



# THE EFFECT OF STRATEGIC HUMAN RESOURCE MANAGEMENT ON ORGANIZATIONAL PERFORMANCE: THE MEDIATING ROLE OF HIGH-PERFORMANCE HUMAN RESOURCE PRACTICES

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*This study investigates the impact of a strategic role for human resource management (HRM) on organizational financial performance. Survey data from 118 financial and manufacturing organizations in Jordan is analyzed to investigate a moderated mediated pathway between a strategic role for HRM and organizational financial performance. The first finding, that high-performance human resource practices (HPHRPs) mediate the relationship between the HR strategic role and performance, suggests that the position of the HR professional as a strategic partner enhances the legitimacy of HR initiatives, as well as facilitating the resourcing and support for their implementation. The second finding, that line management devolvement moderates the relationship between the HR strategic role and HPHRPs, suggests a trade-off between a strategic and operational focus for HR professionals, and also indicates the value of embedding HR practice execution in operational administration. © 2013 Wiley Periodicals, Inc.*

**Keywords:** HR strategic role, HPHRPs, organizational performance, devolvement

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**Human Resource Management**, November–December 2013, Vol. 52, No. 6. Pp. 899–921

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Published online in Wiley Online Library (wileyonlinelibrary.com).

DOI:10.1002/hrm.21587

Strategic human resource management (SHRM) research focuses on the contribution that HR practices can make to organizational performance and competitive advantage (Collins & Clark, 2003). Within this research context, the role of HR management as a strategic partner with influence in organizational and HR strategic decision making has growing importance (Barney & Wright, 1997). Globalization of business and the associated intensification in competitive pressures has led to an increasingly strategic role for HR professionals, directed toward aligning HR practices with business strategy (Raub, Alvarez, & Khanna, 2006). The strategic role

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of HR professionals focuses on strengthening the organizational value of the HRM system and its contribution toward achieving organization strategic goals (Pfeffer, 1994; Ulrich, 1997). Among HR roles, many authors argue that the "strategic role" is a pivotal one for HR professionals in today's organization (Cleland, Pajo, & Toulson, 2000).

Despite the priority placed on HR professionals as strategic partners, recent reviews suggest that there has been little effort to evaluate the strategic contribution of the HR role (Cabrera & Cabrera, 2003). This is a significant research gap, particularly as studies show that firms remain primarily concerned with efficiency of human resources (Becker & Gerhart, 1996). The current study responds to this gap by investigating the impact of a strategic role for HR management in organizational financial performance.

Given the importance of consistency between what a role purports to achieve and its actual impact, a strategic role for HR professionals should focus on the achievement of organizational goals by aligning HR practices with business objectives (Conner & Ulrich, 1996). This alignment necessitates the design and implementation

of HR policies and practices that enhance productivity and develop human resource-related organizational capabilities (Ulrich, 1997; Ulrich & Lake, 1990). Substantial work has occurred in SHRM, which suggests that the adoption of high-performance human resource practices (HPHRPs) promotes better organizational performance (Becker & Gerhart, 1996; Huselid, 1995). However, the relationship between a strategic role for HR professionals and the effective implementation of HPHRPs remains unexplored (H. T. Chang & Chi, 2007). While previous research indicates that the strategic role held by HR professionals is a critical aspect of HRM policy enactment (Hailey, Farndale, & Truss, 2005), few studies have investigated, or established, the link between the literature on HPHRPs and HR professionals' strategic role.

In recognition of this research need, the current study investigates the "black box" between the HR strategic role and financial performance by exploring the mediating role of HPHRPs, defined as a system of interrelated human resource managerial practices that, taken together, influence employee's ability, motivation, and opportunity by creating conditions of high involvement and participation in them in order to increase organizational effectiveness (Huselid, 1995). HPHRPs reflect a combination of HR practices that aim to improve organizational performance (Boselie, Dietz, & Boon, 2005). Building on recent work by Applebaum, Bailey, Berg, and Kalleberg (2000), this study employs the Ability-Motivation-Opportunity taxonomy of performance to categorize the components of HPHRPs. Consistent with previous definitions, the term *HPHRPs* is used to refer to a set of HR practices that are intended to enhance employees' skills, motivation, and opportunity to participate, and which, in turn, seek to improve organization performance.

