

Is it the Brazilian Way? Extending the Comparison of Public and Private Organizations

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Abstract This study investigates the differences in select organizational characteristics, managerial practices and work attitudes among 670 public and private sector workers in Brazil. The results indicate that in some aspects there is a moderation effect by type of organization. For example, when public employees score high on autonomy and task significance, perceive organizational practices as favourable, and keep membership in the same organization, they tend to be more satisfied than private sector workers. Overall, the findings highlight the need for more international comparisons to gain a better understanding of the public-private distinction.

Keywords Public administration · Public-private comparison · Personnel management · Organizational behaviour

There is considerable empirical evidence to support the assertion that there exist a number of differences between public and private organizations. However, as Rainey and Bozeman (2000) point out, much of this evidence is contradictory, and they argue that more study is needed to better specify the similarities and differences between the types of organizations. We would add that there are three additional reasons for continued research on the public-private distinction. First, as Perry and Wise (1990) and Perry et al. (2010) discuss, the state of organizational theory itself can move beyond overgeneralizations by identifying

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the nature of the differences and similarities between the two sectors. Second, as Hartle (1985) argued, one sector can learn from the other insofar as they share common pathologies, such as rules of interpersonal relationships at work, resistance to change, struggles of power, isolation of workers and managers, and centralised decision-making. Such research would be useful for moving beyond the simplistic assumption that public organizations need to become more like private, for-profit firms. And finally, the organizational literature can be significantly improved by looking at the public-private comparison in other national and cultural settings than the U.S. context. As we discuss and explore in this article, the majority of the public-private literature is focused on U.S. organizations. Similarly, Jreisat (2011) calls for a global perspective in comparative public administration.

In this article, we explore the public-private distinction in the context of Brazil. In many ways, Brazil provides a perfect setting for this study. In recent decades, Brazil has assumed a leadership position in the globalised economy due to its rapid economic growth. Along with Russia, India, and China, Brazil is a member of the so-called BRIC countries, a group of countries with rapidly expanding economies that are expected to exert global economic influence in the coming decades. In addition, Brazil's public sector has undergone significant reform in recent years. Although independence from Portugal was declared in 1822, it was only in 1889 that the republic form of government was established. The country experienced a military dictatorship from 1964 to 1985, but soon after began a gradual process of democratization. While some have argued that the Brazilian public sector can be characterised as a system designed more to preserve the status quo and serve the needs of specific interest groups (DaMatta 1997), others have pointed out that, while not perfect, Brazil has a long and sustained history of public sector reform (Candler 2007).

In this manner, the Brazilian context presents a public and private sector that is markedly different than the American context on which much of the public-private literature is based. Indeed, previous research on national cultures has highlighted that Latin American countries and Arabic countries share a great number of cultural values (Hofstede 2001; Javidan et al. 2006). Further, Brazil is known for having strong state intervention in the economy. For example, the federal government still owns or retains significant stakes in a large number of important firms, such as Petrobras, the multinational energy corporation. In general, the Brazilian context offers the opportunity to better understand how public and private sectors differ in the presence of strong patrimonialist and paternalist cultural traits (DaMatta 1997), or what we refer to in this paper as "the Brazilian way."

In this article, we present the results of a study that compared Brazilian public and private organizations on personnel management with regards to work satisfaction. Work satisfaction has been investigated as an important element in the comparison between public and private sectors (Markovits et al. 2010). In general, previous research has supported the a priori assumption that public organizations have lower work satisfaction due to high levels of formalization and ambiguity and low levels of communication and flexibility (Rainey 1983; Rainey and Bozeman 2000; Brewer and Brewer 2011). However, Buelens and

Van Den Broeck (2007) conducted a study on public and private sector workers in Belgium and found that public employees have higher levels of work satisfaction because they experience less work-family conflict, have fewer working hours, present less willingness to exert considerable effort on the behalf of the organization, and are less motivated by extrinsic rewards when compared to private sector employees.

The paper begins with a brief review of the literature on work satisfaction. We then discuss the Brazilian context and derive a number of hypotheses that posit potential differences in work satisfaction between public and private sector organizations. Next, we test these hypotheses and explore the resulting differences by testing several models that allow us to examine the antecedents of work satisfaction; specifically, the role of ownership as a moderating variable, and the nature of the interaction between several independent variables representing individual, task-related, and organizational practices and the dependent variable (work satisfaction). We conclude with a discussion of the results and implications for management and policy.

Literature Review

Work satisfaction has been defined as “result from the perception that one’s job fulfills or allows the fulfillment of one’s important job values” (Locke 1976, 1307), and the construct has been identified as an important determinant for a range of organizational impacts, such as absenteeism and turnover. High rates of absenteeism and turnover result in serious problems for organizations because they raise costs and frequently lead to productivity losses (Hausknecht et al. 2008). The cost of losing employees might be particularly high when it also involves the loss of tacit knowledge (Droege and Hoobler 2003). In addition, having a committed and satisfied workforce facilitates changes (Tsoukas and Chia 2002), contributes to high productivity (Hausknecht et al. 2008; Lee et al. 2008), improves service quality and performance (Zhou et al. 2008), brings flexibility, and enriches the organizational climate (Hackman and Oldham 1980).

