



THE RELATIONSHIP BETWEEN LINE MANAGER BEHAVIOR, PERCEIVED HRM PRACTICES, AND INDIVIDUAL PERFORMANCE: EXAMINING THE MEDIATING ROLE OF ENGAGEMENT

**KERSTIN ALFES, CATHERINE TRUSS, EMMA C.
SOANE, CHRIS REES, AND MARK GATENBY**

This article examines the role played by line managers in the link between HRM practices and individual performance outcomes. Drawing on social exchange theory, the authors test a mediated model linking perceived line manager behavior and perceived human resource management practices with employee engagement and individual performance. The study focuses on two self-report measures of individual performance; task performance and innovative work behavior. Two studies with a total of 1,796 participants were conducted in service-sector organizations in the United Kingdom and analyzed using structural equation modeling. The data reveal that perceived line manager behavior and perceived HRM practices are linked with employee engagement. In turn, employee engagement is strongly linked to individual performance and fully mediates the link between both perceived HRM practices and perceived line manager behavior and self-report task performance (study 1), as well as self-report innovative work behavior (study 2). The findings show the significance of the line manager in the HRM-performance link, and the mediating role played by employee engagement. © 2013 Wiley Periodicals, Inc.

Keywords: perceived HRM practices, perceived line manager behavior, employee engagement, self-report task performance, self-report innovative work behavior

Correspondence to: Kerstin Alfes, Department of Human Resource Studies, Tilburg University, Warandelaan 2, 5037 AB Tilburg, The Netherlands, Phone: + 31 13 466 2499, E-mail: k.alfes@uvt.nl.

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Introduction

A growing body of research has persuasively argued that there is now evidence of a causal link between certain HRM practices and firm-level outcomes, such as financial performance and organizational effectiveness (Batt, 2002; Datta, Guthrie, & Wright, 2005; Sun, Aryee, & Law, 2007; Wright, Gardner, Moynihan, & Allen, 2005). Efforts to unlock the “black box” between HRM interventions and performance outcomes have led to a number of studies that explore the mediating role played by either employee attitudes such as job satisfaction and commitment, behaviors

such as task performance and organizational citizenship behavior (OCB), or experienced organizational practices such as perceived organizational support, organizational justice, or job design (Kuvaas, 2008; Snape & Redman, 2010; Sun et al., 2007). Most recent studies situate their analyses within the framework of social exchange theory, arguing that organizational HRM practices send overt and implicit signals to employees about the extent to which they are valued and trusted, giving rise to feelings of obligation on the part of employees, who then reciprocate through high levels of performance (Allen, Shore, & Griffeth, 2003; Gould-Williams, 2007; Purcell & Hutchinson, 2007).

Although substantial progress has been made, there are several areas where research evidence remains limited. First, although it has been argued that the role of line managers as agents in implementing HRM practices is fundamental to understanding how employees interpret and respond to their employer’s HRM system (Holt Larsen & Brewster, 2003), studies that examine the line manager role alongside HRM policy and practice remain rare (Den

Hartog, Boselie, & Paauwe, 2004; Tekleab & Taylor, 2003).

Second, few studies have used measures of perceived HRM practices from the employee perspective, yet it has been shown that intended, implemented, and perceived HRM practices differ substantially (Conway & Monks, 2008; Gratton & Truss, 2003; Snape & Redman, 2010).

Third, most studies have focused on a relatively restricted range of potential mediators, such as affective commitment or OCB (Allen et al., 2003; Snape & Redman, 2010). The HRM-performance literature has therefore overlooked developments in other, related areas and specifically evidence linking levels of employee engagement with individual performance (Christian, Garza, & Slaughter, 2011; Kahn, 1990; Rich, LePine, & Crawford, 2010; Saks, 2006; Truss et al., 2006). The multi-factorial psychological construct of employee engagement, originally defined by Kahn (1990) as the harnessing of individuals’ selves to their role performance on physical, cognitive, and emotional levels, represents an alternative and conceptually promising factor that is increasingly used as a mediator linking a range of workplace phenomena as demonstrated in a recent meta-analysis by Christian et al. (2011).

Fourth, it has been argued that aggregate outcome variables used in the extant literature, such as firm financial performance and organizational effectiveness, are too distal from the micro-level of HRM interventions, and that more proximal outcome indicators at the individual level would provide a better and more reliable measure (Paauwe, 2004; Purcell & Kinnie, 2007; Wright & Haggerty, 2005). A further consideration is that a focus on purely short-term financial gains may be at the expense of potentially desirable longer-term outcomes, such as sustainability and resilience at the organizational level, and well-being at the individual level (e.g., Boxall & Purcell, 2008; Guest, 2002; Ramsay, Scholarios, & Harley, 2000). There is a case to be made for focusing on attitudinal or behavioral outcomes at the individual level, where the link between experiences of HRM practices and a range of outcomes is more

There is a case to be made for focusing on attitudinal or behavioral outcomes at the individual level, where the link between experiences of HRM practices and a range of outcomes is more proximal, and which may be considered to be an intermediary outcome and core driver of overall organizational performance.

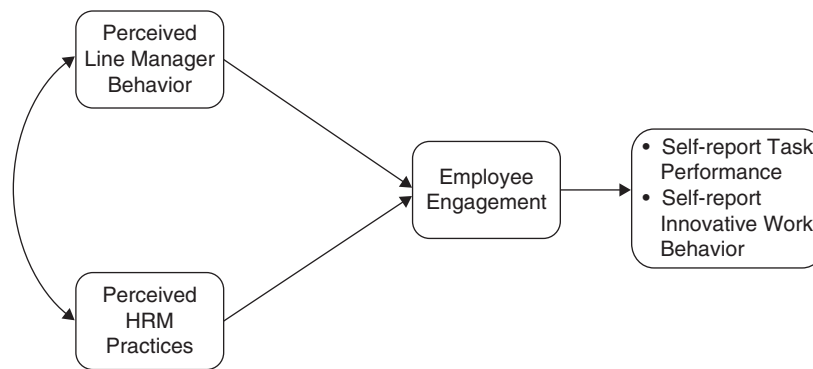


FIGURE 1. Model Linking Perceived Line Manager Behavior and Perceived HRM Practices to Individual Performance

proximal, and which may be considered to be an intermediary outcome and core driver of overall organizational performance (Wright & Haggerty, 2005). However, very few studies have focused on behavioral outcomes at all (Ostroff & Bowen, 2000; Snape & Redman, 2010; Takeuchi, 2009), or examined the link between employee experiences of HRM and behavioral outcomes such as individual performance, aside from intent to quit (Allen, 2006; Conway & Monks, 2009).

