BJIR An International Journal of Employment Relations LSE

British Journal of Industrial Relations doi: 10.1111/j.1467-8543.2010.00816.x
49:S1 June 2011 0007–1080 pp. s1–s26

Compensation Management in Outsourced Service Organizations and Its Implications for Quit Rates, Absenteeism and Workforce Performance: Evidence from Canadian Call Centres

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Abstract

We investigate compensation management in in-house and outsourced call centres with original establishment-level data collected in Canada. Our analysis reveals that both customer service representatives (CSRs) and managers employed in outsourced call centres earn 91 per cent of the cash pay earned by their in-house counterparts. Lower cash pay levels in outsourced call centres are related to higher CSR quit rates and absenteeism. Although CSR cash pay is associated with improved workforce performance, the disparity in cash pay between in-house and outsourced call centres does not result in a significant difference in workforce performance.

1. Introduction

Outsourcing is a common practice for many organizations as they choose between performing work *in-house* or *outsourcing* it to external suppliers. Empirical research on employment conditions in outsourcing organizations is sparse. The few existing studies focus on pay differences between employees of outsourced organizations and in-house organizations (e.g. Abraham and Taylor 1996; Berlinski 2008; Dube and Kaplan 2010). Some factors — skill differences, industry characteristics and lower hours — have been considered as potential mechanisms influencing lower pay in outsourced firms but do not offer a comprehensive explanation. Thus, several questions about

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the outsourced pay differential remain unanswered. Moreover, little is known about the implications of this pay disparity for the management of outsourced organizations. Furthering our understanding of lower pay levels and their consequences in outsourced organizations is important because outsourcing is growing (Bhagwati *et al*. 2004). As many outsourced organizations encounter competitive pressures to reduce expenditures, employee compensation, the single largest operational cost in most organizations (Gerhart *et al*. 2009), is an especially important human resource management (HRM) practice.

We investigate several questions about compensation management in outsourced organizations. First, does this pay disparity for employees transfer to managers? If it exists for managers, is it similar in magnitude to the one for employees? Second, is there a similar disparity in benefits between in-house and outsourced organizations? Few studies of outsourcing organizations examine the possible disparity in employee benefits, which represents a significant portion of payroll expenditures (Bates 2003).[1] Third, what is the relationship among outsourcing status, employee compensation and other HRM practices? Finally, what are the implications of adopting a less generous pay policy for outsourced organizations? By addressing these questions, we present a comprehensive picture of compensation management in outsourced service organizations.

We analyse original establishment-level data from in-house and outsourced call centres located in Canada. In contrast to other outsourcing studies that have examined individual-level data collected in the USA (e.g. Current Population Survey; Berlinski 2008; Dube and Kaplan 2010), we focus on the establishment level. Considering organization-level factors (e.g. call centre characteristics, HRM practices) will provide new insights overlooked by previous outsourcing studies. Canada is an interesting laboratory for examining the outsourcing of customer service work because US and UK firms often outsource customer service work to India and Canada (van Jaarsveld *et al*. 2009).

We find, consistent with Berlinski (2008) and Dube and Kaplan (2010), significant pay disparities for employees between in-house and outsourced call centres. Managers employed by outsourced organizations also earn significantly less cash pay than their in-house counterparts, and this pay gap is similar in size for both customer service representatives (CSRs) and managers. In-house and outsourced call centres also differ in the HRM practices they adopt, and these choices contribute to the disparity in CSR cash pay. Turning to the consequences of less generous compensation, lower cash pay is associated with higher CSR quit rates and CSR absenteeism in outsourced call centres, two factors that have been shown to increase customer turnover (Heskett *et al*. 1997). In addition, CSR cash pay is significantly associated with workforce performance, but we fail to find evidence that lower pay in outsourced centres leads to lower workforce performance.

2. Prior literature and theoretical framework

Inter-organizational Differences in Compensation

Competitive labour markets should eliminate wage gaps among employees who perform similar jobs, yet abundant evidence shows that wage rates vary across organizations (Gerhart and Milkovich 1990; Gerlach and Stephan 2006). Workforce characteristics, organizational size, union presence, industry and geographic location account for employee pay differences (Becker 1975; Dunlop 1957; Freeman and Medoff 1984; Krueger and Summers 1988; Shapiro and Stiglitz 1984).

Beyond these factors, management scholars argue that organizational context, including organizational structure and corporate strategy, influences an organizational compensation system (Gomez-Mejia and Balkin 1992; Milkovich 1988). Decisions about an organization's compensation system are shaped by fit with organizational context and its implications for organizational effectiveness. As a result, systematic variation in compensation systems exists across organizations within the same industry. We argue that *outsourcing status* is an important contextual factor that affects compensation systems.

Aside from compensation, strategic HRM researchers have emphasized the importance of fit between a set of HRM practices and the organizational context (Schuler and Jackson 1987). In this framework, a compensation system is likely to be associated with a specific set of HRM practices that are aligned with the organizational context. Consistent with this perspective, some organizational differences in compensation systems may be explained by organizational decisions about other HRM practices rather than choices about compensation. Call centre research, however, shows mixed evidence that compensation management is related to other HRM practices (Batt 2001; Wood *et al*. 2006). These mixed findings could be the result of institutional differences or variation in the set of HRM practices included in the analyses.

Differences in Compensation between In-House and Outsourced Call Centres

Indeed, several factors influence the outsourcing decision including the need to increase flexibility in staffing levels, reduce labour costs and capitalize on economies of scale for providing specialized services (Abraham and Taylor 1996). However, cost savings is a primary motivator for outsourcing (Doellgast *et al*. 2009; Harrison and Kelley 1993). According to transaction cost economics, organizations outsource work if the costs associated with outsourcing (e.g. fees for external suppliers and transaction costs) are less than the costs associated with internalization (e.g. production costs, acquisition and maintenance of physical and human assets) (Williamson 1975, 1985). For outsourced organizations, preserving a cost advantage in order to attract business is crucial. They can achieve this goal by adopting a low-cost management system or hiring and developing a high-quality workforce to

improve employee productivity. Nevertheless, efforts to increase productivity do not alleviate pressures to reduce costs, a critical issue for outsourced call centres competing with outsourced suppliers in lower-wage countries and with retaining the work in-house (Batt *et al*. 2005; Doh 2005). In order to preserve a cost advantage over their competitors, we expect outsourced call centres to reduce their labour costs, thereby influencing them to pay their CSRs less than their in-house counterparts.

Outsourced call centres' intention to control employment costs will influence other aspects of HRM. First, outsourced call centres may hire CSRs with limited human capital to reduce compensation expenditures and design customer service work so that low-quality workers can perform tasks (e.g. standardizing work procedures). Second, they can reduce expenditures associated with other HRM practices such as hiring and training costs (Doellgast *et al*. 2009). Third, outsourced centres are less likely to be unionized (Doellgast 2008), removing potential obstacles preventing the adoption of a low-cost management system. Together, these choices are likely to be associated with lower CSR pay, suggesting that these factors may contribute to the observed pay disparity. However, we argue that outsourced call centres have a clear intention to reduce employee compensation to support their strategic orientation (i.e. cost advantage). We control for other HRM practices in our analysis rather than as outcomes of outsourcing, allowing us to rule out the possibility that pay-level differences between in-house and outsourced call centres reflect variations in other HRM practices that may result from outsourcing decisions.

