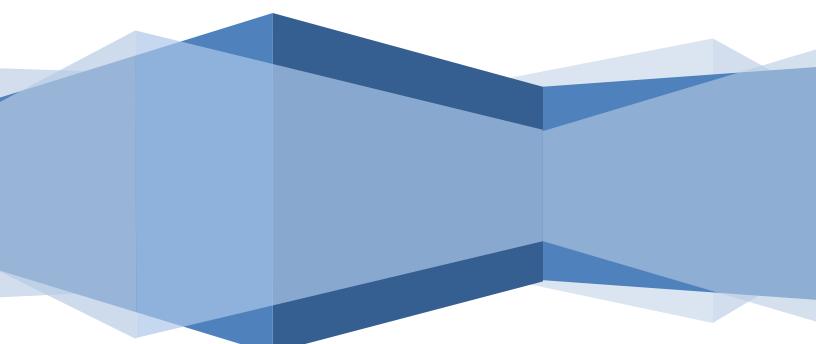
Do Employees Behave Differently in Public- vs. Private-Sector Organizations? A State-of-the-Art Review

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Hayo C. Baarspul MSc



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Author	Hayo C. Baarspul MSc
Date	20 November 2009
Supervisors	Mrs. Prof. Dr. C.P.M. Wilderom
	Mrs. Dr. E. Furtmüller-Ettinger
	Department of Information Systems and Change Management (ISCM)
	School of Management and Government
	University of Twente

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Do Employees Behave Differently in Publicvs. Private-Sector Organizations?

A State-of-the-Art Review

ABSTRACT

Individuals working in public-sector organizations (i.e. civil servants) are often presumed to behave differently from private-sector employees. In this paper, 26 hypothesis-based empirical studies of such public-private comparisons are reviewed; do employees behave differently due to sector? Most of the studies find significant differences at the individual level across the expected direction; accumulation of empirical findings is almost absent to date. Recommendations include 1) the testing of broader models in which sector is only one of a range of variables and 2) the inclusion of theories and methodological sophisti-Behavior.

HAYO C. BAARSPUL MSc

University of Twente The Netherlands

Keywords

Public-private sector comparisons, civil servants, organizational behavior, review paper

INTRODUCTION

A public sector organization is assumed to operate in a different way than a private sector organization. By implication, the attitudes and behaviors of employees of those two types of organizations have been contrasted. Also Public Administration scholars tend to assume that employees across public and private sector organizations behave in significantly different ways. The papers written by Murray (1975) and Rainey et al. (1976) even sparked a line of academic inquiry, addressing the question: in what ways do public and private sector organizations and the behavior of the people they employ differ significantly? In the ensuing years, numerous studies in this line have been published. Most of these studies have been carried out by scholars and practitioners who are rooted in Public Administration; almost no private-sector oriented management-and-organization scholars and journals paid attention to this question.

Various variables have been examined in those scholarly comparisons over the years, ranging from sector and organizational characteristics (e.g. red tape and decision making practices) to individual-level attitudes and behavior.¹ Firmly established by now is the idea that significant *organizational* differences exist between both sectors. By implication, authors have assumed significant differences at the individual level, in both types of organizations. Yet there is (empirical) evidence that, at the individual level, sector does not matter (e.g. Baldwin 1991).

¹ See the revised framework of Rainey (1989): for a comprehensive overview of the scientific evidence concerning the public/private comparison.

Moreover, as already pointed out by both Murray (1975) and Rainey *et al.* (1976), research on public-private comparisons has not been flawless; this study will show that several of the issues they delineated still appear unresolved. Because new sophisticated research on the individual in public/private sector comparisons is important (if only to examine the civil-servant stereotypes), there is a need for a review of the hypothesis-driven empirical studies that have been published in this line of research to date.

In this review study, the empirical evidence on the public-private distinction will be closely assessed, thereby solely concentrating on the role of *individual employees*, including the links with jobs, co-workers and team or departmental/organizational settings. After the following paragraphs, in which the key definitions and methodological approach to this review study are being stated, the author will report in the Results, Discussion and Future Research sections the insights derived from analyzing over two dozen quantitative, hypothesis-driven studies that were explicitly aimed at comparing individuals' behavior across public- and private-sector organizations. The main goal of this paper is to critically examine this set of published empirical studies both in terms of their findings and the methods used. In order to do so, a four-pronged approach is being used: (1) searching the quantitative, hypothesis-driven empirical studies that addressed public-private sector differences at the individual level, (2) analyzing the contents of these articles and the methods that were used, (3) summing up the criticisms regarding the way this research had been conducted, and (4) pleading for more solid and yet practically relevant Organization-Behavioral (OB) research across both sectors.

LITERATURE REVIEW

Public- and private-sector organizations

Over the years, many different interpretations and perceptions have come into play, and clear definitions delineating various types of public and private organizations had not yet been established (Fottler 1981: 2). This was partially attributed to the fact that many dimensions are buried in both concepts; for example, some are based on ownership, others are based on funding or the publics' interest (Perry and Rainey 1988). Most authors on this definitional subject have embraced the idea that organizations can be placed on a continuum in which public- and private-sector organizations make up the ends; and that both types of organizations constitute 'pure' types of organizing.² Since the aim of this study is to offer an accurate review of the systematically derived empirical findings at the individual level of the public-private comparisons obtained to date, the analysis conducted in this study will be limited to these so called pure types: the public bureaucracy and the for-profit business firm.³ The underlying assumption is that the extremes of the continuum will show the differences (if any) very clearly, since they are assumed to be opposites. In the rest of this article, a governmental bureaucratic agency is referred to as a public-sector organization and the for-profit business firm is referred to as the prototypical private-sector organization. Both types of organizations differ fundamentally in terms of their funding, ownership and mode of governance (see Perry and Rainey 1988); the government agency/bureau is publicly funded and owned, while the forprofit enterprise/business firm is in private hands, privately funded and guided or 'controlled' by market forces.4

² See for further reference e.g. Fottler (1981), Perry and Rainey (1988) and Rainey and Chun (2005).

³ Perry and Rainey (1988) refer to these two modes as the 'bureau' and the 'private enterprise.'

