

Barry Bozeman
Arizona State University
Xuhong Su
University of South Carolina

Public Service Motivation Concepts and Theory: A Critique

With its growth in popularity, public service motivation (PSM) research has been subjected to increasing critical scrutiny, but with more focus on measurement and models than on concepts. The authors examine PSM against standard criteria for judging the strength of concepts (e.g., resonance, parsimony, differentiation, and depth). After providing a critique of PSM concepts, they conclude with suggestions for research programs that could improve the explanatory power of PSM theory.

Public Service Motivation Conceptualization: Some Notes for Advancing Theory

Because of its prominence and recent proliferation, the public service motivation (PSM) literature provides an excellent test bed for analyzing the role of concept development in public administration theory building. We provide a critique of PSM conceptualizations, employing a framework developed by Gerring (1999) to organize the analysis. We follow the critique with some suggestions for research that could enhance the status and explanatory power of PSM.

The Growth of PSM Theory and Research

Over the past decade, scholarly interest in PSM has grown remarkably. Figure 1 shows the increase in the number of peer-reviewed journal articles, limited to those with “public service motivation” in their titles.¹

The very popularity of PSM contributes to problems of its conceptualization.

Theorists and researchers pile up successive concepts and measures, always adding but rarely subtracting. This is not, of course, a problem suffered only by PSM. Other popular research topics in public administration, including red tape (Bozeman and Feeney 2011), interorganizational collaboration (Entwistle and Martin 2005), and networks (Isett et al. 2011), are subject to concept profligacy.

Given the popularity of PSM, it is not surprising that it has spawned a variety of responses, including

efforts to advance measurement and operationalization (e.g., Coursey et al. 2008; Coursey and Pandey 2007; Kim 2009a, 2009b, 2011; Kim et al. 2013; Vandenberg 2008) and suggestions for methodological innovation on research designs (Kim 2012; Kim and Vandenberg 2010; Vandenberg 2007; Wright 2008). A few studies—indeed, too few—examine the fundamental causal issues of PSM and how those relate to development of concept and constructs (Kim et al. 2013; Wright and Grant 2010). An even less common approach focuses on the social psychology of problem choice and the possibility that PSM concepts are colored by “aspirational bias,” that is, the framing of researchers’ theorizing in terms of their social values and aspirations (Bozeman and Su 2012).

Assessing PSM Concepts

In analyzing concepts, we employ a framework developed by Gerring (1999). We feel this is a particularly useful framework because it does not assume a high level of theoretical formalization, axioms, or covering laws. Gerring identifies several criteria for concepts, which are summarized in table 1. After examining the PSM literature, we apply Gerring’s framework in assessing PSM concepts.

A surfeit of PSM concepts? The early PSM literature tends to focus on comparing differences in work attitudes and reward preferences between public and

private employees (see Crewson 1997; Houston 2000; Rainey 1982; Wittmer 1991). This research line provides few explicitly defined concepts for PSM, except directly through empirical measures used. These

early, pathbreaking studies include diverse empirical research findings showing, for example, that public employees value more than private sector employees the opportunity to perform public service and that public employees are more likely to be motivated by intrinsic aspects of work than by monetary rewards (e.g., Crewson 1997; Houston 2000; Rainey 1982;

Barry Bozeman is Arizona Centennial Professor of Technology Policy and Public Management at Arizona State University and director of the Center for Organization Research and Design.
E-mail: bbozeman@asu.edu

Xuhong Su is assistant professor of political science at the University of South Carolina.
E-mail: suxuhong@mailbox.sc.edu

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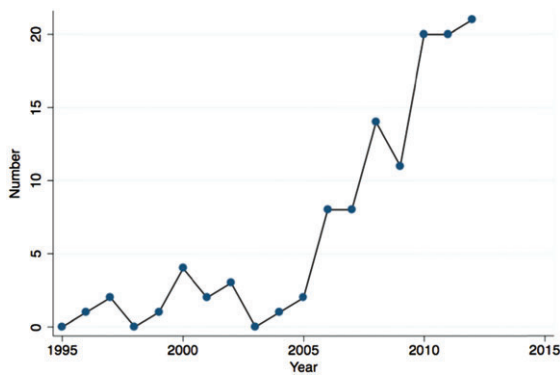


Figure 1 Number of Peer-Reviewed Journal Articles on PSM

Wittmer 1991). The concepts of PSM presented in early studies are suggestive rather than explicit and generally focus on public managers or directly compare public managers with business managers.

Perry and Wise contribute to research and theory in PSM by proposing a formal, stipulated concept of PSM, defining it as “an individual’s predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations” (1990, 368). Significantly, this early Perry and Wise (1990) concept of PSM is grounded in values *from public institutions*. While the Perry and Wise (1990) article is cited in much subsequent literature, the pervasiveness of this definition certainly has not prevented others from developing very different definitions and concepts.

Table 2 shows some of the diverse PSM concepts one finds in the literature. In some cases, authors equate PSM with general altruistic motive (e.g., Brænder and Andersen 2013; Brewer, Ritz, and Vandenabeele 2012; Bright 2008; Francois 2000; Houston 2006; Pandey, Wright, and Moynihan 2008; Perry and Hondeghem 2008a, 2008b; Rainey and Steinbauer 1999; Wright and Pandey 2008), work-related preferences (e.g., Brewer, Ritz, and Vandenabeele 2012; Christensen and Wright 2012; Clerkin and Coggburn 2012; Georgellis and Tabvuma 2010; Kjeldsen 2012b, 2012c; Liu, Tang, and Zhu 2008; Perry and Hondeghem 2008b), or prosocial behaviors (e.g., Andersen et al. 2013; Brænder and Andersen 2013; Brewer, Ritz, and Vandenabeele 2012; Christensen

and Wright 2012; Clerkin, Paynter, and Taylor, 2009; Perry and Hondeghem 2008a). Some conceptualizations focus on individual predisposition (Carpenter, Doverspike, and Miguel 2012; Clerkin and Coggburn 2012; Crewson 1997; Pandey, Wright, and Moynihan 2008; Perry et al. 2008; Perry and Wise 1990), while others pay attention to institutional and ethical factors in shaping PSM (Coursey et al. 2008; Houston 2006; Houston and Cartwright 2007; Perry and Hondeghem 2008b).

Recent attention has been directed toward integrative efforts, with PSM being conceptualized in terms of a variety of presumably inter-related components (Andersen et al. 2013; Kim et al. 2013; Perry and Hondeghem 2008a, 2008b; Vandenabeele 2007). For instance, Vandenabeele defines PSM as “the beliefs, values and attitudes that go beyond self-interest and organizational interest, that concern the interest of a larger political entity and that motivate individuals to act accordingly whenever appropriate” (2007, 547), with institutional identity as one more component being added. More often, scholars combine numerous components together (e.g., Perry and Hondeghem 2008b; Taylor 2007; Vandenabeele 2007). While the multiple conceptualizations of PSM reflect a thriving research agenda in the field, this diversity also proves problematic in some respects. With more components being added to the defining categories over time, the constant reshuffling makes PSM a moving target.

It is, of course, understandable that a wide variety of concepts have been employed for PSM. As Mandler (2008) explains, during the early stages of a field, concepts tend to be very general, often based on oversimplified descriptions. As research and theory evolve, the early concepts tend to be more commensurate with empirical experience. In public administration, chiefly because of limited resources, many studies in public administration rely on convenience samples (Rainey 2011) rather than sampling based on strong theoretical criteria. As a result, researchers often find they must develop measures that suit circumstance rather than theory and, in some cases, “bend” concepts to fit available measures.