Little is known about managerial pay in outsourced call centres in comparison with their in-house counterparts. On the one hand, limiting compensation for managers could give outsourced call centres an additional cost advantage over performing the work in-house. On the other hand, a low-cost operation could also increase CSR dissatisfaction, emotional exhaustion and burnout (Deery *et al*. 2002), thereby increasing job demands for managers and, in turn, their compensation expectations. Outsourced call centres might choose to suppress manager pay levels to preserve their competitive advantage in the marketplace, but only to the extent that it avoids difficulties in attracting and retaining applicants for managerial positions. Therefore, we expect that outsourced managers are paid less than in-house managers, but the manager pay differential may be narrower than the CSR pay differential between in-house and outsourced call centres.

Consequences of the Outsourced Pay Differential: Quit Rates and Absenteeism

Outsourced centres paying CSRs less than in-house centres risk an increase in CSR withdrawal behaviours (e.g. quits and absenteeism). Higher turnover and absenteeism are especially problematic for call centres because these behaviours are related to customer turnover (Heskett *et al*. 1997).

In both organizational-level and individual-level turnover research, the negative relationship between pay and actual quits is robust (Barber and Bretz 2000; Griffeth *et al.* 2000; Shaw *et al.* 1998). The pay differential is likely to be associated with higher CSR quit rates in outsourced call centres. Indeed, Holman *et al.* (2009) reported that quit rates in outsourced call centres were higher than in in-house call centres, without controlling for wage levels. In the present study, we predict higher quit rates in outsourced call centres compared with in-house call centres and consider lower pay as a primary explanation for the expected higher quit rates.

Theories offer ambiguous predictions about the relationship between pay and absenteeism. Equity theory (Adams 1965) suggests that lower pay is associated with higher absenteeism. In a study of employees working in 500 branches of a Danish bank, Kristensen *et al.* (2006) found higher rates of absenteeism in branches with lower salaries. In contrast, economic theory views absenteeism as an outcome related to the labour supply being influenced by the cost employees incur when they are absent (Allen 1981). Lower pay may increase absenteeism because employees are unmotivated to attend work. In the low-wage context, however, employees may lack the financial freedom to be absent. The relationship between pay and absenteeism will depend on the magnitude of these two opposing effects (Dalton and Perry 1981). Thus, we investigate whether the expected pay disparity is associated with higher CSR absenteeism in outsourced call centres.

Consequences of the Outsourced Pay Differential: Workforce Performance

The academic literature provides much less guidance on the question of whether in-house and outsourced organizations differ on workforce performance. We expect that the pay disparity between in-house and outsourced call centres yields variation in workforce performance for several reasons. First, if lower pay is associated with higher quit rates and absenteeism, workforce performance is likely to decline accordingly. Several empirical studies have demonstrated the negative impact of higher quit rates on workforce performance (Shaw *et al.* 2005), although few empirical studies examine the relationship between absenteeism and workforce performance. In addition to physically withdrawing from the workplace, reducing effort is another possible employee reaction to lower pay. Consequently, outsourced CSRs who are paid less than in-house CSRs may perform less well. Second, efficiency wage theory (Shapiro and Stiglitz 1984) points to the possible negative relationship between pay level and work motivation. Paying above market pay rates will prevent employees from shirking because they are more interested in retaining higher-paying jobs. This mechanism is unlikely in outsourced call centres, where the cash pay for employees is expected to be significantly lower than in in-house call centres.

Finally, outsourced call centres are more likely to adopt a low-cost HRM system, and this decision could have a negative effect on workforce performance. Extant call centre research shows that using a high-involvement

HRM approach defined by job security, generous compensation, and empowering employees is associated with improvements in employee and customer satisfaction, sales productivity, sales growth, service quality, and net revenues (Batt 2002; Batt and Moynihan 2002). A key component of the high-involvement HRM approach, a generous pay policy, is likely to be associated with improved workforce performance. We expect that outsourced call centres are less likely to adopt a high-involvement HRM approach as it could increase employment-related expenditures.

3. Methods

Context

This study is a part of 'the Global Call Centre Project' (see Batt *et al*. 2009 for details). In comparison with other countries participating in the project, Canada has a disproportionate share of outsourced call centres (Holman *et al*. 2007). Interviews with industry experts uncovered considerable efforts by economic development agencies in Canada to attract customer service work from other countries during the 1990s, resulting in the widespread presence of outsourced call centres (van Jaarsveld *et al*. 2009).

Sample

The population of this study included all call centres in Canada. Call centres are an emerging sector with unclear industry boundaries, so conventional industry classifications such as the North American Industry Classification System lack a specific category for call centres (Batt *et al*. 2009). For this reason, we developed a database based on membership lists of provincial call centres and a national governmental-level sector council 'Contact Centre Canada', interviews with industry experts, and Internet research. Our effort yielded a list of 3,000 call centres spanning all provinces and a wide cross-section of industries. From this list, we randomly selected 580 call centres to survey.

We surveyed call centre establishments by phone between February 2005 and July 2006. The establishment level of analysis is appropriate because pay level is likely to differ across establishments within a single corporation, reflecting variation in the economic environment, and is considered more reliable than corporate-level surveys (Gerhart *et al*. 2000a). We supplemented the survey developed for the Global Call Centre Project with additional questions about aspects of compensation and labour market conditions we address in this article. For inclusion in this study, centres needed to employ at least 10 employees, and each eligible call centre was asked to select an individual (e.g. contact centre manager, site director) who was most familiar with daily operations to complete the survey. We engaged in site visits to ensure the validity and reliability of our measures.

The response rate was 70 per cent with 406 usable responses, although the choice of variables reduced the sample to 251 usable cases. The number of observations removed from the initial sample is slightly higher than in comparable studies (Colvin *et al*. 2001). We used a pairwise *t*-test to examine whether significant differences existed in our key variables between our final sample and the cases that were removed. We found no significant differences with the exception of CSR absenteeism, which was significantly lower in our final sample ($p < 0.05$). For this reason, the results for CSR absenteeism may need to be interpreted cautiously.

Measures

Measures used in our analysis are described in the Appendix. Three categories of dependent variables are (i) CSR and manager pay level; (ii) CSR withdrawal-related behaviours; and (iii) workforce performance. Pay level was measured with *cash pay* and *benefits level* for CSRs and managers while CSR withdrawal-related behaviours consisted of *CSR quit rate* and *CSR absenteeism*. Consistent with previous call centre studies (Castilla 2008; Wood *et al*. 2006), we used three workforce performance measures: (i) *call abandonment rate*; (ii) *meeting target time*; and (iii) *average call handling time*. The independent variable, *outsourcing status*, indicated whether or not the call centre was outsourced. In our final sample, 37.5 per cent or 94 cases (out of 251 cases) were outsourced, and 62.5 per cent or 157 cases were in-house.

We included three categories of control variables: (i) workforce characteristics; (ii) organizational characteristics; and (iii) HRM practices. Measures of HRM practices were based on previous call centre studies (Batt 2002; Colvin *et al*. 2001).

When estimating pay level and withdrawal-related behaviours, we also controlled for the economic environment using the 2006 average regional unemployment rate and 2006 median local earnings data (Statistics Canada 2008). We excluded these labour market variables when estimating workforce performance because they are unlikely to influence CSR performance.[2]

Analytical Approach

We used (i) ordinary least squares regression to evaluate differences between in-house and outsourced call centres in CSR cash pay, manager cash pay, and average call handling time; and (ii) tobit analysis (PROC LIFE REG in SAS, Ver. 9.1) to analyse CSR benefits level, manager benefits level, CSR quit rate, CSR absenteeism, call abandonment rate and meeting target time. We used tobit regression for these variables because meeting target time is both left and right censored at 0 and 100, while the other variables are left censored at 0 (Maddala 1992).

