

*Paper prepared for the XVII IRSPM Conference, April 2013, Prague
Panel 17: Public Service Motivation, Public Values, and Red Tape*

**Sector differences in the public service motivation-job satisfaction
relationship: The role of organizational characteristics**

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ABSTRACT

Public service motivation has often been shown to have a positive effect on job satisfaction – especially in the public sector. Yet, previous research lacks considerations of how organizational characteristics influence the relationship between public service motivation and job satisfaction. Red tape, hierarchical authority, and lack of organizational goal specificity may have negative influences on the public service motivation-job satisfaction relationship. Moreover, these organizational characteristics are also likely to vary between public and private sector organizations. In this paper, we examine how sector and organizational characteristics influence the relationship between public service motivation and job satisfaction using a sample of 1,018 public and private sector office workers in Denmark. Our study confirms a positive public service motivation-job satisfaction association, which is strongest among public sector office workers. We also find that perceived red tape and lack of organizational goal specificity have negative influences on job satisfaction, but the sector influence on the public service motivation-job satisfaction relationship is robust when controlled for these organizational characteristics. This suggests that the public-private sector status of an organization is more important for the public service motivation-job satisfaction relationship than other organizational characteristics.

INTRODUCTION

Understanding the relationship between public service motivation and employee job satisfaction is vital for public sector management, where this relationship could be expected to be especially pronounced. The literature on public service motivation has already shown that a positive relationship between public sector employees' motivation to contribute to society and job satisfaction exists (Bright, 2008; Kjeldsen & Andersen, 2012; Naff & Crum, 1999; Vandenabeele, 2009). But our knowledge of whether organizational characteristics affect this association is very sparse. Is it in fact a matter of employment sector (i.e., public or private ownership of an organization)? Or perhaps other organizational characteristics such as perceived red tape, hierarchical authority, and goal specificity matter more for whether a positive association between public service motivation and job satisfaction can be established? In general there is a lack of understanding of how organizational characteristics influence job satisfaction in the public and private sectors (Finlay et al., 1995; Hansen & Høst, 2012), and more specifically there is a need to understand how organizational characteristics influence the impact of public service motivation on this outcome variable and whether there are sector differences. For instance, the interplay between perceived red tape and public service motivation is argued to be important to understand sector differences in job satisfaction (Scott & Pandey, 2005: 175).

This paper investigates whether the effect of public service motivation on job satisfaction differs between sectors and according to different organizational characteristics. Drawing on Person-Environment Fit Theory (Kristof-Brown et al. 2005), we generally expect public service motivation to have a stronger positive effect on job satisfaction in the public sector compared with the private sector. Because the public sector offers better opportunities for serving the public, and because "donation of effort" can be more directly given to the public rather than to a private residual claimant, employees with high public service motivation may be better able to act on this pro-social motivation in public sector organizations. Therefore, it is possible that public service

motivation positively affects employee job satisfaction in the public sector, but not in the private sector (Andersen & Kjeldsen, forthcoming).

However, previous research has also shown that organizational characteristics such as red tape and hierarchical authority are important factors for organizations' attempts to support public service motivation (Moynihan & Pandey, 2007b). By investigating different organizational characteristics typically associated with public-private differences in work outcomes in terms of how they affect the public service motivation-job satisfaction relationship (while controlling for job specific characteristics such as autonomy and job content), we may therefore provide new insights into how managers can enhance public service motivation – not just in the public sector, but perhaps also in the private sector. Learning how public service motivation interacts with sector and organizational characteristics is important both to illuminate the debate about how to foster the positive impact of public service motivation, and because the literature suggests that public service motivation have positive consequences in the public sector whereas our knowledge about the public service motivation-job satisfaction relationship in the private sector is more sparse (Perry & Hondeghem, 2008).

The following section outlines our theoretical framework and hypotheses for investigating the public service motivation-job satisfaction relationship depending on public-private employment sector and the organizational characteristics, red tape, hierarchical authority, and organizational goal specificity. Next, we describe our sample consisting of 1,018 Danish office workers employed in different organizations in either the public or the private sector, the measures, and the methods used to analyze the proposed hypotheses in the third section of the paper. Finally, we discuss our results and make suggestions for further research within the area of sector comparisons of job satisfaction.

THEORETICAL FRAMEWORK AND HYPOTHESES

In his seminal piece from 1969, Locke describes job satisfaction as pleasurable or positive emotional state resulting from outcomes from a job that meet or exceed the employees expectations (e.g., when an assignment is experienced as challenging to an employee who enjoys challenges). Drawing on the work by Herzberg, Mausner, and Snyderman (1959), task success is thus seen as an important determinant of linking the work environment with satisfaction, and job satisfaction is a “function of the perceived relationship between what one wants from one’s job and what one perceives it as offering or entailing” (Locke, 1969: 316). Focusing on public service motivation, the job characteristic that employees would presumably want to obtain in their job is the opportunity to produce public services for the benefit of others and society. As mentioned in the introduction, public service motivation denotes the part of employee motivation which is concerned with contributing to society and providing help to other people through the delivery of public services (Perry & Hondeghem, 2008). Hence, a job that allows the public service-motivated employee to make a pro-social difference would likely to support feelings of satisfaction.

This section offers further insights into the expectation of such a positive public service motivation-job satisfaction relationship and outlines the arguments for expecting such a relationship to be more prevalent in a public sector context. Next, we discuss how this relationship is possibly (or even more importantly) influenced by the perceived presence of organizational characteristics such as red tape, hierarchical authority, and organizational goal specificity, which constitutes the main contribution of our study. In total, this leads to the proposal of six hypotheses to be tested in the subsequent empirical analysis.

The public service motivation-job satisfaction relationship

Interest in public service motivation has significantly grown in recent years – especially concerning the impact that public service motivation has on critical human resource issues (Bright, 2008; Perry et al., 2010). This includes studies which have shown that employee public service motivation has a

positive influence on work outcomes such as individual and organizational performance (Bright, 2007; Kim, 2005; Naff & Crum, 1999; Vandenberg, 2009), ethical and pro-social behavior (Andersen & Serritzlew, 2012; Brewer & Selden, 1998), organizational commitment (Crewson, 1997; Camilleri, 2006), and retention (Bright, 2008; Wright & Christensen, 2010). Defined as "an individual's orientation to delivering services to people with a purpose to do good for others and society" (Perry & Hondeghem, 2008: vii), public service motivation is theoretically and empirically expected to be expressed as (at least) a general commitment and loyalty towards the public interest, compassion with people in need of social assistance, and attraction to public policy making to help improve public services (Perry, 1996). These three aspects are conceptualized as dimensions of public service motivation and they should be regarded as a first-order reflective and second-order formative constructs meaning that an individual's composite public service motivation is the sum of these different expressions (Wright, 2008; Kim et al., 2013).

