



FACULTEIT ECONOMIE
EN BEDRIJFSKUNDE

TWEEKERKENSTRAAT 2
B-9000 GENT

Tel. : 32 - (0)9 - 264.34.61
Fax. : 32 - (0)9 - 264.35.92

WORKING PAPER

Linking HR and Line Agents' Implementation of High-Performance Work Systems to Intentions to Leave and Job Performance: A Social Exchange Perspective

Nele Soens¹

Dirk Buyens²

M. Susan Taylor³

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¹ Corresponding author. Ghent University, Faculty of Economics and Business Administration and Vlerick Leuven Gent Management School. E-mail: nele.soens@vlerick.com

² Ghent University, Faculty of Economics and Business Administration and Vlerick Leuven Gent Management School

³ University of Maryland, Robert H. Smith School of Business

ABSTRACT

Unlike common assessments of the overall presence of high-performance work systems (HPWS), this study focuses on actual implementation of HPWS by two specific agents, i.e., the HR department and line management. We investigate how HPWS implementation by HR and line agents – as perceived by employees – relates to intentions to leave and job performance and we propose perceived organizational support (POS) and leader-member exchange (LMX) as potential mediating mechanisms. Respondents (N=266) were nonmanagerial employees from a research organization in Belgium. Results revealed that HPWS implementation by the HR department was indirectly related to intentions to leave through POS. Furthermore, we found that HPWS implementation by line management related to intentions to leave through the mediation of POS and LMX and it related to job performance through the mediation of LMX. These findings contribute to the literature by providing a more refined picture of the social exchange mechanisms that mediate between HPWS and important employee outcomes and inform HR and line practitioners of the employee outcomes associated with their HRM actions.

Keywords: High-performance work systems, implementation, line management, employee outcomes, social exchange

INTRODUCTION

Within the literature on strategic human resource management (HRM), a large body of evidence suggests that the use of a coherent set of HRM practices is associated with desirable firm performance outcomes such as high productivity, low turnover, and high financial performance (e.g., Combs, Liu, Hall & Ketchen, 2006; Huselid, 1995). These performance-enhancing HRM systems have been labeled high-performance work systems (HPWS) (Becker & Huselid, 1998; Huselid, 1995) and have been described as “a group of separate but interconnected HR management practices, including comprehensive recruitment and selection procedures, incentive compensation and performance management systems, and extensive employee involvement and training, which are designed to enhance employee and firm performance outcomes through improving workforce competence, attitudes, and motivation” (Takeuchi, Chen & Lepak, 2009, p. 1 based on Huselid, 1995).

As indicated above, employees are regarded as the central linking mechanism between HPWS and firm performance outcomes (Becker, Huselid, Pickus & Spratt, 1997; Guest, 1997; Purcell & Kinnie, 2007; Wright & Nishii, 2006). Consequently, an accumulating line of research has started to test the assumption that HPWS influence employee attitudes and behaviors (e.g., Takeuchi et al., 2009; Wu & Chaturvedi, 2009). Intentions to leave and job performance are two employee outcomes that have been considered worthy of examination, because they are believed to be important precursors of turnover and productivity (e.g., den Hartog, Boselie & Paauwe, 2004; Steel & Ovalle, 1984). In particular, studies have shown that HPWS are negatively associated with intentions to leave (Boon, den Hartog, Boselie & Paauwe, 2011; Guchait & Cho, 2010) and positively associated with job performance (Chang & Chen, 2011; Liao, Toya, Lepak & Hong, 2009).

One theoretical framework that has been invoked for explaining these relationships is social exchange theory (SET) (Blau, 1964). Basically, the logic is that organizations may exchange supportive HPWS practices for desirable attitudinal and behavioral reactions from employees, such as low intentions to leave and high performance on the job (e.g., Gould-Williams & Davies, 2005; Gould-Williams, 2007). An increasing amount of studies has relied on these assertions to explain and examine how the linkages between HPWS and employee outcomes work (e.g., Gilbert, De Winne & Sels, 2011; Gong, Chang & Cheung, 2010; Purcell & Hutchinson, 2007).

However, there are two key premises of SET that have remained unaddressed in the extant strategic HRM literature. First, scholars have noted that there is a lack of research on the specific agents (e.g., line managers, HR professionals, etc.) that represent the organization in building social exchange relationships with employees (Coyle-Shapiro & Shore, 2007; Shore, Tetrick, Coyle-Shapiro & Taylor, 2004). This need for specification of the agents involved in social exchange resonates with a

need for examination of the different agents that are involved in actual implementation of HPWS. Strategic HRM scholars have argued that existing work has primarily focused on the overall and mere presence of HPWS, without considering the quality of actual implementation of these systems and the different agents that are responsible for this (Guest, 2011; Purcell & Kinnie, 2007). Second, SET suggests that different types of social exchange relationships develop at the workplace (Cropanzano & Mitchell, 2005). Accordingly, a number of studies have examined different types of social exchange (e.g., employee-organization relationships and employee-supervisor relationships) concurrently and have showed differential relationships with employee outcomes (Masterson, Lewis, Goldman, & Taylor, 2000; Settoon, Bennett & Liden, 1996; Wayne, Shore & Liden, 1997). However, despite these authors' recommendations to examine these different types of social exchange together, to our knowledge, no attempts have been made so far to investigate their simultaneous mediation between HPWS and employee outcomes.

This study seeks to address the above research gaps. One purpose of this study is to investigate actual implementation instead of overall presence of HPWS and to disentangle the role of two agents that are highly involved in this, i.e., the HR department and line management (senior, middle and first-line managers). At the same time, we specify these two agents as representatives of the organization with whom employees interact in the development of social exchange relationships. A second purpose of this study is to simultaneously assess the two distinct social exchange mechanisms that we mentioned earlier, i.e., the employee-organization relationship and the employee-supervisor relationship, as mediating mechanisms between HPWS and intentions to leave and job performance. In particular, we examine the mediating role of two well-researched constructs capturing these relationships, i.e., perceived organizational support (POS) and leader-member exchange (LMX).

In line with recent work on HPWS (e.g., Liao et al., 2009; Macky & Boxall, 2007; Qiao, Khilji & Wang, 2009), we conceptualize HPWS implementation by the HR department and line management as individual employee perceptions. The underlying logic is that employees individually perceive and interpret the HPWS practices that are applied to them and base their individual attitudinal and behavioral reactions on these individual perceptions (Ostroff & Bowen, 2000; Purcell & Kinnie, 2007; Wright & Nishii, 2006). In short, at the individual level of analysis, we investigate how POS and LMX simultaneously mediate between HPWS implementation by HR and line agents and intentions to leave and job performance (see figure 1). In so doing, we contribute to the literature by providing a more complete and fine-grained analysis of the mediating role of social exchange between HPWS and employee outcomes. Our study is beneficial to managerial practice as well, since it differentiates

between HR and line implementers of HPWS and thereby provides insight into their individual roles in establishing effective HPWS and social exchange relationships.

Insert figure 1 About Here

In what follows, we begin by integrating the literatures on strategic HRM and social exchange and turn next to a discussion of how POS and LMX mediate between HPWS implementation by the HR department and line management – as perceived by employees – and intentions to leave and job performance.

LITERATURE REVIEW AND HYPOTHESES

Integrating HRM-performance and social exchange research

SET defines social exchange as a series of interactions among individuals that are interdependent and contingent on the reactions of the other party and that may produce high-quality relationships (Cropanzano & Mitchell, 2005). The underlying process governing these interactions has been referred to as the norm of reciprocity, which suggests that favors received by one party from the other party create a sense of obligation on the part of the recipient who remains indebted to the donor until the benefit has been returned (Blau, 1964; Gouldner, 1960).

