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Unanswered Questions about Public Service Motivation: Designing Research to Address Key Issues of Emergence and Effects

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Symposium on **Public Service** Motivation Research

As public service motivation research gains momentum, important questions emerge regarding its origins and consequences that are not addressed by existing research. The authors identify some fundamental public service motivation assumptions, including critical gaps in our current understanding of its basic tenets. The authors then discuss specific research studies that, by virtue of their findings and designs, may fill in and inform such apparent gaps. Their aim is to chart new concrete directions for scholarship that complements and advances existing public service motivation research.

ublic service motiva-tion (PSM) has received considerable research attention in the last two decades, and interest continues to grow (Perry and Hondeghem 2008). Recent studies, for example, have examined the relationship between PSM and job satisfaction (Bright 2008; Steijn 2008; Taylor 2008;

Wright and Pandey 2008, forthcoming), absenteeism (Wright and Pandey, forthcoming), intentions to leave (Bright 2008; Steijn 2008), organizational commitment (Moynihan and Pandey 2007; Taylor 2008), job performance (Alonso and Lewis 2001; Bright 2007; Frank and Lewis 2004; Naff and Crum 1999), and organizational performance (Brewer and Selden 2000; Kim 2005). Although this research has advanced our understanding of PSM in important ways, this understanding is "contingent on the methods, populations, situations and underlying assumptions involved in the process by which [it] has been acquired" (McGrath et al. 1982, 105). In other words, what we know ultimately depends on how we know it. Given that our current knowledge of PSM has been derived primarily from cross-sectional survey research, our understanding remains limited in critical ways. In particular, such research has not answered important causal questions about the emergence and effects of PSM. This may be attributable to the fact that studies addressing these questions can be difficult to design and conduct.

While other scholars in this symposium suggest research agendas that will advance the conceptual development or applications of PSM more broadly, our focus is much more limited. Our objective is to identify some unanswered questions regarding the original assumptions about PSM and to suggest specific research that can help answer them. Building on recent critiques of PSM research (e.g., Wright 2001, 2008), we identify some of the most fundamental

> assumptions of PSM theory as well as the research characteristics that influence our understanding of and confidence in these assumptions. In the next two sections, we identify and discuss critical gaps in our current understanding of these basic PSM tenets and suggest specific research designs that can help fill in these gaps. The

first section focuses on the emergence or origins of PSM and the implications of this for the relationship between PSM and sector of employment. The second section focuses on the basic assumptions regarding the potential effects of PSM on job performance. We conclude with recommendations for future research.

The Current State of Public Service **Motivation Research**

At its core, the theory of PSM assumes that some individuals have a "predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations" (Perry and Wise 1990, 386) that induces them "to perform meaningful ... public, community and social service" (Brewer and Selden 1998, 417). As a result, the theory generally is used to suggest that individuals with greater PSM are more likely (1) to be found working in government because of the opportunities it offers to provide meaningful public service, and (2) to perform better in-and feel

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more satisfied with—their public sector jobs because they find this type of work intrinsically rewarding. Although a growing body of research provides support for these claims, our understanding of and confidence in these fundamental assertions has been limited by a reliance on cross-sectional research designs (Wright 2008).

The research process presents scholars with a series of dilemmas, as the choice of research design reflects inherent trade-offs between the ability to make causal statements, the ability to generalize those statements to other settings, and the ability of a broader audience to accept and apply them (McGrath 1981). While each attribute is desirable, at best, any single research design can only maximize two of these criteria while falling short on the third (see, e.g., Thorngate 1976; Weick 1999). Thus, our critique is not a condemnation of a particular research design, but rather a recognition of the limitations of relying too heavily on any single type of design. Each type of design has both strengths and weaknesses. The strength of cross-sectional survey research lies in its ability to test a theory's predictions in a broad range of populations and settings.

Using such designs, current research has provided considerable evidence that public employees have higher PSM than private sector employees. Our confidence in this relationship has been strengthened by the numerous studies that have replicated these findings in samples that vary by occupation, organization, jurisdiction, and nationality (Brewer 2003; Crewson 1997; Frank and Lewis 2004; Houston 2006; Karl and Peat 2004; Lyons, Duxbury, and Higgins 2006; Posner and Schmidt 1996; Rainey 1982; Steijn 2008; Taylor 2008; Wittmer 1991). The theory's predictions regarding the differences between private and public sector employees have also been supported across both attitudinal or behavioral measures of PSM (Wright 2008). Although these cross-sectional survey research designs have helped maximize PSM's generalizability, they have limited internal validity and contextual realism (McGrath 1981). In other words, we cannot be certain that PSM actually influences job decisions or performance (internal validity), or even whether these causal mechanisms work—and can be influenced—in organizational settings (contextual realism). These issues must be addressed if PSM research is to reach its full potential.

