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## The Association of Public Service Motivation and Civic Engagement: Linking PSM and Volunteering Intensity

**Abstract** While PSM studies have already shown it is a determinant of the frequency of volunteering, it is unclear how PSM is associated to intensity when volunteering. This chapter introduces the concept of volunteering intensity as a supplement to the usual assessment of volunteering in terms of time and frequency. This is particularly important because it emphasizes a quality dimension that cannot simply be captured in time- and frequency-based evaluations of volunteering, therefore giving another layer to the analysis. The chapter first addresses the issue on conceptual grounds and then tests the relation between PSM and volunteering intensity in a sample of 324 British volunteers.

**Keywords** PSM • Volunteering intensity • Person-organization fit • Mediation • UK volunteers

### *Joyce Costello's (co-author of this book) initial exposure to PSM*

*After graduating university back in the early 1990s with a Bachelors of Business Administration, I decided to volunteer to serve my country and enlisted in the US Army. At the same time, Perry and Wise (1990) were just beginning to formulate public service motivation (PSM) as a theory. I had no notion then*

*that my predisposition to serve the greater good of society could be attributed to PSM. Indeed, I spent the next two decades blissfully unaware that the theory even existed. However, one thing I did observe during my 19 years of service as a military broadcast journalist and later a public affairs specialist was that many of my fellow soldiers would volunteer to help others during the course of their own voluntary service to country.*

*While stationed in the Balkans in the late 1990s, I would watch the US Navy Seabees and British Royal Engineers volunteer during their limited free time to toil physically to build playgrounds for schools. Later in Nicaragua, I would observe the National Guard medical team using their mental skills to figure out how to best treat various medical issues of the populace in the remote jungles. More times than I would care to remember, I saw Army Chaplains comforting the surviving service members, families and community when we lost one of our own. These physical, mental and emotional examples of actions volunteers took part in had to come from somewhere. Many scholars argue that volunteering is driven by a sense of altruism (e.g. Carpenter & Myers, 2010; Jackson & Adarlo, 2016), yet Hauert, De Monte, Hofbauer, and Karl (2002) argues that reciprocal altruism needs long-term contact in small groups. In the case of the volunteering while on deployments, the contact the service members with the beneficiaries was often limited to the day they volunteered at that particular site. Alternatively, one could argue there was an increased amount of volunteering as a means to avoid boredom, but in many cases the service members were serving in hazardous duty areas or combat zones and therefore could potentially be endangering their lives to help others. Hence, it is why I initially decided to investigate what exactly motivated others to volunteer.*

*By the time I had learned of PSM, studies were already in place examining it as a motivational driver to volunteering (Clerkin, Paynter, & Taylor, 2009; Coursey, Brudney, Littlepage, & Perry, 2011; Richard & Eric, 2017). As mentioned in Chap. 2, PSM consists of different dimensions with some scholars arguing that the PSM dimensions will motivate individuals differently (Costello, Homberg, & Secchi, 2017). Walton et al. (2017) argues that PSM as a motivational driver propels individuals to seek out opportunities to deliver services and thus volunteering is a consequence of PSM (Clerkin & Fotheringham, 2017).*

This chapter aims to further enhance our understanding of PSM and civic engagement as viewed through the volunteering lens. We do this by investigating two additional variables. First, we focus on the effort the volunteer

exerts also known as volunteering intensity (Rodell, 2013). In our discussion in Chap. 2, we drew a clear link between how PSM is observable in practical aspects such as volunteering, but we wanted to expand this discussion to incorporate differences in behaviour. While one can observe the physical effort of a volunteer that is present and actively participating through time or frequency of volunteering (Cnaan, Jones, Dickin, & Salomon, 2011; Handy et al., 2010), measuring the mental and emotional intensity of volunteers is a greater challenge and is rarely explored. Secondly, we incorporate person-organization fit (P-O fit) as it helps explain why an individual who has a good match with an organization will engage in behaviour that benefits the organization (Ruiz-Palomino & Martínez-Cañas, 2014). For example, a priest may feel that the values of the Army Chaplain's Corp match his own and therefore perceive there will be a good match. Taking these examples and arguments mentioned above together, it is expected that PSM directly impacts and increases a sense of P-O fit and would have a direct impact on the intensity level the volunteer exerts. This in turn can benefit the volunteering organization's service quality.