4. Results

Descriptive Results

Table 1 compares the variables of interest for in-house and outsourced centres. For easier interpretation, we present the means and the results of pairwise *t*-tests calculated before transformation. CSRs and managers employed in outsourced centres earn significantly less cash pay and benefits than their in-house counterparts. CSR quit rates and CSR absenteeism in outsourced centres are significantly higher than in in-house centres. Considering workforce performance, the results are mixed with significantly lower call abandonment rates in outsourced call centres and significantly shorter average call handling time in in-house call centres, suggesting that in-house CSRs handle calls more efficiently. Table 2 reports means, standard deviations and correlation matrix.

Multivariate Analysis

(a) Cash pay

In Table 3, we present the results for CSR and manager cash pay. We added variables in hierarchical order. For CSR cash pay, we added economic environment and organizational characteristics including outsourcing status in Model 1. In Model 2, we added CSR workforce characteristics, and in Model 3, HRM practices. For managers' cash pay level, we followed the same steps, but in Model 2 we added managers' workforce characteristics, and in Model 3, managers' HRM practices and HRM practices applied to CSRs since Colvin *et al.* (2001) found that HRM practices that cover the workforce are associated with pay for both employees and managers.

In Model 3, we find that outsourced call centres pay their CSRs and managers significantly less cash pay than in-house call centres. The beta coefficients for outsourcing status in Model 3 are very similar when comparing CSR cash pay and manager cash pay ($\beta = -0.099$ for both), suggesting that both outsourced CSRs and managers earn 91 per cent (exp (–0.099)) of the cash pay their in-house counterparts earn. Contrary to our expectations, the pay disparity between outsourced and in-house CSRs is similar in magnitude to the pay disparity between outsourced managers and in-house managers.

The addition of workforce characteristics and HRM practices considerably reduced the effect of outsourcing status (CSR cash pay: $\beta = -0.163$ (Model 1) to $\beta = -0.099$ (Model 3); manager cash pay: $\beta = -0.118$ (Model 1) to $\beta = -0.099$ (Model 3)). Thus, some of the difference in cash pay for outsourced CSRs is accounted for by these factors. For example, the number of emails CSRs receive per day from management and the amount of initial training for CSRs are both associated with CSRs earning more cash pay. This pattern could be interpreted as the employer trying to capitalize on employee contributions to organizational effectiveness as suggested by the

TABLE 1
Mean Comparison for In-house and Outsourced Call Centres

Variable	*In-house call centres*	*Outsourced call centres*	*Pairwise t-test*
Compensation			
CSR cash pay	$35,129	$26,818	***
CSR benefits	$6,266	$3,741	***
Manager cash pay	$62,969	$51,699	***
Manager benefits	$12,875	$6,361	***
Quit rate			
CSR quit rate	10.5%	22.1%	***
Absenteeism			
CSR absenteeism	4.4%	7.0%	***
Workforce performance			
Call abandonment rate	5.0%	3.7%	**
Meeting target time	82.3%	83.5%	
Average call handle time	279 seconds	348 seconds	**
Economic environment			
Unemployment rate	5.6%	6.5%	***
Median local earnings	$42,170	$41,290	
Organizational characteristics			
Part of a larger organization	88.5%	70.2%	***
Call centre size	118.0	217.4	***
Union presence	21.7%	6.4%	***
Proportion female CSRs	73.3%	67.8%	**
Average workweek length	38.0	38.3	
Outbound	8.9%	33.0%	***
Job complexity	25.7 weeks	15.9 weeks	***
CSR workforce characteristics			
Community college degree	32.5%	23.4%	
University degree or higher	26.1%	20.2%	
CSR tenure	6.4 years	3.6 years	***
Managers' workforce characteristics			
Community college degree	18.2%	12.9%	
University degree or higher	76.9%	78.5%	
Manager tenure	8.9 years	5.2 years	***
CSR HRM practices			
CSR-manager ratio	13.3	15.3	
Emails per day	6.9	4.1	***
Electronic monitoring	52.4%	69.4%	***
Job discretion	2.9	2.5	***
Systematic selection tests	42.7%	51.6%	
Initial training days	28.8 days	24.5 days	
Formal training days	8.5 days	8.1 days	
Self-directed team	28.2%	20.8%	
Problem solving teams	48.8%	38.1%	**
Financial incentives	1.1%	1.3%	
Managers' HRM practice			
Financial incentives	1.1%	1.5%	*

Note: *Ns* = 110–157 for in-house call centres and 69–94 for outsourced call centres.
* Significant at 10%; ** Significant at 5%; *** Significant at 1%.
CSR, customer service representative.

high-involvement HRM literature (Batt 2002). Contrary to our expectations, we found that increasing the number of formal training days for CSRs was negatively related to CSR cash pay level. Managers may need to increase CSR training to counteract hiring low-quality workers.

