

Demography, perception of public values and degree of publicness as antecedents and correlates of individual public service motivation in Flemish government

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1. Introduction

The motivation of public servants, commonly described as ‘public sector motivation’ can be derived from various sources. Next to transaction based motives in exchange for labor, such as a salary or a postponed salary in the guise of a retirement pay, intrinsic motives for the mere joy of performing a task, the working relation with colleagues or supervisors or other motives, one also can distinguish public service motivation as an important motive for joining public service or performing within the context of a public organization. After all, public service motivation has been empirically related to various types of organizational behavior, such as attractiveness of employers (Lewis and Frank 2002; Vandenabeele in press), retention of employees in public organizations (Vandenabeele 2007a; Bright forthcoming), performance on individual and organizational levels (Naff and Crum 1999; Kim 2005; Bright 2007; Vandenabeele 2008) and ethical behavior (Brewer and Selden 1998) and can therefore be considered as an important motivator in a public sector environment.

This latter type of motivation is based upon a set of ‘public values’ which are closely tied to the operation of public institutions (Perry and Wise 1990; Rainey and Steinbauer 1999; Vandenabeele 2007b). This paper would like to investigate to what extent the presence of such public values within a public organization can be tied to the presence of public service motivation with its employees. In other words, how does the presence of public values within public institutions, compared to other antecedents, influence the development and the presence of public service motivation in members of these institutions.

The paper first discusses some relevant theoretical insights in the public administration literature. Second, based upon these insights, a set of hypotheses is formulated which then will be assessed on their merits. Next to the actual analysis, by means of a hierarchical multiple regression, the data collection, statistical techniques and the measures used in this

study are thoroughly reviewed. Finally, the results are discussed and some concluding comments, as well as avenues for further research are formulated.

2. Theory

The following section will review the existing body of literature of the concepts that are applied in this paper. Public service motivation, its origins and possible antecedents, the idea of institutionalized values and the degree of publicness are important variables in this respect and will be discussed further. At the end of this section, a set of hypotheses will be formulated which then will guide analysis and the discussion in the remainder of the paper.

2.1. Public service motivation and its antecedents

The idea of public servants who have a drive to contribute to the general interest has been around for ages. It can be traced back to Aristotle and Plato and other historic writers who have dealt with it in their works (Horton, in press). More contemporary authors have also found this concept appealing to describe (at least some of) the motivations of present-day civil servants (Downs 1967; Mosher 1968; Chapman 1988), albeit treating it in a general or even anecdotal fashion. It was not until Perry and Wise (1990) defined public service motivation as ‘an individual’s predisposition to respond to motives grounded primarily or uniquely in public institutions (p. 368)’, that it became a more formally established concept in its own right. Next to this definition, some authors have developed their own definitions. Brewer and Selden (1998 : 417) describe public service motivation as ‘the motivational force that induces individuals to perform meaningful public service’. Rainey and Steinbauer (1999 : 23) define it as ‘a general altruistic motivation to serve the interests of a community of people, a state, a nation or humankind’, contrasted to task-motivation and mission motivation. However, similar concepts exist which do not use PSM-terminology at all. Some, mostly non-American,

authors do not use the term at all when studying public service motivated behavior (Chanlat 2003; Pratchett and Wingfield 1996; Woodhouse 1997). In order to overcome these differences and to develop an encompassing definition, Vandenabeele (2007b) has defined PSM as ‘the belief, values and attitudes that go beyond self-interest and organizational interest, that concern the interest of a larger political entity and that motivate individuals to act accordingly whenever appropriate (p. 547)’.

Although little empirical work has been done on the institutional¹ (or organizational) antecedents of public service motivation (Pandey and Stazyk, in press), the available empirical (Moynihan and Pandey 2007; Perry et al 2008) and theoretical work (Vandenabeele 2007b; Perry 2000; Perry and Vandenabeele in press) suggests that institutions play an important role in its development. Institutions, defined as ‘a formal or informal, structural, societal or political phenomenon that transcends the individual level, that is based on more or less common values, has a certain degree of stability and influences behavior (Peters 2000 : 18)’, are held responsible for the transmission of (public service) values from the institution in which they are embedded to the individual’s identity as a member of the institution.

Elaborating this idea, Vandenabeele (2007b) combines it with the concepts of the self-determination theory of Deci and Ryan (2004). Public service motivation can be considered as an autonomous type of identity regulation which is based upon internalized values that are the foundation of an institution and its related identity. This type of self-regulation corresponds to the institutional logic of appropriateness (March and Olsen 1989 & 1995), where individuals act in accordance to institutional values because they have internalized these (Scott 2001; Berger and Luckman 1966). In terms of public service motivation, people will be public service motivated because they have internalized public service values.