While researchers originally developed SET to explain exchange relationships between individuals (Blau, 1964; Homans, 1958), it has also been used to explain the relationship between an organization and its employees, referred to as the employee-organization relationship (EOR) (Whitener, 2001). The EOR has been extensively studied from both the employer (macro) and the employee (micro) perspective (Coyle-Shapiro & Shore, 2007; Shore, Tetrick, Taylor et al., 2004).

Starting from the employer perspective, scholars have argued that HRM systems can be seen as the primary means that organizations may use to implement a relationship with its employees (Tsui & Wang, 2002). More specifically, inducement-contribution theory suggests that organizations may provide employees with inducements in the form of HRM practices such as extensive training and internal career opportunities in exchange for contributions that employees may provide to the organization (Barnard, 1938; March & Simon, 1958; Tsui & Wang, 2002). Tsui and her colleagues have proposed two generic types of employment relationships that organizations may seek to establish. In a 'job-focused' employment relationship organizations exchange short-term economic

inducements for well-specified, job-related employee contributions, whereas in an 'organization-focused' employment relationship organizations offer long-term and broad investment for unspecified and extra-role employee contributions (Tsui, Pearce, Porter & Hite, 1995; Tsui & Wang, 2002).

A job-focused employment approach is implemented through a 'control-based' HRM system emphasizing narrowly defined jobs, centralized decision-making, little training and relatively low wages, while an organization-focused employment approach is enacted by a HPWS, characterized by selective hiring, extensive training, broad job definitions, high pay, extensive benefits and employee participation (Arthur, 1994; Boselie, Paauwe & Richardson, 2003; Delery & Doty, 1996; Huselid, 1995; Tsui & Wang, 2002). Traditionally, HRM-performance research has evidenced a positive association between the latter type, HPWS, and firm performance, which has been confirmed in two meta-analyses (Combs et al., 2006; Subramony, 2009). More recently, this line of research has started to explore the mechanisms through which this relationship occurs, which requires to also incorporate the employee perspective on the EOR.

Shifting from the employer to the employee perspective, scholars have suggested that organizational inducements provided to employees in the form of HPWS practices may initiate a social exchange process between the organization and its employees (Sun, Aryee & Law, 2007; Takeuchi, Lepak, Wang & Takeuchi, 2007). In particular, employees may perceive and interpret organizational inducements in the form of HPWS practices as signals of the organization's commitment to and trust in them, its willingness to invest in them, its consideration and concern for their needs, and its recognition of their contributions (Gould-Williams & Davies, 2005; Gould-Williams, 2007). Based on the arguments of SET, such employee perceptions of beneficial treatment on the part of the organization are expected to engender a feeling of obligation to reciprocate the organization's goodwill and favorable behavior. To repay their 'debt' employees may use the currency of organizationally desired attitudes and behaviors such as high motivation, strong commitment, low intentions to leave and high performance (Gould-Williams & Davies, 2005; Shaw, Dineen, Fang & Vallella, 2009). Ultimately, strategic HRM scholars expect that these positive employee attitudes and behaviors will cascade up to yield superior firm performance (e.g., Lepak, Liao, Chung & Harden, 2006; Ostroff & Bowen, 2000; Wright & Nishii, 2006).

It may be clear from the argumentation above that strategic HRM scholars have taken important steps to integrate insights from SET into HRM-performance research. However, more work is needed to delve further beneath the surface. First, as noted earlier, little attention has been paid to the specific agents that interact with employees to establish these exchange relationships (Coyle-Shapiro & Shore, 2007; Shore et al., 2004) and that are involved in the implementation of HPWS

(Guest, 2011; Purcell & Kinnie, 2007). A large volume of research has shown that HR professionals and line managers share the performance of HRM tasks and that they work in partnership to implement HRM policies (e.g., Currie & Procter, 2001; Hall & Torrington, 1998; Renwick, 2003; Watson, Maxwell & Farquharson, 2007; Whittaker & Marchington, 2003). However, with the exception of Gilbert et al. (2011), few studies have empirically tested the individual roles of HR and line agents in linking HPWS and employee outcomes. Our distinction between HR and line agents attempts not only to fill this gap, but also to answer the need to specify the agents involved in developing social exchange relationships with employees.

Second, scholars have argued that different social exchange relationships may occur at the workplace (Cropanzano & Mitchell, 2005). One is the EOR, which we referred to before. A construct capturing the quality of the EOR that has been heavily researched, is POS. POS refers to the global beliefs that employees hold about how much the organization values their contribution and cares about their well-being (Eisenberger, Huntington, Hutchison & Sowa, 1986; Rhoades, Eisenberger & Armeli, 2001). Rooted in social exchange, organizational support theory assumes that employees personify the organization and make inferences about its favorable or unfavorable treatment based on the interventions of different agents representing the organization (Levinson, 1965; Rhoades & Eisenberger, 2002). To the extent that they perceive that the organization provides them with support, employees are expected to reciprocate the perceived signals of organizational commitment by their own commitment towards the organization (Eisenberger et al., 1986; Rhoades et al., 2001; Rhoades & Eisenberger, 2002).

Another type of workplace social exchange is the relationship that evolves between employees and supervisors, labeled as LMX (Graen & Uhl-Bien, 1995; Liden, Sparrowe & Wayne, 1997). LMX has been defined as the quality of the employee-supervisor relationship and refers to the degree to which supervisors and employees exchange resources and support (Dansereau, Graen & Haga, 1975; Liden, Erdogan, Wayne & Sparrowe, 2006; Sparrowe & Liden, 1997). In low-quality leader-member relations, supervisors and employees do not progress beyond the concrete specifications of the formal employment contract (Graen & Uhl-Bien, 1995; Sparrowe & Liden, 1997). Conversely, in high-quality leader-member relations supervisors exchange extensive tangible and intangible resources for beneficial employee work behaviors beyond what is formally agreed upon (Gerstner & Day, 1997; Liden et al., 1997).

In the present study, we concurrently consider the EOR – as captured by POS – and the employee-supervisor relationship – as captured by LMX – as mediating mechanisms in the relationships between HPWS implementation by HR and line agents and intentions to leave and job

performance. In the following sections, we develop specific hypotheses for our theoretical contentions.

Linking HPWS implementation by HR and line agents to POS

Within the literature on POS, research has theorized and supported the role of HRM practices as antecedents of POS. The underlying rationale is that by suggesting investment in employees and by showing recognition of employee contributions, HRM practices may signal that the organization values and cares about its employees and therefore are expected to lead to employee perceptions of organizational support (Shore & Shore, 1995; Wayne et al., 1997). In particular, organizational treatment in terms of praise and approval, reward, job enrichment or participation may be interpreted by employees as indicative of the organization being supportive of them and seeking to establish or continue strong employee-organization exchange relationships (Eisenberger et al., 1986).

Several studies have empirically examined specific HRM practices as antecedents of POS. For instance, Wayne et al. (1997) found that developmental experiences in terms of formal and informal training and promotions to a higher position were positively related to POS. More recently, Wayne, Shore, Bommer & Tetrick (2002) found that recognition and inclusion in decision-making and communication were positively related to POS. Furthermore, Allen, Shore & Griffith (2003) found that participation in decision making, fairness of rewards, and growth opportunities were positively related to POS. Similarly, Rhoades et al. (2001) found that organizational rewards positively related to POS. Finally, in their meta-analysis, Rhoades & Eisenberger (2002) found that favorable rewards, job security, and training had positive relationships with POS.