To address these various limitations in the existing literature, we examine the relationship between perceived line manager behavior, perceived HRM practices, and the individual-level outcomes of self-report task performance and self-report innovative work behavior, exploring the role of employee engagement as a mediating construct. Using a social exchange framework, we argue that employee experiences of HRM practices interact with perceived line manager behavior to impact on levels of employee engagement and individual performance (Figure 1). We test our model through structural equation modeling on questionnaire data obtained from two studies involving service-sector organizations in the United Kingdom.

Perceived HRM, Perceived Line Manager Behavior, and Employee Engagement

Previous researchers have argued that complementary sets of HRM practices, rather than

individual HRM practices, can lead to higher levels of organizational performance (Combs, Yongmei, Hall, & Ketchen, 2006; Takeuchi, 2009). These bundles of HRM practices, commonly referred to as high-performance HRM practices, are built on the notion that individual experiences of clusters of HRM practices shape employees' beliefs about the nature of the exchange relationship they enter into with their organization (Rousseau & Greller, 1994). Hence, in order to assess the impact of HRM, the entire system of HRM practices rather than individual practices should be taken into account (Wright & Boswell, 2002). A consensus is emerging that high-performance HRM practices are broadly focused around three areas (Conway, 2004; Wright & Boswell, 2002): (1) employee skills, including selective recruitment; (2) motivation, including such practices as performance-based rewards; and (3) empowerment, including participation mechanisms (Snape & Redman, 2010). Most commentators argue that these act synergistically. Snape and Redman (2010, p. 4) define such an HRM system as consisting of "interconnected HR activities, designed to ensure that employees have a broad range of superior skills and abilities, which are utilized to achieve the organization's goals." In the present study, we therefore aim to assess how employees' overall positive perceptions of high-performance HRM practices will be related to their behavior such as task performance and innovative work behavior.

Although most researchers have argued that certain HRM approaches can drive up organizational performance (Batt, 2002; Datta et al., 2005; Huselid, 1995; Som, 2008), others have been more circumspect (Den Hartog et al., 2004; Gooderham, Parry, & Ringdal, 2008; Guest, Michie, Conway, & Sheehan, 2003; Truss, 2001). While large-scale surveys of senior HRM practitioners have helped to develop a broad understanding of relevant HRM factors, a focus on HRM as intended by the employer may not capture employees' lived experiences of HRM, which arguably are more relevant in the HRM-performance chain (Wright & Boswell, 2002; Wright & Haggerty, 2005). Studies have in fact found that the links between intended, implemented, and perceived HRM strategies are poor, due to variability in implementation and diverse individual-level cognitive schemas (Edgar & Geare, 2005; Khilji & Wang, 2006; Kuvaas, 2008; Wright & Haggerty, 2005). However, research that focuses on the perceived HRM-performance linkage is rare. As Nishii, Lepak, and Schneider (2008, p. 504) argue: "[E]mpirical research that begins to explore the role of employees' perceptions of HRM practices in the causal chain is sorely needed." We respond to this call by focusing our attention on employee experiences of HRM practices, rather than simply intended HRM strategies. In doing so, we build upon two earlier studies. First, in an investigation involving 215 salespeople in a department store and 197 insurance agents, Allen et al. (2003) showed that perceptions of supportive HRM practices—such as participation, reward fairness, and growth opportunities—contributed to the development of perceived organizational support, which mediated their relationship with job satisfaction and organizational commitment and showed a negative relationship with turnover. Second, Conway and Monks (2009) studied 288 employees in three Irish financial services firms and found that attitudes toward HRM practices had a greater impact on affective than on other forms of commitment, regardless of context, and also established links between perceived HRM practices, intent to quit, and job satisfaction.

While early studies tended to propose a direct link between HRM and organizational performance, recent evidence suggests that the relationship is most likely mediated by a range of attitudinal and behavioral variables at the individual level, particularly job satisfaction, affective and continuance commitment, task performance, and OCB (Den Hartog et al., 2004; Guest, Conway, & Dewe, 2004; Kinnie, Hutchinson, Purcell, Rayton, & Swart, 2005; Kuvaas, 2008; Snape & Redman, 2010; Takeuchi, 2009).

Studies of mediation often draw on social exchange theory to provide an explanatory framework. Social exchange theory is based on norms of reciprocity within social relationships (Blau, 1964; Emerson, 1976). It is argued that employees are motivated within the employment relationship to demonstrate positive attitudes and behaviors when they perceive that their employer values them and their contribution (Cropanzano, Rupp, & Byrne, 2003; Kuvaas & Dysvik, 2010; Wayne, Shore, & Liden, 1997). Certain HRM practices may be viewed as signaling an intent for long-term investment in employees that obliges them to reciprocate with discretionary role behavior and contributions (Gong, Chang, & Cheung, 2010; Shaw, Dineen, Fang, & Vellella, 2009; Sun et al., 2007). As Hannah and Iverson (2002, p. 339) note: "HRM practices are viewed by employees as a 'personalized' commitment to them by the organization which is then reciprocated back to the organization by employees through positive attitudes and behavior."

Although social exchange theory has proven a useful lens through which to view the relationship between HRM practices and organizational performance, evidence concerning the mediating effects of the proposed range of attitudes and behaviors has so far proved contradictory. For example, while Sun et al. (2007) showed that OCB partially mediates the relationship between high-performance HRM practices and organizational performance, Kuvaas (2008) found no evidence of the mediating effects of affective commitment in the link between developmental HRM practices and individual performance, and Snape and Redman's (2010) findings on mediation were inconclusive.

There is therefore no consistent evidence as to which mediators are most relevant, nor how they operate within mediated models. For example, it could be argued that the proposed attitudinal mediators of job satisfaction and commitment have no immediate relevance to individual performance (Judge, Bono, Thoresen, & Patton, 2001), as borne out by Conway and Monks's (2009) study. OCB clearly is relevant for individual performance, but the focus is on extra-role rather than within-role performance, and a case could be made that employees' task performance is equally important. There would therefore appear to be scope to search for an alternative, and possibly more relevant, mediator. In order to address this point, we introduce the concept of employee engagement as a potentially significant mediating variable.

