service orientations. Evidence supporting such a hypothesis would raise the possibility that public service motivation may influence behavior well before individuals enter the professional work environment, which could have major implications for educational institutions in promoting civil society. One such implication is that colleges and universities seeking to fulfill their roles as central institutions in civic engagement (*Flanagan & Levine, 2010*) should try to facilitate, develop, or recognize nascent public service motives in young adults.

Curricular Service Orientation: Public Service Motivation and Undergraduate Volunteerism

Before individuals choose a career—or even a college major—they often have the opportunity to volunteer and participate in public and community-based programs. In recent years, many elementary and secondary schools and universities have adopted service-learning programs as a mechanism to link community engagement with their educational curriculum (*Bringle & Hatcher, 2000; National Service-Learning Clearinghouse, 2013*).

Service-learning has been defined as a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities (*Stanton, Giles, & Cruz, 1999*). According to Eyler and Giles (*1999*), service-learning enhances the community through the service provided, but it also has powerful learning outcomes for the students providing a service. The service-learning model experience enhances under-

standing in a way that leads to more effective action (Eyler & Giles, 1999). Although service-learning programs vary widely, their key characteristics include “opportunities to engage in problem-solving by requiring participants to gain knowledge of the specific context of their service-learning activity and *community* challenges, rather than only to draw upon generalized or abstract knowledge from a textbook” (National Service-learning Clearinghouse, 2013).

There has been a surge in service-learning scholarship, some of which relates service-learning to public-service-oriented motives. For example, Markus, Howard, and King (1993), using an experimental design with a randomized control group, found that students in service-learning sections had more positive course evaluations, higher scores on midterm and final examinations, and—of particular interest to scholars—more positive beliefs toward service and the community (see also Astin & Sax, 1998; Strage, 2000, 2004), increased political and civic engagement (Astin, Sax, & Avalos, 1999; Giles & Eyler, 1998), and increased volunteering (Astin et al., 1999; Tomkovic, Lester, Flunker, & Wells, 2008).

Student engagement scholars have explored the motivations of faculty in offering or avoiding service-learning courses (Abes, Jackson, & Jones, 2002; Darby & Newman, 2014). However, with a few exceptions (see Coles, 1999; Waterman, 1997), the vast majority of service-learning studies fail to provide systematic assessments of why new university students might select into a service-learning course or curriculum. As a consequence, educational institutions are unable to identify students who are likely to be drawn to or have knowledge of service-learning curricula, although many institutions and degree programs treat the students’ expressed interest or prior experience in performing service-related activities as a criterion for admission. This study sought to address this research gap vis-à-vis the theory of public service motivation.

Although there are no studies to help us explicitly hypothesize the relationship between public service motivation and service-learning in higher education, participation in a service-learning course has the potential to serve as a proxy for correlation of public service motives and prosocial behaviors. First, service-learning’s focus on the community is conceptually aligned with public service motivation’s commitment to public values and the public interest. Second, the largely voluntary nature of service-learning curricula may also be aligned with public service motivation’s self-sacrifice and compassion subdimensions. Considering the shared conceptual space of the variables, we believed that an examination of the

relationship among them would be useful and hypothesized the following:

H1 Students with higher levels of public service motivation will be more likely to enroll in a service-learning course.

Extracurricular Service Orientation: Public Service Motivation and Undergraduate Volunteerism

The authors also considered the relationship between public service motives and *extracurricular* behavior. The authors use volunteering or volunteer service as an example of such extracurricular behavior. The Corporation for National and Community Service (Dote, Cramer, Dietz, & Grimm, 2006) documented that college students are volunteering at slightly higher rates than adults (at 30% and 29%, respectively) and that popular volunteer activities for college students include tutoring, mentoring, fundraising, coaching, and disaster relief.

In addition to the previously cited works drawing a positive association between public service motivation and volunteering, donating blood, and charitable giving (Coursey et al., 2008; Houston, 2006), at least one other study led us to believe that student public service motivation would be positively related to a college student's voluntary behavior. In a discrete choice experiment conducted with undergraduates at North Carolina State University, Clerkin, Paynter, and Taylor (2009) found that students with higher levels of public service motivation were more likely to choose donating or volunteering over the status quo. We therefore hypothesized:

H2 Students with higher levels of public service motivation will report higher levels of extracurricular volunteerism.