In the abovementioned studies, HRM practices have been studied individually and their relationships with POS have been investigated independently. However, strategic HRM theory asserts that employees are exposed to and influenced by a wide range of HRM practices simultaneously (Delery, 1998). In line with this, recent studies have started to examine the HRM system as a whole as an antecedent of POS. For instance, at the individual level of analysis, Liao et al. (2009) found that individual employee perceptions of HPWS were positively related to POS. In a similar vein, Zhang & Jia (2010) found that HPWS (as rated by HR managers) and aggregated employee perceptions of POS were positively related at the firm level. Consistent with this work, the present study considers HPWS as a system of HRM practices. More specifically, our identification of the different agents involved in its implementation allows us to examine HPWS implementation by each agent as a potential source of POS.

In particular, we firstly expect that HPWS implementation by the HR department is positively associated with POS and we build further on Liao et al.'s (2009) theoretical arguments for linking HPWS and POS to justify this relationship. For instance, selective hiring activities undertaken by HR professionals such as careful applicant screening, conducting selection interviews, extensive testing, and organizing assessment centers may convince employees of the fact that the organization highly values their skills and competences because, from a large pool of applicants, they are the ones who have been selected and hired. In the area of training, HR professionals' interventions such as collecting the means and resources for training, organizing and coordinating training activities, and evaluating training results are expected to provide employees with evidence of the organization's willingness to invest in them and establish a long-term relationship. With regard to performance appraisal and rewards, HR professionals' actions such as developing and monitoring performance and reward systems, enhancing the quality of performance appraisals by equipping supervisors with the necessary skills, and assisting employees in properly preparing the appraisal conversation will likely signal to employees that the organization recognizes and values their contributions. Finally, career management activities such as developing the organization's internal labor market, creating opportunities and pathways for career progression, and providing employees with career guidance and advice are expected to show the organization's investment in employees and its long-term perspective on their relationship. Based on the argumentation outlined above, we hypothesize that:

Hypothesis 1a: HPWS implementation by the HR department is positively related to POS.

Secondly, we expect HPWS implementation by line management to be positively associated with POS. To reflect the business reality in most large organizations, in this study line management refers to the chain of authority from senior managers through middle managers to first-line managers (McConville, 2006). Research has shown that each of these managerial ranks is closely involved in managing employees and that these different managerial levels share responsibilities in the implementation of HRM policies (Hall & Torrington, 1998; McConville, 2006; Stanton, Young, Bartram & Leggat, 2010; Watson, Maxwell & Farquharson, 2007; Whittaker & Marchington, 2003).

We propose that, just as HPWS implementation by the HR department, employees may interpret HPWS implementation by their line managers as indicative of the organization's recognition of their accomplishments and care about their well-being. When line managers allow and stimulate employees to participate in training, evaluate and recognize their performance, provide them with developmental and performance-oriented feedback, include them in decision-making, provide them with career advice, and invest in their careers, employees are likely to feel supported by their line

managers and thereby by the organization as a whole. On the basis of this argumentation, we hypothesize that:

Hypothesis 1b: HPWS implementation by line management is positively related to POS.

Linking HPWS implementation by line agents to LMX

One key agent in the management hierarchy who is very close to employees is the direct supervisor. While employee-supervisor relationships have been heavily researched in the LMX literature, scholars have raised the concern that relatively little is known about the antecedents and the development of LMX (Graen & Uhl-Bien, 1995; Harris, Harris & Eplion, 2007; Schyns, Paul, Mohr & Blank, 2005). For instance, few HRM practices have been studied in relation to LMX. One exception is supervisor contingent reward, which has been shown to be positively related to LMX (Aryee & Chen, 2006; Wayne et al., 2002). Another exception are the findings of Yukl and colleagues that leaders' relations-oriented behaviors in terms of supporting, recognizing, consulting, and delegating – which refer to HPWS practices such as performance appraisal and participation – are positively related to LMX (Yukl, O'Donnell & Taber, 2009).

In the present study, we seek to explore the relationship between HPWS and LMX. Graen and his colleagues described high-quality LMX as relationships in which supervisors exchange extensive and precise information, formal and informal support, feedback, recognition and rewards, attractive work assignments, and career opportunities for employee loyalty, commitment, and effort (Graen, Dansereau, Minami & Cashman, 1973; Graen & Scandura, 1987). Although all of these aspects implicitly allude to supervisory engagement in HPWS implementation, we know of no studies that have explicitly examined whether HPWS relate to LMX. We expect that, to the extent that direct supervisors exhibit more engagement in HPWS practices such as developmental coaching, performance evaluation and feedback, career guidance, participation, etc., employees will likely feel more supported and rewarded and hence positively judge the quality of their relationship with their direct supervisor. Thus, we hypothesize that:

Hypothesis 2: HPWS implementation by line management is positively related to LMX.

First, we expect POS to be negatively related to employees' intentions to leave. Researchers have suggested that, on the basis of felt obligation, employees may reciprocate support they receive from the organization by engaging in behaviors that benefit the organization (Eisenberger et al., 1986; Eisenberger, Armeli, Rexwinkel, Lynch & Rhoades, 2001; Rhoades & Eisenberger, 2002). One such valued and desired behavior is continued participation. In other words, employees who feel more supported by the organization are expected to be less likely to leave (Allen et al., 2003; Wayne et al., 1997). The underlying process has been argued to be that, having their socio-emotional needs of esteem, approval, and affiliation fulfilled, employees who feel more supported will be more likely to identify with the organization and thus less likely to seek other employment (Allen et al., 2003). Wayne et al. (1997) and Masterson et al. (2000) found empirical support for a negative relationship between POS and intentions to leave. Furthermore, Allen et al. (2003) found that POS was negatively related to turnover intentions mediated by job satisfaction and organizational commitment. Finally, two meta-analyses confirmed the negative association between POS and intentions to leave (Rhoades & Eisenberger, 2002; Riggle, Edmondson & Hansen, 2009). Based on this evidence, we hypothesize that:

Hypothesis 3a: Perceived organizational support is negatively related to intentions to leave.

Another way for employees to return supportive treatment from the organization is through high performance on the job. Scholars have suggested that perceptions of organizational support may strengthen employees' affective attachment to the organization as well as their expectations that increased performance is recognized and rewarded by the organization (i.e., "effort-outcome expectancy" (Eisenberger et al., 1986, p. 501)). As a result, employees are expected to put more effort into meeting organizational goals and performing better (Eisenberger et al., 1986; Orpen, 1994; Rhoades & Eisenberger, 2002). Empirically, POS has been found to positively relate to employee job performance (e.g., Eisenberger et al., 2001; Randall, Cropanzano, Bormann & Birjulin, 1999) and this positive association has been reinforced in two meta-analyses (Rhoades & Eisenberger, 2002; Riggle et al., 2009). Thus, we hypothesize that:

Hypothesis 3b: Perceived organizational support is positively related to job performance.

Next, we expect LMX to be negatively related to employees' intentions to leave. Employees who have high-quality LMX relationships with their direct supervisors are expected to receive high levels of support, resources, and benefits from their supervisors (e.g., Dansereau et al., 1975; Dienesch & Liden, 1986). SET suggests that employees may reciprocate these supervisory favors by engaging in commensurate behaviors valued by their direct supervisors, such as willingness to remain working for them (Eisenberger, Stinglhamer, Vandenberghe, Sucharski & Rhoades, 2002). In addition, employees in high-quality LMX relationships are expected to feel more attached and connected to their workplace, so that their cost of leaving the organization is higher and their intention to leave lower (Bauer, Erdogan, Liden & Wayne, 2006). Conversely, because of a lack of trust and support, employees in low-quality LMX relationships may have negative affective feelings towards their direct supervisors and be more likely to leave in order to improve their work situation (Harris, Kacmar & Wit, 2005). Another result of detrimental supervisory treatment may be that low-quality LMX employees consider their future prospects in the organization to be poor and hence start thinking about leaving (Harris et al., 2005; Maertz & Griffeth, 2004). Empirical evidence confirms a negative relationship between LMX and intentions to leave (e.g., Bauer et al., 2006; Gerstner & Day, 1997; Venkataramani, Green & Schleicher, 2010). Thus, we hypothesize that:

Hypothesis 4a: Leader-member exchange is negatively related to intentions to leave.