Differentiation: The locus of PSM. A basic requirement for any scientifically useful concept is satisfactory differentiation—making clear exactly what qualifies as an instance of a concept and what does not. Too often, PSM shares concept space with such concepts as “service

Table 1 Gerring’s (1999) Criteria for Assessing Concepts

| Criterion | Question Asked | Comment |
|---------------------|--|---|
| Familiarity | How familiar is the concept? (to a lay or academic audience) | All else being equal, the concept should not be a radical departure from commonly accepted meanings of the word. |
| Resonance | Does the term catch one’s attention? Is it memorable? | Examples of memorable concepts are “exit, voice, loyalty,” “street-level bureaucrats,” and “side payments.” |
| Parsimony | How short is the list of defining attributes? | The reach of the concept should be accomplished with as few terms (items in the definitions) as possible. |
| Coherence | How internally consistent are the instances and attributers? Are they logically related? | A concept should exhibit the interrelation among its multiple dimensions. |
| Differentiation | How differentiated are the instances and the attributes? (from other similar concepts) | Does the concept distinguish from other closely related concepts? |
| Depth | How many accompanying properties are shared by the instances under definition? | To what extent is the concept related to phenomena in the domain of consideration (e.g., worker motivation)? Thus, all else being equal, one prefers a concept that links to phenomena as opposed to concepts so narrow as to constrict use or impede research. |
| Theoretical utility | How useful is the concept within a wider field of inferences? | Terms of concepts should promote explanation and empirical generalization. Concepts should be related to behavior of interest. |
| Field utility | How useful is the concept within a field of related instances and attributes? | The concept should advance the field of study by having applicability across instances or cases. |

Table 2 Illustrative Concepts of PSM

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| <p>"Public service motivation may be understood as an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations" (Perry and Wise 1990, 368).</p> <p>PSM is the "motivational force that induces individuals to perform meaningful public service" (i.e., public, community, and social service); and PSM is "prevalent in the public service (i.e., the public-sector workforce)" (Brewer and Selden 1998, 417).</p> <p>PSM can be "defined as a general altruistic motivation to serve the interests of a community of people, a state, a nation, or humankind" (Rainey and Steinbauer 1999, 23).</p> <p>PSM "inclines employees to provide effort out of concern for the impact of that effort on a valued social service" (Francois 2000, 275).</p> <p>"Consistent with conventional wisdom in public administration that government employment is a calling, public service motivation assumes bureaucrats are characterized by an ethic to serve the public. They act out of a commitment to the common good rather than mere self-interest. Hence, they are motivated by different rewards than those who do not answer the call" (Houston 2006, 67).</p> <p>The public service motive assumes that "public employees are public servants who are committed to the public good and characterized by an ethic that is built on benevolence, life in the service of others, and a desire to affect the community" (Houston and Cartwright 2007, 89).</p> <p>PSM is a "concept that denotes the idea of commitment to the public service, pursuit of the public interest, and the desire to perform work that is worthwhile to society" (Scott and Pandey 2005, 156).</p> <p>PSM can be "characterized as a reliance on intrinsic rewards over extrinsic rewards" (Kim 2006, 726).</p> <p>PSM is "a mix of motives that drives an individual to engage in an act that benefits society" (Taylor 2007, 934).</p> <p>PSM is defined as "the belief, value and attitudes that go beyond self-interest and organizational interest, that concern the interest of a larger political entity and that motivate individuals to act accordingly whenever appropriate" (Vandenabeele 2007, 549).</p> <p>Studies "operationalized public service motivation as work-related values or reward preference such as the employees' desire to help others, benefit society, or engage in meaningful public service" (Wright and Pandey 2008, 503–4).</p> <p>PSM is a "specific expression of prosocial, other-oriented motives, goals and values. PSM understood either as institutionally unique motives associated with public service, or beliefs and values that transcends self and organizational interests on behalf of a larger political entity, could be conceived as a subset, for instance, of the overarching idea of altruism" (Perry and Hondeghem 2008b, 295).</p> <p>PSM is "characterized as altruistic intentions that motivate individuals to service the public interest" (Bright 2008, 151).</p> <p>"Public service motivation is an expression of prosocial and other-oriented motives and values and actually represents an individual's predisposition to enact altruistic or pro-social behaviors regardless of setting" (Liu, Tang, and Zhu 2008, 720).</p> <p>"We construe public service motivation as referring to individual motives that are largely, but not exclusively, altruistic and are grounded in public institutions" (Perry and Hondeghem 2008b, 6).</p> <p>"Rebuilding public service motivation is viewed as a way to improve public service quality and volume without incurring the transaction/monitoring costs associated with 'higher powered' incentives such as performance-related pay" (Myers 2008, 6).</p> <p>PSM's definition has a "common focus on motives and action in the public domain that are intended to do good for others and shape the well-being of society" (Perry and Hondeghem 2008b, 3).</p> <p>"PSM can be seen as a specific form of 'intrinsic motivation' (Crewson 1997; Houston 2000), which pertains to the inherent psychological satisfactions of working, such as finding the work interesting, and the challenge, intellectual stimulation, and variety offered by the work" (Steijn 2008, 14).</p> <p>"PSM is a cluster of motives, values, and attitudes on serving the public interest" (Taylor 2008, 67).</p> <p>"The concept of PSM assumes that there are specific motives that are activated particularly by the features of public institutions" (Ritz 2009, 55).</p> <p>"PSM is a particular form of altruism or prosocial motivation that is animated by specific dispositions and values arising from public institutions and missions" (Perry, Hondeghem, and Wise 2010, 452).</p> <p>"PSM consists of fulfillment of higher-order needs.... The will to act in congruence or consistency with public value is a specific need or motivates of public employees" (Anderfuhren-Biget et al. 2010, 217).</p> <p>PSM is "oftentimes used in a broader context to describe individuals' motivation to contribute to society and help other people through the delivery of public services (i.e., services ordered and fully/partly paid for by the public) regardless of whether this takes place in the public or private sectors" (Kjeldsen 2012a, 7).</p> |
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motivation," "altruism," "helping others," and "prosocial motives." If PSM research aims to make a *distinctive* contribution to social knowledge, then sharper boundaries are required.

One differentiation deficit is the locus of PSM. Does PSM pertain chiefly to public employees? (Carpenter, Doverspike, and Miguel 2012; Clerkin and Cogburn 2012; Houston 2006; Kjeldsen 2012b; Liu, Tang, and Zhu 2008; Perry and Wise 1990; Ritz 2009). Or does PSM occur in any sector? (Andersen et al. 2013; Bright 2011; Houston 2011; Kjeldsen 2012b; Liu, Tang, and Zhu 2008; Taylor 2010). One seemingly compelling locus for PSM is nonprofit organizations (Coursey et al. 2008; Mann 2006; Perry 2000; Wittmer 1991). The majority of studies comparing

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employees' reward preferences in the context of public–private dichotomy were conducted based on the ranking (or rating) of different reward items (Crewson 1997; Houston 2000; Jurkiewicz, Massey, and Brown 1998; Rainey 1982; Wittmer 1991).² The lower rating does not discredit the presence of PSM in private organizations. Indeed, numerous studies sug-

gest that PSM is not just a public sector phenomenon but pertains to all work sectors (Anderson, Pallesen, and Pedersen 2011; Coursey et al. 2008; Kjeldsen 2012b; Moulton and Feeney 2011; Steen 2008).

Whereas much early PSM research focused on government organizations and defined PSM, at least in part, with reference to using government organization instrumentally to achieve public

purpose, research has gone beyond this narrower conception. Perry, Hondeghem, and Wise (2010, 682) state quite clearly that PSM is not unique to government organizations, although they contend that it tends to be more prevalent in government as a result of the explicit public service mandates of government entities.