The construct of employee engagement was first proposed by Kahn (1990) to signify the expression of self in-role, involving physical, cognitive, and emotional dimensions, and has since been the focus of extensive theoretical and empirical research (Alfes, Truss, Soane, Rees, & Gatenby, 2010; Christian et al., 2011; Macey & Schneider, 2008; May, Gilson, & Harter, 2004; Rich et al., 2010; Rothbard, 2001; Truss et al., 2006). Engagement is conceived as a multi-factorial behavioral, attitudinal, and affective individual differences variable (Macey & Schneider, 2008; May et al., 2004; Rich et al., 2010). Researchers have argued that engagement differs from other attitudinal and behavioral constructs, including those most commonly used as mediators in many HRM practice studies: commitment, job satisfaction, and OCB. Engagement is seen as more than job satisfaction, since it implies activation and not merely satiation (Macey & Schneider, 2008). Equally, it differs from commitment, which is merely attitudinal, in that engagement additionally implies attentiveness to work and absorption in its performance (Saks, 2006). Engagement has some associations with discretionary effort and OCB (Campbell & Pritchard, 1976), but additionally refers purely to someone's state of mind in, and behavior in relation to, the performance of their formal work role, while OCB is concerned with *extra*-role activities

(Bateman & Organ, 1983; Griffin, Parker, & Neal, 2008; Macey & Schneider, 2008).

There have been no prior studies examining whether there is a link between HRM, or perceived HRM, and engagement. However, it would be reasonable to extrapolate, from the studies referred to earlier that have established a link between perceived HRM practices and a variety of other attitudinal or behavioral constructs, that perceived HRM practices may be linked with employee engagement. This gives rise to our first hypothesis:

Hypothesis 1: Perceived HRM practices are positively related to employee engagement.

Prior research has also acknowledged that line managers have a significant role to play in the HRM-performance chain (Bredin & Söderlund, 2007; Den Hartog et al., 2004; Kuvaas & Dysvik, 2010; Purcell & Hutchinson, 2007). They signal to employees the value placed upon them by the employer, both in terms of the way they implement HRM practices and through their leadership style (Den Hartog et al., 2004; McGovern, Gratton, Hope Hailey, Stiles, & Truss, 1997; Snape & Redman, 2010). As Purcell and Hutchinson (2007, p. 6) note, line manager behavior "has to be included in any causal chain seeking to explain and measure the relationship between HRM and organizational performance."

In a multinational study, Holt Larsen and Brewster (2003) showed that line managers are taking on increasing responsibility for HRM implementation. There have been a small number of previous studies on the role of line managers in implementing HRM. For example, in an exploratory study involving structured interviews in 12 organizations, Purcell and Hutchinson (2007) found a symbiotic relationship for employees between HRM and front-line manager behavior. Kuvaas and Dysvik (2010), in a study of 331 employees in a Norwegian telecoms company, similarly found that perceived investment in employee development only led to increased work effort, work quality, and OCB when associated with high levels of perceived supervisor support. Equally, Kuvaas (2008) showed that employees can only respond

positively to developmental HRM initiatives when there is a high-quality employee-organization relationship in place.

While some prior studies have therefore suggested that perceived line manager behavior interacts with HRM practices in their impact on individual-level outcomes, a separate body of research has similarly shown that perceived line manager behavior can act as an antecedent to engagement (Bates, 2004; De Mello e Souza Wildermuth & Pauken, 2008; Frank, Finnegan, & Taylor, 2004). Line managers can foster trust relationships between themselves and their direct reports, for example, through encouraging open communication, sharing critical information, and providing support (Settoon, Bennett, & Liden, 1996). This, in turn, will lead to positive emotional states and higher levels of employee engagement (Avolio, Gardner, Walumbwa, Luthans, & May, 2004). For instance, Robinson, Perryman, and Hayday (2004) showed how increased opportunities for upward feedback led to higher levels of engagement, and Blizzard (2003) demonstrated that effective interpersonal relationships between employees and managers raised engagement levels. This gives rise to our second hypothesis:

Hypothesis 2: Perceived line manager behavior is positively related to employee engagement.

Studies of engagement, like those of high-performance HRM practices, draw on social exchange theory to suggest that employees will become engaged with their work when antecedents are in place that signal to them that they are valued and trusted (Rich et al., 2010; Saks, 2006). Although no research has examined the link between HRM practices and engagement, empirical studies have demonstrated a link between high levels of engagement and the same outcomes as the high-performance HRM practices literature. Engaged employees invest themselves fully in their roles (Rothbard, 2001), which may lead to the enactment of active in-role performances (Ho, Wong, & Lee, 2011; Macey & Schneider, 2008). Engaged employees may achieve higher performance because they focus their efforts on work-related goals, are

cognitively vigilant, and are emotionally and socially connected to their work (Kahn, 1990). Since engaged employees feel more spirited, they can accomplish their in-role tasks with less effort (Hockey, 2000), and additionally invest time and resources in seeking new ways of delivering their work or changing and improving their environment (Ramamoorthy, Flood, Slattery, & Sardesai, 2005).

These findings have been supported by further recent studies. In a study of 245 firefighters, Rich et al. (2010) found that engagement mediated the relationship between value congruence, perceived organizational support, core self-evaluations, task performance, and OCB, while Sonnentag (2003) demonstrated that engagement leads to proactive behavior, initiative taking, and the pursuit of learning goals. These findings are consistent with Christian et al.'s (2011) meta-analysis, which found support for a mediating effect of engagement on the relationship between job characteristics, leadership, personal traits, task performance, and OCB. This leads to our final set of hypotheses:

Hypothesis 3a: Employee engagement is positively related to task performance and mediates the relationship between perceived HRM practices and task performance.

Hypothesis 3b: Employee engagement is positively related to innovative work behavior and mediates the relationship between perceived HRM practices and innovative work behavior.

Hypothesis 4a: Employee engagement is positively related to task performance and mediates the relationship between perceived line manager behavior and task performance.

Hypothesis 4b: Employee engagement is positively related to innovative work behavior and mediates the relationship between perceived line manager behavior and innovative work behavior.

Methods

Overview of the Research Process

We employed a cross-sectional research design in two case study organizations operating in

the service sector in the United Kingdom (Bryman & Bell, 2007). This methodology was chosen because we were interested in exploring the patterns of associations within organizational settings between perceived HRM practices and line manager behavior, and their relationship with engagement and self-report individual performance. We used a questionnaire survey of employees in both organizations, which enabled us to gather data on the constructs of interest from a variety of employees in each organization. The cases were chosen as they were fairly similar with regard to the range of different staff employed, their size, and the sector they were operating in. Both online and paper versions of the questionnaire were created and administered by the authors, and sent to a selection of employees with and without Internet access. In both organizations employees were selected in collaboration with the HR manager to ensure that the sample was representative of the whole workforce. Employees were informed about the purpose of the study and its confidentiality, and encouraged to participate in the survey within two weeks. In both organizations, employees were given time to complete the questionnaire during work. While the online responses were stored on a secure server, the paper questionnaires were returned directly to the researchers to ensure confidentiality. For study 1, we analyzed the relationships between perceived line manager behavior, perceived HRM practices, employee engagement, and self-report task performance. For study 2, we examined those relationships with self-report innovative work behavior as a dependent variable.