A strategic role for HR management is argued to enhance the effective utilization of HPHRPs, which, in turn, increases financial performance through increased human resource productivity. In addition to exploring this indirect relationship, this study also explores the moderating role of devolution of responsibility for HR practices to line

management in the relationship between the HR strategic role and HPHRPs. Line management devolvement is argued to increase the operational integration of HR practices and facilitate a strategic focus for HR professionals by reducing their responsibility for traditional HR practice execution and administration.

This study contributes to current research in a number of areas. First, we respond to calls to investigate the impact of the HR strategic role, and pathways through which this effect occurs. Previous research in SHRM has been criticized for its lack of theoretical and empirical work on the mediating, explanatory pathways through which HR strategic factors lead to firm outcomes (Becker & Gerhart, 1996; Delery, 1998; Dyer & Reeves, 1995). This study builds on prior research exploring the impact of HR strategic role and is one of the first to focus on HPHRPs as a mediating pathway explaining this effect. Moreover, this is one of very few studies to do so in a non-Western context (Bae & Lawler, 2000), providing greater understanding of the utility of the HR strategic role in promoting financial performance in non-Western contexts, especially developing countries. The empirical data reported in this article comes from Jordan, a developing country in the Middle East.

A further contribution stems from the investigation of line management devolvement as a moderating variable, enabling researchers, HR professionals, and managers to understand the situations under which a strategic role for HR professionals is more or less likely to generate positive organizational performance effects (H. T. Chang & Chi, 2007). By exploring a moderated mediating relationship, this study clarifies a key mechanism that explains the influence of HR strategic role, as well as identifying circumstances that affect the operation of this mechanism.

## Theoretical Background and Hypotheses

The following sections submit the rationale underlying the proposed relationships and discuss how HR strategic role is linked to HPHRPs, which, in turn, is linked to financial

performance. The subsequent discussion argues the moderating role of line management devolvement in this relationship and a moderated mediated pathway between the HR strategic role and organization financial performance.

### *HR Strategic Role, HPHRPs, and Financial Performance*

Dessler, Griffiths, and Lloyd-Walker (2007) argue that, ideally, the strategic partner role incorporates HR as a full participant in both the development and operationalization of organizational strategies. This role requires HR managers to support strategic HRM initiatives by aligning HR goals, strategies, and practices with corporate objectives and the implementation of business strategy (Andersen, Cooper, & Zhu, 2007). It also requires the participation of HR managers in the strategic business planning process (Sheehan, 2005), which means that HR managers have an active role in both strategy formulation as well as strategy implementation (DeCieri et al., 2008).

A critical function for HR managers in a strategic planning role is to build the organization's human resources as a source of sustained competitive advantage (Barney & Wright, 1997; Becker & Gerhart, 1996). This implies the incorporation of HR practices that contribute to organizational performance into the strategic decision-making process (Huselid, 1995). In their meta-review, Delery and Doty (1996) identified seven such practices, which are consistently depicted as HPHRPs. These practices are theoretically and empirically connected to organizational performance and include practices related to ability, such as training systems; factors related to motivation, including results-oriented appraisal; and factors related to opportunity, such as employee participation programs.

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A pivotal determinant of the adoption of HPHRPs is a perception of HRM in a strategic role as a legitimate mechanism to enhance organizational performance. Those HR professionals possessing a legitimate strategic role through their hierarchical position within an organization are likely to have the authority, opportunity, and resources to search for and adopt innovative HPHRPs (Gooderham, Nordhaug, & Ringdal, 1999; Jennings, 1994). Equally important, as an HR professional, is expertise in HPHRPs, which leads to the perception of “individual competence” (Walton, Allen, & Gaffney, 1987). This, in turn, can enhance the ability to provide valuable information to, and influence, other strategic decision makers (Kane, 1994). A legitimate HR strategic role, therefore, builds the credibility of HR-related initiatives (Bennett, Ketchen, & Schultz, 1998; Galang, Elsik, & Russ, 1999). Once legitimacy of the HR manager as a strategic partner is established, research indicates that this will enhance influence over resource allocation and decision-making authority. Possible benefits include a greater allocation of resources and increased authority, both of which provide greater opportunities to drive the adoption of HPHRPs (Coopey, Keegan, & Emler, 1998; Galang et al., 1999; Kanter, 1988). This is supported by previous studies that have highlighted the key role played by senior management in the identification of HR initiatives and priorities, and its resourcing and support (Beer, 1997; Kane, 1994).

