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# **Does Public Service Motivation Provide a Guide for managers?**

Mark Prebble, May 2014

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# Does Public Service Motivation Provide a Guide for Managers?

Mark Prebble  
School of Government  
Victoria University of Wellington

## Introduction

Managing staff is a core task for public managers and they get plenty of advice from the HR industry. However, some aspects of the public sector can make it difficult to apply some corporate-sector ideas. For example, issues of public accountability can limit the freedom of managers to reward good work or to use cash payments to encourage early severance when that seems necessary. The ability of staff (and especially their representatives) to use political processes to get direct access to Ministers can limit managerial options. And the media often take much more interest in the employment of public servants than they might in similar circumstances involving private sector workers, so it can be difficult to use quiet persuasion to defuse a complex situation<sup>1</sup>.

But what if the differences between the public and private sectors are not just caused by constitutions, institutions and politics, but also arise from a difference between the people who work in public service jobs and those in other lines of work? Public service motivation (PSM) theory suggests this is so. PSM was first defined as 'an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations' (Perry and Wise, 1990 p. 368). That is, the implication of PSM is that people working in public services are motivated differently from others; if that is true (or true to a significant degree), it implies that the management of public servants may need a unique approach.

PSM has attracted substantial academic interest. Thousands of questionnaires have been administered in many countries<sup>2</sup> to examine and compare the motivation of public servants. The literature is too extensive to attempt a full review here. Instead, after a brief introduction to PSM, this paper critically examines the management advice that has been offered by PSM advocates. The conclusion is that much of the advice seems sound, but it does not rely on the existence of PSM. However, in the area where PSM is central to the advice, that advice is more problematic.

## Brief Review of PSM Literature

From the outset, though PSM was said to be 'grounded primarily or uniquely in public institutions' (Perry and Wise, 1990 p. 368) the idea has referred both to working in public institutions and also to providing services for the public. Good policy-making, public duty, and concern for others were all captured within Perry and Wise's definition of PSM. Later

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<sup>1</sup> Perry et al. (2009) and Weibel et al. (2012) discuss a range of the issues that are involved in applying private best-practice HR management to government contexts.

<sup>2</sup> Published studies have come from Australia (Taylor, 2008; 2010), Belgium (Vandenabeele, 2009), China (Liu et al., 2008; Liu and Tang, 2011), Denmark (Andersen and Serritzlew, 2012), Italy (Bellé, 2012), Korea (Kim, 2012), Netherlands (Steijn, 2008), Britain and Germany (Vandenabeele et al., 2006), and multi-national comparisons (Vandenabeele and Van de Walle, 2008; Houston, 2011).

definitions,<sup>3</sup> however, either omitted reference to the public sector or emphasised ‘other-regarding’ aspects of PSM. But in a recent review of the field Perry et al. (2010, p.682) suggested PSM ‘is grounded in the tasks of public service provision, and is more prevalent in government than other sectors’. That is, the government focus of PSM is still there, if a little blurred, but at the same time PSM has become increasingly centred on altruism.

Similarly, measures of PSM have varied. Perry (1996, p.16) initially developed a 24-item measure of PSM, but later studies<sup>4</sup> commonly used fewer than 24 items. After a decade of competing concepts, Kim and Vandenabeele (2010) proposed a new international convergence and Kim et al. (2013) produced a 16-item measure with four newly-specified dimensions: attraction to public service (APS), commitment to public value (CPV), compassion (COM), and self-sacrifice (SS).