Following our theoretical introduction to the public service motivation-job satisfaction relationship presented above, several studies have confirmed a direct positive association between employee public service motivation and job satisfaction (Taylor, 2008; Wright & Pandey, 2008; Kjeldsen & Andersen, 2012; Steijn, 2008; Kim, 2005; Naff & Crum, 1999). Public service-motivated employees are expected to show higher levels of job satisfaction if they feel that the work environment of their jobs allow them to actually make a difference to other people and society; if not, they will experience a discrepancy between what motivates them and the opportunity to fulfill this which according to Locke (1969) will lead to dissatisfaction. Furthermore, Hackman and Oldham (1976) have also emphasized that task significance leads to feelings of job meaningfulness (very likely related to the experience of making a positive difference in other peoples' lives) which positively affects job satisfaction. Appraisal processes leading to higher/lower satisfaction can of course also be centered on other work values and motivations than public service motivation. The satisfaction of many employees likely also hinges on their expectations with respect to getting

interesting work tasks, a high salary, job security, a good relationship with peers and supervisors etc. (Rainey, 2009). In this study, we focus mainly on public service motivation as an important antecedent of job satisfaction – especially when looking at sector differences, but the influence of other determinants of job satisfaction will be discussed in the section on methods. Thus, based on the theoretical work by Locke (1969) and previous studies we first expect the following:

H1: Public service motivation is positively associated with job satisfaction

Sector differences in the public service motivation-job satisfaction relationship

The conceptualization of public service motivation has previously been closely linked with public sector employment in the sense that Perry and Wise originally defined this motivation to be “grounded primarily or uniquely in public institutions and organizations” (1990: 368). Recently, public service motivation has, however, more often been defined as an attribute linked to the delivery of public services (Perry & Hondeghem, 2008), i.e. services that have positive externalities and which are therefore often publicly ordered and/or funded (Kjeldsen, 2012). Public services can also be taken care of by privately owned organizations and this naturally raises the question of whether the expectation from hypothesis 1 differs between sectors?

The previously mentioned studies, which confirm positive associations between public service motivation and job satisfaction, are almost solely based on empirical data collected in public sector organizations. Hence, our knowledge about whether public or private sector jobs and organizations are seen as more favorable for supporting employee job satisfaction than others is still sparse. Some studies show that private sector employees have more job satisfaction than public sector employees (e.g., Bogg & Cooper, 1995; Buchanan, 1974; Solomon, 1986), some show the opposite (Aryee, 1992; Steel & Warner, 1990), and some show no sector differences at all (Cho & Lee, 2001). The reason for these mixed results can partly be found in their different research designs/samples and most notably in their (in most instances) limited number of control variables

and lack of comparable work functions across employees in the two sectors (Baarspul & Wilderom, 2011). Drawing on Person-Environment Fit Theory (Kristof-Brown et al., 2005), Kjeldsen & Andersen (2012) and Andersen & Kjeldsen (forthcoming) show that public/private employment does matter for the public service motivation-job satisfaction relationship – even when we compare employees performing the same jobs in the two sectors. In the public sector, there is a stronger relationship between public service motivation and job satisfaction than in the private sector, and this is especially the case when the public sector employees feel that they can actually contribute to society and help others in their current jobs, i.e. when they experience a public service motivation-work environment fit.

This result that the public service motivation-job satisfaction relationship depends on an experienced comparability between individual needs and motivation to serve the public interest and the environment of their jobs/organizations is akin to results by Bright (2008), Taylor (2008), Steijn (2008), and Wright & Pandey (2008). They all confirm that public service motivation positively affects job satisfaction if the perceived fit between individual motivation and the work environment is high (denoted “mission valence” by Wright and Pandey (2008) and PSM-fit by Taylor (2008) and Steijn (2008)). But regardless of an experienced fit, it can be argued that when comparing public and private sector employees performing similar jobs in the two sectors there are still reasons for expecting public/private differences in the public service motivation-job satisfaction relationship (Andersen & Kjeldsen, forthcoming). Based on usual criteria for distinguishing between public and private sector organizations (Bozeman, 1987; Perry & Rainey, 1988; Rainey et al., 1976; Rainey & Bozeman, 2000) and especially the ownership criterion, the public sector may offer better opportunities for serving the public regardless of the specific job being performed (Andersen & Kjeldsen, forthcoming). Due to the public ownership, employees in public sector organizations are better able to “donate their effort” to the public and hence derive job satisfaction from fulfilling their pro-social motivation compared with employees in private sector organizations, who donate

their effort to a private residual claimant (Andersen & Kjeldsen, forthcoming). Given that Kjeldsen (2012) shows that the environment of the organization means more for establishing a positive public service motivation-job satisfaction relationship than the environment of the job, we therefore modify hypothesis 1 and expect that:

H2: The positive relationship between public service motivation and job satisfaction is positively moderated by public sector employment

Organizational characteristics as moderators

However, one thing is how the public service motivation-job satisfaction relationship is affected by employees' sector of employment (and maybe regardless of the performed tasks); another thing is how the relationship unfolds if we simultaneously consider other organizational characteristics than public/private ownership. This is especially interesting as organizational characteristics are likely to differ between sectors. Could it be that the positive relationship between public service motivation and job satisfaction is not as much a question of sector as it is a question of other barriers and supporting factors within organizations? In addition to employment sector, this study therefore also takes the possible influence from perceptions of organizational red tape, hierarchical authority, and organizational goal specificity into account in the study of public service motivation and job satisfaction.