Similar support for the relationship between the HR strategic role and HPHRP implementation is provided in research into innovation adoption and the role of innovation champions. Previous research provides evidence of the importance of champions in the successful adoption of new HR practices (Frost & Egri, 1991; Kanter, 1983). The HR professional in a strategic role operates as a champion, motivated to explore new policies and practices to build HR-related capabilities,

which is likely to result in a greater rate of adoption of new HPHRPs (Howell & Higgins, 1990). The HR strategic practitioner is often depicted as an organizational change agent—a professional who is willing and sufficiently skilled to identify HR-related initiatives that will enhance organizational performance, and enable and oversee their implementation (Beatty & Schneier, 1997; Russ, Galang, & Ferris, 1998). Therefore, while under-researched, the connection between the HR professional in a strategic role as a critical element impacting the adoption of HPHRPs has considerable merit.

Following this, we will hypothesize a positive relationship between the HR strategic role and HPHRPs:

*Hypothesis 1: The HR strategic role is positively related to HPHRPs.*

Strategic human resource management has been most concerned with the impact of HR strategies on organizational performance (Boxall & Macky, 2007). The resource-based view (RBV) of the firm provides justification of the importance of human resources and effective human resource management as a source of sustainable competitive advantage (Barney & Wright, 1997; Wright, Dunford, & Snell, 2001). In particular, the RBV emphasizes the role of HR practices in influencing the human capital within organizations in a way that may lead to organizational success. Building upon the RBV, the nature of the relationship between HPHRPs and organizational performance has become the focus of the entire SHRM field (Boselie et al., 2005). Within this context, there is significant evidence for the link between HPHRPs and organizational financial performance.

There is significant evidence that the range of practices comprising HPHRPs enhance productivity and, consequently, organizational financial performance. Ability-enhancing HR practices of staffing and training directly influence employees' ability to perform by affecting their knowledge, skills, and abilities at work (Katou & Budhwar, 2010). Selective staffing techniques are used to identify applicants whose abilities are compatible with the

needs of the organization (Huselid, 1995), and the provision of comprehensive training can lead skilled employees with capabilities that are honed to the particular requirements of developing organizational technologies (Arthur, 1994). Similarly, motivation-enhancing HR practices have been linked to employee productivity and incorporated into previous models of HPHRPs. For example, Batt (2002) suggested motivational dimensions of a high-involvement HR system, which include high relative pay and commitment to job security, and Guest (1997) generates evidence to support the link between performance-related pay and enhanced employee motivation. Other motivation-enhancing practices mentioned in the strategic HRM literature include formal performance appraisal, skill-based pay, and group-based pay, which have all been linked to organizational performance (Guthrie, 2001; Huselid, 1995). The final component of HPHRPs, opportunity-enhancing practices (Huselid, 1995), has also been positively linked to organizational outcomes. The performance of highly skilled and motivated employees will be limited if jobs are not structured properly (Tsai, 2006). In particular, employees perform better at work when they are offered a working environment that provides the necessary support and the opportunity to contribute (Boxall & Purcell, 2003).

Substantial research on the link between HPHRPs and organizational performance has occurred worldwide since pioneering work was published in the mid-1990s (Becker & Gerhart, 1996; Huselid, 1995). In general, empirical research on the HPHRPs and performance link has demonstrated that HR practices are related to a set of organizational performance measures (Wright & Kehoe, 2008), and this has provided a basis for many authors to promote the practical benefits that can be gained from adopting HPHRPs compared with the more control-based personnel approach (Tsai, 2006). In particular, many empirical studies have shown positive HPHRPs influence on a range of indicators of organizational performance, including financial performance (Huselid, 1995), employee productivity (Guthrie, 2001), turnover rate (Arthur, 1994; Vandenberg, Richardson,

& Eastman, 1999), and absence rate (Marks, Mirvis, Hackett, & Grady, 1986; Wood & De Menezes, 1998).