⁴ Note that these three characteristics (i.e. funding, ownership and mode of governance) originate from a number of alternative conceptual approaches to the public-private distinction: (1) the economist core approach (emphasizing the distinction between state and markets), (2) the political core approach (emphasizing the amount of political influence), (3) the dimensional approach (combining the two previous approaches) and (4) the normative approach (extending the political approach, by emphasizing public interest) (Bozeman and Brettschneider 1994; Scott and Falcone 1998; Pesch 2008). Apart from these four approaches to public-private sector differentiation (that assume important differences exist between sectors), a so called generic approach can be traced in which the importance of dissimilarities between organizational types is diminished; it assumes that most practices within organizations are essentially the same (Scott and Falcone 1998). By implication, the degree to which individual behavior differes across the two extreme organizational types is assumed to be small.

Two contrasting positions regarding public vs. private modes of organizing can be identified: (1) the idea that "public bureaucracies differ from private business firms in important ways," which has coincided with the "negative views of public bureaucracy in the popular culture" and (2) the antidote, opposing this public-private distinction, thereby denouncing the "harmful and misleading oversimplifications," aiming for "replacing the typologies" by "sound empirical research" (Rainey and Bozeman 2000: 448-449). Rainey and Bozeman concluded that both sides are correct in some respect and incorrect in others, as empirical evidence exists for both positions.

Previous public-private comparisons

Several other authors have reviewed academic studies of public-private comparisons (Rainey *et al.* 1976; Rainey *et al.* 1986; Perry and Rainey 1988; Baldwin 1991; Rainey and Bozeman 2000; Boyne 2002). It was Murray (1975) who sparked a true series of studies with an essay in which he essentially stated that although separate approaches to management science have developed in the public and private sectors, both sectors are facing similar constraints and challenges. Since, in his view, public and private management were converging, both managing and organizing ought to be seen and studied as a generic process (Murray 1975). It was Rainey (Rainey *et al.* 1976) who shortly thereafter offered a contrasting stance. He reviewed many dozens of studies (i.e. various papers and books) that assessed the public-private comparison and concluded that differences persisted in a number of areas, such as management, motivation, objectives and planning (Rainey *et al.* 1976: 242).

In the last 25 years, Rainey (Rainey *et al.* 1986; Perry and Rainey 1988; Rainey and Bozeman 2000) and several others (e.g. Baldwin 1991; Boyne 2002) kept reviewing (mainly empirical) work on public-private differences relating to (public) management issues. In those writings, numerous research issues were raised. They include: (a) the issue of definition, in which it is questioned what the used terms 'public' and 'private' encompass and how they are employed (e.g. Rainey *et al.* 1976; Perry and Rainey 1988), (b) the various perspectives on the public-private distinction (e.g. Bozeman and Brettschneider 1994; Scott and Falcone 1998; Perry and Rainey 1988; Pesch 2008), (c) the issue of representativeness, as some samples consisted of only a few organizations, that were inclined towards certain industries (Rainey and Bozeman 2000) and did not use identical measures (Baldwin 1991), (d) methodological issues related to the use of questionnaires, the response rates and measurement biases, as well as the selected

types of respondents (e.g. Rainey and Bozeman 2000; Baldwin 1991), (e) lack of attention to the external environment, as other variables may account for the effects previously attributed to the public-private distinction (e.g. Rainey *et al.* 1986; Rainey and Bozeman 2000) and (f) whether there are indeed significant differences between the two sectors (e.g. Murray 1975; Rainey *et al.* 1976; Baldwin 1987; Baldwin 1991; Rainey and Bozeman 2000; Boyne 2002). It can be noted that all these serious research issues are reoccurring in a seemingly unproblematic way, while the amount of sector-comparative studies at the individual level seem to be accelerating (Rainey and Bozeman 2000). Even though research attention has been given to differences at the organizational level, such as red tape (e.g. Baldwin 1990; Bozeman, Reed and Scott 1992), organizational politics (Vigoda-Gadot and Kapun 2005) and risk culture (Bozeman and Kingsley 1998), most of the recent empirical research has turned to *individual workers* with respect to how they relate to (various aspects of organizing within) their employers' organization.

Almost a decade ago, Rainey and Bozeman (2000) stated that "by many of the standards that have prevailed in the social sciences, research on public- and private-sector organizations can be considered a success story" (Rainey and Bozeman 2000: 450). This present study will show, however, that this statement does not fully apply to empirical public-private comparisons that focus on the attitudes, values and behavior of *individual* employees. The comprehensive framework of public-private differences listed by Rainey *et al.* (1976), which was slightly revised over the years (see Rainey 1989; Rainey and Chun 2005), mainly focused on organizational attributes and environments, rather than on the individual employees. This lack of attention for the individual level-of-analysis is intriguing since a large part of the current empirical studies regarding the public-private distinction is devoted to the individual. In a review, containing 30 public-private comparisons, Baldwin (1991) observed that almost 50% of his selected studies had hypotheses on sector-specific differences between individuals employed in public and private sector organizations (Baldwin 1991: 6). Yet, as this study's results will demonstrate, *little accumulation of empirical findings* at the individual level has taken place to date.

However, before these results are further elaborated on, attention in the upcoming paragraphs will first of all be given to the criteria that were applied in order to select the set of 26 empirical studies reviewed in this study.

METHOD

In this review-type study, the focus was on individuals' behavior within public-private sector comparisons. Several criteria were applied in selecting the single empirical studies. First, individual-level hypotheses or propositions had to be derived; the authors of the selected comparative studies had to rely on (at least some) previous studies, viewpoints (etc.) in their explicit derivation of their expectations. Hence from the initial database of suitable publications, papers were excluded that did not start with a clear direction in the content of their propositions (e.g. Zeffane 1994; Posner and Schmidt 1996; Macklin *et al.* 2006).⁵ Only those studies with hypotheses or propositions specified in advance and/or reported clearly were incorporated. Falcone (1991), for example, did not report sufficiently clearly to what extent any of the hypotheses were formulated in a particular study, it was not required for all the hypotheses to address the public-private differentiation or for all the hypotheses to address the public-private differentiation or for all the hypotheses to address the public-private differentiation or for all the hypotheses.

A second selection criterion was that the studies had sampled organizations fitting the organizational definition discussed above. Studies were only included if it was explicit that they contained governmental and private for-profit type organizations. Authors who employed a vague public-private definition or who did not somehow indicated which kind of public or private organization they studied were not included in the analysis. For the same reason a few studies were excluded that considered semi-public organizations to be public organizations (e.g. Choudry 1989; Farid 1997). Thus, only those studies were included that had assessed employees within organizations who formed the extremes on the public-private sector continuum.