Samples

Organization A is a support services partner in the United Kingdom providing business solutions for clients across the local government, transport, education, and defense sectors. A total of 2,500 employees from different locations were asked to take part in the survey. From this sample, 1,157 questionnaires were returned. Listwise deletion of missing data led to a usable sample of 924 respondents, a response rate of 37 percent.

The sample comprised 72.5 percent men; the average age was 40.79 years ($SD = 12.15$); and the average tenure was 4.04 years ($SD = 4.11$). Respondents were from different levels in their organization and represented a range of occupational backgrounds, including professionals (51.6 percent); administration (10.7 percent); managers or senior officials (14.9 percent); retail, customer, and personal services (2.3 percent); skilled trades (5.9 percent); machine operators (8.5 percent); and elementary occupations (6.1 percent).

Organization B is a recycling and waste management company. The sample comprised 2,217 employees, ensuring an accurate representation of workforce population.

A total of 1,153 questionnaires were completed. Listwise deletion of missing data led to a usable sample of 872 respondents, which resulted in a slightly higher response rate of 39 percent. There were 25.9 percent female respondents within this sample. The average age was 41.42 years ($SD = 11.56$), and the average tenure was 5.92 years ($SD = 5.72$). Again, the respondents represented different levels in the organization and diverse occupational backgrounds including professionals (12.3 percent); administration (21.4 percent); managers or senior officials (19.0 percent); retail, customer, and personal services (5.0 percent); skilled trades (4.3 percent); machine operators (33.0 percent); and elementary occupations (5.0 percent).

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Measures

Perceived HRM Practices

Perceived HRM practices were measured based upon Gould-Williams and Davies's (2005) HRM practices scale. This was chosen as it has been found to demonstrate high reliability and validity in previous studies of high-performance HRM systems (Gould-Williams, 2003; Gould-Williams & Davies, 2005), but at the same time is of a reasonable length to be included in an employee survey

including different occupational groups. Specifically, we asked employees to assess six HRM practices identified by the high-performance HRM practices literature—namely, the selection process, training opportunities, rewards systems, career management, development opportunities, and feedback mechanisms. A sample item was “I am provided with sufficient opportunities for training and development.” The response scale ranged from 1 (“strongly disagree”) to 5 (“strongly agree”). The alphas were 0.83 for Organization A and 0.85 for Organization B.

Perceived Line Manager Behavior

Perceived line manager behavior was measured using four items derived from Cook and Wall (1980) and Unden (1996). The items asked for employee perceptions of the effectiveness, equity, and integrity of their line manager. A sample item was “I think my line manager is fair in his/her treatment of me.” The response scale ranged from 1 (“strongly disagree”) to 5 (“strongly agree”). The alphas were 0.93 for Organization A and 0.94 for Organization B.

Employee Engagement

We measured engagement using a scale developed by Soane et al. (2012). The scale was chosen because it operationalizes Kahn’s (1990) original conceptualization of engagement as the extent to which employees invest themselves fully in their role by establishing meaningful connections to others, and experiencing positive cognitive and emotional reactions to the task. In line with the multidimensional nature of engagement, the scale encompasses three subscales of engagement. Intellectual engagement focuses on the extent to which employees are cognitively involved in their work. There were three items (e.g., “I get completely absorbed in my work”). Affective engagement measures the extent to which employees are emotionally involved with, and attached to, their work. There were three items, including “I am happy when I do a good job.” Social engagement was assessed with three items and measures the extent to which employees talk to their colleagues

about how to improve their work. Items included “I talk to people at work about how to improve the way I do my job.” Response options ranged from 1 (“strongly disagree”) to 5 (“strongly agree”) for all subscales. Because we were interested in an overall measure of engagement, the three subscales were aggregated to form an overall measure of engagement, resulting in alpha values of 0.81 for Organization A and 0.86 for Organization B.

Individual Task Performance

A five-item scale from Janssen and Van Yperen (2004) was used to assess individual task performance. We slightly altered the wording of the original scale to reflect the fact that employees were asked to self-rate their performance. A sample item was “I always complete the duties specified in my job description.” The response scale ranged from 1 (“strongly disagree”) to 5 (“strongly agree”). The alpha was 0.81 for Organization A.

Innovative Work Behavior

We measured innovative work behavior with a five-item scale based on Janssen and Van Yperen (2004). Similarly to task performance, we changed the wording of the original items to enable employees to self-rate their innovative work behavior. A sample item was “Transforming innovative ideas into useful applications.” The response scale ranged from 1 (“never”) to 5 (“daily”). The alpha was 0.96 for Organization B.

The difficulties in gaining individual-level performance data have been thoroughly discussed in previous literature (Huselid & Day, 1991; Mannheim, Baruch, & Tal, 1997). We took additional steps to limit problems associated with common method variance as described next.

Data Analysis

Because all our variables were collected from a single source only, we had to deal with two concerns prior to proceeding to hypothesis testing: common method variance and discriminant validity.

To examine and control for the influence of common method bias in our study, we performed a series of confirmatory factor analyses (CFA) on both datasets. Following established recommendations (Hair, Black, Babin, Anderson, & Tatham, 2005) we calculated five fit indices to determine how the model fitted our data: χ^2 , goodness of fit index (GFI), comparative fit index (CFI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR). For GFI and CFI, values greater than .9 represent a good model fit, and for SRMR and RMSEA, values less than .07 indicate a good model fit (Hu & Bentler, 1998; Kline, 2005).

We initially performed a CFA on the full measurement model (Anderson & Gerbing, 1988) including all latent variables. Overall, the measurement models exhibited good psychometric properties (Organization A: $\chi^2 = 407$, $df = 129$, GFI = .95, SRMR = .04, RMSEA = .05, CFI = .96; Organization B: $\chi^2 = 379$, $df = 129$, GFI = .95, SRMR = .04, RMSEA = .05, CFI = .98) and all standardized regressions coefficients in the measurement models were significant at the 0.001 level. To test for common method variance, we then conducted Harman's single-factor test (Podsakoff, MacKenzie, Jeong-Yeon, & Podsakoff, 2003), which involves a CFA where all variables are allowed to load onto one general factor. The model exhibited very poor fit for both organizations (Organization A: $\chi^2 = 3,595$, $df = 135$, GFI = .56, SRMR = .15, RMSEA = .17, CFI = .44; Organization B: $\chi^2 = 6,973$, $df = 135$, GFI = .44, SRMR = .21, RMSEA = .24, CFI = .41), which provided a good indication that a single factor did not account for the majority of variance in our data.