TABLE 2
Descriptive Statistics and Correlations

Variable	*M*	*SD*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
1. Outsourcing status[a]	0.37	0.48																	
2. Log CSR cash pay	10.33	0.29	−0.47																
3. Log CSR benefits	7.54	2.59	−0.31	0.37															
4. Log manager cash pay	10.94	0.29	−0.35	0.57	0.29														
5. Log manager benefits	8.39	2.39	−0.24	0.24	0.64	0.25													
6. Log CSR quit rate	1.98	1.35	0.29	−0.34	0.04	−0.05	0.04												
7. Log CSR absenteeism	1.56	0.81	0.24	−0.27	−0.24	−0.07	−0.06	0.34											
8. Call abandonment rate	4.52	4.84	−0.14	−0.05	0.00	−0.05	0.08	−0.08	−0.01										
9. Meeting target time	82.62	11.30	−0.13	0.18	0.13	0.08	0.03	−0.07	−0.16	−0.16									
10. Log average call handle time	5.45	0.80	0.02	0.08	0.17	0.01	0.11	0.12	0.08	0.14	0.12								
11. Log unemployment rate	1.73	0.32	0.21	−0.23	−0.08	−0.21	−0.07	0.10	0.14	−0.11	−0.02	−0.03							
12. Log median local earnings	10.63	0.11	−0.09	0.25	0.06	0.14	0.09	−0.02	−0.14	−0.09	0.03	−0.00	−0.39						
13. Part of a large organization[a]	0.82	0.39	−0.23	0.14	0.23	0.26	0.21	0.13	0.03	0.02	0.13	0.22	−0.12	0.07					
14. Log call centre size	4.15	1.40	0.17	−0.18	0.15	0.04	0.13	0.46	0.36	−0.05	0.06	0.36	0.13	−0.16	0.30				
15. Union presence[a]	0.16	0.37	−0.20	0.28	0.07	0.22	−0.01	−0.32	−0.00	0.06	0.08	−0.12	−0.06	−0.02	0.12	−0.04			
16. Proportion female CSRs	0.71	0.21	−0.13	0.00	−0.16	0.03	0.01	−0.24	−0.02	−0.14	−0.08	−0.28	0.01	0.04	−0.09	−0.24	0.16		
17. Average workweek length	38.11	3.14	0.05	0.06	0.03	0.00	0.01	−0.06	−0.04	−0.02	−0.04	0.10	−0.12	0.05	−0.00	0.03	−0.08	−0.02	
18. Outbound[a]	0.18	0.38	0.30	−0.29	−0.20	−0.22	−0.07	0.10	0.25	−0.17	−0.31	−0.08	0.14	−0.07	−0.15	0.02	−0.09	0.03	0.03
19. Job complexity	22.04	16.33	−0.29	0.36	0.17	0.19	0.09	−0.17	−0.04	0.05	0.12	0.11	−0.05	0.06	0.09	−0.02	0.19	0.16	−0.06
20. Community college degree (CSR)[a]	0.24	0.43	−0.07	0.14	0.04	−0.01	−0.02	−0.05	0.00	−0.11	0.05	0.12	−0.05	0.04	−0.05	−0.03	−0.04	0.11	0.09
21. University degree or higher (CSR)[a]	0.29	0.46	−0.10	0.18	0.11	0.15	−0.02	0.04	−0.19	−0.01	−0.03	0.03	−0.04	0.04	0.05	−0.13	−0.11	−0.21	−0.05
22. Tenure (CSR)	5.33	4.82	−0.29	0.37	0.03	0.23	−0.03	−0.51	−0.21	0.02	0.15	−0.21	−0.09	−0.03	0.03	−0.26	0.38	0.24	−0.00
23. Community college degree (manager)[a]	0.16	0.37	−0.03	0.05	−0.00	−0.01	0.02	−0.02	0.03	−0.15	−0.02	−0.00	−0.11	−0.00	0.01	0.01	0.04	0.12	0.03
24. University degree or higher (manager)[a]	0.74	0.44	−0.01	0.09	0.12	0.12	−0.10	0.14	−0.10	0.11	0.08	0.04	−0.05	−0.01	−0.04	0.03	−0.09	−0.15	0.03
25. Tenure (manager)	7.86	6.06	−0.34	0.33	0.22	0.37	0.08	−0.42	−0.17	0.02	0.15	−0.19	−0.08	0.06	0.10	−0.18	0.42	0.18	−0.06
26. Log CSR–manager ratio	2.09	1.03	−0.03	0.00	0.14	0.18	0.05	0.22	0.20	−0.02	0.05	0.16	0.05	−0.03	0.20	0.38	0.02	−0.15	−0.04
27. Log emails per day	1.50	0.95	−0.27	0.25	0.25	0.14	0.03	−0.04	−0.20	0.18	0.22	0.15	−0.17	0.03	0.19	−0.00	0.11	−0.09	0.01
28. Log electronic monitoring	3.31	1.75	0.19	−0.09	−0.11	−0.11	−0.01	0.00	0.08	−0.04	0.00	−0.09	0.06	−0.04	−0.04	0.05	0.08	0.02	−0.05
29. Job discretion	2.77	0.73	−0.27	0.21	0.21	0.05	0.09	−0.21	−0.28	0.01	0.18	0.09	−0.20	−0.02	−0.04	−0.26	−0.06	−0.04	−0.04
30. Log systematic selection tests	2.31	2.22	0.11	−0.04	0.03	−0.01	0.02	0.20	0.06	−0.10	0.04	0.10	0.07	−0.06	0.14	0.32	0.08	−0.06	−0.02
31. Log initial training days	3.00	0.83	−0.19	0.38	0.17	0.16	0.17	−0.10	−0.08	0.04	0.20	0.13	−0.05	0.14	0.13	0.13	0.18	0.06	0.03
32. Log formal training days	1.93	0.79	−0.05	0.10	0.13	−0.01	0.09	0.11	0.07	−0.01	0.12	0.24	0.04	0.04	0.16	0.29	0.03	−0.07	0.03
33. Log self-directed teams	1.64	1.96	−0.11	0.15	−0.04	0.02	−0.03	−0.18	−0.12	0.03	0.02	−0.04	−0.12	0.00	−0.04	−0.27	−0.01	0.01	0.04
34. Log problem solving teams	3.15	1.43	−0.13	0.23	0.12	0.09	0.05	−0.12	−0.20	−0.04	0.22	0.10	−0.11	0.08	0.12	−0.05	0.15	−0.03	−0.04
35. Log financial incentives (CSR)	1.16	1.37	0.05	0.02	0.09	−0.04	0.14	0.20	0.06	−0.09	−0.10	0.11	0.01	0.01	0.03	0.11	−0.20	−0.18	−0.05
36. Log financial incentives (manager)	1.73	1.38	0.08	0.05	0.10	0.17	0.20	0.22	0.12	−0.11	−0.08	0.04	−0.07	0.01	0.12	0.17	−0.11	−0.12	0.13

TABLE 2 (*contd*)

Variable	*18*	*19*	*20*	*21*	*22*	*23*	*24*	*25*	*26*	*27*	*28*	*29*	*30*	*31*	*32*	*33*	*34*	*35*
1. Outsourcing status[a]																		
2. Log CSR cash pay																		
3. Log CSR benefits																		
4. Log manager cash pay																		
5. Log manager benefits																		
6. Log CSR quit rate																		
7. Log CSR absenteeism																		
8. Call abandonment rate																		
9. Meeting target time																		
10. Log average call handle time																		
11. Log unemployment rate																		
12. Log median local earnings																		
13. Part of a large organization[a]																		
14. Log call centre size																		
15. Union presence[a]																		
16. Proportion female CSRs																		
17. Average workweek length																		
18. Outbound[a]																		
19. Job complexity	–0.21																	
20. Community college degree (CSR)[a]	–0.02	0.14																
21. University degree or higher (CSR)[a]	–0.18	–0.11	–0.36															
22. Tenure (CSR)	–0.16	0.27	0.09	–0.08														
23. Community college degree (manager)[a]	0.07	0.07	0.56	–0.26	0.09													
24. University degree or higher (manager)[a]	–0.10	–0.10	0.01	0.34	–0.04	–0.16												
25. Tenure (manager)	–0.22	0.28	0.04	–0.09	0.60	0.10	–0.09											
26. Log CSR–manager ratio	–0.11	0.04	–0.03	0.06	–0.19	–0.04	0.07	–0.06										
27. Log emails per day	–0.35	0.10	–0.02	0.12	–0.06	–0.02	0.09	0.04	0.08									
28. Log electronic monitoring	0.02	–0.07	–0.01	–0.13	0.00	0.09	–0.10	0.02	0.03	–0.05								
29. Job discretion	–0.16	0.07	0.14	0.15	0.14	0.04	0.08	0.14	–0.02	0.15	–0.09							
30. Log systematic selection tests	–0.16	0.07	0.05	–0.07	–0.05	–0.02	–0.00	–0.00	0.26	0.09	0.07	–0.09						
31. Log initial training days	–0.32	0.32	0.11	–0.05	0.14	0.04	0.06	0.19	0.10	0.16	0.01	0.08	0.22					
32. Log formal training days	–0.11	0.16	0.09	0.01	–0.07	0.02	0.03	–0.07	0.02	0.18	0.05	0.08	0.13	0.43				
33. Log self-directed teams	0.00	–0.13	0.08	0.09	0.08	0.01	–0.03	0.03	–0.01	0.09	0.02	0.23	–0.09	0.05	–0.01			
34. Log problem solving teams	–0.09	0.14	0.15	0.09	0.09	0.13	0.04	0.06	–0.02	0.11	–0.07	0.20	0.10	0.12	0.18	0.17		
35. Log financial incentives (CSR)	0.17	–0.03	0.07	0.12	–0.19	0.01	0.11	–0.19	–0.01	–0.08	0.11	–0.00	–0.01	–0.04	0.22	0.04	0.03	
36. Log financial incentives (manager)	0.04	–0.12	–0.01	0.18	–0.14	–0.01	0.15	–0.15	0.12	0.04	0.02	–0.03	0.14	0.04	0.12	0.00	0.06	0.49

[a] Dummy variable.
Note: $N = 179–251$. Correlations = |0.08| or greater indicate $p < 0.10$ (in case $N = 251$). For variables that apply logarithmic transformation, we added one to the original value.
CSR, customer service representative.