## Public Service Motivation

The dialogue here within builds upon the discussion in Chaps. 1 and 2, but focuses on PSM-volunteering studies.

Steen (2006) suggested the possibilities of PSM being related to volunteering. She argues that volunteering can be a result of "impure" altruism, but that PSM includes the instrumentalism that is often missing in other motivation studies. This divergence from PSM studies in the public sector was subtle, but a foreshadowing of an emerging manner of applying the PSM theory. Indeed, that same year Houston (2005) compared PSM amongst public and non-profit sector employees (using sector as a proxy for PSM) in terms of volunteering time and money. Houston (2008) would later expand his analysis of PSM and volunteering by investigating the relation between PSM and different types of volunteering organizations such as professional associations, church or religious organizations, political parties, sports, leisure or cultural groups and other voluntary organizations. These samples of public and non-profit sector employees mirrored samples studied by other PSM scholars who were exploring evidence

of PSM being prominent in the public sector. However, Houston concluded that by expanding PSM conversations in a context outside of the public sector into areas involving civic participation and prosocial acts, individuals with high levels of PSM could serve as “catalysts for the formation of social capital” (p. 194). Together, Houston and Steen helped build another stream of research where studies linking PSM to volunteering quickly emerged.

A logical and rather easy access for academics to explore evidence between PSM and volunteering was using the student population for studies. Clerkin et al. (2009) surveyed Generation Y university students and found affective and normative motives such as compassion and civic duty were strong motivational drivers. However, the authors did stipulate that the findings were based on scenarios presented to the students and may not necessarily reflect a stronger preference for norm and affective-based motives. Taylor and Clerkin (2011) would later do a study which included looking at rational motives amongst university students to see if they could connect attraction to policy making (APM) to increasing volunteer campaign, contributing and discussion activities. Aside from political discussion, APM was significantly related to various aspects of political participation and volunteering. Clerkin and Fotheringham (2017) would do a follow-up study using similar sample of undergraduate students to see if the relations between PSM and formal or informal volunteering were replicated as shown in Clerkin’s (2009) initial study. However, this time while civic duty remained a significant impactor on volunteering, self-sacrifice was the only significant affective motive. This implies that different PSM dimensions do operate differently. Collectively, these studies provide evidence that PSM was significantly related to volunteering amongst undergraduate students. Even though some scholars will argue that students do not represent the general public, the individuals in the aforementioned studies do represent the next generation of managers and potential leaders who will be in the position to influence policy and decisions as their careers progress.

Other studies chose a different sampling approach which focused on the crème de’ la crème of the volunteering society. Coursey et al. (2011) decided to examine elite volunteers that were recognized by the US President in an annual volunteer recognition ceremony called Daily Point of Light Award. This sample of volunteers was more heterogeneous than

the student samples and allowed for an increased understanding amongst those considered the top volunteers in American society. Coursey et al. (2011) found evidence that supported Houston's findings that PSM operated differently in various types of volunteering, but also discovered the PSM dimensions can function independently. This holds implications for a variety of volunteering contexts. For example, the medical soldier who volunteered to serve their country might be motivated out of a sense of civic duty; whereas, a medical practitioner may volunteer to help at a homeless shelter out of a sense of social justice or out of compassion. For PSM studies, Coursey et al.'s (2011) findings led to an increased attention of studying the various PSM dimensions, and the dimensions of PSM were attracting the interest of scholars on how they influenced behaviour.

However, the majority of PSM studies continued to explore volunteering habits of employees in different sectors. Lee (2012) discovered government and non-profit workers and their volunteering habits differed from those in the private sector. Lee attributed the difference as a result of attitudes towards the various PSM dimensions. Nonetheless, PSM dimensions were not directly measured in Lee's (2012) study and instead PSM levels were inferred by sector affiliation which followed the precedent set by Houston's (2005) work. However, in a later study, Lee and Jeong (2015) directly measured PSM according to its dimensions and would find that high levels of APM predicted volunteering amongst South Korean civil servants.

Ertas (2014) found similar evidence. Her study showed that PSM and volunteering levels differed amongst public sector employees (who did volunteered more so) and private sector employees. Ertas (2016) also examined if millennial public sector employees would volunteer as much as their older colleagues. While there was evidence that the probability of a millennial in the public sector was 1.118 times more likely to volunteer than other sectors, the probability of older public sector employees was the highest (1.40 more likely to volunteer). Ertas (2016) conceded that "It is tricky to interpret interaction effects in non-linear models, because interactions involve exploring differences in differences" (p. 538). However, Ertas findings were consistent with other studies that found evidence that PSM levels differ according to age (Anderfuhren-Biget, 2012; DeHart-Davis, Marlowe, & Pandey, 2006; Houston, 2000) and therefore the implications for civic engagement amongst different generations remain an issue.