¹ In contrast to the typology of antecedents applied by Pandey and Stazyk (in press), this paper does not distinguish between institutions and organizations, the latter being a particular category of the former, according to the definition by Peters (2000). This view is supported by the presence of a large body of literature on organizations as institutions (see Scott 2001).

Next to institutional (and organizational) antecedents, Pandey and Stazyk (in press) also distinguish socio-demographic antecedents. These have been studied as control variables in multivariate studies (see for an overview, Pandey and Stazyk, in press) or as independent variables (DeHart-Davis et al 2006; Perry 1997; Camilleri 2007; Bright 2005). Gender, age, education, minority status or political affiliation have been among the most frequently cited demographic characteristics which are related to public service motivation levels. Education has probably the most robust correlation with public service motivation (Pandey and Stazyk in press). After all, being an important social institution, education plays an important socializing role in public service motivation development (Perry 1997 & 2000). Next to education, age is also an important demographic antecedent of public service motivation. The idea of generativity (Pandey and Stazyk in press), with elder people being more inclined to 'give' to the future generations could be a valuable explanation for this phenomenon. Camilleri (unpublished) also offers some explanations, as elder people could have reached a higher stage of moral development (Perry 1997; Kohlberg 1973) or have a higher stock of social capital (Putnam 2000) and therefore have a different view on public service motivation compared to younger generations. Concerning the influence of gender on public service motivation, the current evidence is mixed according to Pandey and Stazyk (in press). Only with regard to one dimension, compassion, the evidence points to the same finding, as women consequently report higher compassion levels. This could be attributed to the nurturing role due to a different gender socialization (Bright 2005; DeHart-Davis et al 2006).

2.2. Institutionalized public service values

Public values or public service values are those values which belong to the core of the public sector. Although some disagreement exists to what extent public values differ from those found in the private sphere (Van der Wal and Huberts 2007), most researchers agree on

such a distinct set of values attached to public service in a broad sense (not necessary limited to government). These values can be classified in various ways. Beck Jorgenson and Bozeman (2007) group them based on their place in the public values universe and the relation they have with other actors in this universe. Van der Wal and Huberts (2007) distinguish between moral values and instrumental values, without relating these types to a particular type of organization.

As stated above, public values are inextricably interwoven with public service motivation. According to public service motivation theory (Perry and Vandenabeele, in press; Vandenabeele 2007b; Perry 2000), public values are a key component in explaining public service motivation development. Public values are embedded in public institutions, being basic principles upon which these institutions are founded. In this institutional perspective one can see the empirical relationship between public values and public service motivation, as internalization of these values, as institutional values, engenders public service motivation (Vandenabeele 2007b; Perry and Vandenabeele in press). Therefore, public service motivation reflects up to a certain extent public service values (Vandenabeele et al 2006), although, according to Maesschalck et al (in press), the original conception of public service motivation as developed by Perry (1996) was in particular focused upon values referring to external accountability to society, other public service values focusing on ‘the rules of the game’ or integrity of governance values ‘are much less emphasized (Maesschalck et al in press : 162)’. However, Vandenabeele (2008), adding one additional dimension specifically focused upon ‘democratic governance’ to the empirical concept, partly remedies this criticism.

2.3. Degree of publicness

Linked to the idea of public values is the concept of 'publicness'. Within public administration research, it is common practice to put organizations on a public-private continuum. Often, this approach is based upon various sub-dimensions, such as ownership, funding or mode of social control (Perry and Rainey 1988), which are clear-cut dimensions and serve empirical purposes. However, the case is not always so clear-cut. Antonsen and Jorgensen (1997) also demonstrated that public organizations differ in their degree of 'publicness' and that there are several reasons why organizations are considered public : the services are of general public value, the services should be provided by an authoritative organization, the services should be provided by a disinterested organization, the services should be free for citizens (because they are too expensive or because the general norm is that they should be), or the services are part of social welfare.

A high degree of publicness has been linked to various organizational characteristics (Antonsen and Jorgenson 1997), which can be used to identify public organizations. In this paper, because of space and resource constraints, we limit ourselves to the single most important characteristic to determine the degree of publicness, namely the organizational task. The organizational task or the organizational purpose (mission) is one of the earliest distinctions mentioned in solving the publicness puzzle (Dahl and Lindblom 1953; Downs 1967; Lindblom 1977) and is still considered to the most important one today. Vandenabeele (in press) demonstrated that degree of publicness, in particular the organizational task, was related to the effect of public service motivation on employer attractiveness with prospective employees.

2.4. Hypotheses

Based upon the review of these various concepts, a number of hypotheses are derived. These will be tested later in this paper.

H1 : Employees at an organizational institution which organizational task refers to a high degree of publicness, will exhibit a higher level of public service motivation

H2 : Employees who have a higher perception of public values at their organizational institution, will exhibit a higher level of public service motivation[...?]