In a study of the role of different organizational characteristics in fostering public service motivation, Moynihan and Pandey (2007b) show that public sector employees' perceptions of high levels of red tape has a negative influence on their public service motivation. Encountering burdensome rules and constraining bureaucratic structures in the work may imply that public service motivated employees experience difficulties in making a difference to society and other people in the desired way. This can create feelings of meaninglessness leading to lower job satisfaction (Baldwin, 1990; Blau, 1960; DeHart-Davis & Pandey, 2005; Lan & Rainey, 1992). In

other words, perceptions of high levels of red tape may decouple the public service motivation-job satisfaction relationship as it might constrain employee effort donated to the public. Hence, we would expect perceptions of greater red tape to moderate the public service motivation-job satisfaction relationship. The same line of arguments likely applies to the organizational characteristic of hierarchical authority. As Moynihan and Pandey state, “Increased levels of hierarchy are associated with many of the effects of red tape, frustrating the ability to achieve goals, and therefore might be expected to have a similarly negative effect on employee outcomes” (2007b: 44). Hence, greater perceived hierarchical authority may also moderate the public service motivation-job satisfaction relationship in a negative manner – at least when we investigate white-collar workers placed relatively low in the organizational hierarchy.

On the other hand, there is perhaps a positive effect on the public service motivation-job satisfaction relationship of experiencing higher organizational goal specificity. Organizational goal specificity represents the degree to which employees believe they understand or can explain the direction, purpose, and performance measures of the organization (Wright & Davis, 2003: 76). Hence, if employees perceive greater goal specificity, then it likely supports feelings of meaningfulness of the work which can contribute to establish a positive public service motivation-job satisfaction relationship – especially if organizational goals are related to doing something good for others (citizens/clients/customers) and contributing to society. Clearly, this is more likely to be the case in public sector organizations, whereas private sector organizations do not necessarily have goals related to a pro-social purpose.

Reintroducing the public-private sector divide, a control for organizational characteristics that cut across the two sectors may therefore strengthen possible sector differences in the public service motivation-job satisfaction relationship. Although mixed results can be found, most previous studies within the public administration and organizational behavior literature on public-private sector differences point to public sector organizations as having greater red tape and

hierarchical authority and less organizational goal specificity perceived by the employees than private sector organizations (Baarspul & Wilderom, 2011; Boyne, 2002; Rainey, 2009). Public organizations are expected to have more hierarchy due to the fact that public organizations are bureaucracies with multiple organizational levels, ranked positions, and a top-down order of command (Boyne, 2002). Related to the bureaucratic structure, public organizations also put more emphasis on rules and regulations which are likely to be experienced as a compliance burden by the employees (Bozeman et al., 1992; Rainey et al., 1995). Finally, existence of multiple principals in a public sector context is likely to be associated with vague and ambiguous goals, whereas private organizations have a clearer goal of profit (Chubb & Moe, 1988; Farnham & Horton, 1996; Rainey, 2009).

In sum, Wright and Davis thus indicate that a likely cause of an insignificant public service motivation-job satisfaction relationship is that although public organizations have missions that often provide greater opportunities for employees to achieve altruistic or higher order needs, the very structure of these organizations (characterized by greater red tape etc.) can hinder the realization of these opportunities (Wright & Davis, 2003: 71). Including these organizational characteristics could therefore be expected to make the positive moderating effect from sector on the public service motivation-job satisfaction relationship even stronger as the negative effects from these organizational characteristics are separated. In addition to expecting organizational characteristics (red tape, hierarchical authority, and organizational goal specificity) to moderate the public service motivation-job satisfaction relationship, we therefore also expect sector differences in the public service motivation-job satisfaction relationship from H2 to be strengthened when we take these characteristics in into account by control.

H3a: The positive relationship between public service motivation and job satisfaction is negatively moderated by perceptions of red tape

H3b: The positive relationship between public service motivation and job satisfaction is negatively moderated by perceptions of hierarchical authority

H3c: The positive relationship between public service motivation and job satisfaction is positively moderated by perceptions of organizational goal specificity

H4: Sector differences in the public service motivation-job satisfaction relationship are strengthened when controlling for organizational characteristics (red tape, hierarchical authority, and organizational goal specificity perceptions)

DATA AND METHODS

Research design and sample

To test the proposed hypotheses we used survey data from a questionnaire sent to Danish office workers. The reason for investigating our hypotheses among office workers is that they perform highly comparable types of jobs in the public and private sectors which is of crucial importance to insure internal validity when conducting public/private comparative studies (Baarspul & Wilderom, 2011). To further strengthen the comparability of office work across sectors, we also included controls for the more specific types of jobs that the office workers conduct: HRM related tasks, accounting, case processing, and/or general administration (where the office workers have had the opportunity to report more than one). Hence, we have investigated the influence of organizational characteristics while testing this in a setting with highly comparable job characteristics. Studying the impact of the work environment on the public service motivation-job satisfaction relationship may be most interesting as this is easier to change – seen from an organizational perspective – compared with job characteristics (Wright & Davis, 2003). Yet, an important argument for choosing office workers was that we expected this to be a hard case. That is, if we can confirm the proposed hypotheses in this case, it would also be likely considering other types of work due to the fact that we would generally expect office workers to have less opportunities to act on their public service motivation as they administer the services (often with very limited citizen/client contact) rather than produce the services themselves (Leisink & Steijn, 2008: 125).

To insure comparable office work across sectors, we got access to the office workers through the major Danish union HK¹ organizing commercial and clerical employees. It is one of the largest unions in Denmark with more than 300,000 members and more importantly it organizes 45 percent of all Danish office workers. We used a random sample of 2,000 office workers from each sector and we ended up with 697 respondents from the public sector and 346 respondents from the private sector. This corresponds to a response rate of 39 percent for public sector office workers and 20 percent for the private sector office workers (we withdrew the 464 who never received the email due to either change of email, overloaded email inboxes or similar).

Measures

All measures used in this paper are validated constructs corresponding to our literature review, and the translated scales have all been thoroughly tested through pilot interviews of potential respondents in both public and private sector organizations (all study variables and their corresponding survey questions can be found in Table A1 in the Appendix).

To measure job satisfaction, we used a three item Likert-scale construct validated by DeHart-Davis and Pandey (2005) and Moynihan and Pandey (2007a). With a Cronbach's alpha score well above the 0.7 threshold, these items were added into a reflective index for employee job satisfaction rescaled to range from 0-100. With respect to public service motivation, we used a three-dimensional measurement construct originally suggested by Perry (1996) and later refined by for example Coursey and Pandey (2007), Kim et al. (2013), and Gianque, Ritz, Anderfuhren-Biget, and Waldner (2009). We used three reflective indexes for the PSM sub-dimensions, Commitment to the public interest/civic duty, Compassion, and Attraction to public policy participation, which were then combined in an overall formative measure for employee public service motivation rescaled to range from 0-100. To measure the office workers' employment sector we asked in the questionnaire

¹ Originally called *Handels- og Kontorfunktionærernes Forbund*, or Trade and Office Administrators' Union, the union is now named simply 'HK.'

in which sector they currently work, public or private (public=1, private=0). We also had access to this information from HK, but to prevent that they may have changed sector recently, which has not yet been registered by HK, we choose to use the self-reported measure².