Finally, Herath, Costello, and Homberg (2017) explored PSM amongst volunteers and team building through an agent-based modelling simulation. While the focus was on how disorganization of volunteer organizations enabled volunteer teams to solve problems related to fundraising, it relied on actual levels of PSM amongst individual volunteers. Herath et al. (2017) found that in simulations, teams which had higher levels of PSM, P-O fit and volunteering intensity were able to solve more complex fundraising problems. If the simulation settings were replicated in real life, we could link emerging evidence that PSM leads to volunteering with how the consequences of PSM levels impact actual behaviour of the volunteers. By exploring if PSM can impact the effort exerted by the volunteers, one can gain a deeper understanding of what civic engagement can entail. Therefore, the discussion now shifts to volunteering effort or what we refer to as volunteering intensity.

## Volunteering Intensity

Volunteering intensity is conceived as being the physical, mental or emotional effort exerted by the volunteer (Rodell, 2013). Mental effort is indicated by the cognitive skills the volunteer utilizes. In one of the opening examples of this chapter, we spoke of National Guard Medics in Nicaragua having to call upon their cognitive ability to figure out what illness was impacting the members of the communities. In 2017, when Hurricane Maria caused structural damage to the majority of the buildings on Puerto Rico, Elon Musk, Tesla's CEO, had to use his mental knowledge about power and infrastructure damage to advise his team on donating a solar farm to San Juan's Children's Hospital. The concept of applying mental effort is not commonly seen in the volunteer literature. Although if we think of the effort needed in our daily jobs, expending cognitive effort could be seen as a key goal of many organizations.

Volunteering should be no different. Indeed, the example of Elon Musk highlights the lesser spoken angle of volunteering. One may be able to volunteer to physically fill sandbags in the event of a flood, but it is unfeasible for every volunteer to be able to mentally understand the concepts of physics and water pressure when it comes to how to configure the best sandbag wall.

This mental exertion in the context of civil safety could be linked with PSM dimensions' civic duty and commitment to public interest because one has to make a conscience decision about risks when ensuring public and civil safety. The US military specifically capitalizes on the concept of doing one's civic duty to protect one's country and loved ones when recruiting an all-volunteer force (Griffith, 2009); yet, in the UK, civic duty is viewed more as public welfare oriented (Vandenabeele, Scheepers, & Hondeghem, 2006). Together, research has shown that the civic duty dimension reflects protecting the welfare and safety of society. Ironically, Taylor, Clerkin, Ngaruiya, and Velez (2015) and Ngaruiya, Knox Velez, Clerkin, and Taylor (2014) studies about the US military Special Forces and ROTC cadets failed to investigate the PSM dimension of civic duty despite it being a core Army value<sup>1</sup> (Levy, 2010). Nevertheless, civic duty is a unique PSM dimension that captures the calling one has to protecting the public.

The emotional effort, on the other hand, is reflected by the level of empathy one expresses and emotional reaction (Eisenberg & Okun, 1996). An example of emotional effort can be observed by the many chaplains and mental health personnel who help council people during the aftermaths of the Las Vegas mass shooting. There are far more studies about emotional support and encouragement by volunteers, albeit it is often focused on the hospice or medial context (Charlesworth et al., 2017; Claxton-Oldfield, Claxton-Oldfield, Paulovic, & Wasylkiw, 2013). This is an important issue as PSM dimensions' compassion and self-sacrifice have often been associated with religion and health care studies. Certainly, Planalp and Trost (2009) state organizations seeking to recruit hospice volunteers should capitalize on the message of compassion. Volunteers (themselves) on disaster mental health teams during the Katrina Hurricane crisis emphasized the importance of reflective listening and hence the need to be compassionate (Levy, 2008). Other studies have found that volunteers in hospice care who have suffered loss themselves do so as a means to extend compassion to other's suffering (Baugher, 2015). Some scholars would argue that because individuals must be able to show extreme amounts of sympathy when dealing with the passing of life, they will be subjected to compassion burnout. However, Thieleman and Cacciatore (2014) found that volunteers' high levels of compassion and mindfulness were not affected by burnout and compassion fatigue as expected.