Additionally, we conducted a second test as recommended by Podsakoff et al. (2003), introducing an unmeasured latent methods factor to our original measurement model allowing all items to load on their theoretical constructs, as well as on the latent methods factor. A comparison of both models revealed that including the method factor in the model significantly improved the overall fit of the model (Organization A: $\Delta\chi^2(df) = 80(12)$; Organization B: $\Delta\chi^2(df) = 40(12)$). However,

the χ^2 difference test is distributed χ^2 , and researchers argue that χ^2 values are very sensitive to large sample sizes and a high number of observed variables, leading to biased results (Bentler, 1990; Bentler & Bonett, 1980; Bollen, 1989; Hair et al., 2005; Hu & Bentler, 1995; Kline, 2005). We therefore assessed the change of CFI values for both models as an indicator of significance as recommended by Byrne (2001). The change of CFI between both models was 0.02 for Organization A and 0.03 for Organization B, which is below the suggested rule of thumb of 0.05 (Bagozzi & Yi, 1990).

To determine whether the constructs in our model were distinct from each other, we performed a test of the scales' discriminant validity following Fornell and Larcker (1981). We first calculated the average variance extracted for each scale variable. According to Fornell and Larcker (1981), scale variables are sufficiently different from one another if a scale's average variance extracted is greater than its shared variance with any other scale variable in the model. This condition was met in both datasets, and we concluded that all scales were distinct from one another. The values are portrayed along the diagonals of Tables I and III, together with interscale correlations and descriptive statistics for all scale variables in both organizations.

Results—Study 1

Descriptive Statistics

Table I presents the means and standard deviations for each scale, and interscale correlations, for all study variables for Organization A. The interscale correlations show the expected direction of association and are all significant at the $p < .01$ level. Specifically, perceived HRM practices are positively related to perceived line manager behavior ($r = .52$). Moreover, employee engagement is positively associated with perceived HRM practices ($r = .35$), perceived line manager behavior ($r = .34$), and self-report task performance ($r = .32$). The relationships between perceived HRM practices ($r = .11$) and perceived line manager behavior ($r = .18$) and self-report

TABLE I Means, Standard Deviations, and Correlations for Scale Variables—Organization A^a

	Mean	SD	1	2	3	4	5	6	7
1. Gender	.27	.45	<i>n/a</i>						
2. Age	40.79	12.15	−.16**	<i>n/a</i>					
3. Management Responsibilities	.50	.50	−.21**	.15**	<i>n/a</i>				
4. Perceived HRM Practices	3.05	.69	.04	−.05	.02	.67			
5. Perceived Line Manager Behavior	3.67	.87	.06	−.09**	.03	.52**	.87		
6. Engagement	3.75	.47	.00	0.00	.21**	.35**	.34**	.67	
7. Self-Report Task Performance	4.09	.51	.11**	−0.04	.02	.11**	.18**	.32**	.69

^a*n* = 924. The values reported on the main diagonal in italics are square roots of the average variance explained. According to Fornell and Larcker's (1981) discriminant validity test, this value must be larger than a focal variable's zero-order correlations in the same row and column.

***p* < .01.

performance are positive and significant, but weaker compared to the relationship between engagement and self-report performance. Gender is positively, but weakly, associated with self-report task performance ($r = .11$), while age is negatively associated with perceived line manager behavior ($r = -.09$), and management responsibilities is positively associated with engagement ($r = .21$).

Tests of Hypotheses

We employed latent variable structural equation modeling (Jöreskog & Sörbom, 1993) using maximum likelihood estimation in AMOS 18.0 (Arbuckle, 2006) to evaluate our model. Structural equation modeling simultaneously estimates the structure within a series of dependent relationships between latent variables with multiple indicators, while correcting for measurement errors (Bollen & Long, 1993; Hair et al., 2005). This approach seemed the most appropriate for testing our empirical model. Given that perceptions of HRM practices and line manager behavior are likely to be positively associated, both constructs were allowed to correlate in the structural model. Overall, the model provided a good fit for our data ($\chi^2 = 414$, $df = 131$, GFI = .95, SRMR = .05, RMSEA = .05, CFI = .96).

As the sample in Organization A consists of a diverse range of employees, we carried out multigroup analyses to test for the reliability

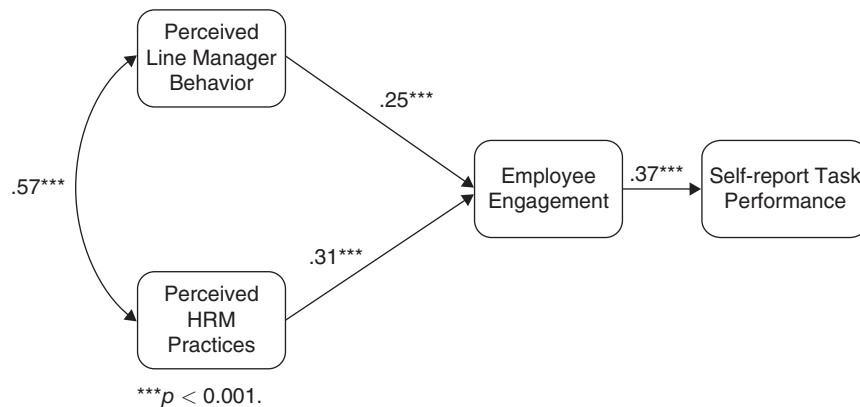
of our proposed model across different genders, age groups, and hierarchical levels. Our results¹ showed that although there were differences with regard to the strength of the association between the groups, we did not find any significant differences with regard to the overall model proposed. We therefore concluded that the proposed model was a consistent reflection of the relationships between perceived HRM, perceived line manager behavior, employee engagement, and self-report performance within Organization A.

Our hypothesized model implied that engagement mediates the link between the antecedents of engagement and self-report task performance. To analyze whether mediation according to Baron and Kenny (1986) could be found in our model, we examined whether an alternative model would lead to a significant improvement in the model fit compared to our hypothesized model by testing a series of nested models (Anderson & Gerbing, 1988; Mayer & Davis, 1999). Table II presents the fit statistics for three alternative models compared to our hypothesized model. We used the same five fit indices as described earlier and carried out sequential χ^2 difference tests to compare all models to our hypothesized model.