The importance of internal validity and contextual realism may vary based on the audience. Internal validity may be of particular concern to scholars, as the current reliance on survey data has made it impossible to fully rule out alternative explanations for the empirical relationship between PSM and employees' attitudes and behaviors. The cross-sectional studies linking PSM and public sector employment choice, for example, have confounded the effects of attraction, selection, attrition, and socialization and adaptation processes (Wright 2008). As a result, it remains unclear to what degree public sector jobs (1) attract, select, and retain employees who already possess high levels of PSM, and/or (2) cultivate, increase, and encourage the expression of PSM among employees.

Contextual realism, on the other hand, may be of particular interest to public sector practitioners. As potential consumers of this research, practitioners are more likely to understand, trust, and apply research findings when they test direct applications in authentic settings (Bozeman and Scott 1992). Knowing that public employees report valuing opportunities to help others or contribute to society

may not be sufficient to convince managers that their employees will actually behave in a way that is consistent with how the organization defines or provides public services (see also Rynes, Gerhart, and Minette 2004). Nor do survey findings provide clear evidence of specific ways that managers can use knowledge of PSM to improve performance. To speak to this audience, researchers need to design and test direct management applications derived from PSM theory. Field experimental and quasi-experimental designs, in particular, can provide researchers with greater levels of control that demonstrate causal effects in organizational contexts while ruling out alternative explanations (Cook and Campbell 1979; Grant and Wall 2009).

Thus, if we assume that the extant PSM research is sufficient to support the existence of PSM (Wright 2008), the next step is to conduct research that can inform our understanding of its emergence and effects, as well as the strategies that managers can use to cultivate PSM and enhance its impact. In the sections that follow, we highlight some of the unanswered questions related to the fundamental assumptions that PSM influences employee recruitment, retention, and performance. When doing so, we identify specific research and research designs that can better inform our answers to these questions.

Understanding the Origins of Public Service Motivation

One of the fundamental assumptions in PSM research is that individuals with greater PSM are more likely to work in government because of the opportunities it offers to provide meaningful public service. As previously noted, the first part of this assumption is supported by a growing body of empirical research that has found PSM to be higher among public sector employees than among private sector employees. Unfortunately, the evidence for the second part of the assumption, focusing on the cause of these differences, is largely circumstantial. While public employees may have higher PSM because the work of government agencies attracts individuals with those values (Pandey and Stazyk 2008), the differences may also be a result of organizational environments that cultivate those values in their employees over time (Moynihan and Pandey 2007). While this can be viewed in the context of broader philosophical or psychological arguments as to whether attitudes and behaviors are driven by stable traits or by dynamic states, a more management-specific application of this debate can be found in the literature investigating the relative importance of attraction-selection-attrition (Schneider 1987) or adaptation and socialization processes (Hall, Schneider, and Nygren 1970).

Understanding the relative influence of these different processes is not just of theoretical importance; it is also necessary to properly assess and guide management practice. For instance, Moynihan and Pandey (2007) found that job tenure is negatively associated with PSM. This important finding can be interpreted in two very different ways. On one hand, it might suggest that government organizations have become increasingly successful in their efforts to recruit employees with public service values. On the other hand, it might also suggest that these organizations are doing a poor job of cultivating and supporting these values over time. In fact, consistent with this latter interpretation, several studies suggest that employees with high PSM may be less satisfied with, and more likely to leave, public sector jobs because they feel unable to make public service contributions at work (Buchanan 1974, 1975; Vinzant 1998).

Unfortunately, the relative influence of attraction-selection-attrition and adaptation (socialization) processes with regard to PSM remains largely untested because existing research has relied on cross-sectional designs that use only data collected after individuals have selected a sector of employment (i.e., Brewer 2003; Crewson 1997; Houston 2006; Posner and Schmidt 1996; Rainey 1982; Wittmer 1991) or academic study (Karl and Peat 2004). While such designs can provide evidence that PSM and sector of employment are correlated, they cannot guarantee that one variable causes the other or even address which variable comes first. Thus, PSM research must make greater use of designs that allow the expected cause (independent variable) to be measured—if not introduced—prior to assessing the expected effect (changes in the dependent variable). In practice, this would involve measuring individuals levels of public service motivation before they choose their jobs or careers. Admittedly, such studies are not easy to design or conduct. In fact, whether PSM is a potentially dynamic state or a static trait has important implications for how PSM can be studied. If PSM is considered a stable trait (or even a disposition that is difficult or slow to change), researchers cannot manipulate it as an independent variable or even make the before-and-after comparisons required by experimental and many quasi-experimental designs.