Thirdly, the studies needed to be quantitative in kind, specifying their methods of data collection and the number of participating subjects. The main reason for this is that an overview of the precise empirical findings obtained to date had to be created (Table 1). Hence, studies were excluded that (1) used qualitative measures such as interviews (e.g. De Graaf and Van der Wal, 2008); (2) were exploratory in nature (e.g. Hammer and Van Tassell 1983; Posner and Schmidt 1987); and/or relevant studies that (3) did not contain any statistical analysis (e.g.

⁵ Given that the earliest studies simply did not have at their disposal many (empirical) publications on which to base their expectations, the author was more lenient in this respect towards those earlier studies than towards studies published in the 1990's and 2000's.

Bowman 1976; Nowlin 1982). Moreover, some initially selected studies were not reviewed if sector could not be determined (e.g. Nalbandian and Edwards 1983: education; Frank and Lewis 2004: 'industry'), thereby including non-public or non-private sector employees in their so called public and private subsamples. Clearly, 'contaminated' samples needed to be avoided in which private or hybrid sector employees were inadvertently part of a so called public-sector sample and vice versa.

Fourthly, the selected studies had to focus explicitly on a public-private comparison of individuals' behavior within organizations (including work-relevant attitudes or attributes). Therefore only those studies were analyzed which focused on sector as an independent variable. Not included were papers examining the public-private distinction with organizational characteristics such as information systems (Bretschneider 1990; Rocheleau and Wu 2002), decision-making practices (Nutt, 1999; Nutt, 2000) or HR management (Boyne et al. 1999; Budwar and Boyne 2004; Poór et al. 2009). Also excluded were publications on organizational attributes that were measured by surveying individual employees, for example in the case of 'managers [who] were asked to react to statements regarding their organization and the administrative procedures with which they work' (Bozeman and Kingsley 1998: 113). As a result, public-private comparisons were excluded that focused on attributes of the organization through individual assessment, such as 'perception of organizational politics' (Vigoda-Gadot and Kapun 2005), 'ethical climate' (Wittmer and Coursey 1996), 'red tape' (e.g. Baldwin 1990; Bozeman et al. 1992; Pandey and Kingsley 2000), 'formalization' and 'organizational justice' (Kurland and Egan 1999), 'organizational values' (Van der Wal et al. 2008), 'goal clarity' (Lan and Rainey 1992) or 'risk culture' (Bozeman and Kingsley 1998). Finally, not included either were individual-themed studies that used the public-private comparison as a moderator variable (e.g. Flynn and Tannenbaum 1993) or as a variable of secondary importance (see, for instance, Silverthorne (1996) or Kuehn and Al-Busaidi (2002) in which the public-private distinction was used to report on cultural differences between nationals and foreigners).

After selecting the individual-level studies, they were categorized into four separate groups: (1) research relating to individual employees (e.g. his/her own generic values); (2) the individual relating to his or her job (e.g. job values or satisfaction with his/her work); (3) the individual relating to the team (e.g. (social) cohesion or social loafing); and (4) the individual relating to the organization (e.g. his/her commitment to the organization): resulting in Table 1.

Table 1: Empirical differences at the individual level within public- and private-sector organizations

Author (Year) Dependent Variable(s)		Sample Type and Size	Significant Difference	Main Findings				
Individual related								
Lyons <i>et al.</i> (2006)	General values	231 public sector and 121 private sector employees	-	No differences were reported on general values between the public and the private sector.				
Nutt (2006)	Risk assessment	134 public sector and 103 private sector middle managers	+	Public sector managers are prepared to take more risks than private sector managers; organizational culture did not mediate this relationship. Moreover, both types of managers tend to use different decision-making foci.				
Becker and Connor (2005)	Personal values	401 public sector and 477 private sector managers	+ and -	With length of tenure, public and private sector managers differ more on values (i.e. they become less similar). In addition, more similarities exist when younger managers from both sectors are compared; older managers between both sectors share less similarities.				
Stackman <i>et al.</i> (2005)	Terminal and instrumental value systems	422 public sector and 446 private sector managers	+ and -	Five value systems (out of the hypothesized seven) diff between public and private sector managers.				
Bogg and Cooper (1995)	Occupational stress	1056 private sector and 557 public sector executives	+	Compared to private sector managers, civil servants have worse mental and physical health. For older employees, intrinsic job factors are the main contributors to these effects.				
Posner and Schmidt (1982)	Personal values	80 public sector and 80 private sector employees and managers	+ and -	Although some differences were found, public sector employees and private sector employees are, on average, more alike than they are different in terms of their personal values.				
Belante and Link (1981)	Risk aversion	3643 public and private sector employees	+	Employees who score high on risk aversion have a higher probability of choosing public sector employment compared to employees working in the private sector.				
Barton and Waldron (1978)	Risk aversion	96 public sector and 118 private sector middle managers	-	Contrary to the expectations, public sector managers are not less risk averse than private sector managers.				
Job related	•	1						
Buelens and Van den Broeck (2007)	Work motivation	409 public sector and 3314 private sector employees and managers	+	Civil servants are less intrinsically and extrinsically (i.e. money) motivated. Civil servants are more motivated by support from the environment. Yet, hierarchical level seems to be more of a motivation than sector.				
Lyons <i>et al.</i> (2006)	Work values	231 public sector and 121 private sector employees	+ and -	Public sector workers valued altruistic motives higher while private sector workers are more interested in prestigious work. No differences are observed between the two groups on extrinsic and social work values.				
Houston (2000)	Motivational factors	101 public sector and 1356 private sector managers and employees	+	Three out of four tested variables differ. Public sector employees place less emphasis on higher pay (1), but value job security (2) and work that is important (3) higher than private sector employees. No differences were found on chances for promotion (4).				
Jurkiewicz <i>et al.</i> (1998)	Motivational factors	296 public sector and 333 private sector employees and supervisors	+	Public sector supervisors and employees differ from private sector supervisors and employees; both groups have other preferences towards the motivational factors that they find important.				
Karl and Sutton (1998)	Job values	47 public sector and 170 private sector employees and supervisors	+ and -	Public sector employees rate interesting work higher. Private sector employees score higher on wages, empathy and "feeling 'in' on things." Job security is valued equally high in both sectors.				
Bogg and Cooper (1995)	Job dissatisfaction	1056 private sector and 557 public sector executives	+	Public sector managers are less satisfied with their work than private sector managers. This relationship is moderated by organizational climate.				
Gabris and Simo (1995)	Motivational factors	42 public sector and 32 private sector employees	-	There are no differences between public and private sector employees in terms of what they indicate to need the most.				
Khojasteh (1993)	Motivational factors	362 public and private sector employees	+ and -	Four out of twelve motivational factors differ between sectors in terms of its importance; five out of twelve factors differ in relative dissatisfaction.				