3. Methods

In order to test these hypotheses, they will be matched with the findings of an empirical dataset. In the following section, first, the survey in which this dataset was collected is elaborated upon below. Second, the empirical measurement of the conceptual variables as well as other control variables will be discussed. Finally, some thought is given to the statistical method that is used in this paper.

3.1. Survey data

The data upon which this paper is based were collected in a survey among Flemish state civil servants of the central ministries and some associated agencies. Therefore, the organizational missions were limited, with missions exclusively reserved for the federal level not included (foreign policy, police and military missions, ...). Next to these, some parts of the state government also chose not to be involved in the sample, because they feared the consequences of a recent reorganization, because they had recently administered a survey themselves or for no explicit reason. Nevertheless, most of the central ministries (approximately 75% of the workforce) and a number of agencies engaged themselves, through explicit consent of their chief executive officers, to take part in this survey. Within these

organizations, however, employees of different level and with different job tasks were involved.

The survey itself was an internet-based e-mail survey. As all employees of state government (even the lowest levels) have access to the internet, the risk of coverage error was reduced. A drawback is that web-surveys return in general a lower response rate compared to mail-surveys (Crawford et al 2001). Couper (2000) attributes this to the lack of tried and tested techniques for increasing response, the discouraging impact they have on subjects who are less familiar with the internet or confidentiality issues raised by electronic communication.

In order to increase absolute responses and response rates, an number of strategies were applied. First, the population was sampled on a census-base (entire population), increasing the sample to the maximum available. Second, both the technology and the design of the survey were chosen to secure maximum technological and psychological accessibility, reducing the perception of burden (Crawford et al 2001). Potential respondents received an e-mail in which they were asked to participate in the survey. In this e-mail, the explicit consent of their chief executive officer was mentioned and in most cases these e-mails were announced by the chief executive officer. The e-mail also announced that respondents would be entered in a lottery in which they could win a € 20 voucher (Porter and Whitcomb 2003). Clicking an URL, they accessed the survey located on a web site. No identification was asked to preserve anonymity and increase response rates (Crawford et al 2001). The survey was put on a single web page (plain HTML) to reduce the technological threshold (no cookies or other browser applets required), as this does not influence response rates (Peytchev et al 2006). Next to this, the survey was also 'humanized' (Tourangeau et al 2003) as much as possible by displaying photographs of the researchers. Third, one week after the first e-mail, a reminder was sent out. Due to the constraints of anonymity, this was sent out to the entire sample,

asking whether they had replied to the survey. Four weeks after the first e-mail, the survey was closed.

When reviewing the data quality, suspicious entries (doubles, inconsistent or monotonous response patterns) were deleted and 3506 usable responses were retained. Response rates for the organizations varied from 21 % to as much as 90 %. As table 1A demonstrates, the bulk of the data were collected with civil servants of the core ministries (which were at the time the largest group of civil servants in our surveyed population). The average respondent was 42 years old at the time of the survey and had been in service for just over 11 years. Table 1B shows that that both sexes are more or less equally represented in the survey. When looking at the grades (grade A requires a master degree or equivalent; grade B requires a bachelor degree; grade C requires high school education and grade D requires no education), most of the respondents belonged to grade A, while the smallest group belonged to grade D. This could be evidence of a bias towards grade A, especially because higher level employees tend to participate more in web-surveys (Couper et al 1999). However, due to the permanent changes in the state government, no accurate population data are available. Nevertheless, because representative sampling is less important in some instances (Krosnick 1999) and correcting for demographic biases demonstrates very little impact in the case of correlational analyses (Brehm 1993), no weighting procedure was applied.

TABLE 1A : *Response rates in the various organizations*

	E-mails sent	Respondents	Response rate
Core ministries	9492	3096	.33
Agency on educational infrastructure	72	26	.36
Agency on Flemish tourism	205	44	.21
Agency on public collection and processing of waste	393	210	.53
Agency on regulating the energy market	20	18	.90
Institute for scientific and technological development	141	47	.33
Institute for agricultural research	N.K.*	66	N.K.*

* N.K. : Not known

TABLE 1B *Some demographic statistics*

Variables	N	%
Gender		
Male	1813	51.71
Female	1691	48.23
Missing	2	.06
Level		
A	1419	40.47
B	716	20.42
C	1008	28.75
D	326	9.30