Thus, questions regarding the emergence or origins of PSM have important implications for how we study and even use PSM, yet such questions remain unanswered. Testing whether PSM is a stable trait or a dynamic state can help determine whether the higher levels of PSM found among public employees are attributable to attraction-selection-attrition or socialization and adaptation mechanisms. Given that even traits may exhibit both stability and considerable within-person variability driven by individual responses to external circumstances (Fleeson 2001), it may be likely that both mechanisms play some role.

Disentangling the Effects of Attraction-Selection and Adaptation-Socialization

To determine the degree to which PSM is an antecedent or a consequence of employee job decisions, scholars must make greater use of longitudinal designs that allow the independent variable—whether it is PSM or employment sector choice—to be measured at multiple points in time or prior to observing a change in the dependent variable. While such studies are difficult to conduct, several types of studies already exist that not only illustrate how this could be done, but also provide results consistent with PSM theory.

The first set of studies that informs our understanding of the origins of PSM by attempting to isolate the effects of attraction-selection and socialization mechanisms only requires measuring employees' values before and after they make their initial employment decisions. For example, Mortimer and Lorence (1979) measured the importance that 512 college school seniors placed on three types of work-related values: extrinsic (e.g., income, prestige and security), intrinsic (e.g., challenge, responsibility and autonomy) and people/ service (e.g., chance to work with people and be useful to society). Ten years later, they measured the importance that these same individuals placed on these values, as well as their current income, level of work autonomy, and extent to which their current job involved social or people-oriented activities.² To assess the relative importance of selection and socialization, they used respondents' values before

entering the workforce to predict the characteristics of their current jobs (salaries, autonomy, and social content) 10 years later, as well as the ability of their job characteristics to predict their current values after controlling for the initial assessment of their values as college

Mortimer and Lorence found that respondents with higher social or people-oriented values as college seniors were more likely to select into jobs that stressed social welfare, teaching, and service compared to others 10 years later, even after controlling for the effects of the other two values and a variety of demographic variables. They also found that the characteristics of respondents' current jobs did not significantly predict their current social or people-oriented values after controlling for their values measured 10 years earlier. While this latter finding suggests that the job does not alter an individual's values and thus fails to support the importance of socialization or adaptation mechanisms (cf. Kohn and Schooler 1982), the former is consistent with the attraction-selection-attrition hypothesis that people are more likely to select occupations that satisfy their values.

While measuring work values both before and after participants' job choice can help provide a better understanding of the relative influence of selection and socialization, such designs rarely provide definitive evidence as to whether values are best defined as stable traits or dynamic traits. For example, although Mortimer and Lorence found that past social or people-oriented values were the best predictor of current values, their data still explained less than a quarter of the variance in current values. In other words, the strength of these values did change over time. While the importance respondents placed on extrinsic rewards increased over time, the importance they placed on social or people-oriented values decreased.3

Other studies have attempted to isolate the effects of attractionselection and socialization mechanisms by measuring individual values before and after joining an organization in order to isolate and test the effects of specific socialization activities or strategies (Cable and Parsons 2001; Chatman 1991). To investigate the separate effects of attraction-selection and socialization, for example, Chatman (1991) measured employees' perceptions of fit with the organization early in their membership and then again 10 to 12 months later.⁴ Although Chatman found that the degree of fit when employees entered the organization was the strongest predictor of their fit nearly a year later, employee involvement in socialization activities (the number of hours spent with an organizational mentor and the number of organizationally sponsored social and recreational events they attended) also helped predict the degree of fit measured a year later.5

Similarly, Cable and Parsons (2001) found evidence supporting both attraction-selection and adaptation processes when comparing the effects of pre-entry estimates of fit and specific socialization activities on fit measured 12 to 18 months after joining the organization. Their findings, however, highlight the potential importance of measuring values prior to (or very early in) an employee's organizational tenure. While socialization tactics provided a better explanation of employees' self-reported perceptions of fit, employees' perceptions of value congruence measured prior to joining the organization explained more of the variance in employee-organization value congruence measured a year later. Similar studies could

be performed with regard to PSM by measuring the PSM of newly hired employees at several stages of their career within an agency and assessing the degree to which PSM changes as a result of specific organizational experiences, or even more broadly as a result of the degree to which their PSM values seem to match the mission, culture, or activities of the agency in which they work.