To measure the organizational characteristics we used both single-item and multi-item measures. Perceived organizational goal specificity was measured using Wright and Davis' (2003) three-item scale building on goal-setting theory. Hierarchical authority and red tape were also both measured as they are perceived by the office workers but on single-item 0-10 point scales formerly used and validated by Bozeman (2000) and Moynihan and Pandey (2007b). To take into account that job satisfaction and public service motivation can also be influenced by various other job- and organizational characteristics as well as personal experiences and attributes, we controlled for perceived job autonomy, organizational size, gender, age, educational level, organizational tenure (Hansen & Villadsen, 2010; Spector, 1997), and as previously mentioned the four more specific types of office work: HRM, accounting, case-processing, or general administration.

We conducted confirmatory factor analyses for all the used multi-item measures, and the scales were found to meet acceptable levels of model fit statistics and scale reliability measured by Cronbach's alpha³. All fit statistics and Cronbach's alphas can be seen in the Appendix. We also conducted a confirmatory factor analysis for the full hypothesized measurement model to validate whether the constructs were unique and only loaded on the expected latent variable. The fit statistics for the model did not indicate any serious problems in regard to convergent and discriminant validity for the measures ($X^2 = 272.02$ (62), CFI = 0.94, RMSEA = 0.057, and SRMR = 0.042).

Descriptive statistics for the public and private office workers are shown Table 1. The table shows that public office workers are generally more satisfied with their jobs compared to private

² Respondents, who answered "don't know" with respect to employment sector (n=20), were coded by using information on the name of the respondent's organization.

³ However, the three public service motivation dimensions had Cronbach's alpha measures slightly below the usually accepted threshold of 0.7. This is a common problem in the public service motivation literature (Kim et al., 2013), and measures near 0.6 are hence also considered acceptable (see also Peterson (1994)) .

office workers. The public respondents are also older and have longer organizational tenure. Furthermore, they perceive more job autonomy and their organizations are smaller in size. Interestingly, public sector office workers also seem to have higher public service motivation and they perceive more red tape, which is in line with the results from previous studies (Bozeman & Bretschneider, 1994), but we do not see significant sector differences in neither organizational hierarchy nor organizational goal specificity.

Insert Table 1 about her

Methods

In the following section we will test our proposed hypotheses using multivariate statistics and more specifically tobit regression models. We use tobit regressions – which is commonly used when the dependent variable is truncated or censored in one end of the scale (Cameron & Trivedi, 2009) – due to the fact that the reported job satisfaction measure is left-censored as the office workers generally report high levels of job satisfaction. This increases the numbers in one end of the scale, which would not have been the case if the scale had included more categories, i.e. tobit regression takes into account that some office workers’ job satisfaction could latently have been higher if the measurement scale had included more categories.

RESULTS

Table 2 shows the results of the tobit regression models explaining job satisfaction. According to hypothesis 1, we expected employee public service motivation to be positively related to job satisfaction. The results in Model 2, Table 2, shows that this is only partially confirmed for the Danish public and private sector office workers ($p < 0.083$) when controlling for individual

characteristics, job autonomy and organizational size. This suggests that when investigating employees, who do not work with direct public service provision, then public service motivation does not play as significant a role for their job satisfaction as it does when investigating, for example, health care personnel and teachers (Andersen & Kjeldsen, forthcoming). In Model 3 and 4, we include employment sector and the interaction term between public service motivation and sector which test hypothesis 2. These models show that employment sector does not have a direct impact on the office workers' job satisfaction, i.e. public sector office workers are not more satisfied than their private sector counterparts – or contrary, but the significant interaction terms confirms that the public service motivation-job satisfaction relationship differs between sectors. More specifically, the results in Model 4 show that the public service motivation has a stronger positive impact on job satisfaction in the public sector than in the private sector. This offers support for hypothesis 2.

In Model 5 we include the organizational characteristics without the interaction term between public service motivation and sector. Here we find that red tape has a negative effect on job satisfaction while organizational goal clarity has a positive effect. This is in line with expectations from the literature while we find no influence of hierarchical authority on employee levels of job satisfaction. Furthermore, the results in Model 5 also show that when organizational characteristics are controlled for, employment sector becomes significant in the sense that the public sector office workers have higher job satisfaction than the private sector office workers. In Model 6 we include three interaction terms, one for each of the three organizational characteristics and public service motivation, to test the three moderation hypotheses 3a, 3b and 3c regarding the influence of organizational characteristics on the public service motivation-job satisfaction relationship. All three interaction terms are non-significant and we therefore find no support for the three hypotheses, i.e. the public service motivation-job satisfaction relationship does not become significantly weaker if the employees experience high levels of red tape, hierarchical authority and

less goal specificity. Contrary, Model 6, Table 2, shows that the public service motivation*sector interaction term is still significant and positive when controlling for the impact of organizational characteristics. This indicates that despite varying organizational characteristics across sectors and with different impacts on public service motivation, we still find that the public service motivation-job satisfaction is stronger for the public sector office workers. Based on this we finally confirm hypothesis 4.

Insert Table 2 about her

With respect to the employed controls, the tobit regression analysis in Table 2 shows that female office workers are generally more satisfied than their male colleagues, older office workers and those with more organizational experience are generally also more satisfied, and the same goes for those who experience autonomy in their jobs. Contrary, working with accounting tasks seems to have a detrimental effect on the office workers' job satisfaction. We will now discuss the results from Table 2 and make suggestions for further research.

DISCUSSION AND CONCLUSION

This study set out to compare the influence of employment sector and various organizational characteristics on the public service motivation-job satisfaction relationship. The main result is that this relationship differs according to employment sector: the influence of public service motivation on employee job satisfaction is stronger in the public sector compared with the private sector. Although some organizational factors such as red tape and organizational goal specificity were also found to have an impact on job satisfaction, our study shows that they do not moderate the public service motivation-job satisfaction relationship, and they also do not reduce the positive moderating

effect of public sector employment on this relationship. This offers strong support for employment sector having a crucial role in determining the public service motivation-job satisfaction relationship compared with other organizational characteristics.