Finally, physical effort is exhibited by the manual effort materially required such as the volunteers in Ireland filling sandbags to protect their communities when Hurricane Ophelia hit in 2017. This physical aspect of volunteering is by far the most represented in volunteering studies. In fact, it is often time that is used to measure the amount of physical effort or time a volunteer spends on site (Hustinx et al., 2010). Of the three elements of volunteering intensity, physical effort is the most common when people think of volunteering. While each of the elements can stand alone, volunteering intensity can also be a combination of each other. For example, a civil protection volunteer with an NGO that helps rescue refugees in the Mediterranean Sea when government authorities refuse to do so may need to use mental effort in order to formulate a rescue plan for a capsized refuge boat, physical force to save the aforementioned boat and then provide the emotional support for survivors. This concept of volunteering intensity runs counter to the volunteer studies that commonly rely on time or frequency as their only indicators of volunteering activity. Rodell's (2013) paper sought to diverge from the traditional understanding of intensity and focused on developing a more inclusive means to examine intensity. While her study did consider time as a physical aspect, she integrated measures for mental and emotional intensity. Rodell asked if the volunteers "apply their skills in ways that benefit a volunteer group" (2013, p. 1279).

Ultimately, volunteering intensity is about the effort that one exerts or performs at. PSM has already been shown to influence performance (Cho & Lee, 2012; Leisink & Steijn, 2009; Taylor, 2007). This can be individual self-rated or individual objective, or organizational self-rated and objective. If we ascribe to the view that public service motivated individuals want to engage in service for others benefit and thus would understand the need to exert more effort, those with higher PSM levels should put forth increased effort. While an Army drill sergeant would often yell about how much effort or lack of cadets were exerting, it is rare that volunteers are asked about the amount of intensity they are exerting. Hence, investigating the relation between PSM and volunteering intensity has the potential to lead to a better understanding of how to get the most out of a volunteer.

Based on the preceding reasoning, we hypothesize:

*Hypothesis 4.1 PSM is positively associated with volunteering intensity.*



## P-O Fit

The final element concerns integrating P-O fit into the conceptual model. When examining if there is any underlying mechanism that can account for the relationship between PSM and volunteering intensity, P-O fit may provide additional insight.

The fit between an individual and an environment, person-environment fit (P-E fit) is an umbrella which includes P-O fit, job/task (P-J fit) and group or person (supervisor) (Kristof-Brown, Zimmerman, & Johnson, 2005). While the umbrella takes into account the various relations an individual has with their workplace environment, P-O fit looks specifically at “the compatibility between people and organizations that occurs when: (a) at least one entity provides what the other needs, or (b) they share similar fundamental characteristics, or (c) both” (Kristof, 1996, pp. 4–5). P-O fit stipulates a relation exists between the individual’s personality characteristics and the operating organizational climate (Kristof, 1996). Supplementary fit exists when the individual and organization share similar goals and value (Bright, 2008).

It also takes into account if the complementary fit or the need-supplies between the two are weighted towards the individual or the organization (Edwards, 2008). Because volunteers may be drawn to specific causes of a particular volunteering opportunity or organization, we argue that P-O fit is a more appropriate measurement than focusing on P-J fit. In particular, while volunteers may be doing a variety of “jobs” during their time volunteering, it is the cause of the organization that may result in them performing better.

P-O fit is an important factor between attitudes and behaviour in studies using PSM (Bright, 2008; Wright & Pandey, 2008). Indeed, high PSM levels not only directly influence work attitudes, but also indirectly through P-O fit (Kim, Aryee, Loi, & Kim, 2013). While Bright’s (2007) study showed PSM did not influence job performance amongst some US public sector employees, he still made a case for P-O fit explaining higher job performance. While P-O fit has shown to enhance the relation between PSM and job satisfaction (Liu, Tang, & Yang, 2015); more often, P-O fit has acted as the mediator between PSM and satisfaction or perfor-

mance (Naff & Crum, 1999; Wright & Pandey, 2008). That is because individuals with high PSM levels directly influence their attitudes in selecting an organization in which they will have a strong P-O fit.