While it is certainly sensible that PSM researchers now widely accept that PSM concepts limited to government service and government organizations have little traction (Brewer, Ritz, and Vandenabeele 2012; Houston 2011; Kjeldsen 2012b; Perry and Hondeghem 2008b), it nonetheless remains the case that, when stripped of public sector-specific nature, it is difficult to distinguish PSM from service motivation studies that can be dated back as early as the 1960s (e.g., Daniels 1960; Pearce 1983; Smith and Sjöberg 1961).

The term “service motivation” is often employed without definition, but at least a few definitions are available. Pearce says that service motivation refers to three types of rewards, “the chance to further the goals of this organization,” “a chance to make a real contribution,” and “identification with the mission of the organization” (1983, 649). Duffy and Raque-Bogdan, who provide a 12-item scale to measure service motivation, offer a straightforward definition of service motivation as “the desire to serve others through one’s future career” (2010, 253), thus tying the motivation to work life but in no particular work context. Finally, Bendor and colleagues, in a paper aimed at understanding incentives for armed forces reservists, indicate that “the motivation to serve can be understood as a reference point within a collectivist-individualist continuum” and that service motivation consists of “attitudes (e.g., satisfaction with reserve service, preference for combat over administrative service), intentions (willingness to devote extra time and effort, desire to continue serving, or conversely, readiness to apply for exemptions and the inclination not to report for reserve duty), and behavior (reports of asking for service deferral)” (2008, 571). In other words, their definition is based on specific attitudes and behaviors and, apparently, motives inferred from them.

These diverse definitions do not provide as clear or as consensual a definition of service motivation as one might hope for, but nevertheless we can consider the service motivation concept in its relation to PSM. Is PSM actually a sector-based subset of service motivation such that any observed sector differences in PSM result from the characteristic service provision requirements in public organizations? (i.e., and attribute of the work context) (e.g., Andersen, Pallesen, and Pedersen 2011; Kjeldsen 2012b). Or is PSM a particular endowment of public sector workers, one owing to self-selection into government work? (e.g., Carpenter, Doverspike, and Miguel 2012). Or is PSM a matter of socialization (e.g., Houston 2011; Kjeldsen and Jacobsen 2013), building on years of service-oriented work performed with others?

Differentiation: PSM and altruism. As suggested by Perry and Hondeghem, PSM can be conceptualized as “a specific expression of prosocial, other-oriented motives, goals and values” and therefore is “a subset, for instance, of the overarching idea of altruism” (2008b, 295). This is in contrast to the view that PSM equates with “a general

altruistic motivation” (Rainey and Steinbauer 1999, 23). Further scrutiny shows that the definition from Rainey and Steinbauer (1999), while it remains useful, is an outlier in a PSM literature that generally seeks to distinguish PSM from general altruism (see also Perry 2014). However, the relationships between altruism and PSM remain somewhat nebulous. Perry and Hondeghem (2008a, 6) suggest that PSM may “complement” altruism, but they do not specify the nature or the extent of the complementary relationship.

Making the conceptual demarcation task more difficult is the fact that altruism is itself an ambiguous concept. For example, there are well-known behavior-oriented definitions such as Fehr and Fischbacher’s definition that altruism is one’s undertaking of “costly acts that confer . . . benefits to other individuals” (2003, 787) or Kerr and colleagues’ similar definition as “behavior that simultaneously entails fitness costs to the behaving individual and fitness benefits to individuals on the receiving end of the behavior” (2004, 136). One of the best-known psychological disposition definitions of altruism is Batson and Shaw’s definition of altruism as “a motivational state with the ultimate goal of increasing another’s welfare” (1991, 110). There are also many multidimensional measures of altruism that define altruism operationally in terms of psychological scale components (e.g., Rushton, Chrisjohn, and Fekken 1981; Sawyer 1966).

Altruism has not only definitional problems but also its own differentiation problems. A particularly thorny one has to do with the reference group for altruism. Does altruism refer to a core interactive group, to an associational group, to a broad self-defined community, or to an entire society? (West, Griffin, and Gardner 2007). This is important because actions that are altruistic with respect to one reference set may be harmful with respect to another. Complicating matters further, is altruism even confined to humans? For example, there is some evidence that altruism occurs among birds and mammals (Koenig 1988; Waltz 1981).

Despite the conceptual ambiguities of altruism, it has one clear advantage over PSM: most people use the term “altruism” in ordinary language and seem to have some shared meaning. PSM exists mostly as a technical term, one not widely known to educated

Public service motivation exists mostly as a technical term, one not widely known to educated persons not involved with public administration, and therefore it requires greater care in communicating conceptual and operational meanings.

persons not involved with public administration, and therefore it requires greater care in communicating conceptual and operational meanings. This does not deny that PSM indexes (e.g., those used in operationalization and multivariate analysis) include some aspects that are not technical and generally recognized by nonresearchers, say, the notion of self-sacrifice. But the multidimensional nature of PSM and its internal dynamics are largely confined to scholarly communities in a few disciplines and fields.

While its relation to altruism remains a conceptual stumbling block, PSM suffers other conceptual rivals. For example, the notions of “helping others” and “prosocial motives” have long histories as distinct concepts but are also rolled into some concepts of PSM (Crewson 1997; Liu, Tang, and Zhu 2008; Perry and Hondeghem 2008b; Rainey and Steinbauer 1999; Taylor 2007). Bierhoff (2002) provides one attempt to distinguish among the concepts, suggesting

Table 3 Illustrative PSM Concepts and Our Comments

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| "Public service motivation may be understood as an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations" (Perry and Wise 1990, 368). | This conceptualization fails to specify which motives grounded in public institutions "qualify." The concept implies that public institutions give rise only to positive and beneficial motives. Public institutions confer power; does a power motive qualify as a basis for PSM? |
| PSM can be "defined as a general altruistic motivation to serve the interests of a community of people, a state, a nation, or humankind" (Rainey and Steinbauer 1999, 23). | Without a distinction between altruism and PSM, the latter has no cash value as a concept; it is redundant. |
| Studies "operationalized public service motivation as work-related values or reward preference such as the employees' desire to help others, benefit society, or engage in meaningful public service" (Wright and Pandey 2008, 503–4). | Again, this fails to distinguish between generalized service and altruism. What public service is "meaningful," and what public service is not meaningful? Often, work-related values are quite different from reward preference; the joining of the two gives a "double-barreled" concept. |
| PSM is defined as "the belief, value and attitudes that go beyond self-interest and organizational interest, that concern the interest of a larger political entity and that motivate individuals to act accordingly whenever appropriate" (Vandenabeele 2007, 549). | Beliefs, values, and attitudes generally are viewed as quite different from one another. Is the "interest of a larger political entity" necessarily benevolent? |
| "Public service motivation is the motivational force that induces individuals to perform meaningful public service (i.e., public, community, and social service); ... is prevalent in the public service" (Brewer and Selden 1998, 417). | This does not significantly distinguish PSM from altruism and related concepts. |
| PSM is "characterized as altruistic intentions that motivate individuals to service the public interest" (Bright 2008, 151). | This does not distinguish PSM from altruism, except in the domain of application. The "public interest" is a famously ambiguous concept. |
| "Consistent with conventional wisdom in public administration that government employment is a calling, public service motivation assumes bureaucrats are characterized by an ethic to serve the public. They act out of a commitment to the common good rather than mere self-interest. Hence, they are motivated by different rewards than those who do not answer the call" (Houston 2006, 67). | What is the nature of a secular "calling"? Would one necessarily need to be a government employee to be called and to have a "commitment to the common good rather than mere self-interest"? Are those who do not have PSM committed to "mere self-interest"? |
| PSM is "a mix of motives that drives an individual to engage in an act that benefits society" (Taylor 2007, 934). | This differs little from altruism and service motivation. |
| PSM is a "specific expression of prosocial, other-oriented motives, goals and values. PSM understood either as institutionally unique motives associated with public service, or beliefs and values that transcends self and organizational interests on behalf of a larger political entity, could be conceived as a subset, for instance, of the overarching idea of altruism" (Perry and Hondeghem 2008b, 295). | This provides no clear indication of "institutionally unique motives," or the basis their uniqueness. Is the "institution" government? If so, what about the institutionally unique motives of those working as contractors or in hybrid organizations? |
| "The concept of PSM assumes that there are specific motives that are activated particularly by the features of public institutions" (Ritz 2009, 55). | Absent a specification of those motives allegedly "activated particularly by features of public institutions" and absent a specification of features, this definition provides few cues for theory or research. |
| "Rebuilding public service motivation is viewed as a way to improve public service quality and volume without incurring the transaction/monitoring costs associated with 'higher powered' incentives such as performance-related pay" (Myers 2008, 6). | This is not a definition but an observation about PSM. |

that "helping others" may have a broader boundary than "prosocial behavior" and that the latter may transcend altruism inasmuch as it occurs as a result of many motives.