TABLE 3
Regression Results with CSR and Manager Cash Pay Level as Dependent Variables

Variable	*Log CSR cash pay level (OLS)*			*Log Manager cash pay level (OLS)*		
	Model 1	*Model 2*	*Model 3*	*Model 1*	*Model 2*	*Model 3*
Outsourcing status	–0.163*** (0.042)	–0.128*** (0.040)	–0.099** (0.039)	–0.118** (0.049)	–0.093** (0.048)	–0.099** (0.049)
Economic environment						
Log unemployment rate	0.010 (0.054)	0.019 (0.051)	0.044 (0.051)	–0.080 (0.063)	–0.072 (0.061)	–0.061 (0.064)
Log median local earnings	0.465*** (0.155)	0.525*** (0.146)	0.540*** (0.140)	0.169 (0.184)	0.122 (0.178)	0.152 (0.180)
Organizational characteristics						
Part of a larger organization	0.023 (0.047)	0.011 (0.044)	–0.011 (0.043)	0.149*** (0.054)	0.145*** (0.053)	0.114** (0.053)
Log call centre size	–0.017 (0.014)	–0.002 (0.014)	0.005 (0.015)	0.036** (0.017)	0.035** (0.016)	0.028 (0.019)
Union presence	0.111** (0.049)	0.076 (0.048)	0.058 (0.047)	0.075 (0.057)	0.016 (0.058)	0.020 (0.058)
Proportion female CSRs	–0.211*** (0.080)	–0.213*** (0.077)	–0.168** (0.074)	–0.088 (0.095)	–0.047 (0.093)	–0.037 (0.093)
Average workweek length	0.010** (0.005)	0.008* (0.005)	0.008* (0.005)	0.000 (0.006)	–0.001 (0.006)	–0.001 (0.006)
Outbound	–0.079* (0.046)	–0.039 (0.044)	0.009 (0.045)	–0.056 (0.054)	–0.023 (0.053)	–0.021 (0.056)
Job complexity	0.003** (0.001)	0.003** (0.001)	0.002** (0.001)	0.001 (0.001)	0.000 (0.001)	0.001 (0.001)
CSR workforce characteristics						
Community college degree		0.092** (0.038)	0.063* (0.037)			
University degree or higher		0.116*** (0.037)	0.099*** (0.037)			
Tenure		0.016*** (0.004)	0.017*** (0.004)			
Managers' workforce characteristics						
Community college degree					–0.029 (0.051)	–0.029 (0.050)
University degree or higher					0.108** (0.044)	0.083* (0.044)
Tenure					0.015*** (0.004)	0.016*** (0.004)

TABLE 3 (*contd*)

Variable	*Log CSR cash pay level (OLS)*			*Log Manager cash pay level (OLS)*		
	Model 1	*Model 2*	*Model 3*	*Model 1*	*Model 2*	*Model 3*
CSR HRM practices						
Log CSR-manager ratio			0.007 (0.015)			0.044** (0.019)
Log emails per day			0.042** (0.017)			0.011 (0.020)
Log electronic monitoring			0.000 (0.000)			–0.000 (0.000)
Job discretion			0.026 (0.022)			–0.006 (0.028)
Log systematic selection tests			–0.006 (0.007)			–0.013 (0.009)
Log initial training days			0.094*** (0.022)			–0.010 (0.028)
Log formal training days			–0.048** (0.021)			–0.007 (0.027)
Log self-directed teams			0.008 (0.008)			0.009 (0.010)
Log problem solving teams			0.007 (0.011)			–0.005 (0.013)
Log financial incentives			0.024** (0.012)			–0.007 (0.016)
Managers' HRM practices						
Log financial incentives						0.047*** (0.015)
Constant	5.231*** (1.689)	4.465** (1.599)	3.860** (1.591)	9.065*** (2.024)	9.457*** (1.963)	9.085*** (2.016)
R^2	0.462	0.532	0.600	0.309	0.372	0.434
F for changes in R^2		10.42***	3.42***		6.59***	1.83*
N	251	251	251	236	236	236

Note: Unstandardized estimates are reported; standard errors are inside ( ). Twenty-two industry dummies and five primary market dummies are included but not reported.

* Significant at 10%; ** Significant at 5%; *** Significant at 1%.

CSR, customer service representative; HRM, human resource management.

(b) Benefits

Table 4 summarizes results for the value of CSR and manager benefits. We added variables in hierarchical order. For both CSR and manager benefits, the effect of outsourcing is negative and significant in Models 1 and 2; however, once we included CSR HR practices, it became insignificant ($p = 0.26$ for CSR benefits; $p = 0.22$ for manager benefits). Despite being insignificant, the signs of the beta coefficients for outsourcing status are consistently negative, and the size of beta coefficient is similar ($\beta = -0.220$ for CSR benefits and $\beta = -0.225$ for manager benefits).

The lower value of benefits offered by outsourced call centres appears to be accounted for, in part, by other HR practices because their inclusion resulted in an insignificant effect of outsourcing on the value of CSR benefits. For example, in Model 3, the number of emails CSRs receive per day from management, job discretion and the use of systematic selection tests are positively associated with the value of CSR benefits. Among these variables, the number of emails CSRs receive per day from management and job discretion are significantly associated with outsourcing status as suggested in Table 2. This finding may suggest that outsourced call centres use less sophisticated HR systems and may limit benefits for CSRs. Turning to managers, Model 1 is the best model because neither Model 2 nor Model 3 improved upon Model 1's fit. Yet we expected that outsourced call centres would have a clear intention to constrain employees' benefits to preserve a cost advantage over and above hiring different types of workers and altering other HR practices. We evaluate this expectation in Model 3 by including other HR practices, and we do not find support for it.

(c) CSR quit rates and absenteeism

In Table 5, we display our results for quit rates and absenteeism. In Model 2, we added CSR cash pay because we are examining whether the pay disparity between in-house and outsourced centres is associated with quit rates and absenteeism. In analysing quit rates and absenteeism, we excluded benefits level to maximize the sample size. We also excluded CSR tenure when estimating quit rates because they are theoretically and empirically related (Trevor and Nyberg 2008).

CSR quit rates are significantly higher in outsourced call centres than in in-house call centres (Model 1). CSR cash pay is significantly associated with CSR quit rates (Model 2). Adding CSR cash pay reduces the significance level of outsourcing status and its beta coefficient by 17 per cent ($\beta = 0.328$ (Model 1); $\beta = 0.271$ (Model 2)). As we reported, outsourcing status is also significantly related to CSR cash pay level. These results suggest that lower pay in outsourced call centres is associated with higher quit rates.