Findings on work satisfaction are somewhat mixed in the literature comparing public and private organizations. While some studies reinforce the a priori assumption that public organizations are worse than private ones, other studies suggest that public workers report somewhat higher levels of work satisfaction and motivation than private employees (Markovits et al. 2010). For example, Baarspul and Wilderom (2011) reviewed twenty-eight empirical studies on public and private sector employees and found the evidence inconclusive regarding the work satisfaction of employees. They found that some studies that hypothesized lower levels of work satisfaction for public employees actually found the opposite, with private-sector employees reporting significantly lower levels of work satisfaction. Further, some of the studies reviewed by Baarspul and Wilderom showed no significant differences between sectors. To a great extent, these disparate findings result from studies conducted in a wide range of organizational contexts. In addition, these studies present a variety of different designs regarding the factors that might influence work satisfaction.

As Glisson and Durick (1988) have argued, a range of job, organizational, and individual characteristics are necessary for understanding employees' satisfaction. Job characteristics are aspects of the worker's tasks that determine how the employee perceives his/her particular activity in the organization. These perceptions are related to internal motivation because identifying the job as meaningful, challenging, and interesting can affect workers' overall behaviours and feelings of happiness, health, safety, and caring about professional colleagues (Hackman and Oldham 1980). Moreover, the perception of a job as meaningful is related to the individual fit in the organization, the amount of complex and different abilities employees are required to use to perform their tasks, and the tasks' overall importance to co-workers, organizations, and society.

In this paper, the primary organizational characteristic taken into account is the public or private ownership of the organization. Nevertheless, there are many organizational characteristics that potentially promote or limit work satisfaction, such as human resource (HR) politics and practices. We would argue that HR politics and practices are particularly relevant since they guide the decision-making of the organization regarding human capital. In addition, these policies and practices communicate, both explicitly and implicitly, what is expected in terms of appropriate behaviours in order to meet organizational values and goals through formal programs and procedures (Judge and Cable 1997).

The category of individual characteristics has also been identified as an important predictor of work related attitudes, although compared to the other predictors it has received less attention (Glisson and Durick 1988). Individual characteristics have typically been assessed in the literature using demographic categories; although a variety of worker characteristics also appear, such as personal needs, values, and personality traits.

Outside of the public-private literature, a number of studies have looked at the impact of job, organizational, or individual characteristics on work satisfaction. For example, Finlay et al. (1995) found that for private sector employees the existence of a low degree of standardised procedures and a high degree of communication across the organization, along with low job ambiguity and high job variety, had significant positive effects on work satisfaction. In the U.S. public sector, Kim (2005) found that effective supervisory communication coupled with a participative management style had a positive impact on levels of work satisfaction. On the other hand, DeSantis and Durst (1996), using data from the National Longitudinal Surveys of Youth (NLSY), show that public employees report higher work satisfaction than private employees regarding the organizational climate. Their results also indicate that monetary reward and personal characteristics such as educational level are strongly related to work satisfaction for private employees, while job significance and organizational climate were stronger for public employees.

A number of important findings have also emerged with regard to extrinsic rewards (Boyne 2002; Lee and Wilkins 2011). For example, Rainey (1983) assessed 40 middle managers of public and private organizations in the U.S. and found that public managers are less satisfied than private managers because they perceive that their own performance is weakly related to monetary incentives. In contrast, Karl and Sutton (1998), in a study of 217 U.S. organizations, found that public employees place greater value on significant and interesting work, while private sector workers value good

wages more. In fact, DeSantis and Durst (1996) add that public workers value most the work-family balance, and so are not inclined to move with their family for a better job or sacrifice their family time by working extra hours.

As this cursory review of the research indicates, there remains a general lack of consensus on the reasons for differences in the levels of work satisfaction of public and private employees, as well as the factors that influence employees' satisfaction in both sectors.

Comparing Sectors in Brazil

Given the considerable diversity of findings in the work satisfaction literature, the ability to predict differences across the sectors, in Brazil or elsewhere, is limited. However, in order to address how Brazilian public and private sectors might differ in relation to work satisfaction and its predictors, it is first important to highlight some aspects of Brazilian culture.

Given the strong paternalist and patrimonialist history of Brazil, DaMatta (1997) suggests that while Brazilian society has higher levels of conflict due to its dependent, colonial, and peripheral, acknowledgement of the conflict among individuals is typically avoided. These findings can be explained by a conflict avoidance trait of the Brazilian society (Javidan et al. 2006). DaMatta (1997) argues that this trait is the product of a social system that recognises hierarchy and authority as something natural and demanding of respect.

While Brazil society has strong patrimonial characteristics (DaMatta 1997), it has been argued that these exist to a greater degree in the public sector (Faoro 2000). Even though Brazil has been going through an effort of rationalization and modernization in the public sector as described by Barzelay and Shvets (2006), Motta (1996) suggests that the older values of the Brazilian middle-class still reside along with modern trends. Thus, we would expect different perceptions related to work satisfaction from public and private workers since public employees are more likely to value aspects that will help them to survive in a system with patrimonial characteristics. In contrast, private sector companies are striving to suppress nepotism and encourage professional relationships in order to enhance efficiency. Therefore, private sector employees tend to be less affected by patrimonial characteristics, valuing aspects of work associated with professional experience.