In our judgment, none of these conceptualizations of PSM provides an entirely suitable route to strong empirical theory. Among the definitions presented in table 2, the most common usages (Perry and Wise 1990; Taylor 2008, 2010) tend to make little headway in distinguishing PSM from service motivation, other-directedness, or altruism. Some do not seek to do so (Rainey and Steinbauer 1999). Others (Perry and Hondeghem 2008a) indicate that PSM is institution or public focused but do not specify the aspects of institutions that are the subject of such focus. In our view, the public-focused concept seems to us to have the most promise to provide a PSM concept that is distinctive, but such a conceptualization requires some greater specification of the particular public aspects and, ultimately, their causal linkages to attitudes and behaviors.

The Gerring Framework: Criteria for Concept Assessment

The Gerring (1999) criteria for concept assessment are particularly useful for the social sciences. Unlike many philosophy of science frameworks that were developed explicitly for application in the physical sciences, the Gerring framework neither requires nor assumes the high level of theoretical and mathematical formalization or the axioms and covering laws that one often finds in the physical sciences but so rarely finds in the social sciences. The major criteria for concept evaluation are presented in table 3.

Regarding the *familiarity* criterion (that concepts should, all else being equal, relate to commonly understood usages), the various PSM concepts score reasonably well. Each of the concepts provided earlier seems to communicate that PSM relates to exactly what the term implies: a motivation to serve the public. Interestingly, only one definition seems to stray a bit from that familiar territory. The Perry and Wise concept indicates that PSM requires motives "grounded primarily or uniquely in public institutions" (1990, 368). This definition does have the value of showing some separation with altruism; however, it entails requirements that would not likely be employed in ordinary language usages of the term. Moreover, later concepts developed by the same authors (Perry and Hondeghem 2008b) have to some extent supplanted this one. However, multiple concepts remain in play, contributing to ambiguity.

Gerring's (1999) *resonance* criterion holds that a term should demand the attention of those communicating. Most PSM concepts score high on this criterion. It is not clear that the great popularity of PSM as a research topic proves that various PSM concepts are inherently valid or even compelling, but it is certainly the case that the large numbers of researchers engaged in PSM research and theory at least find the concept sufficient for scholarly communication.

Generally, *parsimony* is viewed as a secondary criterion; that is, if we assume that all else is equal (coherence, differentiation, and such), then parsimony is a desirable feature. But explanatory utility should never be sacrificed for the sake of parsimony. Thus, Perry and

Hondeghem's (2008b, 295) concept is perhaps the least parsimonious of the ones presented in the above table but, at the same time, it provides several clues for construct development and possible directions for empirical research. Arguably, PSM is not yet at a stage where parsimony is an especially important criterion. Most social science research is sufficiently complex and overdetermined that parsimony, although admirable, cannot be a primary goal for most research fields. Rather, parsimony is a nice "bonus" in well-conceived research and theory.

Most PSM concepts have a sufficient level of internal consistency to meet the *coherence* criterion's requirements. Houston's PSM concept does exhibit a possible coherence problem. If those with PSM "act out of a commitment to the common good rather than mere self-interest," and if they are "motivated by different rewards than those who do not answer the call" (2006, 67), then the definition depends in part on factors that are, at the same time, dispositional and behavioral. That is, one requirement relates to attribution from action, whereas the other relates to motives not necessarily observed in behavior.

It is the *differentiation* criterion that plagues much of PSM. Many PSM concepts remain ambiguous because they do not distinguish adequately from other concepts. In part, this is because PSM is, at the same time, a "force," a "disposition," and, taken together, "belief, value and attitude" (Vandenabeele 2007, 549). PSM also relates closely to intrinsic motivation (for an overview of concepts, see Ryan and Deci 2000).

If PSM is, at the same time, a belief, value, and attitude and a behavior, then how does one differentiate among them? PSM researchers certainly are not unaware of the need to differentiate concepts. Perry, Hondeghem, and Wise (2010) address this point, providing some helpful clarifications. They emphasize that PSM is conceptually distinct from self-interest but acknowledge that it is "a peculiar form of altruism or prosocial motivation that is animated by specific dispositions and values arising from public institutions and missions" (2010, 682). However, they do not claim that PSM is found only in government organizations. While this account provides some clarification, it does not, of course, completely satisfy differentiation criteria. In particular, what does it mean to be "animated by specific dispositions arising from public institutions and their missions"? Is "animated" the same as "caused," and if not, how is it different? Does it in this instance mean "suggested," "inferred," "inspired," or all of these and more? More problematic, what exactly are the "specific dispositions"? Presumably, *specific* dispositions are not the same as *general* dispositions, and if they are specific, then they should be specified. In sum, the foregoing clarification is helpful but not conclusive. It is useful to separate what "animates" PSM from any direct tie to public sector institutions, but questions remain.

Gerring's *depth* criterion relates to the number of properties included under the concept. Vandenabeele's (2007) concept scores particularly high on this criterion, illustrating that depth as a criterion for assessing concepts (similar to criteria for assessing statistical relationships or research designs) often involves trade-offs—in this case, trade-offs with parsimony. Moreover, the depth criterion seems not the most pressing at this point in the history of PSM theory

development. When more consensus has emerged about concepts, then depth will take a more prominent role.

PSM concepts score reasonably well on both utility criteria. With respect to *theoretical utility*, most concepts prove useful for the development of empirical generalizations. The problem, rather, is that in many instances the empirical generalizations are not anchored by consistently applied constructs tied closely to the concepts employed. Likewise, PSM concepts have been applied across many cases (in this instance, types of employees in various sectors), although not always with the best result. Thus, if we know that private sector employees are less motivated by PSM, which most research seems to support (with exceptions; see Christensen and Wright 2011; Kjeldsen and Jacobsen 2013), it may simply be an instance, *depending on the PSM concept in play*, of too much breadth of application. However, if PSM really means altruism, then its applicability is as broad as the altruism concept.

Discussion

In the remaining space, we summarize problems with current PSM concepts and theory and, in doing so, make reference to the Gerring (1999) criteria. A concluding section provides some suggestions that we feel might lead to greater progress in PSM knowledge.

One charge against PSM research is that it has often been used as an independent variable, but much less often have researchers examined PSM as a dependent variable or, related, the causal mechanics leading to PSM (exceptions include Andersen and Pedersen 2012; Kjeldsen 2012c; Kjeldsen and Jacobsen 2013). We submit that this neglect is in part due to the fact that PSM concepts still do not have sufficient conceptual purchase to provide good cues as to causes or, in some cases, to even permit valid research into its causes. Only limited progress (e.g., Perry and Vandenabeele 2008) has been made in providing an adequate set of explanations or hypotheses about how PSM develops and why some people have more of it than others (see Wright and Grant 2010). This is not to say there has been no progress in mapping out the causes of PSM (e.g., Perry et al. 2008). For example, Moynihan and Pandey (2007) have provided insights into the ways in which employees' organizations can affect their PSM. Nevertheless, absent greater attention to the corollary causes of PSM, the PSM literature will not score as well as it might on Gerring's theoretical utility criterion. If PSM is to address, in the words of the criterion, "a wider field of inferences," then more attention to the causal pathways to PSM is required.