Given the difficulty of (and time required for) collecting longitudinal data, an alternative research strategy would be for PSM scholars to identify existing panel studies that measure PSM and track employment over time. One recent study highlights both the potential and the difficulties associated with the using preexisting panel studies not specifically designed to study PSM. Using panel data collected by the American Bar Association to analyze the employment trends of lawyers, Wright and Christensen (2010) found that lawyers who reported choosing a legal career because of their interest in social service and helping others were not only more likely to be employed in the public sector at the time of the initial survey

(when job and PSM were measured concurrently), but also six years later, when they were surveyed again. While this study provides clear evidence that PSM can play a role in employment decisions, it also illustrates how secondary data are often collected in ways that do not maximize our ability to make strong causal inferences about PSM. In particular, the design of this study produced data that tell us little about the origins of PSM, as they were only measured after participants selected a sector of employment and were exposed to organizational socialization processes.⁶

Confidence in the study's conclusions is also limited by its use of a limited single-item measure of PSM that fails to capture the different dimensions suggested by other scholars (Perry 1996).

Implications for Public Service Motivation

If these previous studies of work-related values are any indication of the origins of PSM, then PSM may be a relatively stable disposition, but one that still can change over time and be influenced by the organization (see Fleeson 2001). This has important implications for the study of PSM. To the extent that PSM can be influenced by environmental conditions, research is needed to test the ways in which managers can cultivate PSM. A number of such interventions and tests will be discussed in the next section, addressing issues regarding PSM's effect on performance. If PSM is a relatively stable trait (or even a disposition that is difficult or slow to change), researchers may be limited in their ability to change or even observe changes in PSM before and after interventions. Even so, researchers can still study how PSM influences important employee attitudes and behaviors by introducing or manipulating environmental cues.

One such approach would be to use a policy-capturing design (e.g., Perry et al. 1993) to experimentally manipulate different cues and cue values in ways that will help determine how individuals weight, combine, or integrate informational cues when making decisions. Such designs have a number of advantages over traditional cross-sectional studies. By requiring individuals to make overall judgments about multi-attribute scenarios that emphasize salient decision-making criteria and realistic variable levels and combinations,

policy-capturing designs are not only more similar to actual decision problems (thereby increasing contextual realism) but also weaken social desirability effects by indirectly assessing the importance of explanatory variables (Arnold and Feldman 1981; Karren and Barringer 2002; Rynes, Schwab, and Heneman 1983). Concerns regarding social desirability could be reduced further by validating the results with behavioral data, such as whether individuals attended information sessions to learn more about working for organizations or jobs that best fit the criteria identified by the policy-capturing design.

While not true experimental research because they typically expose all research participants to the same set of environmental cues without employing random assignment to treatment or control groups, policy-capturing designs can address some of the weaknesses that characterize previous PSM research (Wright 2008). For example, policy-capturing designs would allow researchers to examine the influence of PSM on individuals' job choice decisions by manipulating different job attributes and testing the effect of those differ-

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ences on the willingness to accept a job offer. This design could also help isolate selection processes by investigating PSM's relationship to job preferences and selection prior to respondents' acceptance of their first job and before any direct organizational socialization occurs. Thus, in addition to completing a questionnaire assessing their PSM and various demographic characteristics that may affect job choice (i.e., age, gender, marital status, academic achievement/ability), students could be asked about the likelihood that they would accept future job offers that vary on such

items as starting salary, degree of service emphasis or clientele interaction, degree of intellectual challenge, and employment sector.

Using this type of design, for example, Judge and Bretz (1992) found that individuals whose primary value orientation involved concern for others were more likely to accept jobs in organizations that emphasized concern for others. In addition to looking at PSM's influence on sector choice, policy-capturing designs can be used to answer key questions regarding the relative importance of PSM compared to other factors that influence job or sector choice, such as the quality or type of work, career opportunities, supervisors, coworkers, and physical working conditions (Leisink and Steijn 2008).

The Effects of Public Service Motivation on Job Performance: Myth or Reality?