In general, Brazilian employees do not set clear boundaries between work and personal lives as Americans do. As Motta (1996) discusses, there is greater social interaction among workers inside and outside the workplace when compared to the U.S. As result, Brazilian workers tend to be more sensitive to satisfaction at work since it has a more direct impact on their personal lives. Losing a job might be particularly stressful because it is more likely to involve the loss of strong friendships. In this manner, Brazilian employees are perhaps more likely to place greater value on job security.

In short, the characteristics of Brazilian society might lead to interesting differences between public and private sectors, which would potentially deviate from research conducted on American organizations. We would suggest that even though Brazilian public employees tend to be embedded in more political and bureaucratic environments, they are likely to have more positive job satisfaction than private sector workers.

Even though both types of organizations operate within a context of patrimonial and paternalistic characteristics, these forces hold greater sway in the public sector, as the private sector in Brazil is experiencing rapid growth with a reliance on a plentiful, but largely unskilled, labour force.

Job-Related Characteristics

The dimension of job characteristics reflect how jobs are designed and managed under organizational structure and culture, even though they centre on specific features of the job. Public organizations are traditionally recognized for having bureaucratic and routinized activities, less autonomy and feedback, and poor person-organization fit. These factors will contribute to public employees undervaluing job-related characteristics in comparison to private sector workers. On the other hand, private sector workers are more likely to experience less routinized activities, receive constant feedback from the job itself and from peers, have more responsibility for the results of their jobs, and exhibit better person-organization fit. Therefore, they tend to be more satisfied with their jobs because they put more value on the job's characteristics dimensions.

The relationship between job related characteristics and work satisfaction for Brazilian public and private employees is expected to follow previous finding on public-private comparison. Previous research has indicated that task significance, skill variety, and autonomy are strong predictors of work satisfaction in both sectors, despite the magnitude of the differences (Glisson and Durick 1988; Ting 1996; Moynihan and Pandey 2007; Reid et al. 2008). Since private employees have the opportunity to use different skills and enjoy greater autonomy, we expect the relationship between skill variety and autonomy, and work satisfaction will be stronger for the private sector. On the other hand, public employees tend to value the significance of the task the most (Davis 2013). Hence, we expect the relationship between task significance and work satisfaction will be stronger for public workers because of the social relevance of the job and the sense of contribution to society, which are pointed out as major reasons why individuals look for public jobs in the first place (DeSantis and Durst 1996; Lyons et al. 2006; Bright 2008). Thus, the following hypotheses are posed:

H 1a. The relationship between task significance and work satisfaction will be stronger for the public sector than for the private sector.

H 1b. The relationship between skill variety and work satisfaction will be stronger for the private sector than for the public sector.

H 1c. The relationship between autonomy and work satisfaction will be stronger for the private sector than for the public sector.

Organizational Practices

organizational practices help to shape the context in which employees are embedded, since they reflect how organizations manage human capital. Davis (2013) adds that observable organizational characteristics, such as HR practices, influence work satisfaction because they frame employees' interaction with the organization. In public organizations, human resource management is typically characterized by formalization

and red tape (Rainey and Bozeman 2000). The ubiquity of red tape in public organizations might limit person-organization fit to those who value communication and autonomy, undermining work satisfaction.

Previous findings imply that the person-organization fit is the most important predictor of work satisfaction in a model that also includes public service motivation, which is the altruistic intention that motivates individuals to serve in the public interest. For example, Rothbard et al. (2005) suggest that work satisfaction will be low where organizational policies and employees' expectations do not match. Bright (2008) adds that an adequate match between individuals' skills, goals, and values and organizational values, goals, and resources is significantly related to work satisfaction of public employees. On the other hand, changing organizational practices can facilitate work satisfaction as long as changes appraise values that employees estimate (Davis 2013).

In summary, organizational characteristics are expected to influence work satisfaction in both the public and private sectors differently. And in Brazil, public organizations face higher levels of red tape in personnel management, and lower managerial autonomy to reward, promote, train and develop subordinates than American public organizations (Motta 1996). Indeed, as Faoro (2000) has discussed, Brazilian public administration is ruled by laws that frequently contradict common sense and the needs of society. To illustrate, Brazilian employment laws for civil servants dictate that, upon attaining tenure, layoffs are only allowed in three situations: judicial mandate, administrative prosecution, and three consecutive failures on performance evaluations (that will turn into an administrative prosecution). This example gives a sense of how public managers in Brazil have little to work with regarding human resource management. We hypothesised that even in relation to those practices that are allowed a certain degree of autonomy and flexibility to public managers, the influence on Brazilian public employees' satisfaction will be weaker in comparison to private employees. In other words, the level of satisfaction of public sector employees will be less influenced by how the organization manages HR programs such as training and development, reward and benefits, and career planning than for private sector employees. The following hypotheses are proposed:

H 2a. The relationship between the training and development HR practice and work satisfaction will be stronger for the private sector than for the public sector.

H 2b. The relationship between the reward and benefits HR practice and work satisfaction will be stronger for the private sector than for the public sector.

H 2c. The relationship between the career planning HR practice and work satisfaction will be stronger for the private sector than for the public sector.