Finally, we hypothesize that LMX is positively associated with job performance. Willingness to remain with the organization involves one potential type of behavior through which employees may repay the support and resources they receive from their direct supervisor. Another currency that employees may use is their performance on the job. First, based on the norm of reciprocity (Gouldner, 1960), high-quality LMX employees who receive substantial resources and benefits are expected to feel more indebted towards their direct supervisors than low-quality LMX employees and to return the benevolent treatment with high performance (Erdogan & Enders, 2007; Wayne et al., 2002). Furthermore, since high-LMX employees receive more support, resources, and opportunities from their direct supervisors than low-LMX employees, they are expected to perform better (Feldman, 1986; Liden et al., 2006; Wayne et al., 1997). The literature abounds with studies that have examined the relationship between LMX and job performance (e.g., Liden & Graen, 1980; Masterson et al., 2000; Settoon et al., 1996; Wayne et al., 1997), with a meta-analysis confirming a positive association (Gerstner & Day, 1997). Based on the ample evidence, we hypothesize that:

Hypothesis 4b: Leader-member exchange is positively related to employee job performance.

POS and LMX as mediators of the relationships between HPWS implementation and intentions to leave and job performance

Viewed in combination, we expect that POS and LMX mediate the relationships between HPWS implementation by HR and line agents and intentions to leave and job performance. Since both HR and line agents serve as representatives of the organization in employee-organization relationships, we expect POS to mediate between implementation of HPWS by each of these agents and the employee outcomes identified in our model. In addition, direct supervisors establish an interpersonal leader-member relationship with their subordinate employees, which we expect to mediate between line implementation of HPWS and the employee outcomes. Because other theoretical bases than SET, such as psychological contract theory (Wright & Nishii, 2006) or organizational justice theory (Zhang & Agarwal, 2009), have been suggested as relevant frameworks for exploration of the mechanisms through which HPWS and employee outcomes are related, we expect the mediation of POS and LMX to be partial.

Hypothesis 5a: POS partially mediates the relationships between HPWS implementation by the HR department and intentions to leave and job performance.

Hypothesis 5b: POS and LMX partially mediate the relationships between HPWS implementation by line management and intentions to leave and job performance.

METHOD

Sample and procedure

We used a field study design to test our hypotheses. Participants were employees of a research organization located in Belgium. They held a variety of nonmanagerial jobs, with the majority occupying researcher and technician positions. The data for this study came from two sources: an online employee survey and company archives. The online questionnaire was sent to employees by email, soliciting information about their perceptions of the HR department's and line management's implementation of HPWS, the extent to which they felt supported by the organization (POS) and by their direct supervisor (LMX), and their intentions to leave. Supervisors' evaluations of

employee job performance and information on demographic control variables were gathered from official personnel records. The job performance evaluations for the employees concerned the year in which they completed the survey and approximately six months had elapsed between employees' completion of the online survey and supervisors' performance evaluation.

During pre-study site visits, we explained the study's purposes and the data collection procedure to line management, we secured endorsement from senior and HR management, and we encouraged participation. In the email cover letter and survey instructions, employees were informed of the purpose of the survey and they were assured that their responses would remain confidential. Employees completed the online survey during work time.

A total of 335 employees responded to our survey for a response rate of 60%. Deletion of incomplete and unmatched responses led to a final usable sample of 266 employees. The majority of respondents were men (59.4%). The average age was 40.05 years ($SD = 8.96$) and the average organizational tenure was 11.39 years ($SD = 10.10$). We checked for response bias and bias due to deletion of missing data by comparing included cases to non-response and dropped cases on the demographic characteristics mentioned above. No significant differences were found.

Measures

Unless otherwise noted, employees responded using a 5-point Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (5).

HPWS implementation by the HR department and line management. We started from established scales of HPWS (Ahmad & Schroeder, 2003; Bae & Lawler, 2000; Chuang & Liao, 2010; Delery & Doty, 1996; Guest, Michie, Conway, & Sheehan, 2003; Huselid, 1995; Lepak & Snell, 2002; Liao et al., 2009; Paré & Tremblay, 2007; Rogg, Schmidt, Shull, & Schmitt, 2001; Sun et al., 2007) to generate measures of HPWS implementation by the HR department on the one hand and by line management on the other. In addition, we built on existing work on the distribution of HRM responsibilities among HR and line agents (Bliss & Mathews, 2007; Valverde, Ryan & Soler, 2006) and the involvement of line managers in HRM and people management activities (Arnold, Aras, Rhoades, & Drasgow, 2000; Dysvik & Kuvaas, 2008; Major, Davis, Germano et al., 2007; Noe, 2007; Pearce & Herbik, 2004; Yarnall, 1998). For both HR and line agents, we developed several statements reflecting their particular HRM interventions to capture the extent to which they implemented HPWS practices in the eyes of employees.

For HPWS implementation by the HR department, the following five dimensions were measured: (1) selective hiring (5 items, e.g., "The HR department selects only the best qualified

candidates”); (2) performance management (6 items, e.g., “The HR department informs employees about how their performance is evaluated”); (3) extensive training (6 items, e.g., “The HR department offers relevant opportunities for training and development”); (4) promotion from within (5 items, e.g., “The HR department provides employees with career development support and advice”); and (5) participation (6 items, e.g., “The HR department asks employees about their satisfaction with the current HR processes”).

For HPWS implementation by line management, the following eight dimensions were measured: (1) selective hiring (5 items, e.g., “My manager(s) is critical when selecting new employees”); (2) performance management (6 items, e.g., “My manager(s) bases performance appraisals on objective results”); (3) extensive training (6 items, e.g., “My manager(s) views developing employees as an important aspect of his/her job”); (4) promotion from within (5 items, e.g., “My manager(s) takes time to learn about employees’ career aspirations”); (5) participation (6 items, e.g., “My manager(s) asks employees to participate in decisions”); (6) info-sharing (5 items, e.g., “My manager(s) keeps employees informed about important corporate issues such as corporate strategy, financial results, new initiatives and future directions”); (7) job design (6 items, e.g., “My manager(s) designs employees’ jobs to include a broad range of tasks”); and (8) teamwork (5 items, e.g., “My manager(s) encourages employees to work as a team”). All of these HPWS dimensions have been identified in extant literature. We did not include the info-sharing, job design, and teamwork dimensions in the scale of HPWS implementation by the HR department because, for these HPWS practices, we considered line management as the more proximal and obvious source and the HR department as a more distal and less visible source.

We took several steps to ensure the content validity of the abovementioned measures. First, subject matter experts sorted the items of each scale into their respective HPWS dimension and reflected upon the content and wording of the items (Hinkin, 1998). Furthermore, our HR contact person and a number of middle and first-line managers of the participating organization reviewed and interpreted the scale items for accuracy and relevance. Based on their feedback, some content and wording adjustments were made to ensure applicability. Also, this pretesting confirmed the appropriateness of the included HPWS dimensions in our measures of HR and line implementation.