Poor P-O fit though may lead to a bad or negative volunteering experiences (Wymer, 1999). Scherer, Allen, and Harp (2016) have found a low P-O fit will increase the volunteers' intention to quit. However, some might argue those with low PSM levels are rarely going to seek out employment or volunteering opportunities with an organization or service that relies heavily on altruistic or intrinsic rewards. Rather, individuals who already have high levels of PSM will actively seek out organizations with whose mission and values they already feel there is a match (Caillier, 2015). Therefore, by applying the P-O fit construct in the model as a mediator, it helps explain why volunteering intensity is assumed to be higher amongst individuals with high PSM.

Based on the reasoning in the preceding section, we create the following hypothesis:

*Hypothesis 4.2 P-O fit mediates the relationship between PSM and volunteering intensity.*

## Method

To test the hypotheses, we used a sample of individuals registered to volunteer at two community volunteer centres (CVC) in Dorset County in the southwest region of England. This sample allowed us to examine motivations of those who had a history of volunteering. Due to data protection rules within the UK, the CVC was unable to provide us with the direct list of emails. Instead, we had to rely on the organization sending out the invitation to take part in the survey and one follow-up email. After checking unengaged responses, duplication of surveys and exclusion of those who had never volunteered, there were a total of 314 usable responses consisting of 65.9% female, 42% baby boomers and 48.1% volunteering weekly with 53.2% without children.

## Measurement of Main Variables

The dependent variable (DV), volunteer intensity, was measured using Rodell's (2013) scale consisting of five questions asking about physical, mental and emotional components of their volunteering effort. Because the cross-sectional survey consisting of self-reported data collected with the same measurement tool, the authors wanted to minimize common method bias (CMB) in the questionnaire design phase. For that reason, items measuring intensity were buffered from the measured independent variables (IVs) with non-related questions about their employment history (e.g. what sector they were employed in, how long had they been employed at that job, the P-O fit between them and their work organization, which sector would they prefer to work in). Additionally, intensity was measured using a wider Likert scale than the IVs (i.e. 7-point instead of 5-point scale) with answers in opposite scale rating (i.e. 1 = *strongly agree* and 7 = *strongly disagree*) from the IVs to minimize CMB in the survey design. The choices described in the preceding lines follow the suggestions to reduce CMB outlined in Podsakoff, Whiting, Welsh, and Mai (2013) in the survey design.

The main IVs were PSM, P-O fit and volunteering habits by categories. PSM was measured using Perry's (1996) 40-item scale using a 5-point Likert scale where 1 = *strongly disagree* and 5 = *strongly agree*. Secondly, respondents were asked to list the last organization that they volunteered with. They were then asked keeping their experience with that specific organization in mind to answer questions concerning their P-O fit. This was measured using Bright's (2008) 4-item scale using a 5-point Likert scale where 1 = *strongly disagree* and 5 = *strongly agree*.

## Analysis

A confirmatory factor analysis (CFA) was conducted with PSM as a second-order construct. In order to attain an acceptable level of goodness of fit, PSM dimensions commitment to public interest and social justice were eliminated which resulted in Chi-square (183.263)/DF (degrees of freedom) (120) = 1.527, CFI (comparative fit index) = 0.973, RMSEA

(root mean square error of approximation) = 0.041 and PCLOSE ( $p$  of Close Fit) = 0.896. When Perry (1996) ran his initial CFA on the six dimensions, he dropped social justice and civic duty (see Chap. 3). Similarly, in this dataset social justice was cross loading with self-sacrifice and hence social justice was deleted. However, in this dataset, civic duty was retained and commitment to public interest was not carried forward.

The Cronbach Alphas are as follows: PSM= 0.705, volunteer intensity = 0.919 and P-O fit is 0.845 (Table 4.1). The individual Cronbach Alphas for the PSM dimensions are self-sacrifice = 0.765, civic duty = 0.796, compassion= 0.629 and APM = 0.540. Some scholars argue that reliability measures under 0.80 should be considered as insufficient, yet though those in the region of 0.70 may be fine if dealing with new areas of research (Nunnally, 1978). However, Cho and Kim (2015) argue that this misconception is often perpetuated by researchers who need to incorporate the purpose of the research. For the purpose of PSM research, low reliability measures are a common issue with PSM dimensions with many retaining dimensions in the 0.60 range (Andersen & Kjeldsen, 2013).