Individual-Level Considerations

In the management literature, individual differences have been assessed usually as gender, age, marital and parental status, educational level, and tenure. Again, however, empirical findings are not consistent with regard to individual characteristics and work satisfaction (Glisson and Durick 1988).

Regarding educational level, researchers suggest that there is a negative relationship between education and work satisfaction because more educated employees have

higher expectations that organizations may be unable to meet (Ting 1996). Bright (2008) reports that public employees who are highly educated are more likely to leave their jobs than their counterparts who are less educated. In public-private comparison, DeSantis and Durst (1996) find a significant relationship between educational level and work satisfaction in the private sector and a non-significant relationship in the public sector. The authors conclude that highly educated young workers are less satisfied because they are required to perform many simpler tasks due to their limited work experience.

However, the Brazilian public and private environments differ considerably from the U.S. conditions. The public sector in Brazil permits employees a career growth only into the same position. If an employee gets an education and wants to change positions, he/she has to go through the admission process all over again, and this process is usually a public competition, which often includes exams and interviews. Nevertheless, we expect a positive relationship between educational level and work satisfaction because highly educated public employees still enjoy better conditions—more political influence, better financial incentives, prestige, and etc.—in the organizations than less educated public employees. In the private sector, the good market conditions showed by economic growth indices enable educated professionals to achieve better positions in the same organization or in the market. Therefore, because Brazilian private sector employees have greater career mobility as a result of their formal education when compared to public sector employees, we expect a positive relationship between educational level and work satisfaction, and that this relationship will be stronger for the private sector in Brazil. The following hypothesis is proposed:

H 3a. The positive relationship between educational level and work satisfaction will be stronger for the private sector than for the public sector.

Finally, the length of tenure in the same organization has been found to influence work satisfaction negatively (DeSantis and Durst 1996; Moynihan and Pandey 2007). This means that employees feel less engaged and satisfied with their jobs the longer they are members of the same organizations. Moynihan and Pandey (2007) suggest that employees who have remained in the same organization for a long period of time have more limited reference for comparison, which leads them to believe that other organizations are better to work in.

In Brazil, public employees tend to maintain membership in the same organization for a long period of time for two main reasons. First, it is hard to enter into a public organization because the selection process is quite competitive on all levels, so leaving a public job seems a hard thing to do. Second, most employees in Brazil who work for public organizations enjoy a great amount of stability and count on the public retirement system, which reduces the odds of leaving public service. A Brazilian Federal Reserve Bank report shows that since 2007 the turnover rate on public administration has been around 0.5 %, while in other industries such as construction and agricultural it is above 5 % (Brasil 2011). The report supports the assumption that the low turnover rate is mainly due to work stability assured by law. It means that public employees might be unsatisfied with their jobs but they do not want to take the chances of leaving such a stable condition for several reasons, like social pressure, market conditions, lack

of skills, family situation, etc. Younger public employees might feel differently as they can put extra effort to get a better position.

On the other hand, Brazilian private employees are subject to market conditions that might follow the American literature regarding the relationship between tenure and work satisfaction. As they keep membership of the same organization they tend to focus in other aspects of their lives rather than work and lose their engagement to the organization. We therefore expect the relationship between tenure and work satisfaction to be stronger for the Brazilian public sector when compared to the private sector. The following hypothesis is proposed:

H 3b. The negative relationship between tenure and work satisfaction will be stronger for the public sector than for the private sector.

Method

The primary data used to test these hypotheses comes from a survey administered to employees in public and private organizations in Brazil. The survey consisted of a paper-based standardised questionnaire comprised of four sections. The first section assesses individual characteristics, consisting largely of demographic questions. The second section measures job characteristics. The items in this section were adopted from the job diagnostic survey (JDS) developed by Hackman and Oldham (1980), a well-known and widely utilised instrument developed to assess job characteristics (Glisson and Durick 1988; Rothbard et al. 2005). The third section measures the employees' perceptions of human resource practices. The questions in this section were developed based on a combination of the previous literature and the results of some preliminary interviews with Brazilian employees, focusing on the core practices identified in the literature. The research group spearheading the survey developed and validated the questions for the Brazilian context (Borges 2009). The composite measure of reliability reported for this construct was 0.91 and 0.92 in two different studies (Borges and Marques 2008; Borges 2009). The fourth section measures the dependent variable work satisfaction, which utilised Hackman and Oldham's (1980) contextual satisfaction measurements items.

The organizations studied in this analysis are located in the Brazilian state of Minas Gerais. Located in southeast Brazil, Minas Gerais is the second most populous state and the third largest state by Gross Domestic Product (GDP). Although the state occupies only 11 % of the Brazilian territory, it has about 45 % of the population due to high levels of economic development and industrialization (IBGE 2012). The sample size of the public organizations represented by the state agencies is 925 participants. The private organizations are multinationals corporations from Brazil founded in the Minas Gerais state, where they are still settled. In the Brazilian market, there are more than 10,000 multinational organizations, and, from the 500 largest organizations, 221 are multinationals (Valor Econômico 2010). The sample size is 339 respondents.