**Table 1: Dimensions of Public Service Motivation**

<p><b>Attraction to Public Service</b></p> <ul style="list-style-type: none"> <li>• I admire people who initiate or are involved in activities to aid my community</li> <li>• It is important to contribute to activities that tackle social problems</li> <li>• Meaningful public service is very important to me</li> <li>• It is important for me to contribute to the common good</li> </ul>	<p><b>Commitment to Public Value</b></p> <ul style="list-style-type: none"> <li>• I think equal opportunities for citizens are very important</li> <li>• It is important that citizens can rely on the continuous provision of public services</li> <li>• It is fundamental that the interests of future generations are taken into account when developing public policies</li> <li>• To act ethically is essential for public servants</li> </ul>
<p><b>Compassion</b></p> <ul style="list-style-type: none"> <li>• I feel sympathetic to the plight of the underprivileged</li> <li>• I empathise with other people who face difficulties</li> <li>• I get very upset when I see other people being treated unfairly</li> <li>• Considering the welfare of others is very important</li> </ul>	<p><b>Self-Sacrifice</b></p> <ul style="list-style-type: none"> <li>• I am prepared to make sacrifices for the good of society</li> <li>• I believe in putting civic duty before self</li> <li>• I am willing to risk personal loss to help society</li> <li>• I would agree to a good plan to make life better for the poor, even if it cost me money</li> </ul>

Source: Kim et al. (2013).

This new measure (see Table 1) appears to be the nearest there is to a standard statement of PSM, and that will be used in this paper when referring to aspects of PSM.

Though the measurements have changed, some of the concepts have endured. For example, though some have debated the point, most accept Perry’s (1996) suggestion that an individual’s level of PSM is an intrinsic and relatively stable state, reflecting a person’s need for relatedness. PSM theory is based on self-determination theory (Deci and Ryan, 2004). In self-determination theory, three basic needs (competence, relatedness and

<sup>3</sup> Brewer and Seldon, 1998; Rainey and Steinbauer, 1999; Vandenabeele et al., 2006; Vandenabeele, 2007.

<sup>4</sup> These include Alonso and Lewis 2001; Brewer et al., 2000; Pandey et al. 2008; Steijn, 2008; Wright and Pandey 2008; Ritz 2009; Christensen and Wright 2011; Coursey et al. 2012.

autonomy) are considered 'universal, innate, and essential for well-being' (Deci and Ryan, 2000, p.232). In effect, PSM theory suggests that public service workers have relatively strong needs for relatedness so that 'fulfilment of service motives is or should be one of the important rewards for public service' (Rainey, 1982, p.289). Specifically, the suggestion is that allowing those needs to be met can be more effective than incentive payment schemes.

While conceptual and technical development continued, versions of PSM have been used to test connections between PSM and behaviour. Initially researchers looked for a direct relationship and there were some disappointingly ambiguous results (Alonso and Lewis, 2001). However, Perry and Vandenabeele (2008) suggested that PSM may not operate directly on behaviour; instead it may be influenced by institutional context. Accordingly, more recent research has taken more factors into account in considering the connections between reported levels of PSM and workplace behaviour. For example, positive relationships from PSM to behaviour have been found to be mediated or modified by occupation or profession;<sup>5</sup> or by various management concepts like person-organisation fit, mission or mission-valence, organisation logic or transformational leadership.<sup>6</sup> Other studies have identified various combinations of factors that affect the impact of PSM on behaviour.<sup>7</sup>

However, though PSM may have some links to behaviour, connections between reported PSM and performance have been unconvincing (Brewer, 2008). Two studies have focused directly on performance, and both reported a positive impact on results: Bellé (2012) used an experimental approach to show a positive relationship between PSM and performance in an Italian hospital, and Andersen and Serritzlew (2012) showed that Danish physiotherapists with high PSM were more likely than others to care for disabled patients. However, most studies have relied on self-reporting of results to measure performance. Though studies based on self-reporting all suggested positive effects,<sup>8</sup> when Petrovsky and Ritz (2013) controlled for common-method bias in a large study in Switzerland, they found no correlation between PSM and organisational performance.

Despite the lack of convincing evidence about improved organisation performance and continued debate about how PSM should be measured, the study of PSM is showing results. Most published PSM reports suggest that PSM is a factor influencing behaviour, particularly showing that altruistic motives assist in explaining effort, especially in caring or personal-service activities. The issue for this paper is whether those results support the use of different management techniques in public sector agencies from those that apply in other contexts.

### **Management Advice Based on PSM**

The essential proposition of PSM theory is that there is something in the nature of public service workers that requires management practices unique to the public sector, and that PSM captures that element. But translating that theory into practical advice is difficult.