Let us consider some of the causal questions in PSM that are in need of greater attention, especially for the purpose of improving, in Gerring's (1999) terms, the "field utility" of research and theory, the extent to which the work advanced the field by having applicability across many and diverse instances and cases. Field utility depends in some measure on theoretical utility, which, in turn, depends on greater clarification of the causal mechanics of PSM. For example, most concepts of PSM start with some notion of public service or public values motivation but then give few clues about how these motives develop or change or how constituent motives give rise to PSM-relevant behaviors. Are some people genetically predisposed to PSM? Does PSM occur because one's synapses fire in a particular pattern? Is

Many public service motivation concepts remain ambiguous because they do not distinguish adequately from other concepts.

PSM a learned attitude? Or is it a behavior that is as much atavistic as learned? If it is learned, how is it learned? Is PSM inculcated in formal education, such as receiving a master of public administration or master's degree in social work or a certification in engineering ethics? Is it learned on the job, as one's coworkers model PSM behaviors, perhaps transmitted by generations of public interested workers? Or is PSM the result of accumulated life experiences, some sort of amalgamation of commitment to others, religiosity or spiritualism, parental encouragement, and sense self-efficacy? *What actually causes PSM?* PSM remains woefully underdeveloped as a dependent variable. It will be a challenging task to develop a causal map for PSM because a great many factors likely interact (e.g., individual psychological makeup, organizational effects, systemic effects, peer interaction).

With respect to Gerring's (1999) differentiation criterion, we noted earlier the difficulties posed by the fact that PSM conceptualization provides no suitable differentiation from the venerable (but also concept-challenged) tradition of research and theory on altruism (for an overview, see Piliavin and Charng 1990). It is not sufficient simply to say that PSM is a special subset of altruism. That communicates little meaning unless one identifies the specifications by which it is a subset, that is, how PSM is different from other aspects of altruism. Is it a subset confined to public agencies or limited to public service? Does PSM apply to special constituents or a whole society, among other possibilities? PSM researchers are well aware of the "adjacent concept space" problem and have attempted to sort out the relationship of such factors as altruism, religious motivation, and PSM (Perry 1997; Perry et al. 2008), but thus far to no adequate resolution.

Another conceptual issue that seems muddled in existing PSM research is the relationship of PSM to intrinsic and extrinsic motivation. PSM researchers assume implicitly or declare explicitly that PSM exemplifies intrinsic motivation (e.g., Crewson 1995, 1997; Kim 2009a, 2009b). Lately, scholars have tended to downplay the ties between PSM and intrinsic motivation, placing more emphasis on the institutional component of PSM (Perry, Hondeghem, and Wise 2010; Vandenabeele 2007). For instance, a fifth dimension of PSM is unfolded and labeled as "democratic governance" (Vandenabeele 2008). Still, some questions need further attention. For example, what is the *public* nature of that intrinsic motivation? How does one distinguish the desire to serve others from the desire to serve the public? What constitutes "public"? In PSM, is the concern with serving citizens, clients, or some set of public values? Does it not make a difference as to exactly who constitutes this public? We do not suggest that any particular view of the "public" in PSM is superior, only that theoretical progress requires some sorting out of these issues.

Conclusions

Taking into account the progress to date in PSM and the remaining gaps in research and theory, we propose two research programs that, although difficult and resource intensive, could enhance PSM theory. The first suggestion is for research sorting out the dispositional from the environmental aspects of PSM. The second suggestion, not entirely novel, is to use laboratory settings and experiments to nail down some basic empirical aspects of PSM.

Research program 1: Sorting out the dispositional versus the environmental context aspects of PSM. It is easy enough, in principle, to sort out the dispositional versus the environmental context relationship of possible PSM origins. In part, the issue is PSM as a dependent variable versus PSM as an independent variable. In our view, it is both and should be treated as such. PSM has roots somewhere—individual attitudes and history, organizational socialization, responses to benchmark events—and none of this has been sorted out sufficiently. To this point, much more progress has been made in understanding PSM as a cause. But the research on the PSM as an independent variable becomes even more useful once we have a fuller grasp of the PSM phenomenon and its causes. Many important issues remain unresolved, such as whether PSM is inherent to the individual (e.g., Perry and Wise 1990), a matter of socialization (e.g., Bright 2013; Vandenabeele 2011; Ward 2013), related to occupation (e.g., Andersen and Pedersen 2012; Houston 2011), or working in a context in which the focus is providing service (e.g., Houston 2011; Kjeldsen and Jacobsen 2013).

What is required for progress on the causes of PSM and its dynamism, aside from a satisfactory concept and constructs of PSM (which we assume for the moment), is quality longitudinal data about career trajectories (e.g., Brænder and Andersen 2013; Christensen and Wright 2011; Kjeldsen and Jacobsen 2013). Research design requires an early pre-test of PSM, perhaps among college students (Christensen and Wright 2011) or physicians (Kjeldsen and Jacobsen 2013), and then a stratified sample that will have sufficient variance to accommodate a wide variety of work contexts (not only public, private, and nonprofit but also functional differences and, especially, differences in service provision). The design must be longitudinal to trace the effects of not only socialization but also disenchantment and burnout (e.g., Kjeldsen and Jacobsen 2013). Longitudinal design is also vital to examine both job switching and sector switching to determine effects emanating from such changes (e.g., Christensen and Wright 2011; Wright and Christensen 2010; Wright and Grant 2010). With such a design, the mystery of the origins of PSM can likely be put to rest.

Research program 2: Validating PSM in laboratory studies. PSM research would benefit from a series of integrated laboratory studies. Wright and Grant (2010) arrive at the same conclusion. There is a strong tradition of experimental work on adjacent concepts, especially altruism (e.g., Charness and Haruvy 2002; Fong 2007; Grusec 1972). Experiments could prove extremely useful in helping

develop and anchor concepts (not indexes or constructs) of PSM (e.g., Bellé 2013; Christensen et al. 2013).

A simple example should suffice. An experimental treatment that folds altruistic or other-regarding behaviors of some sort into a public context (and then into an unspecified or private context) can provide an indicator of the meaning of that context or, related, public institutions as instruments. But there are many other possible ways in which laboratory experiments can give power to PSM conception. For example, there is the long-standing concern as to whether a high score on a PSM scale actually corresponds to any observable behavior

(e.g., Brewer 2011). It is easy enough to test PSM and then use it to predict behavior on any of a variety of controlled helping behaviors. If experiments can help validate PSM as a dependent variable (e.g., by showing that public institution awareness has independent effects on attitudes and behaviors), then researchers can use a more fully corroborated PSM concept to actually predict behavior. However, if, as a result of controlled experiments, PSM implodes, then perhaps we can find a pathway to new, more powerful concepts and constructs.

As mentioned, the idea of using laboratory studies in connection with PSM research is not a new one, but let us consider as well an approach enabled by recent advances in research technology: using laboratory studies in concert with crowdsourced data. There is an expanding number of providers of such data and an increasing number of “standby volunteers” to such data provision services as Qualtrics and Amazon’s Mechanical Turk (Berinsky, Huber, and Lenz 2012). The use of crowdsourced data has several problems (Goodman, Cryder, and Cheema 2013), not least selection effects, but they are known problems that are often amenable to standard solutions (e.g., statistical weighting).