Understanding the motivational drivers of students' curricular and extracurricular service participation will provide a more complete understanding of the role of service-learning and volunteering in the formative precareer stages. Additionally, future research along these lines can shed light on the degree to which institutions of higher education, via service-learning curriculum, can develop and reinforce public service motivation within individuals. We recog-

nize here that as higher educational environments of engagement become more integrated, it may be less important to examine what we have termed extracurricular volunteering independently from curricular service-learning. However, we submit that testing the aforementioned hypotheses will help fill an important gap in the current literature.

Methods

Procedures

Our survey was approved by the human subjects/IRB office and then administered to undergraduate students at a large public university in the United States at the beginning of the Spring 2012 semester. The survey was administered in introductory American government courses offered by the Department of Political Science. In this case, state law required that all university students take the class, so the students enrolled comprised a consistently representative sample of undergraduate students at the university. Participation was voluntary, and students were given time during class to individually complete the survey. Nearly every student present participated. The authors administered a total of 565 surveys and received 555 usable responses over a 2-week window for a response rate of 98.23%. Some students were absent when the survey was administered. A total of 778 students were enrolled in the courses surveyed, so our respondents represented 71.33% of all students enrolled.

In addition to questions designed to measure public service motivation (instrument described below), the survey asked for information regarding respondents' gender, race/ethnicity, age, employment status, political ideology, religiosity, parents' education, and family income. The authors also asked questions regarding the employment sector in which their parents spent most of their careers (i.e., public sector, nonprofit sector, or private sector) and in which of those three sectors a respondent would most prefer to work in following graduation. Additional questions probed respondents' familiarity with and preference for service-learning activities in their courses and the frequency of their volunteer service.

Participants

Our respondents accurately reflected the basic demographics of first-year students at the university in question: predominantly female (61%) and White (80%). Respondents ranged in age from

18 to 40 years, with the modal age being 19 years. To see if non-traditional students were affecting the results, we reran the models using responses only from students under the age of 22 (97% of the sample). There was no substantive difference in the results. We included the full sample to avoid making an arbitrary cutoff with respect to age. The median annual family income for these students was between \$95,000 and \$110,000 (see Table 1).

Variables and Measurement

Public service motivation. A number of scales have been used over the past 20 years to measure public service motivation, including Perry's (1996) original 24-item scale, the Grant prosocial index (see Grant, 2008a), the five items used by the Merit Service Protections Board (MSPB-5; Wright, Christensen & Pandey, 2013), and variations thereof. Recently, Kim et al. (2013) constructed and validated an international public service motivation scale using rigorous testing from multiple samples in numerous countries. We used this same scale to measure public service motivation. We summed responses to these survey questions and formed a unidimensional index that can range from 16 to 80, although the range we actually observed was from 33 to 80. The alpha coefficient of the 16 items was 0.90.

The index can also be examined subdimensionally (see Perry, 1996). In this study, we explored its four subdimensions as follows: compassion ($\alpha = .81$), self-sacrifice ($\alpha = .78$), attraction to public service ($\alpha = .81$), and commitment to public interest ($\alpha = .65$). We estimated the effect of each dimension on the respective dependent variables. Although we did not specify formal hypotheses on these subdimensional relationships, the findings are discussed in the Conclusion and may serve to motivate future research.

Curricular service-learning—importance of service-learning in selecting classes. The first dependent variable that was explored in the models was the importance of service-learning opportunities demonstrated by students when choosing their courses. We measured the variable using three response categories: unimportant, neutral, and important.

Curricular service-learning—familiarity. Although many primary and secondary schools offer service-learning opportunities, we decided to control for these new college students' familiarity with service-learning when asking how significant service-learning was in students' course decisions. This variable was measured using a single-item Likert response ranging from 1 (*not familiar at all*) to

3 (*very familiar with service-learning*). We included this as a control variable in the model examining the relationship between public service motivation and the value placed on service-learning in selecting classes.