Our finding that public service motivation plays a positive role for employee job satisfaction – and especially in the public sector, is generally in line with the results from former studies of this association (Andersen & Kjeldsen, forthcoming; Bram Steijn, 2008; Taylor, 2008). Further, it supports the theoretical argument stating that the important issue is whether the employees' feel that they can “donate effort to the public” and hence act on their public service motivation in their current employment sectors (Andersen & Kjeldsen, forthcoming). It is, however, important to note that compared with most previous studies, we have a very conservative case for testing positive outcomes of public service motivation; we only test the association within one occupational group and office work is not an area where we would generally expect high levels of public service motivation. Hence, our findings add empirical robustness to the current evidence of a positive public service motivation-job satisfaction relationship from the literature. Moreover, our finding that sector is not significantly related to job satisfaction at first sight but only when controlling for the organizational characteristics emphasizes the importance of including relevant explanatory variables when studying sector differences in job satisfaction and in work outcome measures more generally (Baarspul & Wilderom, 2011). This is similar to the argument in Hansen and Kjeldsen (2013), which examine sector differences in organizational commitment.

Yet, the key point in this paper is whether these organizational characteristics (red tape, organizational goal specificity, and hierarchical authority) influence the relationship between public service motivation and job satisfaction and possible sector differences herein as proposed by Scott and Pandey (2005). Here, our results show that perceived red tape and organizational goal specificity are important explanations of employee job satisfaction – a result which is in line with the results from former studies arguing for studying the importance of organizational characteristics

on job satisfaction (Finlay et al. 1995; Hansen & Høst 2012), but our results also show that none of these organizational characteristics influence the public service motivation-job satisfaction relationship. In other words, the result that public sector employment has a positive moderation effect on the public service motivation-job satisfaction relationship is robust when we include the organizational characteristics. This also means that public service motivation has an even more important effect on job satisfaction in the public sector compared with the private sector; it is not the organizational characteristics (like red tape, hierarchal authority, and organizational goal specificity) that explain sector differences in the public service motivation-job satisfaction relationship.

Still, in a broader perspective our results emphasize the importance of understanding organizational characteristics' influence on job satisfaction as our results highlight red tape and organizational goal specificity as having significant direct impacts on employee job satisfaction. When this result is combined with the finding that public sector office workers, for example, experience more red tape than their private sector counterparts, this further points to the importance of including such measures when making sector comparative studies in work outcomes. This is also even more important as the work environment (like red tape and organizational goal specificity) is argued to be more changeable from an organizational perspective than, for instance, job characteristics (Wright & Davis, 2003). Future research may therefore benefit from paying more attention to controls of organizational characteristics when studying work outcomes such as job satisfaction, but when studying the influence of public service motivation on job satisfaction, employment sector (public/private) still seems to be the most relevant organizational-level marker. Furthermore, future studies are also encouraged to test the possible impact of organizational characteristics on the public service motivation-job satisfaction relationship within other occupational groups to see if the results are generalizable. Still, our study has been focusing on office workers, which we have argued is a hard case; that is, if we find the results here we would

also expect to find them elsewhere. Finally, it would also be interesting with studies including a time dimension as we cannot rule out that sector differences in job satisfaction might also affect public service motivation. However, even if this was the case then it does not change our conclusions about the examined associations. So the main conclusion of this paper is that although organizational factors (here red tape and organizational goal specificity) influence job satisfaction, they do not moderate the public service motivation-job satisfaction relationship, and they also do not reduce the positive moderating effect of public sector employment on this relationship.

LITERATURE

- Andersen, Lotte Bøgh; Kjeldsen, Anne Mette (forthcoming): „Public service motivation, user orientation and job satisfaction: A question of employment sector?“, *International Public Management Journal*.
- Andersen, Lotte Bøgh; Serritzlew, Søren (2012): „Does public service motivation affect the behavior of professionals?“, *International Journal of Public Administration*, 35 (1), pp. 19–29.
- Aryee, Samuel (1992): „Public and Private Sector Professionals A Comparative Study of their Perceived Work Experience“, *Group & Organization Management*, 17 (1), pp. 72–85.
- Baarspul, Hayo C.; Wilderom, Celeste PM (2011): „Do Employees Behave Differently In Public-Vs Private-Sector Organizations?“, *Public Management Review*, 13 (7), pp. 967–1002.
- Bogg, Janet; Cooper, Cary (1995): „Job satisfaction, mental health, and occupational stress among senior civil servants“, *Human Relations*, 48 (3), pp. 327–341.
- Boyne, George A. (2002): „Public and private management: what’s the difference?“, *Journal of Management Studies*, 39 (1), pp. 97–122.
- Bozeman, Barry (1987): *All organizations are public: Bridging public and private organization theories*, San Fransico: Jossey-Bass.
- Bozeman, Barry (2000): *Bureaucracy and red tape*, Upper Saddle River, NJ: Prentice Hall.
- Bozeman, Barry; Bretschneider, Stuart (1994): „The “publicness puzzle” in organization theory: A test of alternative explanations of differences between public and private organizations“, *Journal of Public Administration Research and Theory*, 4 (2), pp. 197–224.
- Bozeman, Barry; Reed, Pamela N.; Scott, Patrick (1992): „Red tape and task delays in public and private organizations“, *Administration & Society*, 24 (3), pp. 290–322.
- Brewer, Gene A.; Selden, Sally Coleman (1998): „Whistle blowers in the federal civil service: New evidence of the public service ethic“, *Journal of Public Administration Research and Theory*, 8 (3), pp. 413–440.