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<sup>5</sup> Kjeldsen, 2013; Andersen and Pedersen, 2012.

<sup>6</sup> Bright, 2007; Wright, 2007; Steijn 2008; Pandey et al. 2008; Park and Rainey, 2008; Wright and Pandey, 2008; Kim, 2012; Wright and Pandey, 2009; Wright and Pandey, 2010; van Loon et al., 2013; Caillier, 2013.

<sup>7</sup> Christensen and Wright (2011), Wright et al. (2012), Liu et al. (2013).

<sup>8</sup> Brewer & Seldon (2000), Bright (2007), Park & Rainey (2008), Ritz (2009), Vandenabeele (2009); for a full review see Petrovsky and Ritz (2013).

Before turning to that advice, there are some technical matters. First, while several studies suggest that public service workers on average are motivated differently from others, averages can hide a lot of variance, especially in large populations. Even if public service workers are more motivated by PSM on average, a large minority may be less motivated by PSM than non-public service workers. Thus PSM-based management may not be successful for all.

Second, PSM is a multi-dimensional construct. Even if concepts like a concern for the 'continuous provision of public services' are important to an individual, it is not obvious why that concern should be correlated with concern for 'equal opportunities', 'meaningful public service', or 'the common good'. On the contrary, some results show various dimensions of PSM pulling some public service workers in different directions.<sup>9</sup>

Third, there is room to doubt whether the general public service nature of work is the determining factor for motivation, or whether occupation is the determinant. And if occupation is the determinant, then 'public service worker' doesn't fit the bill – it is not an occupation: 'The point is simply that *bureaucrats* don't "bur" – there is no common occupational activity they all perform' (Goodsell, 1983 p.83, emphasis in original). Alternatively, even if PSM is common among public service workers, its influence may vary depending on the seniority of the worker. Recent results focusing on professional workers, level of seniority and job content, type and role of organisation, or occupation group, demonstrate that variations in motivation may relate more to jobs and levels than they do to public service.<sup>10</sup>

Faced with those complications, several recent articles have acknowledged that PSM still needs further development before it has findings that are directly applicable in practice.<sup>11</sup> However, despite that caution some leading PSM scholars have offered preliminary advice on how PSM should influence management in the public sector. In 2008 Paarlberg et al. suggested five strategies involving 14 tactics for applying PSM in the workplace<sup>12</sup>, which can be examined to see whether PSM advocates are offering practical guidance for managers. In that process the test is not only whether the advice is practical, but also whether the advice is dependent on the presence of PSM.

On examination, most of the advice does not depend on the existence of PSM as a distinct trait. For example, as part of a strategy to 'create and convey meaning and purpose in the job' (Paarlberg et al, 2008, p. 272) the suggested tactics include 'promoting the social significance of the job' (p. 272) and 'setting clear public service goals' (p. 274). Similarly, the strategy of 'integrating public service mission into organisational mission and strategy' (p. 280) is supported by basing 'mission and vision on employees' aspirations and values' (p. 280) and promoting 'value-based leadership' (p. 281). These tactics can all be seen to be similar to practices associated with transformational leadership (Bass, 1985). Likewise the strategy of 'creating a supportive work environment' (Paarlberg et al, 2008, p. 275) is

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<sup>9</sup> See for example Ritz (2009); Vandenabeele (2009); Andersen and Pedersen (2012); Giauque et al. (2012); Johnson (2012); Kjeldsen (2013).

<sup>10</sup> These include Moynihan and Pandey (2007); Buelens and Van den Broeck (2007); Andersen (2009); Houston (2011); Andersen and Pedersen (2012); Johnson (2012); van Loon et al. (2013).

<sup>11</sup> Hondeghem and Perry (2009); Perry et al. (2010); Wright and Grant (2010); Perry, (2011).