Extracurricular volunteer service participation. The second dependent variable of interest was the extent to which students reported volunteer behavior. This variable reflected the frequency with which individual students reported participating in public, community, or social service that was not part of their educational curriculum (e.g., mentoring, fundraising, and coaching). The frequency of their participation was measured on a 4-point Likert scale ranging from 1 (*never participates*) to 4 (*participates weekly*).

Control variables. In addition to the variables specified above, the authors controlled for other factors that might be related to the dependent variables. The student's gender was included as a dummy variable (1 = female, 0 = male), as was race (1 = non-White, 0 = White). Political orientation was controlled for using a 5-point Likert scale ranging from 1 to 10, where 1 = *very conservative* and 10 = *very liberal*. Religiosity was controlled for using a 5-point Likert scale ranging from 1 to 10, where 1 = *not religious at all* and 10 = *very religious*. Income level was controlled for in 10 classifications ranging from less than \$15,000 per year to more than \$140,000 per year. Descriptive statistics for these measures, as well as the independent and dependent variables discussed above, are shown in Table 1. A correlation matrix is provided in Table 2.

Table 1. Descriptive Statistics

Variable	B	M	SD	Min	Max
Public service motivation ($\alpha = .90$)	320	62.77	8.29	33	80
Commitment to public values ($\alpha = .65$)	380	16.87	2.26	9	20
Compassion ($\alpha = .81$)	421	16.69	2.55	8	20
Self-sacrifice ($\alpha = .78$)	391	12.72	2.80	4	20
Attraction to policy making ($\alpha = .81$)	391	16.52	2.42	8	20
Volunteering	492	2.61	0.79	1	4
Service-learning knowledge	465	1.65	0.81	1	3
Service-learning importance	432	1.53	0.69	1	3
Political orientation	464	4.71	2.06	1	10
Religiosity	469	6.37	2.95	1	10
Income	421	6.73	2.58	1	10
Minority	469	0.19	0.39	0	1
Female	482	0.61	0.49	0	1

Table 2. Correlation Matrix for Survey Responses

	1	2	3	4	5	6	7	8	9	10	11	12	13
1 Public service motivation	1.00												
2 Commitment to public values	0.76	1.00											
3 Compassion	0.81	0.55	1.00										
4 Self-sacrifice	0.81	0.43	0.50	1.00									
5 Attraction to policy making	0.87	0.58	0.62	0.64	1.00								
6 Volunteering	0.31	0.08	0.28	0.27	0.37	1.00							
7 Service-learning knowledge	0.22	0.11	0.17	0.18	0.24	0.30	1.00						
8 Service-learning importance	0.25	0.13	0.19	0.23	0.27	0.33	0.49	1.00					
9 Political orientation	0.27	0.23	0.26	0.23	0.16	-0.03	0.07	0.05	1.00				
10 Religiosity	0.07	-0.07	0.09	0.10	0.08	0.30	0.00	0.10	-0.40	1.00			
11 Income	0.03	0.00	0.02	-0.01	0.09	0.20	0.08	-0.01	-0.19	0.07	1.00		
12 Minority	0.06	-0.02	0.10	0.10	-0.01	0.05	-0.02	0.12	0.24	-0.01	-0.13	1.00	
13 Female	0.16	0.09	0.21	0.03	0.20	0.21	0.19	0.22	0.07	0.07	0.00	-0.05	1.00

Results and Discussion

Curricular Public Service

The first set of models examined the relationship between public service motivation and the importance of service-learning in choosing elective courses while controlling for an individual's knowledge of service-learning (H1). Table 3 contains the results of this analysis. To properly test this relationship, it was important to control for knowledge of service-learning because without this knowledge, students cannot properly assess its role in their future plans. We thus controlled for this variable using dummy variables for each category.