3.2. Measures used in this study

The concept of public service motivation was first described by Perry (1996), who identified four dimensions of public service motivation, ‘Attraction to politics and policy making’, ‘Public interest’, ‘Compassion’ and ‘Self-sacrifice’. Later research (Coursey et al 2008; Coursey and Pandey 2007; Vandenabeele 2008; Bright 2007; Camilleri 2006 & 2007) more or less confirmed this factorial structure, although in some cases subtle or more marked differences could be noted. Vandenabeele (2008) found an additional dimension ‘Democratic governance’ and renamed ‘Attraction to politics and policy making’ to ‘Politics’, whereas Coursey et al (2008) left out the dimensions ‘Attraction to politics and policy making’ altogether. Coursey and Pandey (2007) in their turn did not include the dimension ‘Self-sacrifice’. This paper will use the typology by Vandenabeele consisting of the dimensions ‘Attraction to politics’, ‘Public interest’, ‘Compassion’, ‘Self-sacrifice’ and ‘Democratic governance’. The general procedure for the development of this measurement scale was to split the data in two random datasets of equal size, of which one acted as the set in which the model was calibrated, and another one in which the model was cross-validated to avoid capitalization on chance (MacCallum et al 1994). The model itself was analyzed by means of a Diagonally Weighted Least Squares estimation, to account for the ordinal character of the data (Jöreskog 2005). The specifics of the factor analysis used in the development of this

measurement scale are not considered here, as they are described thoroughly elsewhere (Vandenabeele 2008).

Although public service motivation consists of a number of dimensions, this paper only considers an aggregate instrument of public service motivation, not the individual dimensions, in order to limit the size of the analysis. This instrument involves averaging the score on the set of public service motivation items, scored from 1 to 5 (1. ‘I totally disagree’ to 5. ‘I totally agree’; or the inverted scores, if applicable). Although this measure provides less information on the individual dimensions of public service motivation, an aggregate approach has been frequently applied in public service motivation research (Brewer and Selden 2000; Naff and Crum 1999; Kim 2005; Lewis and Frank 2002). In total, 18 items, relating to five dimensions of public service motivation found by Vandenabeele (2008), are averaged (standardized Cronbach’s α .81).

TABLE 2 : *Public service motivation measurement scale (Vandenabeele 2008)*

Politics
I do not care about politicians 'Politics' is a dirty word
Public interest
To me, before anything, good civilians should think of society Serving the public interest is an important drive in my daily life (at work or outside work) I voluntary and unselfishly contribute to my community To me, serving the public interest is more important than helping individual persons
Self-sacrifice
Much of what I do is for a cause bigger than myself I am prepared to make enormous sacrifices for the good of society I feel people should give back to society more than they get from it Making a difference in society means more to me than personal achievements
Compassion
To me, helping people who are in trouble is very important I seldom think about the welfare of other people whom I don't know personally Without solidarity, our society is doomed to fall apart Fighting poverty is an important duty of government To me, patriotism includes seeing to the welfare of the others
Democratic governance
Everybody is entitled to a good service, even if it costs a lot of money Even in the case of major disasters, public service should be maintained It is important that public servants account for all the costs they make

In order to measure the presence of public values within the organizational institution, this paper draws upon two sets of variables. Both sets refer to the relational systems within the institutions and thus are part of the institutional value pattern (Scott 2001).

First, respondents were asked to what extent they discussed a set of public service values with their direct supervisors. These values correspond to the five dimensions distinguished in the public service motivation construct in the previous chapter : ‘Supervisor Politics’ , ‘Supervisor Public Interest’ , ‘Supervisor Compassion’ , ‘Supervisor Self-sacrifice’ and ‘Supervisor Democratic Governance’ (table 3A). As is the case with the public service motivation instrument, these items are measured on a five-point scale (from 1. ‘I totally disagree’ to 5. ‘I totally agree’). However, they are not the same items that were used in the public service motivation instrument. Many respondents would find it impossible to comment on such detailed items as used in the public service motivation instrument on behalf of their supervisor. After all, measuring supervisor public service motivation was not the intention of this instrument. The aim was to give an overview of the values promoted by the supervisor, as a reflection (of the perception) of the institutionalized public service values within this organization. In the case of ‘Supervisor Public Interest’ , ‘Supervisor Compassion’ and ‘Supervisor Self-sacrifice’ , a single item is used to measure the value. In two other cases, two or more items are used. In the case of ‘Supervisor Democratic Governance’ , the internal consistency of this scale is sufficient, as the Cronbach’s α is .71. In the case of ‘Supervisor Politics’ , the α of .47 is below the suggested lower boundary of .60. However, in order to have an as broad as possible sketch of the institutional value, even if it lacks some internal consistency, the scale will remain in the analysis.