To examine the underlying factor structure of each scale of HPWS implementation, we performed confirmatory factor analysis (CFA) using LISREL 8.80 (Jöreskog & Sörbom, 1993). Specifically, for HPWS implementation by the HR department, we tested a CFA model in which the 28 observed variables or items were specified to load on five first-order latent variables (i.e., the five HPWS-HR dimensions). In turn, each of these five factors were specified to load onto one second-order latent variable (i.e., HPWS implementation_{HR}). The second-order CFA model provided an

adequate fit: $\chi^2(345, N = 266) = 816.86$, comparative fit index (CFI) = .95, root mean square error of approximation (RMSEA) = .075, and standardized root mean square residual (SRMR) = .073. Except for two items of the selective hiring dimension, which were dropped, all items loaded on the intended first-order factor with statistically significant factor loadings at .45 or higher. Also, all five first-order factors loaded on the second-order factor with statistically significant factor loadings at .69 or higher. Table 1 shows the dimensions of each HPWS implementation scale, means, standard deviations, cronbach alphas, and second-order factor loadings.

Insert Table 1 About Here

In a similar vein, for HPWS implementation by line management, we tested a CFA model with 44 items as observed indicators of eight first-order latent variables (i.e., the eight HPWS-line dimensions), which, in turn, were linked to a single second-order factor (i.e., HPWS implementation_line). This second-order CFA model fit the data well: $\chi^2(894, N = 266) = 1831.36$, CFI = .97, RMSEA = .067, and SRMR = .060. We dropped one item from the job design dimension that had a factor loading lower than .40. All other first-order factor loadings were positive and statistically significant (range from .49 to .90), just as all second-order factor loadings (range from .61 to .93) (see table 1).

For both the HPWS implementation_HR and the HPWS implementation_line scales, we calculated the mean value of the items corresponding to each subscale (i.e., HPWS dimension) and we used these as indicators of the latent variables HPWS implementation_HR and HPWS implementation_line in subsequent analyses. This approach is consistent with prior HRM-performance studies such as Beltran-Martin, Roca-Puig, Escrig-Tena & Bou-Llugar (2008) and Chuang & Liao (2010). The overall cronbach alphas were .82 and .91, respectively.

POS. We used eight items ($\alpha = .88$) with high factor loadings from Eisenberger et al.'s (1986) scale to measure POS. Example items are "My organization strongly considers my goals and values" and "My organization really cares about my well-being".

LMX was measured with an eight-item scale ($\alpha = .93$) originally developed by Scandura & Graen (1984) (LMX-7) and revised by Liden, Wayne and Stilwell (1993), who reworded the items to a Likert agreement scale, and by Bauer & Green (1996), who split a double-barrel item. Example items are "I usually know where I stand with my direct supervisor" and "My direct supervisor understands my job problems and needs".

Intentions to leave. We pooled three items ($\alpha = .89$) from different existing measures to assess employees' intentions to leave the organization (Camman, Fishman, Jenkins & Klesh, 1983;

Kelloway, Gotlieb & Barham, 1999; Landau & Hammer, 1986; Masterson et al., 2000). The items were “I am thinking about quitting my job with this organization”, “I will probably look for a new job outside this organization within the near future”, and “I intend to keep working at this organization for the first few years to come” (reverse-coded).

Job performance. As noted earlier, archival company data were used to measure job performance. Following the company’s formal yearly performance appraisal cycle, direct supervisors evaluated each of their employees’ performance on the job. Performance evaluations were recorded on a five-point scale with 1 = unsatisfactory, 2 = not so good (below expectations), 3 = good (meets expectations), 4 = very good (exceeds expectations), and 5 = outstanding.

Control variables. We controlled for employees’ age and organizational tenure (both in years) in our analyses, because the time for which employees have worked in the organization may influence their experiences of HPWS implementation and organizational support (Rhoades & Eisenberger, 2002; Dulac, Coyle-Shapiro, Henderson & Wayne, 2008; Dysvik & Kuvaas, 2008). Furthermore, research has shown that employees’ age and organizational tenure are related to turnover intentions (Harris et al., 2005; Harris, Wheeler & Kacmar, 2009) and job performance (Janssen & Van Yperen, 2004). We also explored gender (0 = male, 1 = female) as a potential control variable, but we found that it was not related to any of the study variables. Therefore, we did not include gender as a control variable in our study (Becker, 2005). Information on all of the abovementioned demographic variables was gathered from company records.

Analytic strategy

We performed structural equation modeling (SEM) analyses using LISREL 8.80 and maximum likelihood (ML) estimation to test our hypothesized model (Jöreskog & Sörbom, 1993). As recommended by Anderson & Gerbing (1988), we adopted the two-step approach examining measurement and structural models in separate steps. We first tested the measurement model by means of CFA to assess the distinctiveness of our constructs. Next, we evaluated a series of structural models to test our hypothesized relationships.

As noted earlier, for both the HPWS implementation_{HR} and HPWS implementation_{line} constructs, we used the mean values of the respective subscales (i.e., HPWS dimensions) as observed indicators of a first-order latent HPWS implementation factor to enhance the ratio of sample size to free parameters (Kline, 2005). We also reduced the number of items by randomly creating three parcels – each composed of a random set of two or three items – for the POS and LMX constructs (Landis, Beal & Tesluk, 2000). Job performance was treated as a single-indicator latent variable. We

adopted a conservative approach assuming a reliability of .90 and we set the path from the latent variable to its observed indicator equal to the square root of .90 and the error variance of the observed indicator equal to the variance of the scale multiplied by one minus .90 (Anderson & Gerbing, 1988; Kline, 2005)⁴. Because age and organizational tenure were factually based and not perceptual, we assumed no measurement error in these variables and we set the path from the latent variable to its observed indicator to one and the error variance of the observed indicator to zero. Finally, because the distribution of the job performance variable was leptokurtic (i.e., positive kurtosis), we used a corrected normal theory method developed by Satorra and Bentler (1994) to avoid bias in our results due to nonnormality. This means that standard ML estimation method was used to estimate parameters, but model χ^2 , fit indices, and standard errors were adjusted by an amount that reflects the degree of nonnormality (Kline, 2005)⁵.

RESULTS

The hypothesized measurement model specifying eight latent variables (i.e., HPWS implementation_HR, HPWS implementation_line, POS, LMX, intentions to leave, job performance, age, and organizational tenure) provided a good fit to the data: $\chi^2(250, N = 266) = 393.11, p < .001, CFI = .99, RMSEA = .046, \text{ and } SRMR = .046$. All factor loadings were statistically significant and directionally consistent with expectations. Furthermore, the hypothesized eight-factor model fit the data significantly better than (1) an alternative seven-factor model combining HPWS implementation_HR and POS, $\Delta\chi^2(7, N = 266) = 31.82, p < 0.001, CFI = .96, RMSEA = .081, \text{ and } SRMR = .06$; (2) an alternative seven-factor model combining HPWS implementation_line and POS, $\Delta\chi^2(7, N = 266) = 137.32, p < 0.001, CFI = .95, RMSEA = .086, \text{ and } SRMR = .073$; and (3) an alternative seven-factor model combining HPWS implementation_line and LMX, $\Delta\chi^2(7, N = 266) = 47.06, p < 0.001, CFI = .95, RMSEA = .09, \text{ and } SRMR = .061$. Together, these results support the discriminant validity of our measures.

⁴ We also explored reliability values of .70 and .80 and found that different assumptions of measurement error had little impact on our results.

⁵ Because the data in this study had a hierarchical structure (i.e., employees were nested within direct supervisors), we re-examined the relationships in our conceptual model using the multilevel technique of hierarchical linear modeling (HLM) to take the nesting of our data into account (Hox, 2010; Raudenbusch & Bryk, 2002). The results from the HLM analyses were comparable to the results from the SEM analyses. Therefore, we considered that the non-independence of our data did not essentially affect our study findings and we regarded SEM as the preferred method, because it allows taking the nonnormality of data into consideration.