Absenteeism is also significantly higher in outsourced call centres (Model 1). With the addition of CSR cash pay (Model 2), the effect of CSR cash pay is significant and the size of the coefficient for outsourcing status decreased,

TABLE 4
Regression Results with CSR and Manager Benefits Level as Dependent Variables

Variable	*Log CSR benefits level (Tobit)*			*Log Manager benefits level (Tobit)*		
	Model 1	*Model 2*	*Model 3*	*Model 1*	*Model 2*	*Model 3*
Outsourcing status	−0.367* (0.192)	−0.322* (0.193)	−0.220 (0.196)	−0.372** (0.179)	−0.356** (0.180)	−0.225 (0.185)
Economic environment						
Log unemployment rate	0.137 (0.257)	0.178 (0.255)	0.271 (0.255)	0.206 (0.215)	0.189 (0.222)	0.270 (0.233)
Log median local earnings	−0.035 (0.762)	0.341 (0.776)	0.557 (0.756)	−0.025 (0.657)	−0.080 (0.667)	0.115 (0.684)
Organizational characteristics						
Part of a larger organization	−0.084 (0.238)	−0.144 (0.237)	−0.142 (0.229)	0.427** (0.201)	0.407** (0.203)	0.373* (0.203)
Log call centre size	0.019 (0.064)	0.050 (0.065)	0.011 (0.078)	0.027 (0.059)	0.030 (0.059)	−0.016 (0.068)
Union presence	0.322 (0.217)	0.203 (0.235)	0.135 (0.232)	−0.008 (0.201)	−0.069 (0.214)	−0.003 (0.214)
Proportion female CSRs	−0.565 (0.376)	−0.532 (0.379)	−0.483 (0.373)	0.258 (0.342)	0.232 (0.345)	0.108 (0.354)
Average workweek length	0.031 (0.020)	0.029 (0.020)	0.041** (0.020)	0.018 (0.019)	0.017 (0.019)	0.024 (0.019)
Outbound	−0.355 (0.237)	−0.345 (0.235)	−0.245 (0.245)	−0.186 (0.197)	−0.179 (0.199)	−0.101 (0.219)
Job complexity	0.003 (0.005)	0.002 (0.005)	−0.001 (0.005)	0.004 (0.004)	0.003 (0.004)	0.003 (0.005)
CSR workforce characteristics						
Community college degree		0.001 (0.173)	−0.144 (0.175)			
University degree or higher		0.101 (0.174)	−0.058 (0.181)			
Tenure		0.036** (0.017)	0.050*** (0.017)			
Managers' workforce characteristics						
Community college degree					0.071 (0.179)	0.150 (0.176)
University degree or higher					−0.025 (0.151)	−0.049 (0.153)
Tenure					0.009 (0.015)	0.001 (0.015)

TABLE 4 (*contd*)

Variable	*Log CSR benefits level (Tobit)*			*Log Manager benefits level (Tobit)*		
	Model 1	*Model 2*	*Model 3*	*Model 1*	*Model 2*	*Model 3*
CSR HRM practices						
Log CSR–manager ratio			0.091 (0.079)			0.029 (0.067)
Log emails per day			0.156** (0.080)			–0.053 (0.073)
Log electronic monitoring			–0.001 (0.002)			–0.002 (0.002)
Job discretion			0.348*** (0.113)			0.133 (0.103)
Log systematic selection tests			0.059* (0.033)			0.048 (0.030)
Log initial training days			0.049 (0.113)			0.153 (0.110)
Log formal training days			–0.039 (0.115)			0.049 (0.099)
Log self-directed teams			–0.040 (0.038)			0.044 (0.036)
Log problem solving teams			–0.069 (0.058)			–0.047 (0.050)
Log financial incentives			0.066 (0.055)			–0.051 (0.055)
Managers' HRM practices						
Log financial incentives						0.038 (0.052)
Constant	7.987 (8.404)	3.842 (8.582)	–0.191 (8.459)	7.397 (7.254)	8.050 (7.389)	4.947 (7.719)
Log likelihood	–192.062	–189.701	–179.904	–191.695	–191.310	–184.924
–2 Log Likelihood ratio		4.72	19.59**		0.77	12.77
N	176	176	176	183	183	183

Note: Unstandardized estimates are reported; standard errors are inside ( ). Twenty-two industry dummies and five primary market dummies are included but not reported.

* Significant at 10%; ** Significant at 5%; *** Significant at 1%.

CSR, customer service representative; HRM, human resource management.

TABLE 5
Regression Results with CSR Quit Rates and Absenteeism as Dependent Variables

Variable	*Log CSR quit rate (Tobit)*		*Log CSR absenteeism (Tobit)*	
	Model 1	*Model 2*	*Model 1*	*Model 2*
Outsourcing status	0.328** (0.160)	0.271* (0.161)	0.321*** (0.106)	0.294*** (0.107)
Economic environment				
Log unemployment rate	–0.386 (0.221)	–0.345 (0.219)	–0.102 (0.139)	–0.088 (0.138)
Log median local earnings	–0.404 (0.616)	0.007 (0.636)	–0.462 (0.408)	–0.249 (0.423)
CSR workforce characteristics				
Community college degree	–0.134 (0.156)	–0.100 (0.155)	–0.060 (0.100)	–0.048 (0.100)
University degree or higher	–0.056 (0.161)	0.016 (0.163)	–0.070 (0.106)	–0.026 (0.109)
Tenure			–0.013 (0.011)	–0.007 (0.011)
Organizational characteristics				
Part of a larger organization	–0.030 (0.200)	–0.030 (0.197)	0.045 (0.124)	0.041 (0.123)
Log call centre size	0.093 (0.065)	0.105 (0.064)	0.008 (0.043)	0.010 (0.042)
Union presence	–0.890*** (0.199)	–0.787*** (0.204)	0.199 (0.134)	0.218 (0.133)
Proportion female CSRs	–0.772** (0.347)	–0.872** (0.347)	0.191 (0.210)	0.138 (0.211)
Average workweek length	–0.044** (0.018)	–0.038** (0.018)	–0.016 (0.012)	–0.013 (0.012)
Outbound	–0.255 (0.191)	–0.248 (0.189)	0.042 (0.124)	0.053 (0.124)
Job complexity	–0.011** (0.004)	–0.009** (0.004)	0.003 (0.003)	0.004 (0.003)
CSR HRM practices				
Log CSR–manager ratio	0.102* (0.062)	0.100* (0.061)	0.075* (0.041)	0.079* (0.041)
Log emails per day	–0.028 (0.066)	–0.011 (0.065)	–0.108** (0.046)	–0.098** (0.046)
Log electronic monitoring	–0.001 (0.002)	–0.001 (0.002)	–0.001 (0.001)	–0.001 (0.001)
Job discretion	–0.220** (0.098)	–0.205** (0.097)	–0.196*** (0.062)	–0.187*** (0.062)
Log systematic selection tests	0.031 (0.029)	0.023 (0.029)	0.019 (0.019)	0.017 (0.019)
Log initial training days	–0.050 (0.093)	0.02 (0.097)	–0.039 (0.060)	–0.009 (0.062)
Log formal training days	0.102 (0.095)	0.053 (0.097)	0.152** (0.060)	0.111** (0.060)
Log self-directed teams	–0.039 (0.035)	–0.030 (0.035)	0.023 (0.022)	0.025 (0.022)
Log problem solving teams	–0.084* (0.051)	–0.076 (0.050)	–0.046 (0.032)	–0.042 (0.032)
Log financial incentives	0.027 (0.047)	0.042 (0.047)	–0.009 (0.032)	–0.002 (0.033)
Log cash pay		–0.640** (0.292)		–0.344* (0.195)
Constant	10.418 (6.843)	12.092* (6.801)	7.825* (4.489)	8.852** (4.495)
Log likelihood	–225.215	–821.607	–167.014	–165.465
–2 Log Likelihood ratio		4.747**		3.096*
N	242	242	237	237

Note: Unstandardized estimates are reported; standard errors are inside ( ). Twenty-two industry dummies and five primary market dummies are included but not reported.
* Significant at 10%; ** Significant at 5%; *** Significant at 1%.
CSR, customer service representative; HRM, human resource management.

supporting our argument that disparity in cash pay accounts for higher rates of CSR absenteeism in outsourced call centres. The evidence for absenteeism is somewhat weaker than it is for quit rates as illustrated by a smaller reduction in the beta coefficient for outsourcing status ($\beta = 0.321$ (Model 1); $\beta = 0.294$ (Model 2), about 8.4 per cent).