TABLE 3A : *Leadership promotion of public service values*

Supervisor Politics	
VAR 137	My direct supervisor reminds me in our discussions about the political sensitivity of our job
VAR 145	My direct supervisor reminds me in our discussions about the influence we exert on public policy
Supervisor Public Interest	

VAR 140	My direct supervisor reminds me in our discussions about our contribution to the public interest
Supervisor Compassion	
VAR 147	My direct supervisor reminds me in our discussions about the importance of compassion to fellow citizens who have a hard time
Supervisor Self-sacrifice	
VAR 149	My direct supervisor reminds me in our discussions about the necessity to forgo my own interests
Supervisor Democratic Governance	
VAR 139	My direct supervisor reminds me in our discussions about the importance of equal treatment
VAR 142	My direct supervisor expects me to account for my actions
VAR 148	My direct supervisor reminds me in our discussions about the importance of honesty and trustworthiness

A similar set of items was used to measure the extent to which co-workers communicate their orientation to the respondent. This instrument, just as is the case with supervisor values, is a reflection (of the perception) of the institutionalized public service values. Similar to the leadership values, these also refer to the five dimensions of the public service motivation : ‘Co-worker Politics’, ‘Co-worker Public Interest’, ‘Co-worker Compassion’, ‘Co-worker Self-sacrifice’ and ‘Co-worker Democratic Governance’. Again, ‘Co-worker Politics’ and ‘Co-worker Democratic Governance’ were measured by means of a multi-item scale. Just as with the supervisor values, ‘Co-worker Democratic Governance’ demonstrated a sufficient α of .71, whereas the ‘Co-worker Politics’ scale α was only a mere .21. Despite this result, both scales were retained in the analysis.

TABLE 3B : *Co-worker promotion of public service values*

Co-worker Politics	
VAR 123	Among colleagues, politics are a frequently discussed topic
VAR 126	My co-workers remind me in our discussions about the influence we exert on public policy
Co-worker Public Interest	
VAR 132	My co-workers are convinced of our contribution to the public interest
Co-worker Compassion	
VAR 129	My co-workers are convinced of the importance of compassion to fellow citizens who have a hard time
Co-worker Self-sacrifice	
VAR 136	My co-workers are convinced that we have to forgo my own interests in our job
Co-worker Democratic Governance	
VAR 127	My co-workers are convinced of the importance of equal treatment
VAR 134	My co-workers agree on our accountability for our actions
VAR 125	My co-workers agree that honesty and trustworthiness are important

Degree of publicness is a multidimensional concept. However, in this paper, due time and resource constraints, it is limited to one dimension : organizational task. Based upon their task, organizations are brought together into nine categories of organizational tasks. Next to a mixed task category, which will act as the reference category in the dummy variable analysis, organizations are focused on particular missions, which all refer to a different degree of publicness (as stated in Antonsen and Beck Jorgenson 1997 and based upon the results of Vandenaabeele, in press). The organizational tasks referring to a high degree of publicness are ‘youth and culture’, ‘education’ and ‘healthcare’, whereas ‘agriculture’, ‘governance and management’ and ‘infrastructure’ refer to a low degree of publicness. The remainder of categories refers to what we will consider a medium degree of publicness (‘environmental issues’ and ‘science’).

Another set of variables at the organizational level are more structural elements. These concern formal roles, such as the tenure or the grade at which one is employed (A to D, with D being the lowest grade).

Finally, a number of other antecedents, both institutional and demographic, are incorporated in the analysis as control variables. First, gender and age, measured by year of birth, are included as pure demographic antecedents (although, one could argue over gender, as it can be considered to be an institutional variable). Second, both the level of education and the educational field are included. These are often used as demographic variables, but one could consider them to be institutional as the educational system, and the various organizations it is comprised of, could be considered to be institutional. The same could be argued about the political preference, which is also included. Finally, a pure institutional antecedent is whether both parents have been or are employed in the public sector.

3.3. Statistical techniques

The model used in the analysis of this paper is a multiple regression model. To evaluate the differential effect of the various independent variables, it is developed in a hierarchical way. A hierarchical regression analysis enables to assess the effect of the independent variables which are entered in each step of the analysis. In order to do so, the additional R^2 , found above the R^2 of the previous step, is statistically tested by means of an F-ratio (Hatcher and Stepanski 1994). Each step of the analysis, independent variables are entered in sets. These sets are based upon their relation to a particular conceptual variable. The order in which the sets are entered in the analysis should be should reflect the presumed causal priority (in particular the temporal ordering) and the research relevance (Cohen and Cohen 1983).

4. Analysis

As the number of variables is rather large because of the abundance of dummy variables, no correlation table is provided. Correlation tables provide little information on dummy variables, as it is only possible to assess some kind of correlation between a dummy variable and an interval variable (when the point bi-serial correlation is equivalent to the Pearson correlation). As many variables are dichotomous, much of the information (in the case of ‘dummy vs. dummy’) would be meaningless. Instead, we directly proceed to the regression model.