<sup>12</sup> Since then two other papers (Paarlberg and Lavigna, 2010; Lavigna, 2012) have offered similar advice. There is much agreement between the three papers offering PSM-based advice, so this paper will focus on the advice offered in Paarlberg et al. (2008) because it is the most comprehensive.

supported by tactics including 'empowering and participatory work structures' (p.276) and 'aligning incentives with intrinsic motivations (p. 278). Tactics of this sort are similar to the approach suggested by Hackman et al. (1975) and other subsequent writers, who prescribe structuring jobs in ways that provide greater satisfaction for employees while providing constructive feedback.

In summary, much of the advice is not new; it repeats ideas that were largely developed in corporate contexts and that pre-date PSM, but are based on similar understandings that people have some level of pro-social motivation. This discussion is not meant to suggest that the advice is wrong. On the contrary, it is good advice which should be applied more widely in public service workplaces. However, though the advice may be good, it cannot be regarded as new insights that have emerged from PSM theory.

At best, PSM provides evidence that some practices that were developed in corporate contexts can also be useful in the public sector, but PSM may not be a necessary concept to arrive at that conclusion. There have been several papers testing and endorsing public-sector applications of management practices that take account of pro-social motivations, but the results do not rely on PSM.<sup>13</sup> And in a very useful review of managing performance in the public sector, Perry et al. (2006) cover financial incentives, job design, participation, and goal setting with only a passing reference to PSM.

There is, however, one piece of PSM-based advice that does depend on the presence of PSM: 'use public service motivation as a selection criterion for entry into public service employment'.<sup>14</sup> The logic behind this proposal is simple; if PSM motivates employees to do the work that is wanted, and if they fit with their jobs and the organisation, then they will improve the performance of the organisation. In short, employees who are high in PSM can be relied on 'to do good at all times' (Perry and Hondeghem, 2008, p.8). But though PSM may assist in the delivery of public services, does it lead to well-managed public organisations? There are two issues – whether PSM always leads to preferred results, and whether it might introduce a bias among the workforce.

On the first issue, the potential problem is that motivation can be too high or misdirected, but the suggestion that people should be employed because they are assessed as having high PSM ignores the challenges involved in managing zealots. 'Individuals motivated by public service may carry their commitment beyond reasonable boundaries. Extreme commitment could lead to fanatical behavior, suspension of individual judgment, and the like' (Perry and Wise, 1990, p. 371). This concern is not insuperable; good managers can channel the enthusiasm of their staff into effective efforts for the organisation. But the difficulty of riding the tiger of an over-enthusiastic workforce should not be disregarded.

The second issue, the possibility of bias, is significant. In a public sector context, motivational alignment and efficiency are not the only concerns – accountability, responsiveness to political direction, and public acceptability are equally important. That means that if PSM is to be a basis for recruitment, its content matters. Kim et al. (2013, p.92) include the following among the items to measure for PSM: 'the plight of the underprivileged'; 'a better life for the poor'; 'the continuous provision of public services'; or 'the interests of future generations.' All those items are laudable, but they do not enjoy

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<sup>13</sup> Vigoda-Gadot and Meiri (2008); Vigoda-Gadot et al. (2013); Ko and Hur (2014).

<sup>14</sup> Paarlberg et al. (2008, p.270); and Paarlberg and Lavigna (2010, p. 713).

universal support; much of politics is defined by debate over where to draw the line on these matters, and moral foundation theory suggests that selecting on PSM could introduce a political bias into public sector organisations.

Graham et al. (2009) have demonstrated that ideological differences between conservatives and liberals (in US terminology) derive from intuitions that are built on different moral foundations. According to moral foundation theory there are (at least) five moral foundations, including 'Harm/Care, Fairness/Reciprocity, Ingroup/Loyalty, Authority/ Respect, and Purity/Sanctity' (Graham et al., 2011, p.360). There is insufficient space here to do justice to moral foundation theory,<sup>15</sup> but a central point is that notions of harm (to people) and fairness relate to how individuals are treated by society, while loyalty, authority and purity are the 'binding foundations' that emphasise 'group-binding loyalty, duty, and self-control' (Graham et al. 2009, p.1031). A series of tests involving thousands of people has shown that liberals derive their moral intuitions from avoiding harm and maintaining fairness (like PSM), but conservatives derive their intuitions from all five moral foundations, including the binding foundations (Graham et al. 2009).