In model 2, we added a direct path from perceived HRM practices to self-report task performance to test whether there was a direct association between both variables,

TABLE II Structural Equation Model Comparisons—Organization A^a

Models	χ^2 (df)	GFI	SRMR	RMSEA	CFI	Comparisons
Hypothesized: Model 1	414 (131)**	.951	.045	.048	.964	
Alternative Model 2 ^b	411 (130)	.952	.045	.048	.964	Model 2 compared to Model 1
Alternative Model 3 ^c	414 (130)	.951	.045	.049	.964	Model 3 compared to Model 1
Alternative Model 4 ^d	407 (129)	.952	.044	.048	.964	Model 4 compared to Model 1

^a $n = 924$.^bDirect path from perceived HRM practices to self-report task performance.^cDirect path from perceived line manager behavior to self-report task performance.^dDirect paths from perceived HRM practices and perceived line manager behavior to self-report task performance.** $p < .01$.**FIGURE 2.** Standardized Path Estimates: Final Model Organization A

as suggested in early strategic HRM research (Arthur, 1994; Huselid, 1995; Koch & McGrath, 1996; MacDuffie, 1995). As Table II shows, the model fit was lower; hence, we found no support for this model. For alternative model 3, we added a direct path from perceived line manager behavior to self-report task performance to examine whether perceived line manager behavior had a direct impact upon individual performance, as research indicates that managerial behavior may have a direct influence on performance (De Jong & Den Hartog, 2007). However, the fit statistics in Table II reveal that this additional path did not improve the overall model fit. For model 4 we combined both modifications and added direct paths from perceived HRM practices and perceived line manager behavior to self-report task performance, respectively. Again results in Table II show that we did not find an improvement in model fit. Hence, data from our nested model comparison suggested that the hypothesized

model fitted the data best and engagement mediated the link between perceived HRM practices, perceived line manager behavior, and self-report task performance. The standardized path coefficients for this model are shown in Figure 2.

Results—Study 2

Descriptive Statistics

Table III shows the descriptive statistics for, and interscale correlations among, all study variables for Organization B. All correlations show the expected direction of association and are significant at the $p < .01$ level. Perceived HRM practices are positively correlated with perceived line manager behavior ($r = .53$). Furthermore, engagement is positively associated with perceived HRM practices ($r = .37$) and perceived line manager behavior ($r = .36$), and all three variables are positively correlated with self-report innovative work

TABLE III Means, Standard Deviations, and Correlations for Scale Variables—Organization B^a

	Mean	SD	1	2	3	4	5	6	7
1. Gender	.26	.44	<i>n/a</i>						
2. Age	41.42	11.56	-.24**	<i>n/a</i>					
3. Management Responsibilities	.38	.49	-.14**	.14**	<i>n/a</i>				
4. Perceived HRM Practices	2.99	.76	.04	-.03	.11**	.70			
5. Perceived Line Manager Behavior	3.53	.96	.13**	-.08	.09**	.53**	.89		
6. Engagement	3.63	.59	.18**	-.03	.18**	.37**	.36**	.72	
7. Self-Report Innovative Work Behavior	2.11	1.10	-.11**	-.09	.26**	.26**	.21**	.39**	.91

^a*n* = 872. The values reported on the main diagonal in italics are square roots of the average variance explained. According to Fornell and Larcker's (1981) discriminant validity test, this value must be larger than a focal variable's zero-order correlations in the same row and column.

***p* < .01.

behavior (*r* between .21 and .39). The data also show a positive association between management responsibilities and our study variables (*r* between .09 and .26), and between being female and perceived line manager behavior (*r* = .13) and engagement (*r* = .18), while the relationship between being female and self-report innovative work behavior is weak and negative (*r* = -.11).

Tests of Hypotheses

As for Organization A, we tested our hypotheses with structural equation modeling (Jöreskog & Sörbom, 1993) in Amos 18.0 (Arbuckle, 2006). Again we allowed perceived HRM practices and line manager behavior to correlate. The model revealed a very good overall fit ($\chi^2 = 385$, *df* = 131, GFI = .95, SRMR = .05, RMSEA = .05, CFI = .98) for our hypothesized model. As for Organization A, we carried out multigroup analyses to test our proposed model across different genders, age groups, and hierarchical levels. As we did not find any significant differences with regard to the model proposed, we concluded that the model was overall an accurate reflection of the relationships between perceived HRM, perceived line manager behavior, employee engagement, and self-report innovative work behavior within Organization B.

Again, we aimed to determine whether an alternative model would better represent our data. We therefore tested and compared the same series of nested structural models as for Organization A using sequential χ^2 difference tests. Five fit statistics and the model comparisons are depicted in Table IV.

For the nested model comparisons we found substantively similar results for Organization B. As Table IV demonstrates, model 2, where we added a direct path from HRM practices to self-report innovative work behavior, fitted the data equally well as our hypothesized model ($\Delta\chi^2(1) = 6.3$, *p* < 0.025). This indicates that HRM practices might have a direct influence on innovative work behavior (Collins & Smith, 2006). However, the first model was superior to model 2, as it was more parsimonious. Table IV also demonstrates that the other two alternative models fitted our data less well than the hypothesized model. The standardized path coefficients for the best-fitting model for Organization B are shown in Figure 3.

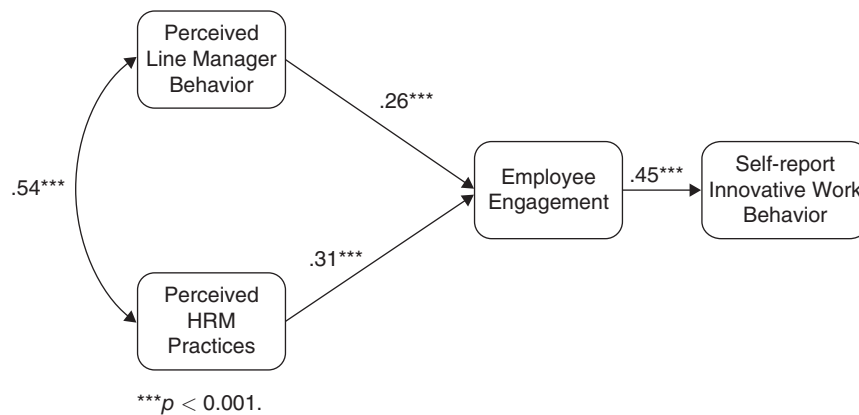
Discussion

Key Findings and Theoretical Implications

The purpose of this research was to develop and test a more complete model of how