Table 3. Ordered Logit—Public Service Motivation and Service-Learning

	(1)		(2)	
	B	SE	B	SE
Service-learning knowledge (unfamiliar excluded)				
Neither familiar nor unfamiliar	0.99*	(0.39)	0.96*	(0.39)
Very familiar	2.92	(0.41)	2.87**	(0.41)
Unidimensional public service motivation				
Commitment to public interest		0.06**		
Compassion			-0.03	(0.09)
Self-sacrifice			-0.04	(0.09)
Attraction to public service			0.11	(0.07)
Attraction to public service			0.18*	(0.10)
Female	0.71*	(0.33)	0.78*	(0.34)
Minority	0.97*	(0.41)	1.01*	(0.41)
Family Income (incomes less than \$15,000 excluded)				
\$15,001-\$30,000	0.96	(1.40)	0.91	(1.42)
\$30,001-\$45,000	0.15	(1.40)	0.09	(1.42)
\$45,001-\$60,000	0.09	(1.37)	0.06	(1.38)
\$60,001-\$75,000	0.25	(1.37)	0.39	(1.38)
\$75,001-\$95,000	-0.48	(1.42)	-0.63	(1.44)
\$95,001-110,000	0.33	(1.35)	0.40	(1.36)
\$110,001-\$125,000	0.94	(1.38)	-1.09	(1.40)
\$125,001-\$140,000	-0.17	(1.45)	-0.15	(1.46)
More than \$140,000	0.22	(1.35)	0.23	(1.36)
ϕ_1	7.78**	(2.22)	7.42**	(2.29)
ϕ_2	10.17**	(2.27)	9.85**	(2.33)
Observations	249		249	
Pseudo R ²	0.242		0.251	

Note. * $p < 0.05$. ** $p < 0.01$. * $p < 0.10$.

In the unidimensional model (Model 1), public service motivation had a significant and positive relationship with the importance of service-learning. This is particularly noteworthy in light of the positive and highly significant dummy variable that probed a respondent's familiarity with service-learning, which could have "drowned out" correlates like motivation. This showed some support for H1. In this model, race and gender were also statistically significant at the .05 level.

To facilitate our interpretation of the model, Figure 1 plots the predicted probability of selecting a category at each value of one standard deviation above and one standard deviation below the mean of public service motivation (indicated by the vertical dotted line). This graph shows a decrease in the predicted probability of a student responding that service-learning is "unimportant" as their level of public service motivation increases. Similarly, the likelihood of selecting "important" increases as level of public service motivation increases.

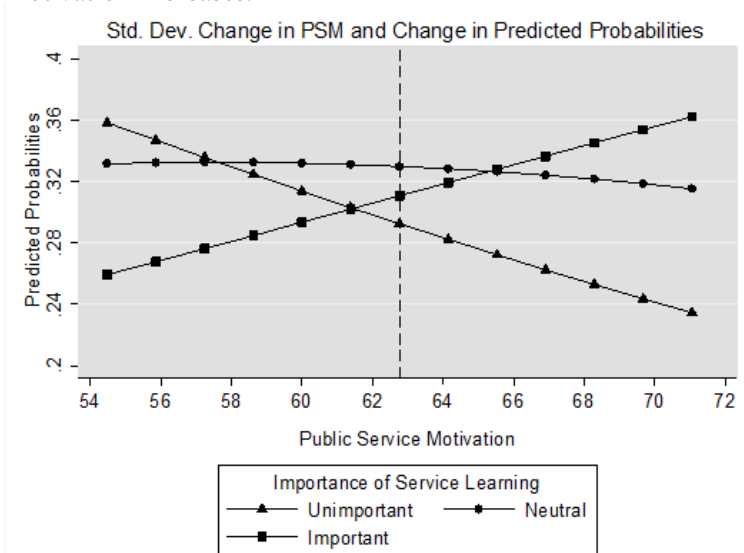


Figure 1. Substantive impact of public service motivation on students' value of service-learning.

Interestingly, when we examined public service motivation's subdimensions (Model 2, Table 3), only attraction to public service was statistically significant ($\beta = .18$), but at the marginal alpha level of .10. This may suggest that instrumental motives like attraction to public service and policy making are key to public involvement in the curricular setting. There was a similar finding in the extra-

curricular results. Minority and female students were more likely to attach importance to service-learning with respect to selecting particular courses. To guide our interpretation of the coefficient of attraction to public service, the predicted probabilities for selecting each category of the importance of service-learning in course selection were calculated and graphed for each value of attraction to public service (see Figure 2).