Individuals who are employed in public and private organizations are the unit of analysis of this research. The administration of the paper-based questionnaire followed

the same procedures for all organizations. Only the administrative and the blue collar workers were randomly asked to meet the researchers at organizations' auditorium. As soon as the employees arrived, they were informed about all aspects of the research project, that there was no need for individual identification, and the voluntary characteristic of the participation. In addition, in the first page of the paper-based questionnaire, a letter reinforced the objectives of the research, the voluntary participation, anonymity, and confidentiality of the information. In fact, no direct identification of individual subjects was possible because no personal information such as name, date of birth, or social security number, was recorded. In the public organizations we distributed 1500 questionnaires reaching a response rate of 62 %. In the private sector, 1000 paper-based questionnaires were distributed, resulting in a response rate of 34 %.

After checking for missing data patterns and outliers, the sample size resulted in 1150 respondents—321 from the private sector and 829 from the public sector. A power analysis was run and the public sector sample was further reduced to maintain parity with the number of respondents from the private sector by randomly selecting 42 % of the public organization cases, totalling 349 public sector respondents.

Data Analysis and Results

We utilised confirmatory factor analysis to test the measurement model for internal consistency and convergent validity, which were estimated using the maximum likelihood procedure in the EQS software. As Segars and Grover (1993) argue, the confirmatory factor analysis provides means to statistically test theorized relationships against observed data. The authors also recommend using maximum likelihood estimates to first assess the measurement model before estimating the structural model. This approach minimises possible interaction between measurement and structural models.

The results provide evidence of an adequate unidimensionality [$\chi^2(194)=1394.6$, $p<0.01$], the CFI (0.90) and GFI (0.95) indices are greater than 0.90, and the RMSEA (0.09) is below the 0.10 threshold. Table 1 shows the standardised loadings, average variance extracted, and reliability values.

According to Hair et al. (2006), factor loadings greater than ± 0.50 are generally considered necessary for practical significance. Thus, two items were removed—one of autonomy and one of task significance. The convergent validity was adequate since all constructs scored greater than 0.50. The reliability was measured by Cronbach's alpha. All constructs scored greater than 0.70, indicating a good internal consistency.

We run ANOVA analysis to identify the differences between sectors. Table 2 displays the ANOVA results, means, and standard deviations. The results show that only salary level and skill variety do not vary across sectors. Public employees have higher tenure and are more educated than private sector employees. Curiously, private employees reported to have less autonomy than public employees. Task significance is higher for public employees, as expected. Also, organizational practices are better in the private sector. Finally, private workers answered that they are slightly more satisfied with their jobs than public employees.

Table 1 Instrument reliability and validity

Construct	Variables	Items	Standardized loadings	AVE	Reliability
Job characteristics	Autonomy	au_1	0.869	0.810	0.889
		au_3	0.930		
	Skill Variety	sv_1	0.813	0.709	0.874
		sv_2	0.796		
		sv_3	0.912		
	Task Significance	ts_2	0.921	0.880	0.933
ts_3		0.955			
Organizational management	Training and development	hrtrdv_1	0.637	0.655	0.875
		hrtrdv_2	0.882		
		hrtrdv_3	0.903		
		hrtrdv_4	0.788		
	Reward and benefits	hrrwbn_1	0.786	0.589	0.845
		hrrwbn_2	0.699		
		hrrwbn_3	0.725		
		hrrwbn_4	0.852		
	Career planning	hrcrpl_1	0.753	0.581	0.895
		hrcrpl_2	0.795		
		hrcrpl_3	0.795		
		hrcrpl_4	0.648		
		hrcrpl_5	0.769		
		hrcrpl_6	0.804		
Work satisfaction	Work Satisfaction	Stability	0.695	0.513	0.708
		Compensation	0.793		
		Growth	0.940		
		Supervision	0.556		
		Environment	0.509		

All the standardized loadings are significant at $p < 0.05$

Deleted items: au_2 and ts_1

The hypotheses were tested using multiple regression analysis. We tested the influence of task-related, organizational, and individual factors on work satisfaction across public and private organizations by analyzing the moderation effect of *ownership*. In other words, we assessed if public or private ownership (i.e., public or private organizations) affects the strength of the relationship between the independent variables and the dependent variable work satisfaction. We also controlled for gender and salary level; the former since women are more likely to have more responsibilities in the family and greater work-family conflict might negatively affect work satisfaction (Martins et al. 2002). And the odds of enhancing work satisfaction are greater for employees by achieving higher positions in the organization and earning larger salaries. Again, however, previous research has

Table 2 Mean, standard deviations, and ANOVA results **

Variables		Private		Public		F value
		Mean	s.d.	Mean	s.d.	
1.	Gender	86		244		372.42*
2.	Educational level	12.86	0.24	14.80	0.95	74.32*
3.	Tenure	11.32	0.89	15.97	1.24	61.80*
4.	Salary level	3870	140	4060	130	0.92
5.	Autonomy	2.88	0.25	3.89	0.55	249.75*
6.	Skill variety	3.91	0.29	3.94	0.44	0.20
7.	Task significance	2.82	0.18	4.55	0.47	1217.76*
8.	Training & Devel.	3.92	0.21	2.85	0.76	213.54*
9.	Reward & Benefits	3.55	0.39	2.15	0.57	404.99
10.	Career planning	3.39	0.33	2.36	0.65	206.36*
11.	Overall Work Satisfaction	3.85	0.19	3.36	0.38	91.88*

Educational level and Tenure are in years. Salary level is the Brazilian currency per month

** $n=670$ * $p<0.01$. Gender represents the number of females in the sample

been inconsistent in establishing the relationship between gender, position and work satisfaction (Glisson and Durick 1988; Rothbard et al. 2005; Bright 2008; Reid et al. 2008; Pitts 2009).