In order to detect the presence of CMB, two tests were employed. First, the Harman's single factor was used. By constraining items to one factor, only 22.99% of variance was explained. Thus, this shows support that CMB is probably not an issue. Secondly, a Common Latent Factor (CLF) method using the zero-constrained test was used. This compares the shared variance across items as being significantly different than zero by doing a chi-square difference test between the unconstrained and constrained models. The minimum was achieved in the unconstrained model: Chi-square (125.862), Degrees of freedom (102),  $p = 0.055$ . In the constrained model, all the paths from the CLF were constrained to zero and the minimum was achieved: Chi-square (183.263), Degrees of freedom (120),  $p = 0.000$ . This resulted in the groups being significantly different at the model level ( $p < 0.001$ ), implying there is a lot of shared variance. Consequently, the CLF was imputed into factor scores.

Before creating composite variables, a configural invariance test was run between men and women. This allows one to check that both groups

**Table 4.1** Descriptive statistics

Correlations	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1. Intensity	5.86	0.981											
2. P-O fit	4.07	0.659	0.523**										
3. PSM	3.44	0.433	0.202**	0.271**									
4. Civic duty	3.26	0.829	0.144*	0.223**	0.736**								
5. Self-sacrifice	3.20	0.649	0.246**	0.252**	0.798**	0.416**							
6. Compassion	4.00	0.588	0.058	0.184**	0.360**	-0.036	0.157**						
7. APM	3.64	0.687	-0.076	-0.100	0.318**	-0.012	-0.008	0.163**					
8. Gender	0.66	0.475	0.138*	0.097	-0.072	-0.165**	-0.060	0.187**	0.000				
9. Baby boomers	0.42	0.494	0.103	0.054	-0.005	-0.049	-0.035	0.096	0.056	0.109			
10. Married	0.66	0.475	0.226**	0.179**	0.111*	0.063	0.031	0.153**	0.083	-0.007	0.354**		
11. Children	0.53	0.500	0.149**	0.189**	0.206**	0.179**	0.141*	0.166**	-0.018	-0.055	0.140*	0.416**	
12. Volunteer often	0.60	0.490	0.329**	0.304**	0.139*	0.098	0.165**	0.120*	-0.109	0.074	0.179**	0.102	0.189**

\*\*Correlation is significant at the 0.01 level (2-tailed)

\*Correlation is significant at the 0.05 level (2-tailed)

Observations = 314, APM = attraction to policy making

understood the questions in a similar manner. There was acceptable level of goodness of fit (Chi-square (329.853)/DF (240) = 1.374, CFI = 0.962, RMSEA = 0.035, PCLOSE = 0.999). Consequently, there is configural invariance.

Finally, in order to detect multicollinearity, the variance inflation factor (VIF) was calculated for the IVs. Each IV was regressed on the others in order to detect VIF. There were no incidents where the VIF is over 5 which would have indicated that multicollinearity is very likely a problem. Rather, the highest VIF was 1.250.

The data analysis uses ordinary least squares (OLS) regression to test Hypothesis 4.1. For hypotheses involving mediation, Hayes's (2013) PROCESS macro package for SPSS was used. Mediation was tested through bootstrap samples with 1000 iterations and 95% confidence levels, and variables were mean centred for products, heteroscedasticity-consistent standard errors and OLS/ML confidence intervals.

Table 4.1 displays the results of the analyses. The estimation strategy is as follows: Model 1 includes the control variables only, model 2 adds aggregate PSM, models 3–6 instead of aggregate PSM include each dimension separately and model 7 uses all dimensions simultaneously.

Hypothesis 4.1 expects PSM to positively affect volunteering intensity. PSM proved to be a good predictor of volunteer intensity ( $\beta = 0.342$ ;  $p < 0.01$ ), and the model accounted for 18.3% of the variance in volunteer intensity (Table 4.2, model 2). Those that volunteered weekly or monthly as measured by "often" showed a greater impact on volunteering intensity. Being female and married also were positively significant. While these results provide initial support for the hypothesis that PSM positively affects volunteering intensity, when the dimensions were regressed collectively, but not as PSM (model 7), self-sacrifice was the only dimension that was significantly related to volunteering intensity in the presence of the other PSM dimensions. Whereas, amongst the individual dimensions on their own, civic duty was also significantly related to volunteering intensity (model 3). This lends support that the variables do perform separately on their own and will be discussed later on.