A direct match between the five foundations of moral foundation theory and the four dimensions of PSM is difficult but, though PSM includes some aspects of duty, the dimensions of PSM are clearly more dominated by the foundations of avoiding harm to individuals (compassion, tackling social problems, and the life of the poor) and fairness (equal opportunity and acting ethically) rather than the three 'binding' foundations. Therefore recruitment on the basis of PSM could tend to exclude conservatives from public organisations. It may be that many public employees are already inclined to favour one side of the political spectrum, but that does not justify recruitment that could promote bias. Until further work is done to refute that risk it seems premature to advocate recruitment on the basis of PSM.

An associated issue is that part of the reason for developing PSM has been to contribute to political debates about public sector management (Perry and Hodeghem, 2008c, p. 7). For example, Perry (2000, p.485) hopes to 'change a stereotype of public employees' and Lavigna (2012, p.216) directly links the need to argue for management by PSM with 'the silly season of the presidential campaign'. In that context the practicality of PSM in public management depends on more than the quality of its analysis or data; it also depends on whether the concept is likely to sway political debate, and that may be problematic.

It would be a challenge to explain to skeptical legislators that public management should be based on a understanding that public officials are different from other people, and especially difficult to make the case that officials are not just different but more altruistic (more virtuous) than the voters on whom those legislators depend. Before resorting to that argument, public managers may have more success making arguments about the limits of performance pay (Perry et al. 2009), the need for public management to take account of the nature of government (Perry et al., 2006), or the fact that the nature of the tasks people undertake in public service work are particularly inappropriate for short-term performance pay systems (Weibel et al., 2012). If those arguments don't work, suggesting that public service workers are morally superior probably won't work either, and workability is at the heart of practical advice for public managers.

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<sup>15</sup> Haidt (2012) offers a useful introduction.

## Conclusion

This paper has set out to provide a brief overview of the literature on public service motivation to see whether it offers useful insights for public managers. In particular, does PSM demonstrate that some private management techniques cannot be applied to public service workers because they have different motivations to other workers, and does it suggest alternative approaches that could improve public service management?

The main managerial message of PSM is that people are not all selfish, they can also be altruistic, and management systems need to take that into account. That is good advice, but it is not just a message for the public sector or for public service workers. Altruism occurs in many contexts. Even extreme altruism is not confined to public sector emergency workers. For example, when the Taj Mumbai came under terrorist attack in November 2011, kitchen hands, waiters, and telephone operators formed human shields to protect guests; several had opportunities to escape, but their bodies were found among the dead (Deshpandé and Raina, 2012). The Taj Mumbai was part of a private sector hotel chain, targeting wealthy customers. The heroism of the staff cannot be explained by PSM.

On the other hand, though altruism is real and it breaks out everywhere, so does self-interest. The prescriptions that have been offered in the name of PSM suggest means to avoid crowding-out the motivation of other-regarding actors but tend to say little about the selfish side of public servant behaviour. A more complete but simpler prescription is offered by Le Grand (2010). He developed a theory that public service workers include 'knaves and knights', explaining that knaves (those driven by self-interest) are best managed by incentives and choice (for users of public services); knights (those driven by altruism) are best managed by targets and voice (so users can say what they want). And since it is hard to tell in advance who is a knight and who is a knave, the best approach is to have a 'robust' system, combining a balance of incentives, targets, voice and choice. Le Grand has not gone into the detail offered by PSM, but he has demonstrated that it is possible to capture the essence of the issue without resort to PSM.

Most of the advice offered in the name of PSM is useful, but it does not depend on the existence of a distinct motivational trait manifested by public service workers. However, the one piece of new advice directly attributable to PSM theory – use measured PSM as a basis for selecting public service workers – is suspect at best. Before recruitment on the basis of PSM can be endorsed, two issues must be addressed. First, strategies must be in place to manage over-enthusiastic or misplaced PSM, because it is insufficient to rely on altruistic public servants to do good. And second, questions about possible bias as a result of encouraging PSM need to be resolved before selection on PSM should be contemplated.