(d) Workforce performance

Finally, we considered whether lower CSR pay in outsourced call centres is associated with lower workforce performance. In Table 6, we present two models for each workforce performance measure. Model 1 excludes CSR cash pay, while Model 2 includes this variable. Overall, our analysis does not offer strong evidence that outsourced CSRs perform worse than in-house CSRs. There is no significant difference in call abandonment rate and meeting the target time between in-house and outsourced call centres, although average call handling time was longer in outsourced call centres ($p < 0.10$).

TABLE 6
Regression Results with Workforce Performance as Dependent Variables

Variable	*Abandonment rate (Tobit)*		*Meeting target time (Tobit)*		*Log average call handle time (OLS)*	
	Model 1	*Model 2*	*Model 1*	*Model 2*	*Model 1*	*Model 2*
Outsourcing status	−0.247 (0.904)	−0.635 (0.902)	−0.783 (2.232)	−0.157 (2.220)	0.212* (0.117)	0.223* (0.119)
CSR workforce characteristics						
Community college degree	−0.604 (0.868)	−0.475 (0.858)	0.478 (2.032)	0.188 (2.009)	0.238** (0.112)	0.230** (0.113)
University degree or higher	−0.830 (0.853)	−0.506 (0.851)	−3.804* (2.031)	−4.586** (2.034)	0.207* (0.111)	0.196* (0.114)
Tenure	−0.028 (0.082)	0.041 (0.086)	0.272 (0.188)	0.149 (0.193)	−0.010 (0.011)	−0.012 (0.011)
Organizational characteristics						
Part of a larger organization	−1.531 (1.051)	−1.526 (1.031)	1.036 (2.509)	1.558 (2.487)	0.088 (0.126)	0.087 (0.126)
Log call centre size	−0.343 (0.330)	−0.414 (0.327)	−0.689 (0.780)	−0.559 (0.772)	0.121*** (0.044)	0.122*** (0.045)
Union presence	0.583 (1.079)	0.905 (1.070)	0.058 (2.519)	−0.441 (2.500)	−0.141 (0.141)	−0.147 (0.141)
Proportion female CSRs	−5.806*** (1.870)	−6.462*** (1.860)	−2.918 (4.707)	−0.916 (4.729)	−0.414* (0.223)	−0.395* (0.226)
Average workweek length	0.070 (0.146)	0.119 (0.154)	0.206 (0.407)	0.012 (0.411)	0.019 (0.014)	0.018 (0.014)
Outbound	0.599 (1.171)	0.391 (1.153)	4.187 (3.296)	3.736 (3.259)	0.004 (0.140)	0.004 (0.140)
Job complexity	−0.014 (0.023)	−0.006 (0.023)	0.007 (0.054)	−0.021 (0.055)	0.008*** (0.003)	0.008** (0.003)
CSR HRM practices						
Log CSR–supervisor ratio	−0.232 (0.346)	−0.133 (0.343)	0.827 (0.806)	0.612 (0.801)	−0.010 (0.047)	−0.011 (0.047)
Log emails per day	0.481 (0.373)	0.629 (0.372)	−0.268 (0.894)	−0.597 (0.894)	0.067 (0.050)	0.063 (0.050)
Log electronic monitoring	−0.011 (0.008)	−0.009 (0.008)	0.021 (0.019)	0.021 (0.019)	−0.001 (0.001)	−0.001 (0.001)
Job discretion	−0.474 (0.512)	−0.435 (0.504)	1.538 (1.229)	1.399 (1.214)	0.110* (0.065)	0.108* (0.065)
Log systematic selection tests	−0.316** (0.159)	−0.346** (0.157)	0.029 (0.384)	0.060 (0.379)	−0.004 (0.021)	−0.003 (0.021)
Log initial training days	0.092 (0.546)	0.433 (0.556)	−0.170 (1.340)	−1.097 (1.385)	−0.059 (0.067)	−0.070 (0.071)
Log formal training days	−0.412 (0.487)	−0.559 (0.483)	0.752 (1.139)	1.333 (1.153)	0.036 (0.064)	0.041 (0.064)
Log self-directed teams	0.156 (0.184)	0.171 (0.181)	0.253 (0.426)	0.234 (0.420)	0.005 (0.024)	0.004 (0.024)
Log problem-solving teams	0.056 (0.253)	0.094 (0.249)	0.107 (0.627)	−0.044 (0.622)	−0.006 (0.033)	−0.007 (0.033)
Log financial incentives	−0.374 (0.275)	−0.215 (0.278)	1.046 (0.648)	0.784 (0.650)	−0.059 (0.035)	−0.062 (0.036)
Log cash pay		−3.856** (1.614)		8.071** (3.587)		0.112 (0.206)
Constant	12.347* (6.692)	48.426 (16.550)	73.478*** (18.060)	−0.466 (37.382)	4.745*** (0.701)	3.664* (2.115)
Log likelihood	−589.441	−586.644	−683.874	−681.376		
−2 Log Likelihood ratio		5.594**		4.996**		
R^2					0.427	0.428
F for change in R^2						0.29
N	225	242	189	189	239	239

Note: Unstandardized estimates are reported; standard errors are inside ( ). Twenty-two industry dummies and five primary market dummies are included but not reported.
* Significant at 10%; ** Significant at 5%; *** Significant at 1%.
CSR, customer service representative; HRM, human resource management.

Our analyses did reveal that CSR cash pay is significantly associated with two workforce performance measures: call abandonment rate and meeting the target time. Specifically, higher CSR cash pay leads to a lower call abandonment rate and an improvement in meeting target times. Employee compensation appears to have a positive influence on workforce performance, although the effects are not strong enough to yield significant differences in workforce performance between in-house and outsourced call centres.

5. Discussion and conclusion

Our study expands the understanding of the significant disparity in cash pay between in-house and outsourced organizations. Several new insights about compensation management in outsourced organizations emerge from our study. First, we find that the influence of outsourcing status on compensation is similar for CSRs and managers. Organizations may try to maintain internal equity so that CSRs and managers in outsourced call centres are consistently compensated in terms of their relative positions to occupational labour market pay rates.

Second, we compared the value of benefits earned by in-house and outsourced CSRs. In contrast to our findings about cash pay, we found that in-house CSRs were not compensated with a greater value in benefits compared with their outsourced counterparts. This finding may be a function of the institutional context, and considering the same question in the USA or other countries might yield a different outcome.

Third, we evaluated how compensation and other HRM practices interact with each other and found some support for the strategic HRM argument that the organizational context, outsourcing in this study, influences various HRM practices simultaneously. CSR cash pay is associated with several HRM practices. Controlling for other HRM practices besides pay, as well as other organization-level characteristics, enriches our understanding of the pay disparity.

Fourth, we evaluated the implications of lower pay in outsourced call centres. Outsourced call centres experience higher CSR quit rates and absenteeism as a result of lower pay. Compared with quit rates, the ability of cash pay to account for the difference in absenteeism between these two types of call centres is relatively weaker. This finding may be the result of a range restriction problem because our sample consisted of call centres with lower absenteeism. Alternatively, in low-wage occupations, employees may proceed more quickly to other permanent forms of employee withdrawal such as quitting compared with high-wage occupations where employees can afford to be absent and quitting could be more costly because fewer alternative positions are available.