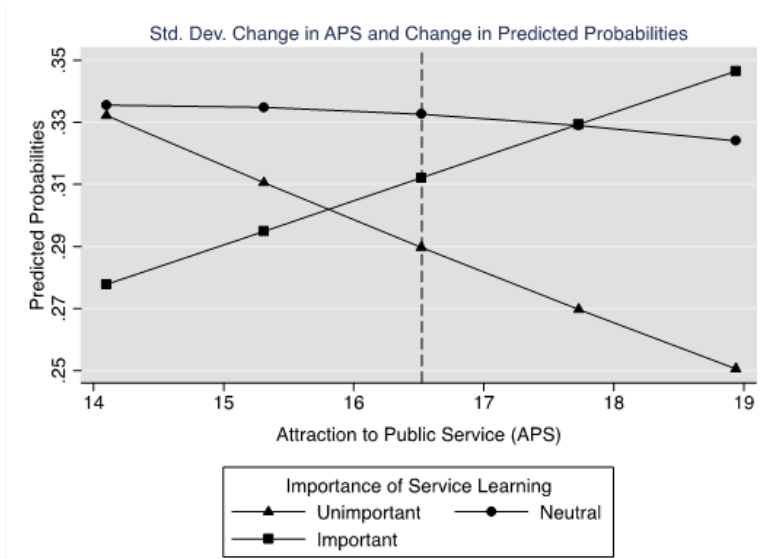


Figure 2. Substantive impact of attraction to public service on students' value of service-learning.

In this graph, the predicted probability of saying that service-learning is “unimportant” decreased as attraction to public service increased from one standard deviation below to one standard deviation above the mean. The predicted probability of selecting “important” increased across the range of attraction to public service values.

There was also a positive relationship among both the female and minority dummy variables and the importance of service-learning. This indicates that both female students and minority students were more likely to participate in service-learning than their male and White counterparts.

Extracurricular Public Service

To analyze the relationship between public service motivation and extracurricular volunteering, we used ordered logistic regres-

sion (OLS) models. In addition, we ran OLS regressions on the limited dependent variables. The significance and directionality of the effects were similar to those of the first OLS (see Table 3). The findings concerning public service motivation's relationship with a student's extracurricular volunteering frequency are reported in Table 4.

Table 4. Ordered Logit—Public Service Motivation and Volunteering Frequency

	(1)		(2)	
	β	SE	β	SE
Public service motivation	0.08**	(0.02)		
Commitment to public interest			-0.23**	(0.08)
Compassion			0.07	(0.08)
Self-sacrifice			0.05	(0.06)
Attraction to policy making			0.41**	(0.09)
Female	0.76**	(0.28)*	0.59*	(0.29)
Minority	0.49	(0.37)	0.46	(0.38)
Family income (incomes less than \$15,000 excluded)				
\$15,001-\$30,000	-4.80**	(1.46)	-4.88**	(1.45)
\$30,001-\$45,000	-3.15*	(1.39)	-3.10*	(1.37)
\$45,001-\$60,000	-2.99*	(1.37)	-3.02*	(1.37)
\$60,001-\$75,000	-3.05*	(1.35)	-2.89*	(1.34)
\$75,001-\$95,000	-2.25	(1.37)	-2.41*	(1.35)
\$95,001-\$110,000	-2.51*	(1.34)	-2.43*	(1.33)
\$110,001-\$125,000	-2.22	(1.35)	-2.18	(1.34)
\$125,001-\$140,000	-2.47	(1.39)	-2.54*	(1.37)
More than \$140,000	-1.73	(1.33)	-1.70	(1.31)
ϕ_1	0.09	(1.77)	-0.03	(1.82)
ϕ_2	4.56*	(1.80)	4.90**	(1.87)
ϕ_3	6.68**	(1.83)	7.11**	(1.90)
Observations	252		252	
Pseudo R ²	0.184		0.222	

Note. * $p < 0.05$. ** $p < 0.01$. * $p < 0.10$.