Table 3 shows the results of the four models for work satisfaction as a dependent variable. With regard to the antecedents of work satisfaction (model 2), only skill variety are not significantly related to work satisfaction. Model 3 was run to determine whether the moderator *ownership* interacts with work satisfaction. The regression results for model 3 indicate that the proposed moderator is classified as a *pure* moderator, according to the typology of specification developed by Sharma et al. (1981). These authors argued that at least three misunderstandings persist when researchers try to conceptualise the moderator effect: the moderator must interact with the predictor variable, it cannot be a significant predictor, and it cannot be related to other predictor variables. In this study, type of ownership interacts with the independent variables (which were centered) to modify the relationship between the predictors and the dependent variable (model 4), but it is not a predictor itself (model 3).

Finally, the results of model 4 allow us to draw conclusions about how the independent variables influence work satisfaction in public and private organizations. The moderator effect of ownership can be evaluated based on strength, significance level, and nature of the relationship (Jaccard and Turrisi 1990). The strength is determined by the differences of the squared multiple correlations of model 2 and model 4. The results indicate that analyzing how the independent variables relate to work satisfaction in the public and private sectors accounts for 4 % of the variance in work satisfaction. The significance level can be assessed for the overall interaction effect and for each coefficient separately. The F test in model 4 is significant [$F(14,670)=4.96$, $p<0.05$]; this means that the presence of the interaction terms significantly adds to the analyzes. In practice, the results suggest that there is a

Table 3 Multiple regression analyzes for work satisfaction

Variables	Model 1	Model 2	Model 3	Model 4
Control				
Gender	0.20**	0.01	0.01	0.02
Salary level	0.09*	0.04	0.04	0.05
Independent				
Task significance		0.15*	0.15*	0.20*
Skill variety		0.13	0.13	0.03
Autonomy		0.18**	0.18**	0.07
HR Training&Development		0.21**	0.21**	0.35**
HR Reward&Benefits		0.24**	0.24**	0.14*
HR Career planning		0.38**	0.38**	0.34**
Educational level		-0.09*	-0.09*	-0.07*
Tenure		0.08*	0.09*	0.04
Moderator				
Ownership			0.64	0.01
Interactions				
H1a Ownership x Task significance				0.08*
H1b Ownership x Skill variety				-0.03
H1c Ownership x Autonomy				0.16**
H2a Ownership x HR Training&Development				-0.15*
H2b Ownership x HR Reward&Benefits				0.17*
H2c Ownership x HR Career planning				-0.02
H3a Ownership x Educational level				-0.10
H3b Ownership x Tenure				0.09*
R ²	0.05	0.59	0.59	0.61
Adjusted R ²	0.05	0.58	0.58	0.62
F	4.84*	6.30*	6.30*	4.96*
ΔR^2		0.53*	0.00	0.04*

significant difference in both groups—public employees and private employees—regarding the relationship between job, organizational, and individual characteristics and work satisfaction.

To examine the nature of the interaction, we check if each interaction coefficient is significant, and plot and test the slopes for each sector (Preacher et al. 2006). According to Cohen and Cohen (1993), a greater slope denotes a greater degree of predictability of the criterion, and subsequently of validity; “in the interpretive context, it is understood as indicative of differential test validity” (p.317). The regression variate provides the coefficients of the regression line of public and private sectors for each significant interaction. To simplify, the difference between the slope of public organizations and the slope of private organizations is exactly the same as the interaction term coefficient. Since private sector respondents were coded as 0, the private sector slope is the

coefficient of the independent variable, whereas the public sector slope (coded as 1) is the sum of the independent variable coefficient and the interaction coefficient in model 4.

Job Characteristics

Model 4 suggests that ownership moderates the relationship between task significance and work satisfaction. This means that the slopes of this relationship are significantly different for the public and private sectors. The regression lines for both sectors are shown in Fig. 1a. This shows that the relationship between task significance and work satisfaction is stronger for the public sector, supporting *Hypothesis 1a* ($p < 0.05$). In practice, a one-point increase in skill variety is associated with an average increase of 0.02 in work satisfaction for the private sector, and five times greater for the private sector (0.10).

Hypothesis 1b implies that the relationship between skill variety and work satisfaction is stronger for the private sector. However, the Brazilian sample suggests that skill variety is not even a predictor of work satisfaction ($p = 0.27$). Therefore, the results fail to support *Hypothesis 1b*.

Although the results indicate that ownership moderates the relationship between autonomy and work satisfaction, *Hypothesis 1c* was partially supported ($p < 0.001$). Figure 1b shows that the relationship between autonomy and work satisfaction is stronger for the public sector than for the private sector. In fact, an increase of one point in autonomy is associated with an average increase of 0.06 of work satisfaction for the private sector and an increase that is three times greater for the public sector (0.18).