TABLE IV Structural Equation Model Comparisons—Organization B^a

Models	χ^2 (df)	GFI	SRMR	RMSEA	CFI	Comparisons
Hypothesized: Model 1	385 (131)**	.953	.046	.047	.978	
Alternative Model 2 ^b	378 (130)	.953	.040	.047	.978	Model 2 compared to Model 1
Alternative Model 3 ^c	384 (130)	.953	.044	.047	.978	Model 3 compared to Model 1
Alternative Model 4 ^d	379 (129)	.953	.040	.047	.978	Model 4 compared to Model 1

^a $n = 872$.^bDirect path from perceived HRM practices to self-report innovative work behavior.^cDirect path from perceived line manager behavior to self-report innovative work behavior.^dDirect paths from perceived HRM practices and perceived line manager behavior to self-report innovative work behavior.** $p < .01$.**FIGURE 3.** Standardized Path Estimates: Final Model Organization B

perceived line manager behavior, together with employees' experiences of HRM practices, affect levels of employee engagement and, further, how the relationship between HRM practices, perceived line manager behavior, and individual performance is mediated through engagement. We thereby responded to calls for studies analyzing the role of line managers in the HRM-performance chain (Guest, 2011; Purcell & Hutchinson, 2007). Data from 1,796 employees in two organizations largely supported our theoretical framework. In both organizations, perceived HRM practices were positively associated with employee engagement ($\beta = .31$), lending support to Hypothesis 1. Furthermore, perceived line manager behavior was positively associated with engagement in both organizations ($\beta = .25$ and $.26$), supporting Hypothesis 2. Moreover, perceptions of HRM practices and

line manager behavior were positively correlated, supporting the notion of a joint effect on individual levels of engagement ($r = .57$ and $.54$). Engagement, in turn, led to higher levels of task performance ($\beta = .37$) and innovative work behavior ($\beta = .45$), as measured by self-report questionnaires, and mediated the link between line manager behavior, HRM practices, and individual performance. Hence, Hypotheses 3 and 4 were fully supported. These results have several theoretical implications, which we consider in turn.

First, we show that employees' experiences of perceived line manager behavior are an essential element in the HRM-performance linkage. Viewed through the lens of social exchange theory, our data suggest that line managers have an important role to play, not just in the way they implement and enact HRM policy (Bowen & Ostroff, 2004), but also

through their daily behavior toward their staff, which sends signals about the extent of the value placed upon them. Hence, employees' experiences of HRM occur along at least two dimensions, first their experiences of HRM policies and practices, and second the way they are treated by their line manager. Positive experiences of HRM practices alone appear insufficient to generate high levels of engagement and performance; rather, our data suggest that it is the combination of positive perceived line manager behavior and positive experiences of HRM practices together that is associated with an engaged and high-performing workforce. These findings support the argument that a systemic approach is needed when examining the HRM-performance linkage, one that focuses on the general working climate experienced by employees, which will inevitably include their perceptions of their line manager as well as HRM policy implementation (Purcell & Hutchinson, 2007).

Our findings also lend support to the small number of other studies that have demonstrated a link between positive experiences of HRM practices and individual-level performance outcomes. Data from our study show that where employees' experiences of HRM practices are positive, self-report individual performance in terms of task performance and innovative work behavior is enhanced. This can be understood through the lens of social exchange theory, which suggests that where employees feel that their organization is investing in them through the positive experiences they have of HRM policy and line manager behavior, they are more willing to reciprocate through high levels of engagement and performance. A focus on intended HRM strategy alone will not capture the lived experiences of employees and will omit critical dimensions of the exchange relationship. This reflects the findings of other studies that have suggested that it is not the HRM strategies intended by the organization that are most significant in the HRM-performance chain, but rather how employees experience those HRM practices (Gratton & Truss, 2003; Kinnie et al., 2005; Nishii et al., 2008). Consequently, this lends further weight to the argument that

studies of the HRM-performance linkage need to seek the views not just of HRM managers, but also of individual employees (Den Hartog et al., 2004).

Finally, we bring together two hitherto disparate bodies of literature by demonstrating that employee engagement acts as a mediator linking perceived HRM practices and perceived line manager behavior to self-report individual performance. No prior studies have examined the link between HRM, employee engagement, and individual performance. Some earlier research has shown that attitudes are an important element in the HRM-performance chain, focusing on other attitudinal constructs such as commitment, job satisfaction, and OCB (Allen et al., 2003; Batt, 2002; Sun et al., 2007). Equally, several prior studies have argued that there is a link between perceived line manager behavior and engagement (May et al., 2004), and between engagement and individual performance (Rich et al., 2010). By bringing these lines of argument together, consistent with our predictions, our data suggest that engagement acts as an important mediator between HRM and individual performance. Although this is a new finding, it is in line with our predictions based on the engagement literature (Christian et al., 2011; Halbesleben & Wheeler, 2008; Rich et al., 2010), and on the literature linking perceived HRM with attitudinal and behavioral outcomes (Allen et al., 2003; Snape & Redman, 2010). Within a social exchange relationship, employees' positive perceptions of organizational investments in them, communicated through line manager behavior and perceived HRM practices, give rise to a willingness to engage cognitively, affectively, and behaviorally, and to consequent high levels of task performance and innovative work behavior.

Implications for Practitioners

Our data provide further support to the growing interest in the changing relationship between line managers and HRM professionals in the management of employees. The current study shows that line managers play an important role in creating and maintaining a positive

environment in which employees are willing to engage and perform. This emphasizes the importance of a symbiotic relationship between HRM professionals and line managers (Purcell & Hutchinson, 2007). Collaboration between both parties will enable the effective implementation of HRM practices, which are positively perceived by employees and encourage them to reciprocate by enacting desired behaviors. Our study demonstrates that it is through effective partnership that HRM practitioners and line managers are able to elicit positive responses from their workforce.

Our findings have specific implications for HRM professionals. Arguably, the goal of strategic HRM is to evoke positive employee attitudes and improve performance. The crucial question for HRM practitioners is how to achieve these objectives. A key challenge is to ensure that HRM policies and practices are enacted in a consistent way by different line managers across the organization. One focus for HRM professionals should be the alignment of line managers' performance goals and objectives with desired strategic HRM outcomes, and the assessment of line managers' performance based on their approach to managing people.