Author (Year)	Dependent Variable(s)	Sample Type and Size	Significant Difference	Main Findings				
Maidani	Motivational	175 public sector and	+ and -	Public sector employees place a higher value on extrinsic				
(1991)	factors	172 private sector employees		factors of motivation. There are no differences reported for intrinsic motivational factors.				
Wittmer (1991)	Reward pref. a. Job security b. Status and prestige c. Pay and ethics	92 public sector and 62 private sector managers	+ and -	Public sector managers rate job security lower than private sector managers, and they prefer ethics above pay. Private sector managers prefer pay above ethics. There are no differences between public and private sector managers for status and prestige.				
Steel and Warner (1990)	Job satisfaction	480 public sector and 4029 private sector employees	+	Public sector employees show a higher level of satisfaction than their private sector counterparts.				
Baldwin (1987)	Job security	130 public sector and 104 private sector managers (middle and upwards)	+	Public sector managers experience greater job securit than private sector managers. However, sector only a counted for a modest amount of variation, and other riables may also have a significant impact on job secu				
Solomon (1986)	Satisfaction	60 public sector and 60 private sector top managers	+	Public sector managers report lower levels of satisfaction in six out of six tested scales, which related to both perceived organizational climate and job characteristics.				
Rainey (1983)	Work satisfaction	150 public sector and 125 private sector middle managers	+ and -	Public middle managers show lower scores in two out of five dimensions of work satisfaction: promotion and co- workers. There were no differences in the dimensions pay, work and supervision.				
	Motivation		-	No differences are reported between both sectors.				
	Job		-	No differences are reported between public and private				
	involvement			sector managers on job involvement.				
Posner and Schmidt (1982)	Occupational values	80 public sector and 80 private sector employees and managers	-	There are no differences found between the public and private sector. Only in two areas, work recognition and contribution to society, did the differences approach statistical significance.				
Rainey (1982)	Reward preferences	150 public sector and 175 private sector middle managers	+ and -	Overall, the author concludes that few differences were found between sectors, and that if differences were found they became smaller when other variables were taken into account.				
Newstrom <i>et al.</i> (1976)	Intrinsic and extrinsic reward preferences	354 public and private sector employees	+ and -	Public sector employees have lower dissatisfaction scores in four out of nine reward preferences. Only two out of nine reward preferences (security and rewards) are rated lower in importance by public sector employees.				
Buchanan (1975)	Job involvement	76 public sector and 69 private sector (middle) managers	+	Public managers show lower levels of job involvement than business managers.				
Buchanan (1974)	Job satisfaction	279 managers from public and private sector organizations	+	Public sector managers have lower levels of job satisfaction than private sector managers.				
Organization related								
Buelens and Van den Broeck (2007)	Commitment	409 public sector and 3314 private sector employees and managers	+	Civil servants are less unconditionally committed to their work as are private sector managers and employees.				
Lyons <i>et al</i> . (2006)	Organizational commitment	231 public sector and 121 private sector employees	+	Public sector employees are less committed to their organizations than are private sector employees. Compared to private sector employees, their personal goals and values are less compatible with the organization				
Goulet and Frank (2002)	Organizational commitment	336 public sector and 364 private sector employees	+	Public sector employees place less emphasis on job security; private sector employees place more emphasis on extrinsic rewards.				
Hooijberg and Choi (2001)	Effectiveness of leadership	175 public sector upper-level managers and 819 private sector middle-level managers	+ and -	There are both differences and similarities between the two sectors concerning (a) managerial perception of leadership effectiveness and (b) the different leadership roles that managers adapt.				
Buchanan (1974)	Organizational commitment	279 managers from public and private sector organizations	+	Public sector managers show lower levels of organizational commitment than private sector managers				

Table 1: Empirical differences at the individual level within public- and private-sector organizations (continued)

RESULTS

Based on the criteria formulated above, 26 studies were included in the analysis (Table 1). They appeared between 1974 and 2007. Eight of them were identified as 'individual related,' nineteen studies as 'job related' and five studies as 'organizational related.'⁶ Surprisingly, however, none of these comparative studies addressed the individuals' team-related attitudes or behavior; therefore, this category of studies was dropped from Table 1's initial frame (making team behavior already -if only for exploratory purposes- fit for future comparative-research purposes).

In terms of the dependent variables attended to in the set of 26 papers, a total of nine⁷ were addressed (see column #2 of Table 1); seven of them were central in two or more papers: generic values (4 studies), risk (3 studies), work values (4 studies), job motivation and related motivational factors (10 studies), job satisfaction (5 studies), job involvement (2 studies) and organizational commitment (4 studies). Note that eight out of the 26 papers also covered non-individual public-private differences, while a total of five studies were not exclusively geared to the public-private distinction and included semi-public or hybrid sector organizations (which are avoided in the analyses). Twenty of the 26 papers addressed in this review had been published in a public-sector journal.

Analysis of the empirical findings

The three subsets in the set of 26 studies will now be reviewed; following the order of Table 1.

Generic values – Four of the 26 studies focused on generic values (Posner and Schmidt 1982; Becker and Connor 2005; Stackman *et al.* 2005; Lyons *et al.* 2006).⁸ Three of them used the Rokeach Value Survey (RVS), consisting of more than thirty values, distributed over instrumental and terminal type values. Posner and Schmidt asked respondents to state the importance of the listed RVS values, Becker and Connor asked respondents to rank the listed RSV values and Stackman *et al.* assessed seven 'value systems' (i.e. combinations of values).