Organizational Characteristics

The findings indicate that the influence of the training and development HR practice and the rewards and benefits HR practice on work satisfaction is different for public and private organizations, thereby supporting *Hypothesis 2a* ($p < 0.05$) and partially supporting *Hypothesis 2b* ($p < 0.05$). Figure 1c shows that the relationship between the HR practice of training and development and work satisfaction is stronger for the private sector than for the public sector. From the regression lines, we can infer that a one-unit increase in the training and development HR practice is associated with an average increase of 0.21 in work satisfaction for the public sector and 0.35 for the private sector.

Unexpectedly, the significant effect of ownership reveals that the relationship between rewards and benefits and work satisfaction is stronger for the public sector than for the private sector. From Fig. 1d, we can conclude that a one-unit increase in the rewards and benefits HR practice is associated with an average increase of 0.31 in work satisfaction for the public sector and 0.14 in the private sector—an effect twice smaller for the private sector when compared to public organizations—therefore partially supporting *Hypothesis 2b*. The remaining variable—career developing—does not seem to suffer any influence from ownership, although the results indicate that it is an antecedent of work satisfaction ($p < 0.001$). Hence, *Hypothesis 2c* ($p = 0.77$) was not supported.

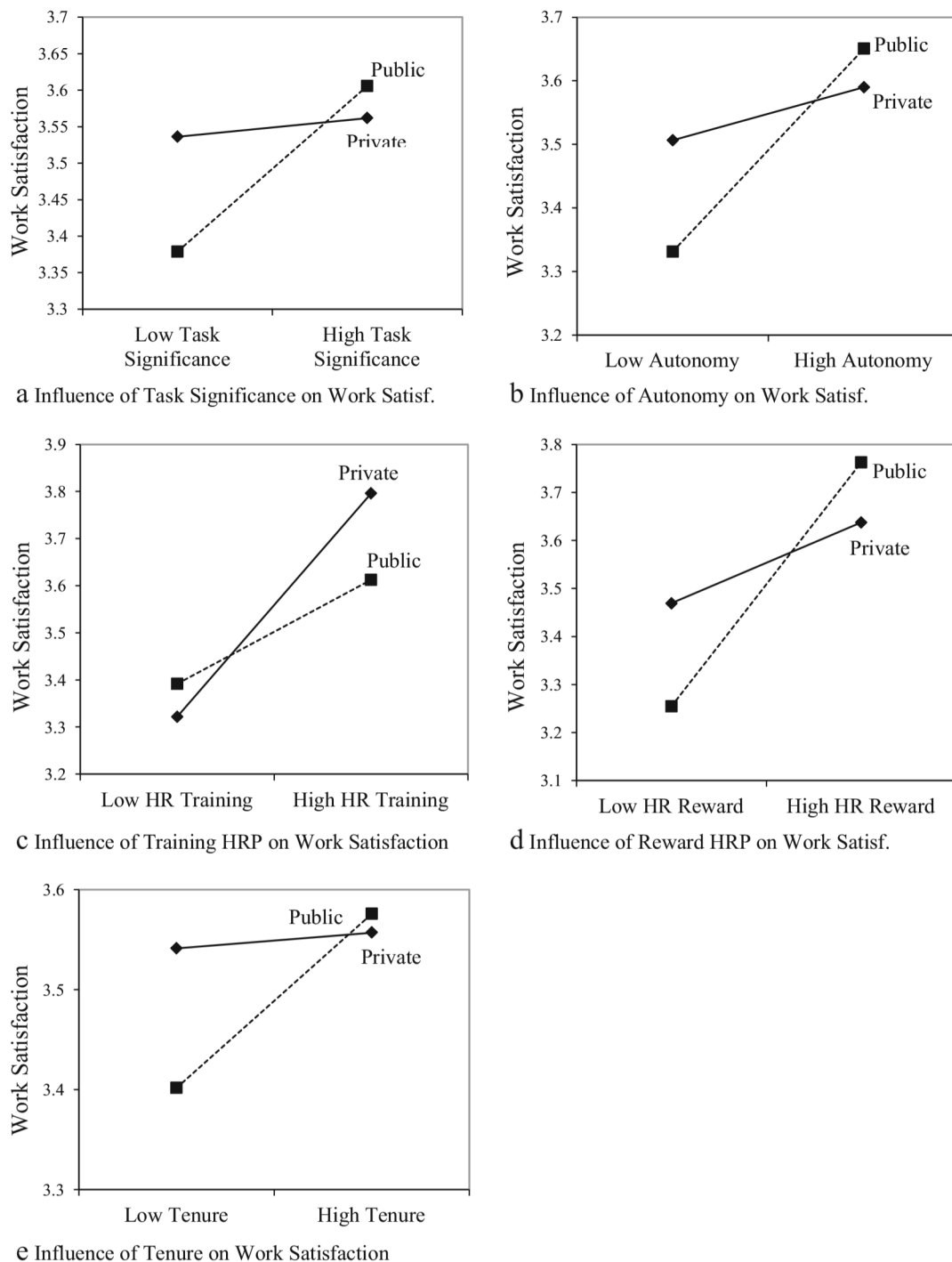


Fig. 1 Regression lines for work satisfaction

Individual-Level Considerations

With the two individual characteristics (educational level and tenure) examined, the moderator effect of ownership was not significant for educational level, failing to support *Hypothesis 3a* ($p=0.81$). *Hypothesis 3b*, which states that the negative relationship between tenure and work satisfaction will be stronger for public employees, was partially supported ($p<0.05$). Figure 1e reveals an interesting pattern in the

difference between public and private organizations regarding the influence of tenure on work satisfaction. The results reveal a positive slope for both sectors. So while one length of tenure increases 0.13 the level of satisfaction in public organizations, it increases three times less (0.04) the level of satisfaction in public organizations.