Model 3 tested the relationship between public service motivation (measured as a unidimensional/global construct) and student volunteering. Results indicate that students with higher levels of public service motivation reported volunteering slightly more often than students with lower levels of public service motivation ($\beta = 0.08$, $p < .01$). In addition, being female was positively associ-

ated with the students' frequency of extracurricular volunteering ($\beta = 0.76, p < .01$).

The estimated coefficients did not provide a substantive understanding of the nature of the relationship between public service motivation and the reported frequency of student volunteering. Although H2 was supported by the coefficient, we further investigated the substantive effects of the relationship by plotting the predicted probabilities that students would select a specific frequency of volunteering (i.e., "never," "yearly," "monthly," and "weekly") for different levels of public service motivation. Figure 3 shows the predicted probabilities of selecting a particular response across public service motivation values range from one standard deviation above and one standard deviation below the mean (see dotted vertical line in the figure). The predicted probability of selecting "never" and "yearly" both decreased as the level of public service motivation increased. There was an increase in the predicted probability of selecting "monthly" or "weekly" as public service motivation increased.

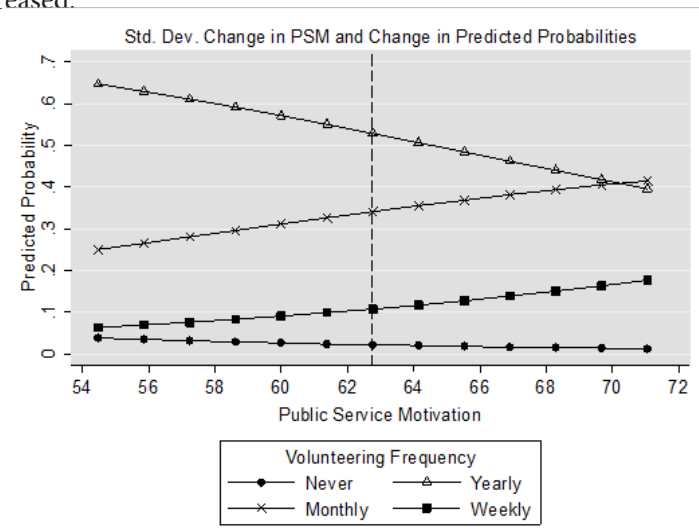


Figure 3. Predicted probability that public service motivation will have a substantive impact on students' extracurricular volunteering.

Model 4 moved beyond public service motivation as a global/unidimensional construct and explored whether certain public service motivation subdimensions were important to a student's pre-career public service orientation. Interestingly, much of public service motivation's positive association with extracurricular volunteering appeared to be correlated with students' attraction to public

service ($\beta = 0.41, p < .01$), which some scholars have described as an instrumental—as opposed to an affective or values-based—motive (Kim & Vandenberg, 2010). Instrumental motives are those that capture “the extent to which individuals want to participate in the public policy process or other activities that contribute to their community or society” (Kim et al., 2013, p. 83).

The subdimension of “commitment to public values” was negatively related to extracurricular volunteering ($\beta = -0.23, p < .01$). Some scholars consider commitment to public values a values-based motive that reflects “the extent to which an individual’s interest in public service is driven by their internalization of and interest in pursuing commonly held public values such as equity, concern for future generations, accountability and ethics” (Kim et al., 2013, p. 83). This may mean that some individuals focus on the tangible aspects of public service such as volunteering, while others are energized by the less tangible aspects like public values. If so, these two orientations may be at odds: Individuals who are motivated by deep-seated values may be reluctant to take action, and conversely, individuals who are more pragmatic and have less durable value sets may rush to action.

One possible conclusion is that precareer extracurricular public service is associated with very particular forms or subdimensions of public service motivation. Instrumental motives are positively related to volunteering and outweigh the negative effects of values-based motives in our sample. Affective motives seem to matter very little. Why is this so? The authors can only speculate that extracurricular volunteering, although generally praiseworthy, is attractive to instrumentally-motivated students as a means to an end. Perhaps that end is the personal satisfaction of making a decision that is beneficial to one’s community or self. Students largely driven by values-based motives, on the other hand, may recognize that extracurricular service can be temporary and even self-serving. These students may seek other public service opportunities to sate their values-based needs. Another possible explanation is that an individual’s public service motivation evolves from instrumental to values-based over the course of a lifetime, possibly becoming more durable.