TABLE 4 : Hierarchical regression model with public service motivation as the dependent variable

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
	β	β	β	β	β	β
	(B)	(B)	(B)	(B)	(B)	(B)
Year of birth	-.01 *** (-.15)	-.01 *** (-.17)	-.01 *** (-.17)	-.01 *** (-.19)	-.01 *** (-.18)	-.01 *** (-.18)
Gender	-.10 *** (-.11)	-.11 *** (-.12)	-.11 *** (-.12)	-.11 *** (-.12)	-.10 *** (-.11)	-.09 *** (-.10)
Tertiary education	.14 *** (.15)	.11 *** (.11)	.12 *** (.12)	.05 (.05)	.09 * (.10)	.08 * (.09)
Secondary education	.04 (.04)	.04 (.03)	.04 (.04)	.01 (.01)	.02 (.02)	.02 (.02)
Parents	.06 * (.04)	.06 * (.04)	.06 * (.03)	.06 * (.03)	.05 * (.03)	.04 (.02)
Science study	.03 (.03)	.02 (.02)	.01 (.01)	.01 (.01)	.00 (.00)	.00 (.00)
Art study	.04 (.02)	.02 (.01)	.02 (.01)	.02 (.01)	.01 (.00)	.01 (.01)
Language study	.12 ** (.05)	.09 * (.04)	.09 * (.04)	.08 (.03)	.05 (.02)	.04 (.02)
(Health-)care study	.02 (.01)	.00 (.00)	.00 (.00)	.00 (.00)	-.01 (-.01)	-.02 (-.01)
Social science study	.13 *** (.09)	.09 ** (.07)	.09 ** (.07)	.10 ** (.07)	.07 * (.05)	.06 (.04)
Management study	-.05 * (-.04)	-.05 (-.04)	-.04 (-.03)	-.04 (-.03)	-.04 (-.03)	-.03 (-.03)
Law study	-.01 (-.01)	-.01 (-.01)	-.01 (-.01)	-.03 (-.01)	-.02 (-.01)	-.04 (-.02)
Social democrat		.25 *** (.23)	.25 *** (.23)	.25 *** (.22)	.22 *** (.21)	.19 *** (.18)
Green		.27 *** (.21)	.26 *** (.21)	.26 *** (.20)	.23 *** (.19)	.20 *** (.16)
Christian-democrat		.12 *** (.11)	.12 *** (.11)	.12 *** (.11)	.09 *** (.09)	.07 ** (.08)
Right		.08 * (.05)	.08 * (.05)	.07 * (.04)	.06 * (.04)	.04 (.03)
Extreme-right		-.15 *** (-.07)	-.15 *** (-.07)	-.14 *** (-.06)	-.15 *** (-.07)	-.14 *** (-.07)
Other		.11 ** (.05)	.11 ** (.05)	.11 ** (.05)	.10 * (.05)	.07 (.03)
Blanco		-.05 (-.02)	-.05 (-.02)	-.05 (-.02)	-.08 (-.03)	-.08 * (-.04)
Youth and culture			.01 (.01)	.02 (.01)	.03 (.02)	.01 (.01)
Infrastructure			.04 (.03)	.04 (.03)	.04 (.04)	.04 (.04)
Governance			.05 (.02)	.04 (.02)	.04 (.02)	.06 (.03)
Healthcare			.02 (.02)	.04 (.03)	.04 (.03)	.03 (.02)
Agriculture			.02 (.01)	.03 (.02)	.03 (.02)	.04 (.03)
Science			-.06 (-.02)	-.08 (-.03)	-.07 (-.03)	-.07 (-.02)
Environmental			.05 * (.05)	.05 * (.05)	.03 (.02)	.02 (.02)
Education			.02 (.02)	.03 (.02)	.01 (.01)	.01 (.01)

Tenure				.00	.00	.00
				(-.04)	(-.03)	(-.04)
Grade A				.11 **	.08 *	.06
				(.12)	(.09)	(.07)
Grade B				.01	-.01	-.02
				(.01)	(-.01)	(-.02)
Grade C				.06 *	.06 *	.07 *
				(.06)	(.07)	(.07)
Supervisor politics					.02 ***	.01 *
					(.07)	(.04)
Supervisor public interest					.04 ***	.02 **
					(.11)	(.06)
Supervisor compassion					.02 **	.00
					(.05)	(.00)
Supervisor self-sacrifice					.00	.00
					(.00)	(-.01)
Supervisor democratic governance					.04 **	.01
					(.07)	(.02)
Co-worker politics						.05 ***
						(.13)
Co-worker public interest						.04 ***
						(.09)
Co-worker compassion						.05 ***
						(.11)
Co-worker self-sacrifice						.02 *
						(.04)
Co-worker democratic governance						.03 *
						(.05)
N	3504	3504	3504	3490	3413	3356
R ²	.067	.129	.131	.140	.192	.245
Adjusted R ²	.064	.124	.124	.132	.184	.236
F-model	21.01 ***	27.10 ***	19.43 ***	18.11 ***	22.34 ***	26.21 ***
F-ratio	-	150.46 ***	1.12	26.37 ***	184.50 ***	207.00 ***