Another fundamental assumption in PSM research is that employees with greater PSM are likely to perform better in public sector jobs (Perry and Wise 1990). It is thought that employees with high PSM are motivated to perform more effectively because their jobs provide opportunities to express and fulfill their values of compassion, self-sacrifice, civic duty, and policy making. Although a few studies have begun to link PSM to higher levels of job performance (Alonso and Lewis 2001; Frank and Lewis 2004; Naff and Crum 1999), causality is unclear (Bright 2007; Wright 2008) and much more research is needed. As with PSM research in general, existing studies have been limited by their use of cross-sectional survey designs, which are threatened by two broad classes of rival explanations: reverse causality and omitted variables.

Reverse Causality: The Chicken or the Egg?

Researchers have rarely considered the possibility that PSM may be a consequence, not a cause, of performance. Similar to the wellestablished finding that performance influences satisfaction, not only vice versa (for a

review, see Judge et al. 2001), it may be the case that high performance strengthens PSM, while low performance weakens PSM. While studies suggest that PSM-related values may be as much a result of attraction-selection-attrition as adaptation processes, PSM-related values were found to change over time (Mortimer and Lorence 1979), and even to be cultivated through organizational socialization (Cable and Parsons 2001; Chatman 1991). Given this possibility, it is important to consider some additional relevant evidence for this causal direction—that is, that performance may increase PSM rather than vice versa.

Why might success increase PSM? Extensive research has shown that high performance builds self-efficacy—the belief in one's capabilities to perform a task successfully (Bandura 1997; Gist and Mitchell 1992). Self-efficacy, in turn, provides employees with the confidence to persist in the face of setbacks; to adopt new strategies to overcome barriers; to attribute shortcomings to specific, controllable forces rather than global, uncontrollable forces; and to learn new skills during challenging tasks (Bandura 1997; Haidt and Rodin 1999). As a result, self-efficacy tends to increase motivation (e.g., Davidson and Eden 2000; Wright 2004, 2007), fueling high performance (Stajkovic and Luthans 1998). Together, these arguments suggest that when employees achieve high performance, they experience greater confidence in their capabilities to succeed, which may strengthen their PSM. For example, when a government official performs a task effectively, she is likely to feel more convinced in her capabilities to perform civic duties and policy making, which will enhance her desire to serve the public.

The mirror image of these arguments holds that low performance is likely to decrease PSM. By reducing employees' self-efficacy, low performance may contribute to a syndrome of learned helplessness (e.g., Maier and Seligman 1976), whereby employees come to feel that they cannot make meaningful contributions as public servants (Buchanan 1974, 1975). To avoid the cognitive dissonance triggered by this aversive self-concept threat (Aronson 1999), employees may change their attitudes, reducing their desire to serve the public. The mechanisms of self-efficacy versus learned helplessness represent only one of many plausible explanations for why performance may cause PSM rather than vice versa. Our broader point is that crosssectional research designs cannot rule out reverse causality as an alternative account of the observed associations between PSM and performance.

Omitted Variables: The Force That Caused Both the Chicken and the Egg?

In addition, there are many possible common causes of both PSM and performance. In the language preferred by economists, this is an endogeneity problem. There are many factors that may independently increase both PSM and performance, creating a spurious association between the two variables. For example, consider the personality trait of conscientiousness, which refers to the extent

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to which individuals tend to be industrious, disciplined, goal oriented, and organized. There is ample evidence that of all personality traits, conscientiousness is the most robust and reliable predictor of job performance across a wide range of occupations (Barrick and Mount 1991; Barrick, Mount, and Judge

2001). Conscientious employees tend to achieve higher performance because they set higher goals, are willing to invest more time and energy in their work in order to achieve those goals, and exercise greater vigilance in completing tasks carefully (Judge and Ilies 2002). There is also good reason to believe that conscientiousness will be positively associated with PSM. A sense of duty and responsibility to others is one of the defining features of conscientiousness (Moon 2001). As a result, we expect that conscientious employees will experience stronger propensities toward civic duty and selfsacrifice, and possibly policy making and compassion as well, than their more "carefree" counterparts. We recommend that researchers start by testing whether there is a positive relationship between PSM and performance after controlling for conscientiousness, which can be measured with a variety of self-report surveys (see Roberts et al. 2005).