- Bright, Leonard (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), pp. 361–379.
- Bright, Leonard (2008): „Does public service motivation really make a difference on the job satisfaction and turnover intentions of public employees?“, *The American Review of Public Administration*, 38 (2), pp. 149–166.
- Buchanan, Bruce (1974): „Government Managers, Business Executives, and Organizational Commitment“, *Public Administration Review*, 34 (4), pp. 339–347.
- Cameron, Adrian Colin; Trivedi, Pravin K. (2009): *Microeconometrics using stata*, Texas: Stata Press College Station, TX.
- Camilleri, Emanuel (2006): „Towards developing an organisational commitment-public service motivation model for the Maltese public service employees“, *Public Policy and Administration*, 21 (1), pp. 63–83.
- Cho, Kyung-Ho; Lee, Seok-Hwan (2001): „Another look at public-private distinction and organizational commitment: a cultural explanation“, *International Journal of Organizational Analysis*, 9 (1), pp. 84–102.
- Chubb, John E.; Moe, Terry M. (1988): „Politics, markets, and the organization of schools“, *The American Political Science Review*, pp. 1066–1087.
- Coursey, David H.; Pandey, Sanjay K. (2007): „Public Service Motivation Measurement Testing an Abridged Version of Perry’s Proposed Scale“, *Administration & Society*, 39 (5), pp. 547–568.
- Crewson, Philip E. (1997): „Public-service motivation: Building empirical evidence of incidence and effect“, *Journal of Public Administration Research and Theory*, 7 (4), pp. 499–518.
- DeHart-Davis, Leisha; Pandey, Sanjay K. (2005): „Red Tape and Public Employees: Does Perceived Rule Dysfunction Alienate Managers?“, *Journal of Public Administration Research and Theory*, 15 (1), pp. 133–148.
- Farnham, David; Horton, Sylvia (1996): *Managing public and private organisations*, London: Macmillan.
- Finlay, William et al. (1995): „Organizational Structure and Job Satisfaction Do Bureaucratic Organizations Produce more Satisfied Employees?“, *Administration & Society*, 27 (3), pp. 427–450.
- Giauque, David et al. (2009): „Motivation of public employees at the municipal level in Switzerland“, *Paper presented at the International Public Service Motivation Research Conference, Bloomington, IN, June 7-9, 2009*.
- Hackman, J. Richard; Oldham, Greg R. (1976): „Motivation through the design of work: Test of a theory“, *Organizational behavior and human performance*, 16 (2), pp. 250–279.
- Hansen, Jesper Rosenberg; Høst, Viggo (2012): „Understanding the Relationships Between Decentralized Organizational Decision Structure, Job Context, and Job Satisfaction—A Survey of Danish Public Managers“, *Review of Public Personnel Administration*, 32 (3), pp. 288–308.
- Hansen, Jesper Rosenberg; Kjeldsen, Anne Mette (2013): „Comparing affective commitment of office workers in the public and private sectors: a comprehensive test“, *Paper prepared for the annual Academy of Management Conference, Lake Buena Vista (Orlando), Florida, August 9-13, 2013*.

- Hansen, Jesper Rosenberg; Villadsen, Anders R. (2010): „Comparing Public and Private Managers' Leadership Styles: Understanding the Role of Job Context“, *International Public Management Journal*, 13 (3), pp. 247–274.
- Herzberg, Frederick; Mausner, Bernard; Snyderman, Barbara Bloch (1959): *Motivation To Work*, New York: Wiley.
- Kim, Sangmook (2005): „Individual-level factors and organizational performance in government organizations“, *Journal of Public Administration Research and Theory*, 15 (2), pp. 245–261.
- Kim, Sangmook 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), pp. 79–102.
- Kjeldsen, Anne Mette (2012): *Dynamics of public service motivation*. Aarhus: Politica.
- Kjeldsen, Anne Mette; Andersen, Lotte Bøgh (2012): „How Pro-social Motivation Affects Job Satisfaction: An International Analysis of Countries with Different Welfare State Regimes“, *Scandinavian Political Studies*, Early view online 07-12-2012.
- Kristof-Brown, A. L.; Zimmerman, R. D.; Johnson, E. C. (2005): „Consequences of individuals' fit at work: a meta-analysis of person-job, person-organization, person-group, and person-supervisor fit“, *Personnel Psychology*, 58 (2), pp. 281–342.
- Leisink, Peter; Steijn, Bram (2008): „Recruitment, Attraction, and Selection“, pp. 118–135 in JL Perry & A. Hondeghem (Eds.): *Motivation in Public Management: The call of Public Service*, Oxford: Oxford University Press.
- Locke, Edwin A. (1969): „What is job satisfaction?“, *Organizational Behavior and Human Performance*, 4 (4), pp. 309–336.
- Moynihan, Donald P.; Pandey, Sanjay K. (2007a): „Finding Workable Levers Over Work Motivation Comparing Job Satisfaction, Job Involvement, and Organizational Commitment“, *Administration & Society*, 39 (7), pp. 803–832.
- Moynihan, Donald P.; Pandey, Sanjay K. (2007b): „The Role of Organizations in Fostering Public Service Motivation“, *Public Administration Review*, 67 (1), pp. 40–53.
- Naff, Katherine C.; Crum, John (1999): „Working for America Does Public Service Motivation Make a Difference?“, *Review of Public Personnel Administration*, 19 (4), pp. 5–16.
- Perry, James L. (1996): „Measuring public service motivation: An assessment of construct reliability and validity“, *Journal of Public Administration Research and Theory*, 6 (1), pp. 5–22.
- Perry, James L.; Hondeghem, Annie (2008): *Motivation in public management: The call of public service*, New York: Oxford University Press, USA.
- Perry, James L.; Hondeghem, Annie; Wise, Lois Recascino (2010): „Revisiting the motivational bases of public service: Twenty years of research and an agenda for the future“, *Public Administration Review*, 70 (5), pp. 681–690.
- Perry, James L.; Rainey, Hal G. (1988): „The public-private distinction in organization theory: A critique and research strategy“, *Academy of Management Review*, 13 (2), pp. 182–201.
- Perry, James L.; Wise, Lois R. (1990): „The motivational bases of public service“, *Public Administration Review*, 50 (3), pp. 367–373.