## References

- Alonso, P. & Lewis, G. B. (2001). Public service motivation and job performance: Evidence from the federal sector. *American Review of Public Administration*, 31(4): 363-380.
- Andersen, L. B. (2009). What determines the behaviour and performance of health professionals? Public service motivation, professional norms and/or economic incentives. *International Review of Administrative Sciences*, 75, 79-97.
- Andersen, L. B. & Pedersen, L. H. (2012). Public service motivation and professionalism. *International Journal of Public Administration*, 35(1), 46-57
- Andersen, L. B. & Serritzlew, S. (2012). Does public service motivation affect the behavior of professionals? *International Journal of Public Administration*, 35(1), 19-29
- Bass, B. M. (1985). Leadership: Good, better, best. *Organizational Dynamics* 13(3), 26–40.
- Bellé, N. (2012). Experimental evidence on the relationship between public service motivation and job performance. *Public Administration Review* 73(1), 143-153.
- Brewer, G. A. (2008). Employee and organizational performance. In J. L. Perry & A. Hondeghem (Eds.), *Motivation in public management. The call of public service*, (pp. 136–156). Oxford: Oxford University Press, 136-156.
- Brewer, G. A. & Selden, S. C. (1998). Whistleblowers in the federal civil service: New evidence of the public service ethic. *Journal of Public Administration Research and Theory* 8(3), 413-39.
- Brewer, G. A. & Selden, S. C. (2000). Why elephants gallop: Assessing and predicting organizational performance in federal agencies. *Journal of Public Administration Research and Theory*, 10(4), 685 - 711.
- Brewer, G. A., Seldon, S. C. & Facer, R. L. (2000). Individual conceptions of public service motivation. *Public Administration Review*, 60(3), 254-264
- Bright, L. (2007). Does person–organization fit mediate the relationship between public service motivation and the job performance of public employees? *Review of Public Personnel Administration* 27(4), 361–79.
- Buelens, M. & Van den Broeck, H. (2007). An analysis of differences in work motivation between public and private sector organizations. *Public Administration Review* 67(1), 65–74
- Caillier, J. G. (2013) Transformational leadership and whistle-blowing attitudes: Is this relationship mediated by organizational commitment and public service motivation? *American Review of Public Administration*, early online, doi: 10.1177/0275074013515299.
- Christensen, R. K. & Wright, B. E. (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.
- Coursey, D., Yang, K. & Pandey, S. (2012). Public service motivation (PSM) and support for citizen participation: A test of Perry and Vandenabeele’s reformulation of PSM theory. *Public Administration Review*, 72(4), 572–582.

Deci, E.L. & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.

Deci, E. L. & Ryan, R. M. eds (2004). *Handbook of self-determination research*, Rochester, NY: University of Rochester Press.

Deshpandé, R. & Raina, A. (2011). The ordinary heroes of the Taj. *Harvard Business Review*, 89(12), 119-123.

Giauque, D., Ritz, A., Varone, F. & Anderfuhren-Biget, S. (2012). Resigned but satisfied: The negative impact of public service motivation and red tape on work satisfaction. *Public Administration*, 90(1), 175–93.

Goodsell, C. T. (1983). *The case for bureaucracy: A public administration polemic*. Chatham, N.J.: Chatham House.

Graham, J., Haidt, J. & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*. 96(5), 1029-1046.

Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S. & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*. 101, 366-85.

Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. New York: Vintage Books.

Hackman, J. R., Oldham, G., Janson, R. & Purdy, K. (1975). A new strategy for job enrichment. *California Management Review*. 17(4), 57-81.

Hondeghem, A. & Perry, J. L. (2009). EGPA symposium on public service motivation and performance: Introduction. *International Review of Administrative Sciences*, 75, 5–9.

Houston, D. J. (2011). Implications of occupational locus and focus for public service motivation: Attitudes toward work motives across nations. *Public Administration Review*, 71(5), 761-771

Johnson, B. J. (2012). Public service motivation and the technical, political, and facilitator roles of city planners. *International Journal of Public Administration*, 35:1, 30-45.