Given that many of the studies linking PSM to performance have measured the latter using performance appraisals and promotions (Alonso and Lewis 2001), another possible explanation for these findings may be that supervisors in public organizations have a predilection toward employees with high PSM (Christensen and Whiting 2009). Such supervisors are likely to be biased in favor of employees with high PSM, as predicted by theories of expectancy confirmation (see Heath, Larrick, and Klayman 1998), motivated reasoning (Kunda 1990), and halo effects (e.g., Forgas and George 2001). Although PSM is a latent construct, supervisors may make inferences based on observing employees' attitudes, emotions, and behaviors. For example, employees with high PSM may express compassion more frequently, engage in self-sacrificing citizenship behaviors, volunteer to follow through on their commitments to civic duty, or show enthusiasm for policy making. Upon observing these tendencies, supervisors may selectively notice and recall the desirable behaviors of employees with PSM, while discounting or overlooking their undesirable behaviors. In performance appraisals, supervisors may award employees with high PSM more credit for their contributions. They may even skew objective performance by offering employees with high PSM more resources and support to achieve their goals (e.g., Gerstner and Day 1997). Meanwhile, employees with low PSM may find that their contributions are neglected, that their missteps are unfairly penalized, and that they lack the resources and support that they witness their colleagues enjoying.

Researchers could begin to address these rival explanations by examining whether PSM predicts higher performance even after controlling for conscientiousness and supervisor biases.7 However, this would only address the omitted variable problems posed by conscientiousness and supervisors' cognitive and motivational biases, neglecting a much larger pool of possible common causes of a spurious relationship. We turn our attention to an alternative approach that rules out these rival explanations using research design features, rather than statistical controls, that facilitate strong inferences about internal validity.

The Value of Field Experiments and Quasi-Experiments

Philosophers of science and methodologists agree that in order to establish a causal relationship, four criteria are necessary (e.g., Edwards and Bagozzi 2000). The cause and effect must be (1) distinct entities that (2) covary with (3) the cause preceding the effect in time while (4) alternative explanations for covariation and temporal precedence are ruled out. These criteria are best fulfilled in randomized, controlled experiments (e.g., Campbell and Stanley 1966; McGrath 1981). To demonstrate that PSM truly motivates higher levels of job performance, we encourage researchers to conduct true field experiments and quasi-experiments, which are designed to establish internal validity while maintaining high levels of external validity.

A true field experiment involves randomly assigning employees to controlled treatment conditions. Generally speaking, it is ideal to compare interventions that both strengthen and weaken the

independent variable with a neutral control condition. However, given the ethical problems associated with attempting to decrease PSM, we recommend that researchers begin by designing and evaluating the effects of interventions to increase PSM. Researchers have used field experiments and quasi-experiments to demonstrate the causal impact of impor-

tant organizational factors on performance, including goal setting (Locke and Latham 2002), leader expectations (Eden 2003) and transformational leadership (Dvir et al. 2002), job design (Griffin 1983), incentives (Rynes, Gerhart, and Minette 2004; Stajkovic and Luthans 2001), and autonomous workgroups (Wall et al. 1986).

As an illustrative example, because its focus is conceptually related to PSM, consider the research program on prosocial motivation devised by Grant and colleagues. These researchers were interested in understanding whether contact with customers, clients, and other beneficiaries outside the organization would motivate employees to perform more effectively (Grant et al. 2007). They conducted a randomized, controlled field experiment at a public university. The university managed a call center that solicited monetary donations from alumni. Callers received little information about how their donations were used, which created the opportunity for an intervention to provide interpersonal contact with a beneficiary of the callers' work. In the contact condition, a scholarship recipient visited the organization to talk with the callers about how he had benefited from the money that they raised. In the control conditions, callers had no contact with the scholarship recipient or read a letter by the recipient but did not meet him face to face. The researchers measured employees' persistence (time on the phone) and performance (donation money raised) before and after the intervention. The results showed nearly threefold increases on both outcomes for callers who had met the scholarship recipient, but not for those in the control condition (Grant et al. 2007).

The researchers also identified three other-regarding psychological mechanisms that explained these effects: as a result of having contact with a beneficiary of their work, employees are more likely to feel that their work has a meaningful impact on beneficiaries, that their actions are valued and appreciated by beneficiaries, and that they are emotionally committed to beneficiaries (Grant 2008b; Grant et al.

2007). A follow-up quasi-experiment showed that even when contact with beneficiaries is implemented by managers rather than by an external researcher, it can enhance performance (Grant 2008a).

Implications for Public Service Motivation

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candidates.