⁶ For purposes of completeness, note that several set of hypotheses (e.g. in the studies of Buchanan 1974; Posner and Schmidt 1982; and Lyons *et al.* 2006) fit into more than one of the four categories.

⁷ Please note that the dependent variables in the 26 studies were categorized according to the labels used by the respective authors. Therefore, what some authors refer to as 'work values' may by other authors worded as 'motivational factors', etc.

⁸ Becker and Connor (2005) and Stackman et al. (2005) partially relied on the same dataset.

Lyons *et al.* (2006) used the Schwartz Value Survey, consisting of 44 items, and calculated Schwartz' 10 value-type scores.

The results of these studies are mixed; Posner and Schmidt (1982) hypothesized that sectors would differ on generic values; only 12 out of a total 34 values differed significantly in importance across sectors (some were labeled as significant with a p-score < .10). Becker and Connor (2005) had stratified their two employee samples (one Canadian and one Japanese) into young (\leq 40 years) and older (\geq 42 years). In the Canadian sample, 13 of the 36 values differed significantly between older public and private managers; 9 out of 36 values significantly differed between young public- and private-sector managers. In the Japanese sample, only one significant difference between young public and private managers was found while 11 of the 36 values differed significantly between older public and private managers. It was found that four of Becker and Connor's sector-differentiating values matched with the sector-distinguishing values used by Posner and Schmidt (i.e. equality, mature love, forgiving, a world of beauty).⁹ In the study by Stackman *et al.*, the authors first compiled seven combinations of the RVS values and then they compared these 'value systems' between the sectors; differences were hypothesized, and five out of the seven value systems differed significantly. In contrast, Lyons *et al.* hypothesized no sector differences whatsoever; and they did not find them either.

Risk – Risk orientation is a topic that was studied by Barton and Waldron (1978), Belante and Link (1981) and Nutt (2006). Nutt's focus was on risk behavior associated with the organization, while both Barton and Waldron and Belante and Link focused on risk aversion. Nutt (2006) hypothesized that public sector managers use different decision-making practices and assess risk differently than their private-sector counterparts. Using a scenario, managers had to indicate (a) the likelihood of approving the budget proposal and (b) what level of risk they believed it to be associated with. Nutt found *more* risk behavior among public sector middle managers; compared to private sector middle managers, the public sector middle managers rated the amount of risk associated with decisions to be lower and the probability of approval of those rated decisions to be higher. Belante and Link (1981) hypothesized more risk aversion (i.e. due to more emphasis on job security) among those who chose the public sector; the study's outcomes supported this claim. Barton and Waldron (1978) concluded that, contrary to their

⁹ This could be due to the fact that Becker and Connor measured the relative importance of values, while Posner and Schmidt asked respondents to rate the overall importance of the values.

expectations, no significant differences between the two sectors in risk-taking behavior could be observed.

Comparing the results of the three risk studies, some types of public-sector managers and/or employees may not be as risk averse as the civil servant stereotype suggests. However, carefully matched subsampling within both sectors will need to be done in similar future studies, so that the possible various levels of risk-orientation across both sectors can be established more precisely.

Work values – Work values were studied in four different sector-comparative studies (Lyons *et al.* 2006; Karl and Sutton 1998; Baldwin 1987; Posner and Schmidt 1982). Lyons *et al.* (2006) assessed the 'generalized beliefs about the desirability of certain attributes of work (e.g. pay, autonomy, working conditions), and work related outcomes (e.g. accomplishment, fulfillment, prestige)' (Lyons *et al.* 2006: 607). Employees had to rank those values on importance, a method based on the Schwartz Value Survey. Karl and Sutton (1998) relied on a 10-item questionnaire developed by Kovach (1987), and added six value-related items. Posner and Schmidt (1982) in turn relied on items developed by Kilpatrick *et al.* (1964). They defined work values as 'the representation of things and ideas that matter to people and are important to them' in their work. Although they hypothesized otherwise, Posner and Schmidt found no statistical significant difference between the sectors: Both Lyons *et al.* and Karl and Sutton did find some differences between the two sectors; Lyons *et al.* reported statistical differences in 5 out of 18 values, while Karl and Sutton report statistical differences in 4 out of the 16 assessed values.

Results from empirical value-based studies often yield contradictory results. Baldwin (1987), for example, concentrated on job security and concluded that public sector managers feel greater job security than their private sector counterparts while Karl and Sutton did not find statistical differences on that variable. In a similar vein, Lyons *et al.* found no sector difference in terms of extrinsic work values, such as pay, while Karl and Sutton showed that private-sector employees value wages more than public-sector employees. It is clear that, in terms of the many different work values that the various types of employees may hold, not all the potential differences have been examined yet.

Motivation – Ten of the 26 studies compared employee motivation: Rainey (1983) and Buelens and Van den Broeck (2007) studied job motivation, while Newstrom *et al.* (1976), Rainey (1982),

Wittmer (1991), Maidani (1991), Khojasteh (1993), Gabris and Simo (1995), Jurkiewicz *et al.* (1998) and Houston (2000) focused on broader motivational factors (i.e. specific characteristics of the job or the work environment that may motivate an employee).¹⁰ Some authors are referring to these motivational factors as reward preferences (Newstrom *et al.* 1976; Rainey 1982; Wittmer 1991).

Notable across these ten motivational-type studies is the great variation in how the potential differences between both sectors were assessed. For instance, some authors (e.g. Houston 2000) only took a few single items when comparing motivational factors, while others took many motivational factors (e.g. Gabris & Simo, 1995), others combined several dimensions of motivation (e.g. Rainey 1982; Buelens and Van den Broeck 2007), and others calculated factors based on several items (e.g. Khojasteh 1993). In appraising the differences, roughly three assessment styles can be identified: one is to let respondents rate the importance of motivational factors (e.g. Rainey 1982; Buelens and Van den Broeck 2007); another is to let them rate the relative importance of motivational aspects compared to other factors (e.g. Jurkiewicz *et al.* 1998); the third is a combination of both methods: letting respondents rate the relative importance of and their relative dissatisfaction with certain motivational factors (e.g. Newstrom *et al.* 1976; Maidani 1991; Khojasteh 1993). This assessment variety is not simple; even when authors use the same instrument their employment of it tends to differ.¹¹ And, this diversity led often to results that are difficult to compare, as can be seen in Table 2.