Kim, S. (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), 830-840.

Kim, S. & Vandenabeele, W. (2010). A strategy for building public service motivation research internationally. *Public Administration Review*, 70(5), 701-709.

Kim, S., Vandenabeele, W., Wight, B. E., Andersen, L. B., Cerase, F., Christensen, R., Desmarais, C., Koumenta, M., Leisink, P., Liu, B., Paliduskaite, J., Pedersen, L. H., Perry, J., Ritz, A., Taylor, J., and de Vivo P. (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, A. M. (2014). Dynamics of public service motivation: Attraction–selection and socialization in the production and regulation of social services. *Public Administration Review*. 74(1), 101-112.

Ko, J. & Hur, S. (2014), The impacts of employee benefits, procedural justice, and managerial trustworthiness on work attitudes: Integrated understanding based on social exchange theory. *Public Administration Review*, 74(2), 176-187.

Lavigna, B. (2012). Commentary on "Pulling the levers: Transformational leadership, public service motivation, and mission valence". *Public Administration Review*, 72(2), 216-217.

Le Grand, J. (2010). Knights and knaves return: Public service motivation and the delivery of public services. *International Public Management Journal*, 13(1), 56-71.

Liu, B., & Tang, T. L-P. (2011). Does the love of money moderate the relationship between public service motivation and job satisfaction? The case of Chinese professionals in the public sector. *Public Administration Review*, 71, 718-727.

Liu, B., Tang, N. & Zhu, X. (2008). Public service motivation and job satisfaction in China: An investigation of generalizability and instrumentality. *International Journal of Manpower*, 29, 684-699.

Liu, B, Tang, T L-P. & Yang, K. (2013). When does public service motivation fuel the job satisfaction fire? The joint moderation of person-organization fit and needs-supplies fit. *Public Management Review*, early online, doi: 10.1080/14719037.2013.867068.

Moynihan, D. P., & Pandey, S. K. (2007). The role of organizations in fostering public service motivation. *Public Administration Review*, 67(1), 40–53.

Paarlberg, L. E. & Lavigna, B. (2010). Transformational leadership and public service motivation: Driving individual and organizational performance. *Public Administration Review*, 70(5), 710-718.

Paarlberg, L. E., Perry J. L. & Hondeghem, A. (2008). From theory to practice: Strategies for applying public service motivation. In J. L Perry & A. Hondeghem (Eds.). *Motivation in public management: The call of public service*, (pp. 268-293). Oxford: Oxford University Press.

Pandey, S. K., Wright, B. E. & Moynihan, D. P. (2008). Public service motivation and interpersonal citizenship behavior in public organizations: Testing a preliminary model. *International Public Management Journal*, 11(1), 89-108.

Park, S. M., & Rainey, H. G. (2008). Leadership and public service motivation in U.S. federal agencies. *International Public Management Journal*, 11(1), 109–142.

Perry, J. L. (1996). Measuring public service motivation: An assessment of construct reliability and validity. *Journal of Public Administration Research and Theory*, 6(1), 5–22.

Perry, J. L. (2000). Bringing society in: Toward a theory of public service motivation. *Journal of Public Administration Research and Theory* 10(2), 471–488.

Perry, J. L. (2011). Federalist No. 72: What happened to the public service ideal? *Public Administration Review*. 71, s143-s147.

Perry, J. L., Engbers, T. A. & Jun, S. Y. (2009). Back to the future? Performance-related pay, empirical research, and the perils of persistence. *Public Administration Review* 69(1), 39–51.

Perry, J. L. & Hondeghem, A. (2008) Editors' introduction. In J. L. Perry, & A. Hondeghem (Eds.). *Motivation in public management: The call of public service*, (pp. 1-14). Oxford: Oxford University Press.

Perry, J. L., Hondeghem A. & Wise, L. R. (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, J. L., Mesch, D. & Paarlberg, L. (2006). Motivating employees in a new governance era: The performance paradigm revisited. *Public Administration Review*, 66(4), 505–514.