Moreover, our data show that employee perceptions of HRM practices play an important role in determining individual performance and, in conjunction with perceived line manager behavior, are associated with higher levels of employee engagement. Creating a highly engaged workforce has become a significant focus for many organizations recently (MacLeod & Clarke, 2009; Truss, Soane, Alfes, Rees, & Gatenby, 2010), and our study indicates to HRM professionals that line managers have to be integrated in any strategies designed to maintain or increase engagement levels.

Limitations

Although our research provides interesting insights into the causal chain linking line manager behavior, HRM practices, employee engagement, and individual performance, the findings should be assessed against the background of the limitations inherent in our

study. First, we collected data in each organization at one point in time, which limits the conclusions that can be made regarding the causal order of our relationships. It might, for example, be possible that employee engagement leads to positive perceptions of HRM practices. Second, we relied on individuals' self-reports on all variables of our model, which raises concerns about possible common method bias. However, our analysis indicated that common method bias was not an issue in either organization and the results obtained were stable in two different organizations and generalizable across a number of demographic criteria. Moreover, in terms of the current study, our focus was on employee perceptions of HRM as the first link between HRM practices and outcomes (Wright & Boswell, 2002), and so we would argue that self-report measures might actually be the most valid measurement method for most of our constructs, as individuals are best placed to report their own levels of engagement, their perceptions of HRM practices, and line manager behavior. Hence, the only constructs that could have been measured by multiple data sources are self-report performance and innovative work behavior. Although at least two data sources are required to help rule out the validity threats of self-report and single-method bias (Donaldson & Grant-Vallone, 2002), a recent review of performance appraisal research suggests that performance ratings by line managers might be equally biased as self-rated performance (Levy & Williams, 2004). Moreover, authors have recently questioned the assumption that common-method variance causes serious problems in organizational research (Spector, 2006). Nevertheless, we encourage future researchers to collect data from multiple sources to investigate our findings further.

Implications for Research

In our study we shed light on the roles line managers and HRM professionals play in

Our study demonstrates that it is through effective partnership that HRM practitioners and line managers are able to elicit positive responses from their workforce.

shaping employees' attitudes and behaviors at work. We have demonstrated that it is important to consider how line managers affect employees' perceptions of HRM practices and policies, which supports the notion of a symbiotic relationship between both parties for the effective management of people. We encourage future research to further explore the dynamics between HRM professionals and line managers in the enactment of HRM practices and their effect on employee attitudes and behaviors.

An interesting question arising out of our research is whether different occupational groups within one organization share the same perceptions of line management behavior, HRM practices, engagement, and individual performance. Although we found some variability in path coefficients between individuals with and without management responsibilities, we did not find a significant difference with regard to the overall model. We encourage future research to assess whether there are differences in individuals' perceptions based on their occupational background. Indeed, Kinnie et al. (2005) suggest that the relationships depicted in our model may well vary between different groups of employees.

Future research might also analyze whether different leadership styles have a differential impact on employees' perception of, and attributions to, HRM systems. For example, would an engaging leadership style (Chartered Institute of Personnel and Development [CIPD], 2008) lead to a more positive evaluation of the HRM system compared to traditional transactional and transformational leadership styles? We also encourage consideration of how employees' perceptions of the wider organizational climate, such as perceived organizational support and organizational trust, might be related to perceived HRM practices and line management behavior.

Our study has demonstrated that it is important to consider employee perceptions when evaluating the impact of HRM practices. Future research could assess to what extent line managers' perceptions of HRM practices influence their employees' perceptions of HRM practices, using multilevel data from different data sources in the organization. It might be

that line managers who have positive experiences of HRM themselves shape their subordinates' perceptions and attitudes toward HRM.

Finally, we encourage researchers to evaluate changes in the effect of line manager behavior and HRM practices over time. By adopting longitudinal research designs, researchers will be able to demonstrate causal effects in the HRM-performance chain and assess the impact of any intervention designed to enhance employee attitudes and performance.

Conclusion

Our study has contributed to debates around the HRM-individual performance link through the development and testing of a mediated model incorporating employee engagement as the key attitudinal variable, and analyzing the role of line managers in this causal chain. Through structural equation modeling on a sample of 1,796 respondents from two organizations, we tested a number of hypotheses to determine how these factors are interrelated. We found that employees' perceptions of line manager behavior and HRM practices are positively related to levels of employee engagement, and that engagement, in turn, mediated the link with self-report individual performance. These findings are consistent with social exchange theory, which suggests that organizations able to cultivate a climate of reciprocity will elicit positive attitudinal and behavioral outcomes from employees. We argue that HRM's impact on performance outcomes is therefore indirect rather than direct, and that the focus of HRM efforts should be first on the effective selection, deployment, and performance management of line managers, second on supporting line managers to ensure the fair and consistent enactment of intended HRM practices, and third on developing and implementing employee engagement strategies. These factors together will create a virtuous cycle fostering high levels of performance.

Note

1. The full results are available from the first author upon request.

KERSTIN ALFES is an assistant professor in the Department of Human Resource Studies at Tilburg University. Her research interests include employee engagement, strategic human resource management, overqualification, and the management of change. She has written on these topics in journals such as *Human Resource Management Journal*; the *International Journal of Human Resource Management*; *Gender, Work & Organization*; and *International Public Management Journal*.

CATHERINE TRUSS is head of Group, People, Management and Organisation at Kent Business School, University of Kent, UK. She has held research grants valued at over £900,000 from the Economic and Social Research Council, the Chartered Institute of Personnel and Development, the National Institute for Health Research, and Industry, and has written or coauthored over 180 articles, papers, books, and reports. Her research interests include strategic HRM, employee engagement, and meaningful work. She is co-editor of *Employee Engagement in Theory and Practice*, published by Routledge in 2013.

EMMA C. SOANE is a lecturer in the Department of Management at the London School of Economics. She is the academic director, CEMS MSc International Management; a chartered occupational psychologist; and a chartered scientist. Her research interests are centered on individual differences in leadership, personality, decision making, risk, and engagement with work. She has written a number of journal articles, book chapters, and practitioner articles. She coauthored the book *Traders: Risks, Decisions, and Management in Financial Markets* published by Oxford University Press in 2006.

CHRIS REES is a senior lecturer in employment relations in the School of Management at Royal Holloway, University of London. His current research centers on comparative corporate governance and trade union responses to corporate social responsibility; the cross-border transfer of employment practices in multinational corporations; and European information and consultation regulations. His work has been published in journals such as *Organization Studies*, *Work Employment and Society*, the *European Journal of Industrial Relations*, and *Human Resource Management Journal*.

MARK GATENBY is a lecturer in organizational behavior in the School of Management at the University of Southampton. His research interests include public service reform, the role of managers, and critical realism.

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