To get a better substantive interpretation of the relationship between these two public service motivation subdimensions and volunteering, we graphed the predicted probability of each outcome from one standard deviation below to one standard deviation above the mean of both the commitment to public values (CPV) and attraction to public service subdimensions. Interestingly,

the relationships of CPV to volunteer frequency (Figure 4) and of attraction to policy making to volunteer frequency (Figure 5) stand in sharp contrast. As respondents' commitment to public values increased, the predicted probability of responding "never" and "yearly" actually increased. As commitment to public values increased, the predicted probability of respondents' volunteering "weekly" and "monthly" decreased. In other words, values-based public service motives decreased the probability of regular (weekly/monthly) extracurricular volunteering but increased the probability of episodic (yearly) volunteering or not volunteering at all.

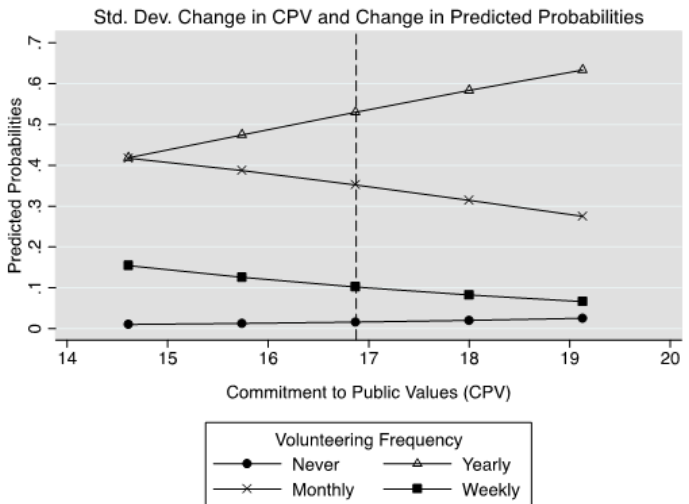


Figure 4. Predicted probability that commitment to public values will have a substantive impact on students' extracurricular volunteering.

As shown in Figure 5, the predicted probability of selecting "never" and "yearly" decreased across the range of values as attraction to public service increased. One possible explanation is that students with higher levels of instrumental public service motives reported wanting more regular opportunities for extracurricular volunteering. The predicted probability of volunteering "monthly" and "weekly" increased as attraction to public service increased.

Beyond public service motives, being female was also positively related to volunteerism in this model ($\beta = 0.59, p < .05$). It appears that female students volunteered more frequently than their male counterparts. Prior research has shown that women tend to have higher levels of public service motivation than men, and their motives are likely to be more compassionate (DeHart-Davis, Marlow & Pandey, 2006). This raises interesting questions about the

possible interaction between public service motivation and gender as a predictor of service-learning, volunteering, and other important civic behavior.

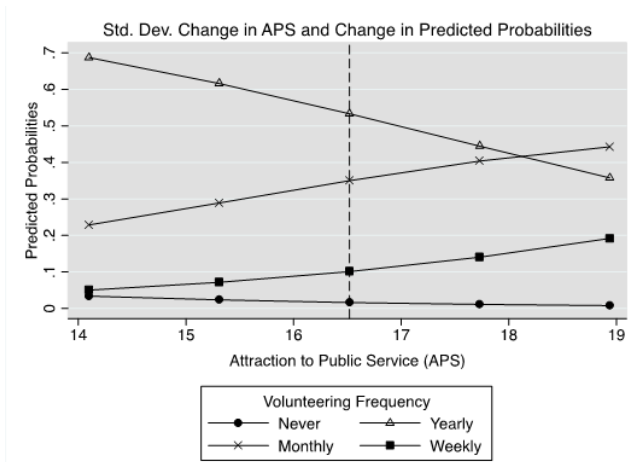


Figure 5. Predicted probability that attraction to public service will have a substantive impact on students' extracurricular volunteering.