**Table 4.2** Regression results: PSM and volunteering intensity

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Coeff	s.e.	Coeff	s.e.	Coeff	s.e.	Coeff	s.e.	Coeff	s.e.	Coeff	s.e.	Coeff	s.e.
(constant)	5.062***	0.126	3.919***	0.421	4.582***	0.241	5.267***	0.354	4.112***	0.274	5.365***	0.303	4.563***	0.477
Gender	0.253*	0.109	0.273*	0.108	0.293**	0.11	0.266*	0.111	0.277**	0.107	0.253*	0.109	0.311**	0.110
Baby boomers	-0.075	0.113	-0.057	0.112	-0.057	0.112	-0.075	0.113	-0.047	0.110	-0.070	0.113	-0.035	0.111
Married	0.415***	0.126	0.398***	0.124	0.411***	0.125	0.421***	0.126	0.420***	0.123	0.426***	0.126	0.438***	0.124
Children	0.041	0.114	-0.009	0.115	0.002	0.115	0.049	0.115	-0.008	0.113	0.036	0.115	-0.012	0.114
Frequency	0.606***	0.108	0.570***	0.107	0.583***	0.108	0.611***	0.108	0.541***	0.107	0.592***	0.109	0.530***	0.108
PSM			0.342**	0.121										
Civic duty					0.148*	0.063								
Compassion							-0.056	0.091						
Self-sacrifice									0.307***	0.079				
APM <sup>a</sup>											-0.083	0.075	-0.076	0.075
R-squared	0.161		0.183		0.176		0.162		0.200		0.164		0.209	
Adjusted R-squared	0.148		0.167		0.160		0.146		0.185		0.148		0.185	
F(5)=11.837,			F(6)=11.436,		F(6)=10.911,		F(6)=9.908,		F(6)=12.823,		F(6)=10.076,		F(9)=8.902,	
p < 0.001			p < 0.001		p < 0.001		p < 0.001		p < 0.001		p < 0.001		p < 0.001	
N	314		314		314		314		314		314		314	

Note: \*\*\*p < 0.001, \*\*p < 0.01, \*p < 0.05, †p < 0.10

<sup>a</sup>Attraction to policy making, unstandardized coefficients are displayed

In a further step, regressions were used to test for a potential mediating effect of P-O fit on the relationship between PSM and volunteer intensity. Hypothesis 4.2 suggests P-O fit mediates the relationship between PSM and volunteering intensity. In order to establish the total effect of PSM on intensity, first P-O fit was regressed on PSM ( $\beta = 0.330$ ,  $p < 0.001$ ) and was significant (Table 4.3). Second, intensity was regressed on PSM and P-O fit with a positive relationship demonstrated with P-O fit ( $\beta = 0.632$ ,  $p < 0.001$ ). Lastly, total effect of PSM ( $\beta = 0.343$ ,  $p < 0.01$ ) on intensity was significant, and the model accounted for 18.3% of the variance in volunteer intensity. The total effect was derived from the combined direct and mediated effects (Hayes, 2013). Consequently, the indirect effect of PSM on volunteering intensity at 95% confidences interval bootstrap is significant ( $\beta = 0.2090$ ,  $s.e. = 0.0626$ , Bootstrap Lower Limits for Confidence Intervals (BootLLCI) = 0.1117, Bootstrap Upper Limits for Confidence Intervals (BootULCI) = 0.3529). For robustness, it was double-checked with the Sobel test (normal theory test for z score test if  $c - c' = /0$ ) ( $Z = 3.622$ ,  $s.e. = 0.058$ ,  $p < 0.001$ ) which supports the conclusion made using the bias-corrected bootstrap confidence interval. Therefore, Hypothesis 4.2 is supported.

**Table 4.3** Mediation results PSM, volunteering intensity and P-O fit as mediator

Variable	DV: P-O fit		DV: Intensity		Total effect	
	Coeff	s.e.	Coeff	s.e.	Coeff	s.e.
Constant	2.506***	0.284	2.33***	0.472	3.919***	0.421
Gender	0.144*	0.073	0.182†	0.099	0.273†	0.108
Baby boomers	-0.071	0.075	-0.013	0.101	-0.057	0.112
Married	0.172*	0.084	0.289*	0.113	0.399**	0.124
Children	0.077	0.083	-0.058	0.104	-0.009	0.115
Frequency (often)	0.338***	0.077	0.356***	0.101	0.570***	0.108
PSM	0.330***	0.081	0.134	0.112	0.343**	0.121
P-O fit			0.632***	0.077		
R-squared	0.176		0.331		0.183	
	F(6)=10.902, $p < 0.001$		F(7)=21.664, $p < 0.001$		F(6)=11.436, $p < 0.001$	
Observations	314		314		314	