* p<.05; ** p<.01; *** p<.001

Table 4 provides the information on the hierarchical regression analysis. In the first step of the model, demographic variables referring to age, gender, parental situation and education are entered. These variables are temporal prior to the later ones (in particular those referring to employment in the public sector), and therefore should be entered first (Cohen and Cohen 1983). The results show that year of birth and gender (being) has a negative effect on public service motivation, whereas both parents being employed in the public sector and the educational level (having had a tertiary education) are positively related to public service motivation. The effect of educational domain, with a general education as the reference group, is mixed (a language or a social science study have a positive effect; a management study has

a negative effect). This model significantly explains 6.4 % of the variance (adjusted R^2) in public service motivation.

In the second step, political preference is entered to the equation. Although the temporal order with the other independent variables could be argued (political preference is not stable and could have changed after entering the service), it is entered here because this is not the most important focus of the research. The results demonstrate that, compared to the reference group of not-voters, only a preference for the extreme-right party results in a negative effect on public service motivation. Every other preference, except no preference at all, contribute positively to individual public service motivation. Adding this set of variables results in an increase of 6% of the adjusted R^2 to .124. Compared to the previous step, this is a statistical significant increase.

The third step enters a set of dummy variables which describe the organizational task, in order to assess the effect of a high versus a low degree of publicness. Compared to the reference category (those organizations with a mixed mission), only employees of an organization which is focused on environmental issues, report to have a significant higher level of public service motivation. This finding does not result in a significant increase of the adjusted R^2 (only .0004).

The fourth step adds other features of the organizational status of the respondents to the regression. These variables are considered to represent the structural component of their role within the organization. Both organizational tenure and grade join the other variables already in the model. This results in a significant increase of the adjusted R^2 , adding up to an R^2 of .132. Tenure does not demonstrate any effect and compared to the reference group of grade D employees, grade A and grade C employees have a higher level of public service motivation.

In the fifth and sixth step, the impact of institutional public values is assessed. By entering the perception of value presence with direct supervisors (fifth step) and co-workers (sixth), this effect can be tested. Adding the supervisor values, the adjusted R^2 increases to .184, with every value but 'Self-sacrifice' resulting in a positive effect on public service motivation. Adding co-worker values, the adjusted R^2 rises further to .236. Each the co-worker values referring to the dimensions of the public service motivation has a positive impact on the individual public service motivation.

5. Discussion

First one needs to review this analysis against the backdrop of the hypotheses which were stated earlier in this paper. Hypothesis H2 is corroborated, with being exposed to public values by co-workers and direct supervisors seems to socialize individuals into internalizing public values themselves, engendering a higher degree of public service motivation. With an additional R^2 of over .10, this effect has a substantial effect size. Both supervisor and co-worker seem to have an effect on the internalization of public service motivation. With regard to the effect of direct supervisors, an effect is found for every value, except 'Self-sacrifice'. This makes sense, because the unequal power balance between employees and supervisor in a labor relationship could prevent a socializing effect for this dimension; employees may not 'learn' self-sacrifice from their supervisor because it does not fit within the general idea of an employment relationship (in particular because an effect for this dimension is found with the co-workers, with whom they have another, less exchange-based relationship). The socializing effect of co-workers is found over all five dimensions. Some of the explained variance is shared with the effect of supervisors, as the number of its significant parameters is reduced from four to two when adding the effect of co-workers. This could point to an institutional

effect of the entire immediate relational system, as the effect of co-workers and supervisors seems to be related.

Hypothesis H1, concerning the degree of publicness embedded in the organizational task, was however rejected. Despite the slightly significant result for organizations concerned with environmental issues, no systematic effect of high publicness organizations compared to low or medium publicness organizations was found. Apparently, no additional socializing effect takes place in this type of organization compared to other organizations when the organizations are grouped according to this typology. This finding could be due to the fact that the typology which has been based upon a Danish research (Antonsen and Beck Jorgenson 1997) does not deliver in a Flemish situation. Nevertheless, as this typology has demonstrated its validity in a Belgian and Flemish context (Vandenabeele in press), another explanation should be sought. It may be possible that the organizational level (being a ‘meso’-level) is too broadly defined and that socializing effects unfold themselves at micro-level². This would lead us to conclude that some kind of (not necessarily direct) interaction is needed before an institutional socialization effect can be found. Theoretical and empirical insights about how transformational leadership needs to translate the mission towards employees at lower levels in the organization (Shamir et al 1993; Dvir et al 2002) seem to support this finding.