The chief advantage of combining laboratory studies (and perhaps questionnaire studies) of PSM with crowdsourced studies of PSM is the ability to quickly, conveniently, and inexpensively compile a data benchmark for PSM. This allows, among other possibilities, comparing public managers’ PSM, both causes and effects, to ordinary citizens. Such a comparison is vital inasmuch as it helps identify expectations for PSM in relation to public service work, public service careers, and public organizations. While there has been some attention to such comparisons, studies comparing public managers with private managers or with ordinary citizens remain uncommon, perhaps owing to the cost barriers presented by very large traditional samples of citizens. Crowdsourced data helps diminish the cost and resource requirements of such comparative work.

In closing, we note that the early stage of a scientific endeavor in any field is characterized by a search for the universals. Fields have matured only when theory has advanced to the point that researchers begin to focus on contingencies and moderators within those universals (Pfeffer 1993). With regard to PSM, expanding universal elements (e.g., the existence and incidence of PSM) is for the time being a necessity (e.g., Houston 2011; Kim and Vandenabeele 2010; Liu, Tang, and Zhu 2008; Taylor 2008). However, understanding “a ‘denser’ and more logically coherent set of relationships” (Sabatier 1999, 6) is of at least of equal importance in that it maps the intellectual landscape more accurately and allows researchers to better accumulate and deploy a body of knowledge. A precondition for PSM’s improved explanatory power is continued progress in conceptual development and verification of the broad relevance of PSM to not only managers’ and citizens’ attitudes but also to their behaviors.

At this juncture, PSM has made considerable progress, but the PSM literature is at a critical juncture. Will it endure as a theoretical lens on human behavior, especially behavior of public managers and their citizen clientele? Or has PSM run its course, having reached the apex of its explanatory power? The answers depend on the ability of researchers and theorists to take the next bold leaps toward broader and deeper explanation, steps that will expand, in Gerring’s (1999) terms, not only PSM’s depth but also its resonance.

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Notes

1. The approach to the task of tracking the PSM literature is as follows: Because there are significant differences in the compilation mechanics of major bibliometric databases, we searched Web of Science, Scopus, and Google Scholar. In each case, we searched titles and keywords for the exact terms “public service motivation,” “Public Service Motivation” and “PSM.” We did a quick reader’s check of each of the less obvious articles to ensure that, in fact, the captured titles were about public service motivation rather than, say, “prostate-specific membrane” or “phosphate solubilization microorganisms” (to give examples of two actual and not common uses of PSM). We did not limit the relevant PSM articles to the public administration, public policy, or political science literatures, but the vast majority of published articles are in the journals of these fields (a few, less than 5 percent, are in management and economics journals or highly specialized social sciences journals).
2. Typical reward items include pay, promotion, job security, status and prestige, performing meaningful public service, and being helpful to others. To be sure, there were a great deal of variants used in different survey questionnaires, but the central thread of comparative analysis was to detect whether public employees rank performing public service higher and pay lower than their private peers.

References

- Anderfuhren-Biget, Simon, Frédéric Varone, David Giauque, and Adrian Ritz. 2010. Motivating Employees of the Public Sector: Does Public Service Motivation Matter? *International Public Management Journal* 13(3): 213–46.
- Andersen, Lotte Bøgh, Torben Beck Jørgensen, Anne Mette Kjeldsen, Lene Holm Pedersen, and Karsten Vrangbæk. 2013. Public Values and Public Service Motivation: Conceptual and Empirical Relationships. *American Review of Public Administration* 43(3): 292–311.
- Andersen, Lotte Bøgh, Thomas Pallesen, and Lene Holm Pedersen. 2011. Does Ownership Matter? Public Service Motivation among Physiotherapists in the Private and Public Sectors in Denmark. *Review of Public Personnel Administration* 31(1): 10–27.
- Andersen, Lotte Bøgh, and Lene Holm Pedersen. 2012. Public Service Motivation and Professionalism. *International Journal of Public Administration* 35(1): 46–57.
- Batson, C. Daniel, and Laura L. Shaw. 1991. Evidence for Altruism: Toward a Pluralism of Prosocial Motives. *Psychological Inquiry* 2(2): 107–22.
- Bellé, Nicola. 2013. Experimental Evidence on the Relationship between Public Service Motivation and Job Performance. *Public Administration Review* 73(1): 143–53.
- Ben-Dor, Gabriel, Ami Pedahzur, Daphna Canetti-Nisim, Eran Zaidise, Arie Perliger, and Shai Bermanis. 2008. I versus We: Collective and Individual Factors of Reserve Service Motivation during War and Peace. *Armed Forces and Society* 34(4): 565–92.
- Berinsky, Adam J., Gregory A. Huber, and Gabriel S. Lenz. 2012. Evaluating Online Labor Markets for Experimental Research: Amazon.com’s Mechanical Turk. *Political Analysis* 20(3): 351–68.
- Bierhoff, Hans-Werner. 2002. *Prosocial Behaviour*. Chicago: Psychology Press.
- Bozeman, Barry, and Mary K. Feeney. 2011. *Rules and Red Tape: A Prism for Public Administration Theory and Research*. Armonk, NY: M. E. Sharpe.
- Bozeman, Barry, and Xuhong Su. 2012. Public Service Motivation Concepts: Aspirational Theory in Public Administration. Paper presented at the 16th Annual Conference of the International Research Society for Public Management, April 11–13, Rome, Italy.