¹⁰ Note that Rainey (1982, 1983) used one dataset in both studies.

¹¹ For example, Newstrom *et al.*, Maidani and Khojasteh engaged in "Porter/Lawler type of research" (Newstrom *et al.* 1976: 68), in which perceptions of 'importance of' and 'satisfaction with' certain motivational factors were recorded. Respondents had to answer three questions for each of the motivational factors: 'how much is there now', 'how should it be', and 'how important is the particular factor'. Based on the respondents' answers, both the importance of and dissatisfaction with the motivational/reward categories were calculated; some authors combined items into subscales and compared those for both importance and dissatisfaction (Newstrom *et al.* 1976; Khojasteh 1993), while others partially compared the items separately and partially clustered all items into overall dissatisfaction scores (Maidani 1991). Note that the selection of items is different in all three studies. Newstrom *et al.* based their instrument on 12 items of Maslov's hierarchy of needs, plus several items of their own and 18 questions relating to (in)direct rewards. Maidani used measurements conceived in earlier research by other authors, and invoked both job factor importance (Rosenfield and Zdep 1971) and job (dis)satisfaction (Warr *et al.* 1979). Khojasteh's questionnaire consisted of 39 items that represented five categories of intrinsic rewards and seven categories of extrinsic rewards, based on the Herzberg Motivation Hygiene Theory (Herzberg 1959).

In Table 2 one may note that only in terms of one motivational factor (i.e. community service), does sector appear consistently different; in all the other motivational factors or dimensions, were the results inconsistent and/or not significant. Thus, also in terms of this largest -motivational- subarea of sector comparisons, authors report conflicting results. The high community-service motivation of public managers is the first consistent finding that (motivational) sector-comparisons led to, thus far, although it is based on only two of the 26 studies.

	Job Security	Pay	Accomplish- ment	Promotion	Status	Helpfulness	Community Service	Working Conditions	Recognition	Autonomy
Buelens and VdB (2007)		pu < pr ⁱⁱ						pu > pr		n.s.
Houston (2000)	pu > pr	pu < pr	pu > pr	n.s.						
Gabris and Simo (1995)	n.s.	n.s.		n.s.		n.s.				n.s.
Khojasteh (1993)	pu < pr	pu < pr	pu > pr	pu > pr	n.s.			n.s.	n.s.	
Maidani (1991)	n.s.	n.s.	n.s.	n.s.	pu > pr			n.s.	n.s.	
Wittmer (1991)	pu < pr	pu < pr		n.s.	pu < pr	pu > pr	pu > pr			
Rainey (1982)	n.s.	pu < pr	n.s.	n.s.	pu < pr	pu > pr	pu > pr		n.s.	
Newstrom et al. (1976)	pu < pr	pu < pr	n.s.		n.s.	n.s.		n.s.		n.s.

Table 2: Sector-comparative results on the relative importance of 10 motivational factors i

ⁱ note that even though the actual number of the studied motivational factors is over 40, only the variables that had been addressed by two or more of the 26 analyzed publications have been reported in this Table. ⁱⁱ pu = public, pr = private, n.s. = not significant

Job involvement – This concept was studied across sectors by Rainey (1983) and Buchanan (1975), who both used the Lodahl-Kejner (1965) definition and scale of job involvement. The variable was considered later to be an additional dimension of job motivation (Rainey 1983) and was described as "the internationalization of values about the goodness [...] or the importance of work of the person" (Lodahl and Kejner 1965: 24). Buchanan hypothesized that public managers show higher levels of job involvement than do business managers while Rainey hypothesized that public managers score significantly lower. Of both studies, only Buchanan found statistical significant differences between the sectors; contrary to his expectation, public sector managers had *lower* levels of job involvement. These results were based on performing a t-test on the mean scores. Hence it may inferred that sector comparisons on job involvement are, at best, inconclusive.

Job satisfaction – Five of the 26 sector-comparative studies dealt with the well-known job satisfaction variable (Buchanan 1974; Rainey 1983; Solomon 1986; Steel and Warner 1990; Bogg and Cooper 1995). All five studies varied in applied definitions and measures. Bogg and Cooper defined job satisfaction as "how satisfied the individual feels with his/her job" (Bogg and Cooper 1995: 329), and assessed this with a scale consisting of 22 items, organized into six subscales (including 'total job satisfaction'). Solomon developed two questionnaires, one capturing job characteristics and one organizational climate (39 items total); respondents had to indicate on a 6-point Likert scale how satisfied they were with those attributes. Buchanan and Rainey used the Job Descriptive Index in order to measure the level of job satisfaction for public- and private-sector employees; Buchanan's satisfaction concept has two dimensions (both 'work' and 'co-workers'), while Rainey's has five ('work' and 'co-workers', as well as 'supervision', 'pay' and 'promotion'). Steel and Warner used a measure of job satisfaction that was incorporated in the National Longitudinal Surveys, the organization of whom they acquired the dataset used in their study; it consisted of one item, asking how respondents "feel" about their current job.

In terms of the studies' outcomes, Buchanan and Solomon both concluded that private sector managers experience higher levels of job satisfaction. Yet, Steel and Warner reported the opposite result: public sector employees experience higher levels of job satisfaction. Rainey found that public middle managers showed significantly lower satisfaction in two out of his five dimensions (promotion and co-workers), while Bogg and Cooper reported higher job dissatisfaction scores for civil servants employed in the United Kingdom. When interpreting this set of findings, inconclusiveness must be noted again; the results do not only vary in terms of whether or not there are differences, but also in the direction of those differences if they are found. Additionally it can be mentioned that, with the exception of Steel and Warner, none of these authors reported related findings based on a broader model; instead, merely yes/or no differences across both sectors were reported.

Organizational commitment – Organizational commitment was addressed by four of the 26 comparative studies (Buchanan 1974; Goulet and Frank 2002; Lyons *et al.* 2006; Buelens and Van den Broeck 2007). Due in part to different approaches in the field, viewing organizational commitment as a pattern of behaviors, a set of behavioral intentions, a motivating force or an attitude (Goulet and Frank 2002), these four studies on organizational commitment do differ

both in terms of definitions and applied measures.¹² All the studies showed a statistical significant difference between public and private sector employees; both Lyons *et al.* and Buelens and Van den Broeck found lower organizational commitment among public sector employees, as hypothesized; Goulet and Frank and Buchanan hypothesized higher organizational commitment of public sector employees, but also found significant lower levels of commitment among public sector employees. With regards to statistical analysis, three authors merely used a t-test to establish their resultant differences; Buelens and Van den Broeck used a regression analysis to control for background variables.