Concluding Discussion

This study sought to extend research on differences between public and private organizations by looking at Brazilian organizations. Research hypotheses were developed using the existing literature and tested using data collected from Brazilian organizations. This study contributes to the public-private literature in three important ways. First, comparative analyzes of these organizations in national contexts other than the United States are exceedingly rare. Second, since most analyzes are based on empirical studies of U.S. organizations, the applicability of the findings in the literature in other national contexts is questionable. Third, this research can help public managers from young bureaucracies who are embedded in similar conditions to understand the particularities of the public and private sectors. In the study, we hypothesised how job related characteristics, organizational practices, and individual-level factors might affect work satisfaction differently for the private and public sectors. The results suggest that the relationship between job, organizational, and individual characteristics and work satisfaction varies, to some degree, across the public and private sectors. And, as we discuss below, the findings departed from the existing literature in interesting ways.

With job characteristics, we find that autonomy and task significance are predictors of work satisfaction, which coincides with the findings in the literature (DeSantis and Durst 1996; Bright 2008; Davis 2013). However, the results regarding skill variety contradict the findings of Glisson and Durick (1988), Ting (1996), Moynihan and Pandey (2007), and Reid et al. (2008). Similarly, the lack of significant differences in intrinsic work values also contradicts the findings of Lyons et al. (2006). In fact, Brazilian public employees perceive they have more autonomy than private workers. Both sector employees reported to use the same amount of skills to perform their daily activities. As expected, public employees perceive their activity as more meaningful than private sector employees. In general, these findings suggest that, in the Brazilian context, the level of autonomy and task significance affect the level of work satisfaction greater for public sector workers than for private sector workers.

organizational practices in general were found to have a significant effect on employees' satisfaction. In the private sector, Brazilian employees value most how organizations conduct their training and development programs. We would argue that this was less important for Brazilian public sector employees largely because of the continuing impact of patrimonialism, where getting a better position in the public sector still depends on factors other than investments in career development. An interesting finding is that public sector employees seem to value how organizations design and manage their reward and benefit systems more than

private sector workers. When public employees perceive organizational reward programs as favourable, they tend to present greater levels work satisfaction than private sector workers.

Our findings support the findings of DeSantis and Durst (1996), Ting (1996), and Bright (2008) with relation to educational level, which suggest that the more employees get educated the less satisfied they are with their jobs. The Brazilian sample indicates that there are no differences regarding how educational level impacts work satisfaction across public and private sectors. Moreover, the Brazilian sample indicates that the more public employees remain in the same organization, the more satisfied they are with their jobs, which contradicts the findings of Moynihan and Pandey (2007) on the U.S. public sector. In fact, Bellou (2007) found that the more Greek employees get tenure the more they value friendly working climate and the more they show respect for personal life, regardless of ownership. Nonetheless, the results from the Brazilian private sector did exhibit a negative relationship between tenure and work satisfaction.

This research also offers some implications to practitioners. As Davis (2013) points out, managers interested in improving employees' performance could benefit from this type of research by understanding the psychological outcomes of public and private sector workers. Managers from private organizations should pay more attention to job-related characteristics and be aware that private sector employees are more satisfied than their public sector counterparts mainly due to organizational practices. Managers from public organizations need to pay special attention to newcomers and low tenured employees since they tend to be more dissatisfied with their jobs. But as long as they keep membership in the organization they are more likely to present higher levels of work satisfaction than the private sector employees. Finally, Brazilian government can enhance work satisfaction in public sector by meeting some of the employees' expectations regarding financial compensation.

Limitations and Future Research Directions

This study has several limitations. In general, the data suffers from some limitations, including sample selection, response rate, and common method bias. Another limitation involves the generalizability of the findings: all respondents are from one state in Brazil, thereby limiting the applicability of the results in other countries and research contexts. The last potential limitation of this study is the variables selected as antecedents of work satisfaction. Future research could include different variables or could utilise other measurement models, selecting from the many available in the literature.

Future research can explore in greater depth how and why the Brazilian results deviated from the existing literature. Clearly, national culture plays an important role. A great deal of work on national culture and organizations, largely initiated or influenced by Hofstede (2001), has informed a range of organizational theory, but an adequate understanding of the impact of national culture on differences between public-private organizations is sorely lacking. While an exact determination of whether Brazilian culture led to our results is beyond the scope of this study, the findings suggest a number of potential avenues for further research. For example, we were intrigued with the result that skill variety was not related to work satisfaction. We speculate that this might be a Brazilian phenomenon, or even a phenomenon of developing economies, as result of centralized decision making in both sectors. As Jreisat (2011) argued, the need

for more comparative research in public administration is crucial in a highly globalised world. While the number of comparative studies has been increasing, there is still a dearth of research. The incredible growth of a number of previously developing economies, such as Brazil, requires far greater cross-cultural understanding about the management of organizations in those economies. It is our hope that this study contributes to that effort.

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