- Peterson, Robert A. (1994): „A meta-analysis of Cronbach’s coefficient alpha“, *Journal of consumer research*, pp. 381–391.
- Rainey, Hal G. (2009): *Understanding and managing public organizations*, 4 Ed. San Fransisco: Jossey-Bass.
- Rainey, Hal G.; Backoff, Robert W.; Levine, Charles H. (1976): „Comparing public and private organizations“, *Public Administration Review*, 36 (2), pp. 233–244.
- Rainey, Hal G.; Bozeman, Barry (2000): „Comparing public and private organizations: Empirical research and the power of the a priori“, *Journal of Public Administration Research and Theory*, 10 (2), pp. 447–470.
- Rainey, Hal G.; Pandey, Sanjay; Bozeman, Barry (1995): „Research note: Public and private managers’ perceptions of red tape“, *Public Administration Review*, 55 (6), pp. 567–574.
- Scott, Patrick G.; Pandey, Sanjay K. (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), pp. 155–180.
- Solomon, Esther E. (1986): „Private and public sector managers: An empirical investigation of job characteristics and organizational climate.“, *Journal of Applied Psychology*, 71 (2), pp. 247.
- Spector, Paul E. (1997): *Job satisfaction: Application, assessment, causes, and consequences*, Thousand Oaks, London, New Delhi: Sage Publications, Incorporated.
- Steel, Brent S.; Warner, Rebecca L. (1990): „Job satisfaction among early labor force participants: Unexpected outcomes in public and private sector comparisons“, *Review of Public Personnel Administration*, 10 (3), pp. 4–22.
- Steijn, Bram (2008): „Person-environment fit and public service motivation“, *International Public Management Journal*, 11 (1), pp. 13–27.
- Taylor, Jeannette (2008): „Organizational influences, public service motivation and work outcomes: An Australian study“, *International Public Management Journal*, 11 (1), pp. 67–88.
- Vandenabeele, Wouter (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 Sciences*, 75 (1), pp. 11–34.
- Wright, Bradley E. (2008): „Methodological challenges associated with public service motivation research“, pp. 80-98 in JL Perry & A. Hondeghem, *Motivation in public management: The call of public service*, New York: Oxford University Press.
- Wright, Bradley E.; Christensen, Robert K. (2010): „Public Service Motivation: A Test of the Job Attraction–Selection–Attrition Model“, *International Public Management Journal*, 13 (2), pp. 155–176.
- Wright, Bradley E.; Davis, Brian S. (2003): „Job Satisfaction In The Public Sector The Role of the Work Environment“, *The American Review of Public Administration*, 33 (1), pp. 70–90.
- Wright, Bradley E.; Pandey, Sanjay K. (2008): „Public Service Motivation and the Assumption of Person—Organization Fit Testing the Mediating Effect of Value Congruence“, *Administration & Society*, 40 (5), pp. 502–521.

Table 1: T-tests of sector differences in the study variables (N=1,018)

Sector of employment	Private (n = 335)	Public (n = 683)	T-test of mean difference
Job satisfaction			
Mean	76.59	81.22	***
SD	18.43	17.00	
Gender			
Male	17.9%	14.1%	
Female	82.1%	85.9%	
Age (in years)			
Mean	43.70	48.24	***
SD	0.58	0.39	
Educational level			
Mean	4.16	4.37	
SD	0.07	0.05	
Organizational tenure			
Mean	10.90	14.98	***
SD	0.51	0.45	
Work task			
Accounting	38.5%	61.5%	
Case processing	14.1%	85.9%	
HRM	16.4%	83.6%	
General administration	36.5%	63.5%	
Job autonomy			
Mean	69.60	73.61	**
SD	1.13	0.72	
Organizational size			
Mean	5.12	4.82	**
SD	0.10	0.07	
Public service motivation			
Mean	59.39	63.88	***
SD	11.36	11.18	
Red tape			
Mean	5.65	6.04	**
SD	2.34	2.84	
Hierarchical authority			
Mean	5.58	5.84	
SD	2.61	2.52	
Organizational Goal Specificity			
Mean	61.94	61.74	
SD	21.71	19.40	

Note: * p < 0.05, ** p < 0.01, *** p < 0.001.

Table 2: Tobit regressions of job satisfaction

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Gender (female=1)	3.217 ⁺ (1.766)	3.144 ⁺ (1.765)	3.041 ⁺ (1.765)	3.315 ⁺ (1.763)	3.497 [*] (1.692)	3.708 [*] (1.684)
Age (in years)	0.159 [*] (0.075)	0.138 ⁺ (0.076)	0.129 ⁺ (0.076)	0.132 ⁺ (0.076)	0.140 ⁺ (0.073)	0.137 ⁺ (0.072)
Education	-0.537 (0.509)	-0.508 (0.510)	-0.539 (0.509)	-0.538 (0.508)	-0.219 (0.489)	-0.188 (0.489)
Organizational tenure	0.158 [*] (0.069)	0.158 [*] (0.069)	0.151 [*] (0.069)	0.145 [*] (0.068)	0.111 ⁺ (0.066)	0.111 (0.065)
<i>Work tasks:</i>						
Accounting	-3.000 (1.619)	-2.933 ⁺ (1.618)	-2.883 ⁺ (1.617)	-2.991 ⁺ (1.612)	-2.714 ⁺ (1.554)	-2.926 ⁺ (1.547)
Case processing	-0.589 (1.747)	-0.731 (1.748)	-1.196 (1.775)	-1.215 (1.770)	-0.310 (1.702)	-0.339 (1.705)
HRM	0.272 (1.928)	0.243 (1.928)	-0.208 (1.950)	-0.0674 (1.945)	-0.840 (1.869)	-0.590 (1.869)
General administration	-2.405 (1.541)	-2.392 (1.540)	-2.398 (1.538)	-2.357 (1.533)	-2.597 ⁺ (1.473)	-2.568 ⁺ (1.472)
Job autonomy	0.477 ^{***} (0.033)	0.475 ^{***} (0.033)	0.472 ^{***} (0.033)	0.462 ^{***} (0.034)	0.392 ^{***} (0.033)	0.382 ^{***} (0.033)
Organizational size	-0.093 (0.335)	-0.067 (0.335)	-0.025 (0.336)	-0.008 (0.335)	0.167 (0.328)	0.171 (0.328)
Public service motivation		0.099 ⁺ (0.057)	0.089 (0.058)	-0.119 (0.097)	0.034 (0.056)	-0.085 (0.237)
Sector (public=1)			2.108 (1.440)	-17.35 [*] (7.410)	3.058 [*] (1.387)	-17.59 [*] (7.171)
PSM*Sector				0.320 ^{**} (0.120)		0.337 ^{**} (0.116)
<i>Org. characteristics:</i>						
Red tape					-0.751 [*] (0.316)	-0.858 (1.801)
Hierarchical authority					-0.224 (0.287)	1.050 (1.649)
Organizational goal specificity					0.259 ^{***} (0.031)	0.251 (0.159)
PSM*Red tape						0.002 (0.028)
PSM*Hierarchical aut.						-0.020 (0.026)
PSM*Org. goal spec.						0.001 (0.003)
Constant	40.90 ^{***} (5.016)	35.70 ^{***} (5.844)	35.83 ^{***} (5.837)	48.49 ^{***} (7.490)	31.33 ^{***} (6.052)	39.25 [*] (15.55)
Sigma	19.54 ^{***} (0.528)	19.53 ^{***} (0.527)	19.50 ^{***} (0.527)	19.44 ^{***} (0.525)	18.62 ^{***} (0.501)	18.55 ^{***} (0.499)
Observations	1,018	1,018	1,018	1,018	1,018	1,018