Grade, being another organizational variable, exerts a smaller, but still significant effect. Compared to grade D, which is the lowest grade in the Flemish administrative system, a positive effect is found for grades A and C, whereas B (which concerns mainly employees with bachelor degrees) does not have a positive effect. The effect of grade on public service motivation therefore is not linear, although grade D seems to have the lowest impact and grade A to have the highest impact.

² Especially since the explained variance of public service motivation through the variable ‘organization’ (over 20 different organizations) is less than 3 %, this explanation gains credibility.

Other institutional variables, such as education or family, also provide support for an institutional theory of public service motivation. The positive effects on public service motivation of public employment of both parents, having a tertiary degree (bachelor or master's degree) or having a degree in social sciences or languages (as well as the negative effect of a management education) all increase the credibility of an institutional theory of public service motivation. Even gender roles could be considered as an institutional effect, as being part of the female part of society seems to have a negative impact on public service motivation. Nevertheless, it could be that comparing individual dimensions of public service motivation over gender shows different results. However, as this was not the main focus of this study, it is not further discussed here.

Another interesting finding is the effect of political affiliation. Compared to non-voters (an anti-political group), respondents voting for democratic parties is positively related to public service motivation. Extreme-right voters demonstrate a lower level of public service motivation. The effect seems to be moderated the point one occupies on the leftwing-rightwing continuum, as the standardized regression parameters for leftwing voters are higher than those situated at the rightwing end. To the extent that political affiliation can be considered to be an institutional variable, it fits with the institutional framework of public service motivation. Leftwing political institutions are related stronger to ideas as the general interest and society as a collective endeavour, whereas rightwing parties further individualism and reduced government interference. However, political affiliation could also be a consequence of public service motivation and internalization of public values. Therefore, without further research, one cannot voice a definitive conclusion on this matter.

Finally, age, measured by year of birth, exerts a significant influence on public service motivation. Older respondents seem to report higher levels of public service motivation, which is in line with most studies reported so far. With the limited data available, one should

conduct further, preferably longitudinal, research before reaching a conclusion on which mechanism, generational difference, generativity or mere organizational socialization, is responsible for this finding

When comparing the differential effect of the various antecedents used in this research, one finds that public service motivation is a complex matter. This complexity reflects the multidimensional socialization trajectory of public service motivation development. Public service motivation has been present partly before entering the service (Vandenabeele in press) and is partly further developed when having entered the service. In this latter part, public values have been demonstrated to play an important role (although it could be argued that this will be the case for the pre-entrance socialization in other institutions).

6. Conclusion

The results of the analysis provide support for an institutional theory of public service motivation. Institutional arrangements inside and outside the public sector appear to influence the development of public service motivation. The combination of these multiple antecedents in a single model demonstrates the complexity of public service motivation as an individual and a societal phenomenon. Various institutions appear to exert an influence on public service motivation development. The results of the analysis also demonstrate the importance of the 'value'-component (and in particular public values and their manifestation at the micro-level) of institutions, whereas structural elements or elements at the organizational level (such as degree of publicness) seem to have less of an influence. However, before one can generalize this finding, further research should elaborate on this and further disentangle the impact of the different institutions. After all, the paper only uses one dimension of the 'degree of publicness concept'.

Despite these interesting conclusions, some limitations rest upon the results of the research in this chapter. First, the conclusions are based upon a cross-sectional database. This is a possible threat to the internal validity of the conclusions. Although this was somewhat remedied by embedding the conclusion in a sound theoretical framework and by controlling for other variables which point to other possible explanations, the danger of a lower internal validity is still looming at the back. Therefore, additional research should be carried out to strengthen these findings, in different environments and with both cross-sectional and longitudinal ways of collecting data. Moreover, also the measurement of the institutional public service values is limited. Only single items, or at best two-item scales were used, providing only a narrow perspective on these values. If sufficient resources are available, future research should incorporate more elaborated scales and may extend the search for institutional values to other levels than the ones used in this research. Nevertheless, the findings presented in this paper provide interesting insights which can help to further develop a public administration theory of public service motivation, especially with regard to the relative importance of pre and post-entrance institutions.

Next to this, the information from this paper can be used to improve public management practice. One important lesson is that, due to complex nature of the socialization process, public service motivation can be harnessed and nurtured at different stages in the human resource management process. As well at the stage of selection and recruitment, but also later on in the organizational career. On the one hand, this can be perceived as a weakness, with public service motivation requiring constant attention and a need for mainstreaming in the management process. On the other hand, it also an opportunity, as one can try to harness it in various processes and employee who initially demonstrate low levels of public service motivation, can still acquire this when already in the organization. Instead of a pass-fail type of competence, it remains a point of enduring interest and effort.

8. References

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