The previous discussion indicates that a positive relationship is likely to exist between HPHRPs and financial performance. Accordingly, it is hypothesized that:

*Hypothesis 2: HPHRPs are positively related to organizational financial performance.*

We have argued that the HR strategic role is linked to HPHRPs, which in turn are linked to performance. Based on these arguments, we reason that HPHRPs play a mediating role in the relationship between the HR strategic role and financial performance because HR professionals' holding a more strategic role creates conditions conducive to the adoption of HPHRPs within organizations. Such adoption of high-performance practices leads, in turn, to enhanced financial performance. Thus, we hypothesize the following:

*Hypothesis 3: HPHRPs mediate the relationship between the HR strategic role and organizational financial performance.*

Although a direct relationship between the HR strategic role and HPHRPs is hypothesized, a review of the literature on SHRM indicates that there are factors capable of moderating the HR strategic role-HPHRP relationship. An examination of moderating factors is especially important for a comprehensive understanding of this relationship and the conditions under which it applies (Wright & Haggerty, 2005). One often-mentioned impediment to achieving success in a strategic role is the oppressive burden of administrative transactional tasks (Ulrich & Brockbank, 2005). Informed by these studies, devolvement of responsibility for HR practice execution and administration to line management is argued as a key factor influencing the impact of the HR strategic role on HPHRPs.

The devolvement of HR practices, which has been referred to as "downward integration" of HRM (Zhu, Cooper, De Cieri, Thomson, & Zhao, 2008), is defined as the involvement of line managers, commonly

referred to as supervisors, in the execution and administration of HR practices (Budhwar, 2000a, 2000b), including selection, training, and performance management. While some authors, like Thornhill and Saunders (1998), state that the increased role of line managers in the management of human resources is a vital characteristic of any HRM model; others, like Brewster and Larsen (2000), go further by arguing that the devolution of HR responsibilities to line managers is seen as a defining issue in HRM since line managers' actions and behaviors are largely responsible for the difference between intended and actual HRM implementation.

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*The devolvement of more traditional HRM activities to line managers allows HR professionals to adopt a more strategic role because it releases them from the more traditional and time-consuming operational activities.*

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Arguments for the moderating role of line management devolvement are based on the assumption that, if HR professionals are going to hold a more strategic role, the day-to-day HR activities need to be decentralized and shifted to line managers (Kulik & Bainbridge, 2006). The devolvement of more traditional HRM activities to line managers allows HR professionals to adopt a more strategic role because it releases them from the more traditional and time-consuming operational activities (Conner & Ulrich, 1996; Ulrich, 1997). In addition, numerous studies suggest the role of line managers is important in ensuring effective implementation of HRM strategy and policies (Bhatnagar & Sharma, 2005). In particular, the adoption of more commitment-oriented HPHRPs requires line managers to be involved in the initiation and implementation of "high-performance" models, especially when the actions of line managers are the difference between intended and actual HR practices (Boxall & Purcell, 2008). Line management involvement in HPHRP execution and administration ensures consistent application through integration with operational decision making and planning, as well as day-to-day administrative activities (Renwick, 2003).

The significance of an increased HR role for line managers has been recognized by a number of researchers. Currie and Procter (2001) show that line managers hold important roles in the realization of HR strategy. Other research has connected the devolution of HRM to line managers to financial performance. For example, Perry and Kulik's (2008) study showed a positive effect of devolution on perceived people management effectiveness.

Previously, we have argued that the HR strategic role enhances the adoption of HPHRPs, which, in turn, enhances performance. Following this discussion, we also argue that devolvement of HR practices to line managers moderates this relationship:

*Hypothesis 4: Devolvement moderates the relationship between the HR strategic role and HPHRPs.*

We have argued that the HR strategic role is linked to organizational financial performance through HPHRPs and that devolvement moderates the relationship between HPHRPs and performance. Together this provides a rationale for a hypothesis of moderated mediation:

*Hypothesis 5: Line management devolvement will moderate the relationship between the HR strategic role and financial performance, such that the positive relationship between the HR strategic role and performance through HPHRPs will be stronger at higher levels of line management devolvement than at lower levels of line management devolvement.*

## Methods

### Sample and Data Collection

Data were collected through a self-administered survey in the Jordanian private sector in the period from March to June 2009. The sample was drawn from the Jordanian Company Control Department database. The sample included companies from both the financial and manufacturing sectors. In total, 176 participants were recruited in these

sectors. Only companies employing more than 100 employees were included in this study. The decision to exclude organizations employing fewer than 100 employees was based on results of previous research in HRM, which indicates that the larger the firm, the more likely it is to have a formal organizational unit dealing with human resources as well as more formalized HR practices (Guthrie, 2001; Huang, 2000).