Fifth, CSR cash pay is significantly related to workforce performance; however, the pay disparity between in-house and outsourced call centres is

not ultimately associated with differences in workforce performance. Outsourced call centres may use mechanisms that mitigate the effects of negative outcomes caused by lower pay (e.g. higher quit rates and higher absenteeism) on workforce performance. Our unreported *ad hoc* analysis shows that neither CSR quit rates nor CSR absenteeism is associated with workforce performance. These findings suggest that higher quit rates and absenteeism in outsourced call centres do not culminate in lower workforce performance. Hence, outsourced call centres may adopt practices that enable them to effectively handle the workforce churn. This view is consistent with the configurational approach (Delery and Doty 1996), which argues that there are multiple optimal HR systems that allow organizations to achieve improved performance. Clearly, more in-depth studies on the relationship between HR systems and workforce performance in outsourced organizations are needed.

Given the connection to the Global Call Centre Project, we can place these findings in a broader context. Extant studies typically examine global outsourcing with service work being outsourced from developed countries (e.g. USA) to low-wage countries (e.g. India) (Batt *et al*. 2005). By contrast, this study examined pay disparity within a country and found that domestic outsourcing is also associated with lower pay, less high-involvement HRM and higher employee withdrawal. Indeed, evidence of a wage premium for CSRs employed in in-house call centres when compared with outsourced call centres in 15 countries is a consistent finding with three exceptions: Israel, the UK and India (Batt and Nohara 2009). The magnitude of this wage premium varies across the countries participating in the study (Batt and Nohara 2009). Along with outsourcing status, each country's unique institutional setting also serves as a context that affects outsourced call centres' compensation decisions.

This study has several limitations. First, our analysis relied on a single respondent, which could introduce possible systematic and unsystematic biases (Gerhart *et al*. 2000a,b). We used techniques to reduce measurement errors, yet having multiple respondents for each establishment would increase the reliability of our data. Second, cross-sectional data and using call centres that have already decided whether to retain customer service in-house or outsource it altogether limits the claims we can make about causality. Third, our study relied on data from call centres, and replicating these results with other industries would strengthen our argument.

This study provides valuable insights about the difference in compensation management between in-house and outsourced service organizations for employees and managers. The unique outsourcing context plays a key role in the determination of compensation systems. Outsourcing status has been typically captured as a consequence of organizational strategic decisions, but, as shown by this study, it has important implications for management practices.

Final version accepted on 2 May 2010.

Acknowledgements

This research was funded by the Social Sciences and Humanities Research Council of Canada, the Inter-University Research Centre on Globalization and Work (CRIMT), and a Hampton Grant from the University of British Columbia. We thank Alexander J.S. Colvin, George Milkovich, Masao Nakamura, Daniel P. Skarlicki, and two anonymous reviewers for comments on earlier versions, and also, Florence Lee for valuable research assistance.

Notes

1. Berlinski (2008) examined the provision of a few benefit programmes (i.e. employer provided health insurance and pension) but did not examine the value of the entire benefits package.
2. We also ran analyses with the unemployment rate and median local income and confirmed that they failed to improve the fit of the models.
3. The unemployment rate was derived from provincial health regions, whereas the median local earnings was calculated using municipalities with a population of at least 5,000 (Statistics Canada 2008).

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Appendix: Variables Used in Study of Compensation in Outsourced Organizations

Dependent variables

Cash pay (CSR & Manager): Gross annual earnings earned by the typical full-time core employee or manager before deductions and taxes, including wages, earnings, bonuses, commissions, profit sharing and overtime pay; but excluding benefits such as pensions and health, and deferred compensation such as stock options, log transformed.
Benefits (CSR & Manager): Total value of benefits that CSRs or managers receive, log transformed. This measure includes the value of discretionary benefits such as supplementary coverage and pensions, and excludes benefits employers are legally required to offer employees in Canada.
Quit rate: Percentage of CSRs who voluntarily left their job in the previous year excluding promotions, internal transfers, dismissals, and retirements, log transformed.
Absenteeism: Daily ratio of CSRs who are absent from work, log transformed. An absence includes all types of absences except legitimate absences for holidays, vacation days, and training.
Abandonment rate: Proportion of calls abandoned by the customer before the phone is answered (in percent).
Meeting target time: Proportion of calls answered within the set target time (in percent).
Average call handling time: Average length (in seconds) of calls handled by CSRs.

Independent variable

Outsourced status: Dummy variable indicating whether the call centre is an inhouse or an outsourced operation.

Controls

Establishment's economic environment
Unemployment rate: 2006 average regional unemployment rate for the establishment's location, log transformed (Statistics Canada 2008).

Median local earnings: 2006 local median earnings for full-time employees who work in the same municipality as the establishment's location, log transformed (Statistics Canada 2008).[3]

Organizational characteristics
Part of a larger organization: Dummy variable indicating whether the call centre is independent or part of a larger entity.
Call centre size: Number of workstations in the centre, log transformed.
Union presence: Dummy variable indicating whether or not CSRs are represented by a union (1 = union, and 0 = non-union).
Proportion female CSRs: Percentage of the CSR workforce that is female.
Average workweek length: Average number of hours a full-time CSR works per week.
Outbound: Dummy variable indicating whether the call centre handles primarily inbound or outbound calls.
Job complexity: Number of weeks CSRs need to become proficient on the job.
Industry served by the call centre: Dummy variables for 22 industries (e.g., banking, utilities, government, and airlines).
Primary market: Dummy variables indicating geographic location of customer market: local, provincial, national (Canadian only), international (US only), international (Outside of the US) or Other, with a reference of Other.

CSR workforce characteristics
Community college degree: Dummy variable indicating the typical CSR education level: (1) community college degree.
University degree or higher: Dummy variable representing the typical CSR education level: (1) university degree or higher.
Organizational tenure: Average number of years the typical CSR has worked at the establishment.

Manager workforce characteristics
Community college degree: Dummy variable indicating the typical manager's education level: (1) community college degree.
University degree or higher: Dummy variable representing the typical manager's education level: (1) university degree or higher.
Organizational tenure. Average number of years the typical manager has worked at the establishment.

CSR HRM practices
CSR-manager ratio: Number of full-time CSRs divided by number of managers and supervisors.
Emails per day: Number of emails per day CSRs receive providing relevant information such as product updates.
Electronic monitoring: The percent of a CSR's daily activities that is electronically monitored.

CSR job discretion: Measured on a five-point Likert scale ranging from 1 (not at all) to 5 (a great deal) with six items assessing the amount of discretion employees have over the daily tasks they perform, what they say to customers, and the speed at which they work (Holman 2002; Wood *et al*. 2006) ($\alpha = 0.72$).
Systematic selection tests: Percentage of employees selected using systematic selection tests, for example, psychometric, aptitude, and work sampling.
Initial training: Number of initial training days for new CSR hires.
Formal training days: Number of formal training days for experienced CSRs per year.
Self-directed teams: Percentage of CSRs who routinely perform their job as part of a self-managed team.
Problem solving teams: Percentage of CSRs currently involved in quality circles or process/product improvement teams.
CSR financial incentives: Percentage of pay CSRs receive in the form of profit-sharing, gainsharing, commission-based pay, and bonuses.
All HRM variables were transformed using a natural log transformation except for job discretion.

Manager HR practices
Manager financial incentives: Percentage of pay managers receive in the form of profit-sharing, gainsharing, commission-based pay, and bonuses.