- Brænder, Morten, and Lotte Bøgh Andersen. 2013. Does Deployment to War Affect Public Service Motivation? A Panel Study of Soldiers before and after Their Service in Afghanistan. *Public Administration Review* 73(3): 466–77.
- Brewer, Gene A. 2011. Parsing Public/Private Differences in Work Motivation and Performance: An Experimental Study. Supplement 3, *Journal of Public Administration Research and Theory* 21: i347–62.
- Brewer, Gene A., Adrian Ritz, and Wouter Vandenabeele. 2012. Introduction to a Symposium on Public Service Motivation: An International Sampling of Research. *International Journal of Public Administration* 35(1): 1–4.
- Brewer, Gene A., and Sally Coleman Selden. 1998. Whistle Blowers in the Federal Civil Service: New Evidence of the Public Service Ethic. *Journal of Public Administration Research and Theory* 8(3): 413–40.
- Bright, Leonard. 2008. Does Public Service Motivation Really Make a Difference on the Job Satisfaction and Turnover Intentions of Public Employees? *American Review of Public Administration* 38(2): 149–66.
- . 2011. Does Public Service Motivation Affect the Occupation Choices of Public Employees? *Public Personnel Management* 40(1): 11–24.
- . 2013. Where Does Public Service Motivation Count the Most in Government Work Environments? A Preliminary Empirical Investigation and Hypotheses. *Public Personnel Management* 42(1): 5–26.
- Carpenter, Jacqueline, Dennis Doverspike, and Rosanna F. Miguel. 2012. Public Service Motivation as a Predictor of Attraction to the Public Sector. *Journal of Vocational Behavior* 80(2): 509–23.
- Charness, Gary, and Ernan Haruvy. 2002. Altruism, Equity, and Reciprocity in a Gift-Exchange Experiment: An Encompassing Approach. *Games and Economic Behavior* 40(2): 203–31.
- Christensen, Robert K., and Bradley E. Wright. 2011. The Effects of Public Service Motivation on Job Choice Decisions: Disentangling the Contributions of Person–Organization Fit and Person–Job Fit. *Journal of Public Administration Research and Theory* 21(4): 723–43.
- . 2012. Does the Pool of Narcissus Reflect Public Service Motivation? Evidence from Municipal Employees. Paper presented at the 16th Annual Conference of the International Research Society for Public Management, April 11–13, Rome, Italy.
- Christensen, Robert K., Steven W. Whiting, Tobin Im, Eunju Rho, Justin M. Stritch, and Jungho Park. 2013. Public Service Motivation, Task, and Non-Task Behavior: A Performance Appraisal Experiment with Korean MPA and MBA Students. *International Public Management Journal* 16(1): 28–52.
- Clerkin, Richard M., and Jerrell D. Cogburn. 2012. The Dimensions of Public Service Motivation and Sector Work Preferences. *Review of Public Personnel Administration* 32(3): 209–35.
- Clerkin, Richard M., Sharon R. Paynter, and Jami Kathleen Taylor. 2009. Public Service Motivation in Undergraduate Giving and Volunteering Decisions. *American Review of Public Administration* 39(6): 675–98.
- Coursey, David, Jeffrey Brudney, James Perry, and Laura Littlepage. 2008. Measurement Questions in Public Service Motivation: Construct Formation and Nomological Distinctiveness and Explanatory Power for Volunteering Activities. Paper presented at the Minnowbrook III Conference, August 29–31, Lake Placid, NY.
- Coursey, David H., and Sanjay K. Pandey. 2007. Public Service Motivation Measurement: Testing an Abridged Version of Perry's Proposed Scale. *Administration & Society* 39(5): 547–68.
- Crewson, Philip E. 1995. A Comparative Analysis of Public and Private Sector Entrant Quality. *American Journal of Political Science* 39(3): 628–39.
- . 1997. Public-Service Motivation: Building Empirical Evidence of Incidence and Effect. *Journal of Public Administration Research and Theory* 7(4): 499–518.
- Daniels, Morris J. 1960. Affect and Its Control in the Medical Intern. *American Journal of Sociology* 66(3): 259–67.
- Duffy, Ryan D. and Trisha L. Raque-Bogdan. 2010. The Motivation to Serve Others: Exploring Relations to Career Development. *Journal of Career Assessment* 18(3): 250–65.
- Entwistle, Tom, and Steve Martin. 2005. From Competition to Collaboration in Public Service Delivery: A New Agenda for Research. *Public Administration* 83(1): 233–42.
- Fehr, Ernst, and Urs Fischbacher. 2003. The Nature of Human Altruism. *Nature* 425(6960): 785–791.
- Fong, Christina M. 2007. Evidence from an Experiment on Charity to Welfare Recipients: Reciprocity, Altruism and the Empathic Responsiveness Hypothesis. *Economic Journal* 117(522): 1008–24.
- Francois, Patrick. 2000. Public Service Motivation as an Argument for Government Provision. *Journal of Public Economics* 78(3): 275–99.
- Georgellis, Yannis, and Vurain Tabvuma. 2010. Does Public Service Motivation Adapt? *Kyklos* 63(2): 176–91.
- Gerring, John. 1999. What Makes a Concept Good? A Criterial Framework for Understanding Concept Formation in the Social Sciences. *Polity* 31(3): 357–93.
- Goodman, Joseph K., Cynthia E. Cryder, and Amar Cheema. 2013. Data Collection in a Flat World: The Strengths and Weaknesses of Mechanical Turk Samples. *Journal of Behavioral Decision Making* 26(3): 213–24.
- Grusec, Joan E. 1972. Demand Characteristics of the Modeling Experiment: Altruism as a Function of Age and Aggression. *Journal of Personality and Social Psychology* 22(2): 139–48.
- Houston, David J. 2000. Public Service Motivation: A Multivariate Test. *Journal of Public Administration Research and Theory* 10(4): 713–28.
- . 2006. “Walking the Walk” of Public Service Motivation: Public Employees and Charitable Gifts of Time, Blood, and Money. *Journal of Public Administration Research and Theory* 16(1): 67–86.
- . 2011. Implications of Occupational Locus and Focus for Public Service Motivation: Attitudes toward Work Motives across Nations. *Public Administration Review* 71(5): 761–71.
- Houston, David J., and Katherine E. Cartwright. 2007. Spirituality and Public Service. *Public Administration Review* 67(1): 88–102.
- Isett, Kimberly R., Ines A. Mergel, Kelly LeRoux, Pamela A. Mischen, and R. Karl Rethemeyer. 2011. Networks in Public Administration Scholarship: Understanding Where We Are and Where We Need to Go. Supplement 1, *Journal of Public Administration Theory and Research* 21: i157–73.
- Jurkiewicz, Carole L., Tom K. Massey, Jr., and Roger G. Brown. 1998. Motivation in Public and Private Organizations: A Comparative Study. *Public Productivity and Management Review* 21(3): 230–50.
- Kerr, Benjamin, Peter Godfrey-Smith, and Marcus W. Feldman. 2004. What Is Altruism? *Trends in Ecology and Evolution* 19(3): 135–40.
- Kim, Sangmook. 2006. Public Service Motivation and Organizational Citizenship Behavior in Korea. *International Journal of Manpower* 27(8): 722–40.
- . 2009a. Revising Perry's Measurement Scale of Public Service Motivation. *American Review of Public Administration* 39(2): 149–63.
- . 2009b. Testing the Structure of Public Service Motivation in Korea: A Research Note. *Journal of Public Administration Research and Theory* 19(4): 839–51.
- . 2011. Testing a Revised Measure of Public Service Motivation: Reflective versus Formative Specification. *Journal of Public Administration Research and Theory* 21(3): 521–46.
- . 2012. Does Person–Organization Fit Matter in the Public Sector? Testing the Mediating Effect of Person–Organization Fit in the Relationship between Public Service Motivation and Work Attitudes. *Public Administration Review* 72(6): 830–40.
- Kim, Sangmook, and Wouter Vandenabeele. 2010. A Strategy for Building Public Service Motivation Research Internationally. *Public Administration Review* 70(5): 701–9.