Conclusion

In this study, the relationship between precareer public service motivation among college freshmen and their campus-related public service in the form of service-learning (curricular) and participation in voluntary activities (extracurricular) was explored. Student public service motivation was strongly and positively related to both aspects of public service orientation. Our findings raise the possibility that public service motivation matters well before the student has chosen a vocational setting, and public service motivation moves students to prioritize both curricular and extracurricular public service. These findings have important implications for educational institutions that seek to instill civic values in students and promote civic culture in society.

We recognize several limitations of these findings. First, there is a possibility of common source bias since all variables were self-reported. Secondly, we were unable to make causal attributions because of the cross-sectional survey design employed. For instance, it is certainly possible that curricular and extracurricular service involvement might foster higher levels of public service motivation rather than the reverse. However, we believe that sur-

veying students early in their college experience attenuates some of these concerns about causal direction. Furthermore, our findings are consistent with those found in other university and occupational settings (Houston, 2006).

We not know the extent to which these findings apply to higher education across the nation; we note that family incomes trended toward affluence for our particular population. Although this may not be unusual for students at flagship research universities, future research should include students from other universities and higher educational contexts, including other large public and private universities, small liberal arts colleges, community colleges, and for-profit universities. Future research should also strive to more objectively assess students' enrollment in service-learning courses and their volunteer activities, which were self-reported in this study. Another possibility that deserves future attention is explicitly surveying a more complete set of public service/engagement activities beyond service-learning and extracurricular volunteering.

Our findings suggest that public service motivation's positive association with students' curricular/extracurricular service orientation is driven by a particular subdimension of the concept: instrumental motives. This is not unprecedented in public service motivation research (e.g., Kim *et al.*, 2013). Instrumental motives, captured in the attraction to public service items, seem to drive a student's collegiate public service orientation. This is not altogether surprising and suggests that students may use curricular and extracurricular service in order to become involved in decision or policy processes that contribute to their broader communities. Some students may also exhibit these civic attitudes and behaviors to gain an edge in university admissions, win scholarships, and land good jobs. These more self-interested aims are consistent with the instrumental motives we found, and they may be the starting point of a process that eventually instills deep-seated public service values and motives. In many respects, one might argue that this is one of the purposes of college life—to build community and provide a microcosm in which leadership and decision making can be developed. Furthermore, the prominence of instrumental motives may reflect the fact that most college students have not yet been socialized into professional organizations where affective and values-based motives may be more salient. Past research has shown that these types of public service motives grow stronger with years of experience and tenure in an organization (Ritz, Brewer, & Neumann, 2013).

The broader implications of our findings range across public administration scholarship, pedagogy, and practice and extend into higher education generally. Our study is one of few to unpack the significance of public service motivation before individuals embark on a professional career. A more complete understanding of the development and manifestation of public service motivation would potentially aid our understanding of its effects as individuals transition into public service education and public service jobs. This reflection yields some major questions worth exploration: When do public service motives emerge? How do they develop? What are the consequences for individuals and society?

For those interested in student engagement more broadly, our findings indicate that student public service motivation may be an important determinant of the extent to which students engage in student life and community involvement. Because these are important determinants of matriculation and college success (*Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008*), universities may need to consider new ways to cultivate and strengthen a public service orientation among students. Championing the importance of government and public employees in society; recognizing the myriad ways that public, nonprofit, and private organizations can contribute to the public good; and acknowledging the seminal role of citizens in building a just society would all be a good start.

Our research also highlights the importance of biodemographic traits in better understanding freshman orientation toward curricular and extracurricular engagement. We found that female and minority students were more likely to identify the importance of service-learning with respect to course selection, and female respondents were also more likely to report extracurricular engagement. To some extent, this mirrors what scholars have discovered concerning faculty orientation in offering service-learning courses (e.g., *Abes et al., 2002; Vogelgesang, Denson, & Jayakumar, 2010*). Although we cannot ascertain whether students actually selected service-learning courses in the following semesters, we think this is a valuable direction for future research—connecting aspirational inclinations with behavioral consequences. Institutions of higher education could better use these findings to appropriately target segments of the student population that may be more inclined to seek out engagement opportunities. To the extent that such engagement has substantial benefits for female and minority students, we see this as a promising possibility.

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