On the basis of these four studies, it is tempting to point to a lower commitment thesis for public-sector employees. Note that various conceptual and operational definitions of organizational commitment had been employed by these four studies.¹³ More importantly, however, other authors (e.g. Balfour and Wechsler 1990; Steinhaus and Perry 1996) have reported inconclusive results vis-à-vis the organizational commitment variable between sectors. Therefore, conclusions regarding organizational commitment should be drawn with care.

¹² Buchanan (1974) used three measures of organizational commitment; one is the previously mentioned Lodahl-Kejner (1965) scale of job involvement; and the other scales are the Hall *et al.* (1970) Organizational Identification Scale, and the "specially constructed index of organizational loyalty" (Buchanan 1974: 340). Goulet and Frank (2002) adapted the questionnaire by Mowday *et al.* (1979); a scale that is widely used for measuring organizational commitment (Steinhaus and Perry 1996: 282). Lyons *et al.* (2006) measured levels of organizational commitment using the Porter *et al.* (1974) Organizational Commitment Questionnaire, the predecessor of the Mowday *et al.* (1979) questionnaire. Buelens and Van den Broeck (2007) constructed a measure that reflects the definition of organizational commitment employed by Steinhaus and Perry (1996).

¹³ Buelens and Van den Broeck (2007) conceptualized organizational commitment as 'the willingness to exert considerable effort on behalf of the organization' (Steinhaus and Perry 1996: 278). Lyons *et al.* (2006) stated that organizational commitment manifests itself in (a) a strong belief in and acceptance of the organizations' goals and values, (b) a willingness to exert a considerable amount of effort on behalf of the organization and (c) a desire to remain within the organization (Lyons *et al.* 2006: 609). Buchanan (1974) divided organizational commitment into three components: (a) a sense of identification with the organizational mission, (b) a sense of involvement [...] in one's organizational duties and (c) a sense of loyalty and affection for the organization [...] (Buchanan 1974: 340).

DISCUSSION

In what ways do individuals act differently when engaged in a public- or a public-sector organization? A fascination with this question led to the review of a set of empirical studies to date. However, a strong sector pattern in the 26 comparative studies cannot be detected; only two types of empirical findings were repeated, although merely based on two and four studies respectively: compared to their private-sector counterparts, public-sector employees have shown 1) a higher level of community-service motivation; and 2) a lower organizational commitment level.

How may one interpret this lower level of organizational commitment of public sector employees with their higher motivation to serve the community? Clearly, their significantly higher need to serve their community does not necessarily translate into a high degree of commitment towards the organization that employs them. Previous research on organizational commitment supports the notion that public-sector employees may feel attracted to and yet repelled by the organization at the same time (Balfour and Wechsler 1990). It may well be that only if a public-sector organization (or particular agency or team within it) is serving the needs of the community well the employees concerned feel a higher level of organizational commitment. This insight does not go against the other findings shown in this review; publicsector employees are not always a great fan of the entire organization that employs them. They tend to have a nuanced view of their employer; the great and almost blind loyalty that civil servants have had in the past is clearly not seen in the attitudinal findings presented here.

Thus, it can be concluded –on the basis of the current review– that there are hardly behavioral or attitudinal type variables with which one could confirm the widely assumed sector-difference thesis at the individual level, as accumulation of empirical-research findings could hardly be ascertained. In part, this can be attributed to a number of shortcomings in the ways the single studies were conducted.

Criticisms on the 26 studies

Based on what has been elaborated above, four points of critique can be placed regarding the 26 studies that tested the various individual-level hypotheses across the public and private sector.

First, hardly any of the authors specified extensively which type of organization they had studied (apart from labeling it as either public or private); of the theoretically 52 definitions

that could have been given (i.e. one public- and one private-sector organization definition for each of the 26 papers), a mere seven were clearly defined. Sometimes, authors included semipublic or hybrid-type organizations in their public-sector subsamples: these are kinds of organizations that are essentially different from public-sector organizations in terms of funding, ownership or mode of social control (see also Perry and Rainey 1988). Based on the proposition that public and private organizations are in fact fundamentally different (an assumption many authors have embraced), it is strange that this fundamental comparative-sampling issue is not much specified. Thus within the set of 26 papers, no consensus or uniformity in the usage of the terms public- and private-sector organization can be observed. Previous authors (e.g. Rainey *et al.* 1976; Rainey and Bozeman 2000; White 2001) have pointed out the need for clarity on this definitional issue, and after more than 25 years of research in this area, this issue is still persisting. The lacking definitional clarity in the 26 reviewed studies may have led to sampling inaccuracy. Given that sampling in this line of inquiry always entails multi-stage sampling, it is imperative to select truly comparable organizational units as well as comparable responding employees.

Second, most of the papers in this review lack specifics on employee sampling processes and subsample characteristics. Frequently, it was not specified what types of employees had been questioned and in what ways both groups were comparable. Most studies were not sufficiently specific either on who responded: whether the respondents are managerial or nonmanagerial employees (and at what level) typically matters. Moreover, the set of studies did show an overreliance on managers: almost half of the 26 studies indicated to have tapped only managers. It appears that most samples seem to be samples of convenience; some of the authors were open about this (e.g. Becker and Connor 2005). Not all comparative subsamples (across both sectors) were approximately equal in size; in only sixteen of the 26 studies was the public sector subsample between 45% and 55% of the total sample, and in five out of the 26 studies the public sector subsample was less than 25% of the total sample size. Given that one wants to compare equivalent individuals within two groups on the same variable, one would have expected a better subsample ratio. Above and beyond subsample size, working at the same hierarchical level and in a similar organizational function must be criteria in second-stage subsampling; this sort of sampling precision was seldom found within the 26 analysed studies. Groups with potential subsampling similarity are, for instance: similar-typed managers;

engineers; ICT- or other specific professionals; or front-office service employees. They could be examples of subsamples that are potentially legitimately comparable across both sectors. In the set of reviewed papers, very little information was given typically about the comparability of the second-stage subsamples.