Table 2 presents descriptive statistics and bivariate correlations among the variables in our study. As can be seen, HPWS implementation by the HR department and HPWS implementation by line management were significantly related to intentions to leave ($r = -.28, p < .001$ and $r = -.38, p < .001$), but not to job performance ($r = -.10, ns$ and $r = .05, ns$). To further examine whether the first condition for mediation, that is a significant X-Y relationship (Baron & Kenny, 1986; Mathieu & Taylor, 2006), was met, we tested a direct effects model estimating direct relationships between our independent and dependent variables, controlling for age and organizational tenure. This model fit the data well ($\chi^2(141, N = 266) = 275.21, p < .001, CFI = .98, RMSEA = .06, \text{ and } SRMR = .054$), but not all direct relationships were as expected. HPWS implementation by line management was significantly and negatively associated with intentions to leave ($\beta = -.35, p < .001$), as expected. However, although the bivariate correlation was statistically significant and negative, HPWS implementation by the HR department was no longer significantly associated with intentions to leave ($\beta = -.12, ns$). As a result, following the mediation guidelines set by Mathieu & Taylor (2006), we were only able to test an indirect instead of a mediated effect of HPWS implementation by the HR department on intentions to leave. Furthermore, whereas bivariate correlations between the HPWS implementation variables and job performance were not statistically significant, the paths from HPWS implementation by the HR department and line management to job performance became statistically significant in the direct effects model, which may be indicative of suppression⁶. As expected, HPWS implementation by line management was positively associated with job performance ($\beta = .22, p < .05$). However, contrary to expectations, HPWS implementation by the HR department was negatively associated with job performance ($\beta = -.25, p < .05$). When we deleted three outliers from the dataset, we obtained equivalent results except for the negative association between HPWS implementation by the HR department and job performance, which was no longer statistically significant ($\beta = -.18, ns$). Given this inconsistency in our data, our findings with regard to the direct relationship between HPWS implementation by the HR department and job performance need to be treated with caution.

As a baseline, we next tested a fully mediated model in which POS and LMX were included as mediating variables. In this model, we assumed the exogenous variables to be correlated and we also

⁶Suppression is present when the relationship between a predictor and an outcome variable is stronger with than without control for a suppressor variable. Because a suppressor variable is most commonly related to the predictor (and possibly also to the outcome), its inclusion controls for irrelevant covariation between the suppressor and the predictor, and, thereby, purifies the relation between the predictor and outcome variable (Cohen, Cohen, West & Aiken, 2003; Pedhazur, 1997; Schwab, 2005).

allowed POS and LMX to correlate because past research has found these variables to be significantly related (e.g., Masterson et al., 2000; Settoon et al., 1996). This fully mediated model provided a good fit to the data: $\chi^2(256, N = 266) = 415.75, p < .001, CFI = .99, RMSEA = .049, \text{ and } SRMR = .052$. The standardized path coefficients are shown in figure 2.

Insert Figure 2 About Here

HPWS implementation by the HR department and HPWS implementation by line management both had a positive relationship with POS ($\beta = .53, p < .001$ and $\beta = .23, p < .05$, respectively), supporting Hypotheses 1a and 1b. HPWS implementation by line management was positively associated with LMX ($\beta = .81, p < .001$), supporting Hypothesis 2. Also, providing support for Hypothesis 3a, POS had a significantly negative relationship with intentions to leave ($\beta = -.39, p < .001$). Contrary to expectations, POS was not significantly related to job performance ($\beta = -.12, ns$), disconfirming Hypothesis 3b. Finally, LMX was negatively related with intentions to leave ($\beta = -.22, p < .01$) and positively related with job performance ($\beta = .22, p < .01$), supporting Hypotheses 4a and 4b.

Together, the significantly positive relationship between HPWS implementation by the HR department and POS and the significantly negative relationship between POS and intentions to leave support that HPWS implementation by the HR department has an indirect relationship with intentions to leave through POS. Given the lack of a significant relationship between POS and job performance, the mediation of POS between HPWS implementation by the HR department and job performance could not be confirmed. In sum, we received marginal support for Hypothesis 5a.

Because Hypothesis 5b proposed partial mediation of POS and LMX between HPWS implementation by line management and intentions to leave and job performance, we compared the fully mediated model to two alternative partially mediated models. In the first partially mediated model, we added a path from HPWS implementation by line management to intentions to leave and in the second partially mediated model, we added a path from HPWS implementation by line management to job performance. Both of these partially mediated models failed to show a significantly better fit than the fully mediated model: $\Delta\chi^2(1, N = 266) = 1.13, ns, CFI = .99; RMSEA = .049, SRMR = .052$ and $\Delta\chi^2(1, N = 266) = 1.99, ns, CFI = .99; RMSEA = .048, SRMR = .052$, respectively. In addition, the added direct paths from HPWS implementation by line management to intentions to leave and job performance were not statistically significant ($\beta = -.11, ns$ and $\beta = -.17, ns$, respectively). Based on these results, we retained the fully mediated model as the final model. In sum, our data were consistent with full rather than partial mediation of POS and

LMX between HPWS implementation by line management and intentions to leave. Furthermore, LMX fully mediated the relationship between HPWS implementation by line management and job performance. Because the relationship between POS and job performance was not significant, the mediation of POS between HPWS implementation by line management and job performance could also not be confirmed. Overall, the fully mediated model explained 50% of the variance in POS, 66% of the variance in LMX, 28% of the variance in intentions to leave, and 4% of the variance in job performance.

As a final step, we estimated the indirect effects in SEM. As can be seen in table 3, all indirect effects, except for the path from HPWS implementation by the HR department to job performance through POS, were statistically significant, providing additional support for the abovementioned findings.

Insert Table 3 About Here

DISCUSSION

The purpose of this study was to address two issues central to the mediation of social exchange between HPWS and employee outcomes that have remained unexplored in the strategic HRM literature to date. Our first aim in this study was to answer similar calls that have been made in strategic HRM and EOR literatures to recognize the agents, e.g., the HR department and line management, that are involved in implementing HPWS (Guest, 2011; Purcell & Kinnie, 2007) and establishing social exchange relationships with employees (Coyle-Shapiro & Shore, 2007; Shore et al., 2004). Our second aim was to acknowledge the existence of different types of social exchange relationships, e.g., employee-organization and employee-supervisor relationships, and to investigate their simultaneous mediation between HPWS implementation by HR and line agents and intentions to leave and job performance. In what follows, we elaborate on the implications of our findings for theory and practice, the limitations of our study, and avenues for future research.

Theoretical implications

Our findings provide empirical evidence for an emergent paradigm in the strategic HRM literature that focuses on implementation (e.g., Becker & Huselid, 2006; Purcell & Kinnie, 2007; Purcell & Hutchinson, 2007; Soens, Buyens & Taylor, 2012). We contribute to the literature by

specifying and distinguishing between the HR department and line management as implementers of HPWS and by exploring relationships between HPWS implementation by each of these agents and employee intentions to leave and job performance. A second contribution is that we present one of the first empirical attempts to consider POS and LMX jointly as mediators between HPWS and employee outcomes.

We firstly found that HPWS implementation by both the HR department and line management was positively associated with POS. This suggests that those employees who experienced higher implementation of HPWS by either the HR department or line management tended to report higher levels of support received from their organization. We also found that HPWS implementation by line management was positively associated with LMX. This indicates that employees who experienced higher implementation of HPWS by their line managers tended to report higher leader-member relationship quality. Although we need to be cautious not to draw causal inferences from this cross-sectional study, these findings suggest that HR and line support in the form of HPWS implementation may play an important role in developing high-quality social exchange relationships among employees, line managers and organizations.

The fact that HPWS implementation by both the HR department and line management was positively related to POS is an important finding. This suggests that, even if the HR department is the more distal source of HRM implementation for employees, it may still play an important role in the extent to which employees generally feel supported by their organization. These results are consistent with recent findings from Gilbert et al. (2011) that line managers' effective enactment of HR practices and the HR department's service quality – as perceived by employees – were both positively related to affective commitment.