Perry, J. L. & Wise, L. R. (1990). The motivational bases of public service. *Public Administration Review*, 50(3), 367-373.

Perry, J. L., & Vandenabeele W. (2008) . Behavioral dynamics: Institutions, identities, and self-regulation. In J. L. Perry & A. Hondeghem (Eds.), *Motivation in public management: The call of public service*, (pp. 56–79). Oxford: Oxford University Press.

Petrovsky, N. & Ritz, A. (2013). *Assessing the effect of public service motivation on performance, without and with a correction for common-method bias* (July 20). Available at SSRN: <http://ssrn.com/abstract=2296383> or <http://dx.doi.org/10.2139/ssrn.2296383> [Accessed 20 May 2014].

Rainey, H. G. (1982). Reward preferences among public and private managers: In search of the service ethic. *American Review of Public Administration* 16(4): 288-302.

Rainey, H. G., & Steinbauer, P. (1999). Galloping elephants: Developing elements of a theory of effective government organizations. *Journal of Public Administration Research and Theory*, 9(1), 1–32.

Ritz, A. (2009). Public service motivation and organizational performance in Swiss federal government. *International Review of Administrative Sciences*, 75, 53-78.

Steijn, B. (2008) Person-environment fit and public service motivation. *International Public Management Journal*, 11(1), 13-27.

Taylor, J. (2008). Organizational influences, public service motivation and work outcomes: An Australian study, *International Public Management Journal*, 11(1).

Taylor, J. (2010). Public service motivation, civic attitudes and actions of public, non-profit and private sector employees. *Public Administration*. 88(4), 1083–1098.

van Loon, N. M., Leisink, P. & Vandenabeele, W. (2013). Talking the talk of public service motivation: How public organization logics matter for employees' expressions of PSM. *International Journal of Public Administration*, 36(14), 1007-1019

Vandenabeele, W. (2007). Toward a public administration theory of public service motivation. *Public Management Review*, 9(4), 545-556.

Vandenabeele, W. (2009). The mediating effect of job satisfaction and organizational commitment on self-reported performance: more robust evidence of the PSM-performance relationship. *International Review of Administrative Science*, 75(1), 11–34.

Vandenabeele, W., Scheepers, S. & Hondeghem, A. (2006). Public service motivation in an international perspective: The UK and Germany. *Public Policy and Administration*, 21(1), 13-31

Vandenabeele, W. & Van de Walle, S. (2008). International differences in public service motivation: Comparing regions across the world. In J. L Perry & A. Hondeghem (Eds.). *Motivation in public management: The call of public service*, (pp. 223-244). Oxford: Oxford University Press.

Vigoda-Gadot, E. & Meiri, S. (2008). New public management values and person organization fit: A sociopsychological approach and empirical examination among public sector personnel. *Public Administration*, 86(1), 111-132.

Vigoda-Gadot, E., Eldor, L. & Schohat, L. M. (2013). Engage them to public service: Conceptualization and empirical examination of employee engagement in public administration. *The American Review of Public Administration*, 43, 518.

Weibel, A., Rost, K. & Osterloh, M. (2010). Pay for performance in the public sector—Benefits and (hidden) costs. *Journal of Public Administration Research and Theory* 20(2), 387–412.

Wright, B. E. (2007). Public service and motivation: Does mission matter? *Public Administration Review*, 67(1), 54-64.

Wright, B. E. & Grant, A. M. (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, B. E., Moynihan, D. P., & Pandey, S. K. (2012). Pulling the levers: Transformational leadership, public service motivation, and mission valence. *Public Administration Review*, 72, 206-215.

Wright, B. E., & Pandey, S. K. (2008). Public service motivation and the assumption of person-organization fit: Testing the mediating effect of value congruence. *Administration & Society*, 40, 502-521.

Wright, B. E., & Pandey, S. K. (2009). Transformational leadership in the public sector: Does structure matter? *Journal of Public Administration Research and Theory*, 20, 75-89.

Wright, B. E., & Pandey, S. K. (2010). Public organizations and mission valence: When does mission matter? *Administration & Society*, 43, 22-44.