Third, various authors of the 26 publications included in this analysis incorporated nonvalidated measures and employed relatively simple statistical methods. Moreover, not one of the 26 studies had a longitudinal design, multi-level analyses or various methods of empirical data collection (such as the semi-structured interview, diary-analyses, video-observations, etc.). At times, variables lacked consistent and clear operationalizations; sometimes no conceptual definitions were given, and variables were defined, measured and portrayed in many different ways. This did not aid in the sophistication that is necessary for seriously and systematically comparing context-bound human behavior.

Fourth, in some of the 26 studies a disregard can be noted for previous research and findings. For example, authors sometimes presented their own study as if no other paper had ever compared public with private employees. Some authors did not refer to earlier (and at times even groundbreaking) relevant work of others (known in adjacent fields). It is staggering to see that some studies were published without much foundation in earlier work. Many of the authors just assumed that there are significant differences between public- and private-sector employees, and that these differences are almost solely attributed to the variable sector.¹⁴ The fact that sector is assumed as the only explanatory variable hinders attention to other variables that could explain different behavior across similar situations in both sectors; only a handful of authors tested the effect of sector on the dependent variable taking into account other possible (background) variables that could explain the expected significant differences. Those authors acknowledged this by, for instance, a) including the sector variable as part of a larger research model (e.g. DeSantis and Durst 1996; Moon, 2000), b) concluding that greater variance in the dependent variable is explained by other variables (see also Buelens and Van den Broeck 2007; Steinhaus and Perry 1996), and/or c) reporting smaller differences between sectors when other variables were included in the analysis (Rainey 1982). Studies that had only included sector as a

¹⁴ As an example, Khojasteh (1993) found that public-sector employees are more satisfied with pay than their private-sector counterparts; he did, however, not link this finding to external variables that could have influenced this score, such as the relative amount of salary, any salary-growth pattern, or the amount of effort an individual job holder has to make.

small part of their explanatory research model explained a lot more variance and seem therefore much more valuable than simple sector comparisons (e.g. Steel and Warner 1990; DeSantis and Durst 1996; Moon 2000). Therefore, sector may no longer be regarded as the explanatory variable par excellence in individual-level differences between sectors; other factors may have an impact on how employees think or act within an organization.

The above considerations need to be taken seriously by those who engage in the next generation of behavioral research across the public and private sector.

FUTURE RESEARCH

Even though almost all of the 26 empirical studies proposed one or more significant differences at the individual level across the public and private sectors, the evidence to date is sparse and mixed.¹⁵ The findings of the reviewed studies lack accumulative comparability, and together they question the ingrained idea that the behavior of employees of public-sector organizations differs significantly from the behavior of those employed by for-profit business firms. On this basis one may even conclude that 'sector' plays a minor (perhaps even a negligible) role in explaining individual behavior. Hence, in contrast to studies carried out at the organizational level,¹⁶ at the individual level, sector may no longer be regarded as the independent variable that is accountable for meaningful behavioral and/or attitudinal differences.

However, because sector was widely examined as the *only* independent variable to account for individual differences between the two sectors, this may have blocked attention to other independent or contextual variables that -in combination with sector- may explain differential behavior or attitudes in similar sector contexts. Thus, although little ground was found for doing more of mere-sector comparisons, the near lack of accumulated sector-differences may lead to more use of broader hypothetical models, if only to address persistent stereotypical ideas around civil servants' relative pace of work and their lacking result orientation. Scholars are advised then to take a radically different research approach than the one that was taken by most of the authors of the 26 papers reviewed. For instance, a recommendation would be to conduct individual-level studies where sector is only part of a constellation of (many) explanatory variables; this way, the relative importance of type-of-sector might also get some scrutiny at the individual level. Given also the various delineated persistent methodological issues (such as the concern for subsample comparability), a new impetus in

¹⁵ In terms of the limitations of this analysis, the author does recognize that the strict selection criteria used in this study may have possibly led to the inadvertent omission of some empirical studies. Moreover, many of the articles that were included in the set of 26 did not offer very precise definitions of the public-private sector distinctions used and, therefore, 'contaminated' samples could have been selected into the set. Additionally, the author should note -as a limitation of the entire study- that he did not take into consideration any qualitative comparative sector studies on this individual-level of analysis. ¹⁶ Note that consistently reported empirical findings at the organizational level are sometimes challenged as well. For instance, see the work of Pandey and Kingsley (2000) on red tape; previously only seen as an attribute of the organization, the authors concluded that the individual-level variable 'work alienation' is as strong a predictor of red tape as organizational size and sector of employment.

terms of methodological enrichment is needed for the area as well to be more viable; more heed needs to be paid to the methodological advice gelled thus far.

A final point that is brought forward in this review, is the lack of theory in many of the herein analyzed empirical studies. Besides the employment of broader empirical models, a more theory-guided approach to individual-level, public-private comparisons is needed. It is thus recommended studying individual-level phenomena through broader behavioral hypotheses rooted in earlier studies, beyond the 26 empirical studies reviewed herein. For this purpose, it could be suggested that OB-theories and its associated methodological sophistication are to be imported into this area of Public-Administration research (see also Kelman 2005). Currently, the management subdiscipline OB (based in part on the subfields I/O and Social Psychology) is mainly based on private-sector samples and near neglected by the Public-Administration scholars whose papers reviewed in this study. It is remarkable that so little of the wide array of Organization-Behavioral (OB) knowledge has been integrated in past public-private sector comparisons. The field of Public Administration would definitely be enriched if Public-Administration scholars would include OB-content as sources for their testable hypotheses. OB-subareas such as organizational citizenship behavior (e.g. Podsakoff et al. 2000); work engagement (Bakker and Demerouti 2008); work team dynamics (e.g. Van Mierlo et al. 2007; Somech et al. 2009) are just a few of the many possible OB-subareas to draw from; many potentially relevant variables received thus far no comparative attention. Thus, if still assuming differences between public- and private-sector employees, researchers may need to start selecting and combining a range of additional variables from the diverse subareas of OB. With the inclusion of more OB-theory, civil servants' degree of commitment to their employing organization and to community-service provision in general could be better explained and developed further. The upshot of such better based new research efforts would be to get more insight into the hearts, minds and behaviors of civil servants compared to those working in similar, private-sector organizational contexts.

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