Furthermore, consistent with prior research (e.g., Gerstner & Day, 1997; Rhoades & Eisenberger, 2002; Riggle et al., 2009), we found that POS and LMX were negatively related with intentions to leave, suggesting that employees who feel more supported by their organization or by their direct supervisor, are less likely to leave the organization. LMX, but not POS, was positively related to job performance. Although the non-significant path from POS to job performance contrasts with our expectations, it is consistent with findings of previous studies that also have considered POS and LMX simultaneously (Settoon et al., 1996; Wayne et al., 1997). These authors have argued that, in hierarchically structured organizations, such as the company in this study, LMX may dominate POS in explaining job performance because line managers may have more direct control over employee behavior and because employees may feel more obliged to reciprocate to their direct supervisors than to the organization as a whole (Settoon et al., 1996; Wayne et al., 1997).

Taken together, we have shown HPWS implementation by the HR department to be positively related to POS, which, in turn, has been shown to be negatively related to intentions to leave. These findings are consistent with a social exchange perspective whereby employees who experience higher support in the form of HPWS implemented by the HR department, may respond with the organizationally desired resource of continued participation. Furthermore, we found a differential mediating role of POS and LMX in the relationships between HPWS implementation by line management and intentions to leave and job performance. Both POS and LMX mediated the relationship between HPWS implementation by line management and intentions to leave. In contrast, LMX, but not POS, mediated the relationship between HPWS implementation by line management and job performance. One way this discrepancy can be interpreted is that employees primarily consider line managers in their capacity as interpersonal exchange agent as opposed to organizational exchange agent when reciprocating their HPWS support with high performance on the job. For intentions to leave, on the contrary, our findings can be interpreted as illustrating that employees may remain working with the organization to reciprocate HPWS support from both interpersonal and organizational sources of social exchange.

Overall, our findings provide support for our contention that different social exchange mechanisms mediate the relationships between HPWS implementation and intentions to leave and job performance and that these mechanisms can be better understood by specifying the different HR and line agents that are involved.

Managerial implications

Our findings offer useful insights for HR and line practitioners as well. By distinguishing between the HR department and line management as implementers of HPWS, our study informs each of these agents of the employee outcomes that were associated with their respective implementation efforts.

For the HR department, we found that implementation of HPWS was associated with employee feelings of organizational support, and, through this, with intentions to leave. An important implication for practice is that, despite the ongoing move towards higher devolution of HRM responsibilities to the line, the HR department may not lose sight of its own potential to support employees in a direct way and needs to secure the quality of its direct services for employees, as also suggested by Gilbert et al. (2011). Furthermore, our findings suggest that the HR department as a more distal delivery source of HPWS may play a role in employee retention, albeit in an indirect way.

For line management, an important finding was that only their implementation of HPWS was positively associated with job performance and that this positive association seemed to operate through the quality of their interpersonal relationship with employees. This suggests that line managers may have the sole potential to positively affect job performance and that the HR department may need to take on a primarily supportive role towards the line with respect to this outcome. Furthermore, organizations can use the relationships that we established between HPWS implementation by line management and employee job performance and intentions to leave to justify the importance of effective HPWS implementation to line managers.

In sum, we found that implementation of HPWS by both the HR department and line management was linked with important employee outcomes, suggesting that both agents play a role in the success of HPWS.

Limitations and future research

Despite the contributions this study makes to theory and practice, it is essential to view our findings in light of several limitations. First, all data except for the job performance data were cross-sectional. This means that we cannot establish causal relationships, nor can we rule out the possibility of reverse causation. Future research using longitudinal designs is needed to further investigate the causal direction of the relationships among our variables. Second, all data except for the job performance data were collected using self-report measures. Although self-reports can be considered as the most appropriate way to assess the majority of the variables in our study, this approach increases the risk of common method bias (Podsakoff, MacKenzie, Jeong-Yeon & Podsakoff, 2003). Third, we tested our hypotheses within a single organization, allowing us to improve the validity and reliability of our results by using context-specific language in our HPWS implementation measures. In spite of this, the generalizability of our findings needs to be tested by future research using alternative samples of organizations and industries. Fourth, we recommend that future investigations explore potential moderating influences of the relationships examined in this study. For instance, Coyle-Shapiro & Shore (2007) have challenged the assumption that line managers automatically pursue and act in concert with the organization's interest in relationships with employees. These authors have suggested line managers' self-interests, commitment to or identification with the organization as potential reasons for (mis)alignment. Based on this, the extent to which line managers act as organizational agents and are perceived as such by employees may provide an interesting moderator of the relationship between line implementation of HPWS and POS. Furthermore, within the POS literature, employees' exchange ideology and perceived supervisor

status have been identified as important moderators of the effects of POS on employee outcomes (Eisenberger et al., 1986; Eisenberger et al., 2002). In brief, it would be fruitful for further research to map the boundary conditions under which social exchange mechanisms mediate between HPWS implementation and employee outcomes. Fifth, in our examination of HPWS implementation, we did not explicitly recognize the discretionary nature of some HPWS practices, i.e., not all practices are provided to all employees (e.g., fast-track career programs for high-potentials, individual bonuses for high-performers, etc.). Recent LMX studies have borrowed insights from social comparison theory (Festinger, 1954) to theorize and test the effects of differences between an employee's own LMX and the LMX of his or her coworkers on employee outcomes (e.g., Henderson, Wayne, Shore, Bommer, & Tetrick, 2008; Vidyarthi, Liden, Anand, Erdogan, & Gosh, 2010). In a similar vein, future research on strategic HRM should investigate whether and how employee perceptions of differentiation in the degree of HPWS implementation by line managers influence their evaluations of the quality of their relationship with their leaders as well as their subsequent attitudinal and behavioral responses. Finally, following the assertions of strategic HRM and HRM-performance theory, the importance of the employee outcomes examined in this study lies in their aggregation into collective HRM outcomes such as low turnover and high productivity, and, ultimately, superior firm performance. Therefore, we recommend that future research takes further steps to complete the causal chain between HPWS and firm performance by investigating how individual employee outcomes such as intentions to leave and job performance cascade up to collective firm performance outcomes.

CONCLUSION

This study extends a growing body of research that relies on SET to explain why and how HPWS relate to employee outcomes (e.g., Gilbert et al., 2011; Gong et al., 2010; Liao et al., 2009; Purcell & Hutchinson, 2007; Wu & Chaturvedi, 2009). Focusing on individual-level processes, we found that two different types of social exchange, i.e., employee-organization and employee-supervisor relationships, provide useful mechanisms for linking HPWS implementation by HR and line agents – as perceived by employees – to intentions to leave and job performance. In the strategic HRM and EOR literature alike, scholars have pointed to the need to specify the agents; in strategic HRM research to acknowledge those involved in the implementation of HPWS (Guest, 2011; Purcell & Kinnie, 2007), in EOR research to identify those that represent the organization in exchange relationships with employees (Coyle-Shapiro & Shore, 2007; Shore et al., 2004). This study represents a first attempt to answer these calls simultaneously.