These research designs can be applied and extended to inform our understanding of the relationship between PSM and performance in ways that strengthen our ability to make causal inferences while also maintaining good external validity. We recommend starting with randomized, controlled field experiments with interventions designed to increase PSM. Ideally, researchers will use multisource, interrupted time-series designs to obtain both observer ratings and objective measures of performance in pretest and posttest phases. There are a number of possible interventions to enhance PSM; here, we consider three candidates. First, the interventions utilized by Grant and colleagues may be effective in increasing PSM. Placing employees in direct contact with program clientele in ways that

highlight meaningful impact or appreciation of their work (Grant 2008a; Grant et al. 2007), or sharing vivid stories about how other members of their occupations and organizations have helped others (Grant 2008b), may play a powerful role in supporting and enhancing PSM.

Second, given the effectiveness of goal-setting interventions (Locke and Latham 2002; Wright 2001, 2004, 2007), we recommend the evaluation of whether setting specific, difficult public service goals can increase PSM. Surprisingly, goal-setting research has focused almost exclusively on learning and performance goals (e.g., Seijts et al. 2004), overlooking the importance of setting goals that emphasize helping, benefiting, giving, or contributing to others. Such public service goals may be quite effective in increasing PSM.

Third, researchers may draw on social psychological research establishing the effectiveness of self-persuasion interventions (Aronson 1999; Heslin, Latham, and Van de Walle 2005). The central premise underlying self-persuasion is that employees are most likely to be influenced and motivated by sources that they already find to be likeable and credible: themselves (Aronson 1999). Typical self-persuasion interventions involve the processes of idea reflection and advocacy. For example, researchers might ask employees to reflect on the importance of public service, and then publicly advocate, both in writing and in person, why it is critical for each person to engage in public service. In doing so, they may convince themselves of the importance of public service, making a private and public commitment to furthering public institutions in the future. Such an intervention has the potential to increase PSM (see also Morwitz and Fitzsimons 2004; Nelson and Norton 2005).

With all three of these interventions, it will be critical to test whether any increases in rated or objective performance are mediated by increases in PSM. The strongest possible design will involve surveying employees both before and after the intervention to examine whether their levels of PSM increase as a result of contact with beneficiaries, goal setting, or self-persuasion, and whether these increases in the experimental condition but not the control condition account for the effects of the intervention on performance (for excellent advice, see MacKinnon, Fairchild, and Fritz 2007).

This will allow researchers to examine whether PSM can in fact be increased by organizational interventions, whether interventions simply signal to employees that their current work situations provide sufficient opportunities to express their existing levels of PSM (see Grant 2008b), or whether PSM is relatively robust against interventions.

To further strengthen external validity, researchers may also look for naturally occurring changes in factors that affect PSM without researcher intervention. For example, a change in an organization's mission statement to emphasize greater public service, a leader's inspirational vision speech about serving the public, and the first invitation of a client or customer group to give feedback are events that may be ripe for experimentation. To deepen the theoretical and practical insights gained, researchers may consider testing finergrained predictions about the independent and interactive effects of different dimensions of PSM identified by Perry (1996, 1997). For example, it may be the case that compassion most directly influences interpersonal helping behaviors, while self-sacrifice has a stronger impact on overtime hours worked, and civic duty increases performance on unpleasant tasks in which it is difficult to maintain intrinsic motivation.

To test these types of predictions, it will be critical to design interventions that are tailored to each dimension of PSM. For instance, we might expect that contact with beneficiaries is most relevant to increasing compassion, as it often involves empathy-inducing interactions with potential beneficiaries in need or distress (Grant et al. 2007). Self-persuasion, on the other hand, could easily be tailored to each of the four dimensions by asking employees to reflect on, and advocate, the importance of policy making, civic duty, compassion, or self-sacrifice. In sum, before we can conclude that PSM actually affects job performance, field experiments are sorely needed. In addition to advancing our theoretical knowledge, such experiments will provide managers with guidelines on how to increase PSM.

It is important to note that these experimental designs will be most fruitful if PSM is a dynamic state rather than a static trait. However, even if PSM is a more static trait, experiments still have potential. Researchers have demonstrated that relatively small interventions can change the behavior and performance of individuals who hold PSM-related values by making these values more salient (Verplanken and Holland 2002) and by signaling that the job provides opportunities to express these values (Grant 2008b). Thus, placing employees in contact with beneficiaries, setting difficult and specific public service goals, and designing self-persuasion exercises may all be interventions that differentially motivate employees with high PSM by making their public service values more salient and highlighting the opportunity to fulfill these values in their jobs. If these types of interventions motivate stronger increases in performance among employees with high PSM, researchers will have more convincing evidence that PSM plays a causal role in job performance.