Note: \*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , † $p < 0.10$



## Discussion and Conclusion

We examined the connection between PSM and volunteering intensity while taking the mediating effect of P-O fit into account. The findings suggest PSM is a factor that does positively affect volunteering intensity. Hence, the results presented in this chapter extend previous work by Clerkin et al. (2009) who also found PSM was a motivational driver to volunteer. However, in contrast to Clerkin et al. (2009) who studied the incidence of volunteering, we go a step further linking PSM and its dimensions to the effort the individual perceived they exerted when volunteering. Furthermore, the findings of volunteering intensity mirror the findings of Andersen and Serritzlew's (2012) study of the outcome variable work effort. They found Danish physiotherapist worked harder to provide services to disabled patients because of an increased sense of commitment to public interest. Similarly, we found those volunteers that exhibited a high commitment to delivering services to others did so at a higher level of effort.

Other significant findings in this chapter relate to the effects of gender, frequency of volunteering and being married. It could be that females feel a stronger sense of societal acceptance and recognition which may be an additional factor influencing the commitment and frequency of the volunteers. This supports findings by DeHart-Davis et al. (2006) who found females had higher levels of compassion and attraction to policy than their male counterparts did. Although Charbonneau and Van Ryzin (2017) contend that gender does not explain much variance of PSM (amongst public sector employees at least). In terms of the control variable frequency of volunteering, there is a greater reporting of volunteering effort when one volunteers on a weekly or monthly basis. However, volunteers who commit much of their time are at risk of experiencing the underlying effects of burnout (McBride, Gonzales, Morrow-Howell, & McCrary, 2011). One must ask if deeply or highly motivated individuals could pose significant challenges to management if they feel the organization is moving in a direction different than they believe it should be going (O'Leary, 2010). Finally, being married was significantly related to volunteering intensity in model 1. This mirrors the findings by Rotolo and Wilson (2006) that found women can indeed influence husbands when it comes to volunteering.

Despite these findings, there are several limitations concerning social desirability bias and issues concerning what volunteers were actually doing when they reported volunteering intensity. Some researchers would argue that self-reported measures are subject to social desirability bias especially in situations where one is being asked questions directly opposed to filling out a self-administered survey (Tourangeau & Yan, 2007). However, research has shown that individualistic cultures are less likely to over-report answers (Kim & Kim, 2016b). In the case of self-reported PSM measures, Kim and Kim's (2016a) study found while there was no evidence of social desirability bias between gender, it does exist for those in their 20s. Regardless, only the individuals know their personal level of exertion and therefore are the only ones who can determine if they applied mental, physical or emotional effort. Secondly, while we know how much time individuals volunteered, at what level of intensity and even where, we do not know what the individuals were doing while volunteering. Studies have found a significant relationship between the characteristics of the job one was doing and its influence on PSM (Battaglio & Gelgec, 2017). Therefore, because volunteering can often be associated with menial tasks such as passing out water during a sporting event or setting up chairs at a fundraising event, what one does when volunteering might influence the physical, mental or emotional effort one exerts.

When we started this chapter, we discussed how Joyce's exposure to service members volunteering while on military missions around the world made her question the motivation. If we return to the example of volunteering to serve one's country through military service, the PSM dimension civic duty could be the propellant to the action of going down to the recruiter and signing on the dotted line. Likewise, if the US Navy Seabees and British Royal Engineers that volunteered to build playgrounds for schools were motivated by PSM dimension commitment to public interest, that motivating factor drove them to making a difference. Similarly, the National Guard's PSM motive to provide medical assistance might have been motivated by compassion; whereas, the chaplain offering comfort to the grieving could be due to self-sacrifice. Collectively, each individual was motivated to take a different type of action, but ones that showed a sense of civic engagement.

## Note

1. As part of the Army of One Campaign in the mid-1990s, the US Army core values were developed in order to instill a sense of personal responsibility and social values within Soldiers. The acronym for these values is LDRSHIP and stands for: loyalty, duty, respect, selfless service, honesty, integrity and personal courage.

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