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TABLE 1:

Subscales of implementation of high-performance work systems (HPWS) by the HR department (HPWS Implementation_HR) and line management (HPWS Implementation_Line)

Practice dimension	HPWS Implementation_HR ($\alpha = .82$)				HPWS Implementation_Line ($\alpha = .91$)			
	M	SD	α	Loading	M	SD	α	Loading
Selective Hiring	3.52	.57	.66	.72	3.63	.68	.87	.61
Performance Management	3.22	.61	.82	.87	3.43	.70	.86	.93
Extensive Training	3.50	.63	.87	.69	3.25	.64	.85	.80
Promotion from Within	3.27	.54	.72	.80	2.93	.66	.80	.81
Participation	2.80	.62	.88	.71	3.63	.72	.88	.79
Info-Sharing					3.40	.64	.81	.88
Job Design					3.36	.65	.84	.87
Teamwork					3.20	.84	.91	.84

TABLE 2:

Descriptive statistics, correlations, and internal consistency reliabilities of study variables (N=266)

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. Gender	.41	.49	-								
2. Age	40.05	8.96	-.06	-							
3. Tenure	11.39	10.10	-.02	.79***	-						
4. HPWS Implementation-HR	3.26	.45	.02	-.15*	-.14*	.82					
5. HPWS Implementation -Line	3.35	.55	.01	-.10	-.11	.54***	.91				
6. POS	3.40	.54	.01	-.13*	-.18**	.56***	.51***	.88			
7. LMX	3.51	.74	-.06	-.05	-.07	.31***	.77***	.44***	.93		
8. Intentions to Leave	2.02	.80	-.06	-.02	.01	-.28***	-.38***	-.43***	-.36***	.89	
9. Job Performance	3.12	.48	-.03	-.04	-.06	-.10	.05	.01	.15*	-.03	.90

Note. HPWS = high-performance work system. HPWS Implementation_HR = employee perceptions of HPWS implementation by the HR department. HPWS Implementation_Line = employee perceptions of HPWS implementation by line management. POS = perceived organizational support. LMX = leader-member exchange. Internal consistency reliabilities (Cronbach's alpha) appear on the diagonal.

* $p < .05$; ** $p < .01$; *** $p < .001$. Two-tailed tests.

TABLE 3:

Standardized indirect effects

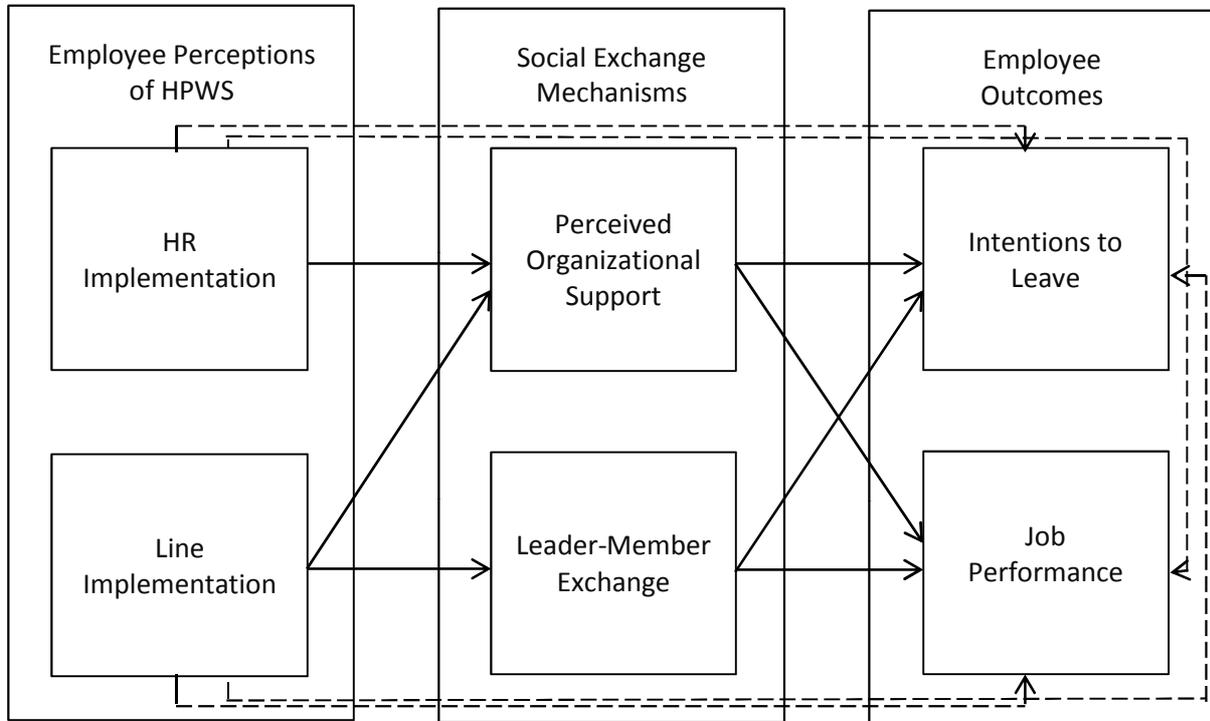
Indirect Path	Standardized Indirect Effect
HPWS implementation_HR → POS → intentions to leave	-.20***
HPWS implementation_HR → POS → job performance	-.07 <i>ns</i>
HPWS implementation_Line → POS/LMX → intentions to leave	-.26***
HPWS implementation_Line → POS/LMX → job performance	.15**

Note. HPWS = high-performance work system. HPWS Implementation_HR = employee perceptions of HPWS implementation by the HR department. HPWS Implementation_Line = employee perceptions of HPWS implementation by line management. POS = perceived organizational support. LMX = leader-member exchange.

** $p < .01$; *** $p < .001$

FIGURE 1:

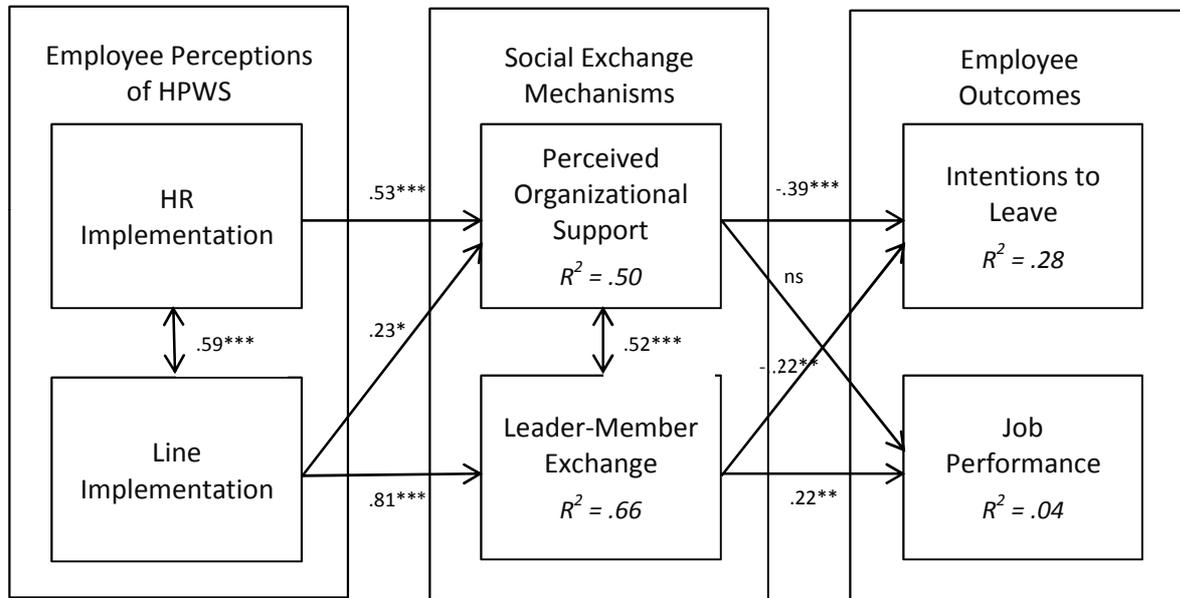
Conceptual model



Note. HPWS = High Performance Work System.

FIGURE 2:

Structural model



Note. HPWS = High Performance Work System. The effects of the control variables are not shown in the figure.