Conclusion

Even as research on PSM continues to gain momentum, there are important questions regarding its origins and consequences that have not been sufficiently answered by existing research, given its reliance on cross-sectional data and designs. There are, however, specific studies that can inform our understanding of PSM through the relevancy of both their findings and designs. For our purposes, these research designs are of particular importance, as they could be used by scholars to study PSM directly in future research.

More specifically, we suggest a series of research designs that can answer these critical questions in ways that maximize both internal validity and realism of context. Such research not only helps to validate the benefits of PSM, but also to identify potential implementation strategies that organizations can use to leverage these benefits. For example, through the use of policy-capturing and longitudinal research designs, PSM scholars would build a better understanding of the relative importance of PSM and other factors in influencing the employment decisions of job candidates, knowledge that then can be applied by public organizations to more effectively recruit and retain the next generation of public servants. The use of other field experiments and quasi-experiments discussed here can help convince scholars and practitioners of PSM's role in enhancing employee performance while simultaneously suggesting some specific management strategies that might help cultivate PSM values or encourage their expression. We hope that these ideas will help both scholars and managers advance the theory and application of PSM.

We have focused heavily on quantitative methods, as we believe the most important unanswered questions about PSM pertain to understanding its emergence and effects. However, we encourage further PSM research with qualitative methods. Such methods have been used to unpack four different ways in which individuals can experience PSM as samaritans, communitarians, patriots, or humanitarians (Brewer, Selden, and Facer 2000). However, qualitative research has untapped potential for building theory about the processes through which PSM develops and contributes to performance. We hope to see researchers use more qualitative methods—integrating interviews, nonparticipant and participant observation, and archival documents—to understand how organizations seek to influence PSM and the psychological and behavioral processes associated with PSM. Comparative case studies of individuals and organizations with different levels of PSM may also be fruitful. Finally, qualitative methods can be quite powerful in providing rich examples, creating contextual realism to make research findings more credible and persuasive for practitioners. For these reasons, qualitative methods have an important role to play in the present and future of PSM research.

Notes

- 1. Other possible explanations emphasize omitted variables such as generational differences, or even the fact that PSM declines as employees age (Mortimer and Lorence 1979) or gain work experience. This latter process may be driven more by a natural adjustment of idealistic views held by individual employees than by the characteristics of any specific organization.
- 2. Highlighting one of the difficulties of this type of design, the study initially involved 694 participants, but 12 percent of these participants could not be located for the follow-up data collection effort 10 years later.
- 3. In general, however, there is evidence that prosocial values tend to increase as people grow up (Eisenberg 2000) and approach midlife (McAdams and De St. Aubin 1992).
- 4. Chatman (1991) used the Q-sort methodology to assess fit by comparing employee value profiles with the values that a group of organizational managers felt best characterized their organization.

- Scholars taking such an approach should take care to avoid the use of difference scores (Edwards 2001).
- 6. Similarly, several recent studies have examined PSM's effects on employment decisions by analyzing the relationship between an employee's current level of PSM and past (rather than future) job decisions (Su and Bozeman 2009; Tschirhart et al. 2008; Wright and Christensen 2010). While these studies provide additional evidence for the relationship between PSM and public employment, they cannot tell us whether PSM influences or is influenced by employment decisions. Even if current PSM levels can predict whether an individual's first job was in government, for example, it cannot rule out the possibility that the individual's PSM is a result of experiences or socialization related to that first (or even subsequent or current) jobs. Such studies may not even be able to confidently disconfirm PSM's relationship with employment decisions. For example, while Wright and Christensen (2010) found that PSM did not predict whether a lawyer's first job was in government, they note that these findings may just suggest that PSM's influence on employment decisions depends on other factors such as job availability and the stage of an employee's career. In fact, consistent with this latter interpretation, several studies have found that PSM predicts the desire better than the act of working in government (Lewis and Frank 2002; Tschirhart et al. 2008). Even though such studies may not isolate the causal mechanisms underlying the relationship between PSM and employment decisions, they raise valuable questions regarding when and under what conditions PSM may have a stronger effect on employee attraction.
- 7. Supervisor biases can be accounted for by controlling for their moods (Forgas and George 2001), by triangulating sources by asking independent observers to rate performance (Cook and Campbell 1979), or by obtaining objective work samples that can be evaluated by experts (Schmidt and Hunter 1998).

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