- Kim, Sangmook, Wouter Vandenabeele, Bradley E. Wright, Lotte Bøgh Andersen, Francesco Paolo Cerase, Robert K. Christensen, et al. 2013. Investigating the Structure and Meaning of Public Service Motivation across Populations: Developing an International Instrument and Addressing Issues of Measurement Invariance. *Journal of Public Administration Research and Theory* 23(1): 79–102.
- Kjeldsen, Anne Mette. 2012a. Dynamics of Public Service Motivation: Attraction and Socialization Effects in the Production and Regulation of Social Services. Paper presented at the 16th Annual Conference of the International Research Society for Public Management, April 11–13, Rome, Italy.
- . 2012b. Sector and Occupational Differences in Public Service Motivation: A Qualitative Study. *International Journal of Public Administration* 35(1): 58–69.
- . 2012c. Vocational Study and Public Service Motivation: Disentangling the Effects of Higher Education. *International Public Management Journal* 15(4): 500–524.
- Kjeldsen, Anne Mette, and Christian Bøtcher Jacobsen. 2013. Public Service Motivation and Employment Sector: Attraction or Socialization? *Journal of Public Administration Research and Theory* 23(4): 899–926.
- Koenig, Walter D. 1988. Reciprocal Altruism in Birds: A Critical Review. *Ethology and Sociobiology* 9(2–4): 73–84.
- Liu, Bangcheng, Tang Ningyu, and Zhu Xiaomei. 2008. Public Service Motivation and Job Satisfaction in China. *International Journal of Manpower* 29(8): 684–99.
- Mandler, Jean M. 2008. On the Birth and Growth of Concepts. *Philosophical Psychology* 21(2): 207–230.
- Mann, Gregory A. 2006. A Motive to Serve: Public Service Motivation in Human Resource Management and the Role of PSM in the Nonprofit Sector. *Public Personnel Management* 35(1): 33–48.
- Moulton, Stephanie, and Mary K. Feeney. 2011. Public Service in the Private Sector: Private Loan Originator Participation in a Public Mortgage Program. *Journal of Public Administration Research and Theory* 21(3): 547–72.
- Moynihan, Donald P., and Sanjay K. Pandey. 2007. The Role of Organizations in Fostering Public Service Motivation. *Public Administration Review* 67(1): 40–53.
- Myers, Jerrett. 2008. Public Service Motivation and Performance Incentives: A Literature Review. Oxford Policy Institute. http://www.publicservices.ac.uk/wp-content/uploads/publicservicemotivationandperformanceincentives_myersjune2008.pdf [accessed June 12, 2014].
- Pandey, Sanjay K., Bradley E. Wright, and Donald P. Moynihan. 2008. Public Service Motivation and Interpersonal Citizenship Behavior in Public Organizations: Testing a Preliminary Model. *International Public Management Journal* 11(1): 89–108.
- Pearce, Joan L. 1983. Job Attitude and Motivation Differences between Volunteers and Employees from Comparable Organizations. *Journal of Applied Psychology* 68(4): 646–52.
- Perry, James L. 1997. Antecedents of Public Service Motivation. *Journal of Public Administration Research and Theory* 7(2): 181–97.
- . 2000. Bringing Society In: Toward a Theory of Public Service Motivation. *Journal of Public Administration Research and Theory* 10(2): 471–88.
- . 2014. The Motivational Basis of Public Service: Foundations for the Third Wave of Research. *Asian Pacific Journal of Public Administration* 36(1): 34–47.
- Perry, James L., Jeffrey L. Brudney, David Coursey, and Laura Littlepage. 2008. What Drives Morally Committed Citizens? A Study of the Antecedents of Public Service Motivation. *Public Administration Review* 68(3): 445–58.
- Perry, James L., and Annie Hondeghem. 2008a. Building Theory and Empirical Evidence about Public Service Motivation. *International Public Management Journal* 11(1): 3–12.
- . 2008b. *Motivation in Public Management: The Call of Public Service*. Oxford, UK: Oxford University Press.
- Perry, James L., Annie Hondeghem, and Lois Recascino Wise. 2010. Revisiting the Motivational Bases of Public Service: Twenty Years of Research and an Agenda for the Future. *Public Administration Review* 70(5): 681–90.
- Perry, James L., and Wouter Vandenabeele. 2008. Behavioral Dynamics: Institutions, Identities, and Self-Regulation. In *Motivation in Public Management: The Call of Public Service*, edited by James L. Perry and Annie Hondeghem, 56–80. Oxford, UK: Oxford University Press.
- Perry, James L., and Lois Recascino Wise. 1990. The Motivational Bases of Public Service. *Public Administration Review* 50(3): 367–73.
- Pfeffer, Jeffrey. 1993. Barriers to the Advance of Organizational Science: Paradigm Development as a Dependent Variable. *Academy of Management Review* 18(4): 599–620.
- Piliavin, Jane Allyn, and Hong-Wen Charng. 1990. Altruism: A Review of Recent Theory and Research. *Annual Review of Sociology* 16: 27–65.
- Rainey, Hal G. 1982. Reward Preferences among Public and Private Managers: In Search of the Service Ethic. *American Review of Public Administration* 16(4): 288–302.
- . 2011. Sampling Designs for Analyzing Publicness: Alternatives and Their Strengths and Weaknesses. Supplement 3, *Journal of Public Administration Research and Theory* 21: i321–45.
- Rainey, Hal G., and Paula Steinbauer. 1991. Galloping Elephants: Developing Elements of a Theory of Effective Government Organizations. *Journal of Public Administration Research and Theory* 9(1): 1–32.
- Ritz, Adrian. 2009. Public Service Motivation and Organizational Performance in Swiss Federal Government. *International Review of Administrative Sciences* 75(1): 53–78.
- Rushton, Philippe J., Roland D. Chrisjohn, and G. Cynthia Fekken. 1981. The Altruistic Personality and the Self-Report Altruism Scale. *Personality and Individual Differences* 2(4): 293–302.
- Ryan, Richard M., and Edward L. Deci. 2000. Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology* 25(1): 54–67.
- Sabatier, Paul A. 1999. *Theories of the Policy Process*. Boulder, CO: Westview Press.
- Sawyer, Jack. 1966. The Altruism Scale: A Measure of Co-Operative, Individualistic, and Competitive Interpersonal Orientation. *American Journal of Sociology* 71(4): 407–16.
- Scott, Patrick G., and Sanjay K. Pandey. 2005. Red Tape and Public Service Motivation: Findings from a National Survey of Managers in State Health and Human Services Agencies. *Review of Public Personnel Administration* 25(2): 155–80.
- Smith, James Otis, and Gideon Sjoberg. 1961. Origins and Career Patterns of Leading Protestant Clergymen. *Social Forces* 39(4): 290–96.
- Steen, Trui. 2008. Not a Government Monopoly: The Private, Nonprofit, and Voluntary Sectors. In *Motivation in Public Management: The Call of Public Service*, edited by James L. Perry and Annie Hondeghem, 203–22. Oxford, UK: Oxford University Press.
- Steijn, Bram. 2008. Person–Environment Fit and Public Service Motivation. *International Public Management Journal* 11(1): 13–27.
- Taylor, Jeannette. 2007. The Impact of Public Service Motives on Work Outcomes in Australia: A Comparative Multi-Dimensional Analysis. *Public Administration* 85(4): 931–59.
- . 2008. Organizational Influences, Public Service Motivation and Work Outcomes: An Australian Study. *International Public Management Journal* 11(1): 67–88.
- . 2010. Public Service Motivation, Civil Attitudes and Actions of Public, Nonprofit and Private Sector Employees. *Public Administration* 88(4): 1083–98.
- Vandenabeele, Wouter. 2007. Toward a Public Administration Theory of Public Service Motivation. *Public Management Review* 9(4): 545–56.
- . 2008. Development of a Public Service Motivation Measurement Scale: Corroborating and Extending Perry's Measurement Instrument. *International Public Management Journal* 11(1): 143–67.

- . 2011. Who Wants to Deliver Public Service? Do Institutional Antecedents of Public Service Motivation Provide an Answer? *Review of Public Personnel Administration* 31(1): 87–107.
- Waltz, Edward C. 1981. Reciprocal Altruism and Spite in Gulls: A Comment. *American Naturalist* 118(4): 588–92.
- Ward, Kevin D. 2013. Cultivating Public Service Motivation through AmeriCorps Service: A Longitudinal Study. *Public Administration Review* 74(1): 114–25.
- West, Stuart A., Ashleigh S. Griffin, and Andy Gardner. 2007. Social Semantics: Altruism, Cooperation, Mutualism, Strong Reciprocity and Group Selection. *Journal of Evolutionary Biology* 20(2): 415–32.
- Wittmer, Dennis. 1991. Serving the People or Serving for Pay: Reward Preferences among Government, Hybrid Sector, and Business Managers. *Public Productivity and Management Review* 14(4): 369–83.
- Wright, Bradley E. 2008. Methodological Challenges Associated with Public Service Motivation Research. In *Motivation in Public Management: The Call of Public Service*, edited by James L. Perry and Annie Hondeghem, 80–98. Oxford, UK: Oxford University Press.
- Wright, Bradley E., and Robert K. Christensen. 2010. Public Service Motivation: A Test of the Job Attraction-Selection-Attrition Model. *International Journal of Public Management* 13(2): 155–76.
- Wright, Bradley E., and Adam M. Grant. 2010. Unanswered Questions about Public Service Motivation: Designing Research to Address Key Issues of Emergence and Effects. *Public Administration Review* 70(5): 691–700.
- Wright, Bradley E., and Sanjay K. Pandey. 2008. Public Service Motivation and the Assumption of Person–Organization Fit: Testing the Mediating Effect of Value Congruence. *Administration & Society* 40(5): 502–21.