Note: Standard errors in parentheses, ⁺ $p < 0.10$, ^{*} $p < 0.05$, ^{**} $p < 0.01$, ^{***} $p < 0.001$

APPENDIX

Table A1: Measurement of Study Variables

<p>Job satisfaction (DeHart-Davis & Pandey, 2005) (reflective index consisting of 3 Likert-scale items, theoretical range: 0-100, Cronbach's alpha: 0.810)</p> <ol style="list-style-type: none">1. In general, I like working here.2. In general, I don't like my job. (R)3. All in all, I am satisfied with my job.
<p>Organizational goal specificity (Wright & Davis, 2003) (reflective index consisting of 3 Likert-scale items, theoretical range: 0-100, Cronbach's alpha: 0.853)</p> <ol style="list-style-type: none">1. I can clearly explain to others the direction (vision, values, mission) of this organization.2. This organization has objectives that are specific and well defined.3. There is a clear understanding of organizational priorities.
<p>Red tape (Bozeman, 2000; Moynihan & Pandey, 2007b) If red tape is defined as burdensome administrative rules and procedures that have negative effects on the organization's performance, please assess the level of red tape in your organization. Enter a number between 0 and 10, with 0 signifying no red tape and 10 signifying the highest level of red tape.</p>
<p>Hierarchical authority (Bozeman, 2000; Moynihan & Pandey, 2007b) Please assess the extent of hierarchical authority in your organization. Enter a number between 0 and 10, with 0 signifying few layers of authority and 10 signifying the many layers of authority.</p>
<p>Public Service Motivation (Coursey & Pandey, 2007; Kim et al., 2013; Giauque et al., 2009) (formative measure of the public interest, compassion, attraction to public participation indexes, theoretical range: 0-100, CFA for the three-factor model reports the following fit statistics: $\chi^2 (SB) = 71.65$, $df = 17$, RMSEA = 0.055, SRMR = 0.033, CFI = 0.955)</p> <p><i>Attraction to public participation (Cronbach's alpha: 0.609)</i> I like to discuss topics regarding public programs and policies with others. It motivates me to help improve public services.</p> <p><i>Commitment to public interest/civic duty (Cronbach's alpha: 0.524)</i> I unselfishly contribute to my community Meaningful public service is very important to me I would prefer seeing public officials do what is best for the whole community even if it harmed my interests I consider public service my civic duty</p> <p><i>Compassion (Cronbach's alpha: 0.632)</i> It is difficult for me to contain my feelings when I see people in distress I am often reminded by daily events about how dependent we are on one another</p>
<p>Job Autonomy (Hansen & Villadsen, 2010) (reflective index consisting of 3 Likert-scale items, theoretical range: 0-100, Cronbach's alpha: 0.771)</p> <ol style="list-style-type: none">1. I plan my own work hours2. I influence the contents of the task I am given3. I decide the priority of the job content I am given
<p>Gender Are you male (0) or female (1)?</p>
<p>Age In what year were you born? (converted to age in years)</p>

Educational level

Primary and secondary education (1)
High school degree (vocational training) (2)
High school degree (academic) (3)
College degree (vocational training) (4)
College degree (academic) (5)
Bachelor's degree (6)
Graduate degree (7)

Organizational tenure

How many years have you worked for this organization?

Employment sector

Where do you have your primary employment?
Private sector (0) or public sector (1) (state, regional or local level)

Work task

What characterizes you daily work tasks?
Accounting (1=Yes, 0=No)
Case processing (1=Yes, 0=No)
Human resource management (HRM) (1=Yes, 0=No)
General administration (1=Yes, 0=No)

Organizational size

How many employees are there in your organization?
1-9=1, 10-49=2, 50-99=3, 100-199=4, 200-499=5, 500-999=6, 1,000 or more=7.

Sector

Where are you currently employed?
Public sector=1, Private sector=0

Table A2: Correlations among study variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Job satisfaction	1.000														
2 Gender	0.056	1.000													
3 Age	0.150*	0.027	1.000												
4 Education	0.031	0.031	0.060*	1.000											
5 Org. tenure	0.167*	0.001	0.591*	-0.064*	1.000										
6 Accounting	-0.039	-0.048	-0.038	0.035	-0.003	1.000									
7 Case process.	0.057	-0.004	0.114*	0.144*	0.127*	0.028	1.000								
8 HRM	0.051	-0.001	-0.013	0.054	-0.004	0.165*	0.046*	1.000							
9 General adm.	-0.055	0.068*	-0.065*	-0.139*	-0.078*	0.100*	0.084*	0.149*	1.000						
10 Job autonomy	0.433*	-0.009	0.049	0.140*	0.093*	0.033	0.025	0.093*	-0.062*	1.000					
11 Org. size	0.014	-0.073*	-0.073*	0.077*	0.064*	-0.059*	0.052	-0.018	-0.010	0.042	1.000				
12 PSM	0.085*	0.034	0.198*	-0.013	0.120*	-0.032	0.077*	0.007	-0.032	0.059	-0.064*	1.000			
13 Sector	0.112*	0.072*	0.204*	0.062*	0.171*	-0.063*	0.216*	0.111*	-0.067*	0.083*	-0.072*	0.187*	1.000		
14 Red tape	-0.163*	0.034	-0.030	0.085*	-0.119*	-0.091*	0.084*	-0.019	-0.012	-0.147*	0.106*	0.036	0.093*	1.000	
15 Hierarchical authority	-0.176*	0.056	-0.066*	-0.005	-0.071*	-0.034	0.064*	-0.073*	0.007	-0.247*	0.167*	-0.012	0.061*	0.522*	1.000
16 Org. goal spec.	0.336*	-0.022	0.018	-0.033	0.052	-0.015	-0.042	0.047	0.025	0.221*	0.003	0.132*	-0.030	-0.182*	-0.146*

Note: * $p < 0.05$, Correlations (Pearson's r).