The questionnaires were completed by the most senior manager responsible for the HR functions within the company. Of the 176 questionnaires distributed, 121 questionnaires were returned. In total, 118 completed and usable questionnaires were used in the analysis, with a 66 percent response rate.

Responding companies represented financial (41.5 percent) and manufacturing (58.5 percent) sectors. Of the organizations that responded, the majority (74.5 percent) employed between 100 and 300 employees. More than 81 percent of the organizations had been in operation for more than five years, and most of the organizations (88 percent) were locally owned. The majority of respondents were male (82 percent) and had less than 10 years of experience (92 percent) in their current organization.

Based on previous literature (Gardner & Wright, 2009), studies that collect data from a single respondent using the same method may be subject to potential common method bias. To reduce the potential for common method variance (CMV), a set of steps were undertaken. In common with much previous research (Guthrie, 2001), we chose to ask the most senior person responsible for human resource management to complete the survey on the basis of required expertise. Past research suggests that the most senior HR manager is well placed to provide expert judgment on HR-related policy and practices (Guthrie, 2001; Way, Lepak, Fay, & Thacker, 2010). This is particularly true in our study, which required knowledge of the HR strategic management policy and also required understanding across a wide range of HR-related management practices.

As an additional strategy to reduce the risk of CMV bias, we asked respondents to

nominate the source of information about financial performance and we also nominated measures that were less open to subjective interpretation: return on equity, return on assets, sales growth, and market share. Previous research suggests that using more objective and concrete measures is less likely to be associated with bias (Podsakoff & Organ, 1986). In doing so, we aimed to balance emphasis on objective measurement and expert judgment in order to be comprehensive in our measurement of practices while minimizing the risks that personal judgment would reduce the reliability of our measurements (Guest, 2001). This is supported by research in strategic human resource management, which argues that factual information, of which the respondent holds accurate knowledge and which is potentially objectively verifiable, does not pose serious problems (Guthrie, 2001). The primary dependent variables (financial performance) in this study reflect this type of measure.

Finally, we followed empirical recommendations for the use of a CMV marker (Lindell & Whitney, 2001; Richardson, Simmering, & Sturman, 2009). The marker variable was included in the middle of the survey. It was chosen as the CMV marker because it did not have a strong theoretical connection to the predictor variables but was within the scope of organizational management. The marker variable chosen for analysis was *low-cost strategy*. A measurement scale developed by Huang (2001) was used in this study for measuring business strategy of innovation and cost leadership.

## Measures

The questions used in the survey were drawn from previously validated measures. The double-back-translation method was used, whereby the questionnaire was developed in English language and then translated into Arabic by a certified translator, and then back-translated into English. The questionnaire was then evaluated by a number of independent researchers in human resource management in order to ensure content validity.

### Dependent Variable: Financial Performance

This study adopted quasi-perceptual measures of performance, which evaluate performance in objective terms (e.g., return on equity, sales growth, and profitability) through the subjective perception of managers (Ketkar & Sett, 2009). Perception-based measures of performance are widely used in the literature (e.g., Macky & Boxall, 2008; Shih, Chiang, & Hsu, 2006). Measures of financial performance were taken by asking respondents to compare their company's performance with that of similar companies operating in the same sector over the past one to three years. Responses were taken on a seven-point Likert scale ranging from 1 (0 percent) to 7 (100 percent).

### Predictor Variable: HR Strategic Role

HR strategic roles were measured using a scale derived by Conner and Ulrich (1996), frequently used in similar research on HR managerial roles (Raub et al., 2006; Voermans & Veldhoven, 2007).

Respondents were asked to refer to their role as HR manager on six items that reflect the HR strategic role. Respondents were asked to indicate whether they agree or disagree with each of these items on a Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). One item was reversed and modified ("HR manager is seen as strategic partner" became "HR manager is not seen as strategic partner"). Negatively worded questions are recommended in order to reduce pattern response bias (Hinkin, 1995).

### Mediating Variable: HPHRPs

Based on extensive review of the literature, scales were developed for measuring the three HPHRP dimensions: ability-enhancing, motivation-enhancing, and opportunity-enhancing practices. All items measuring HPHRPs were adopted from survey items used by Flood et al. (2008), Huselid (1995), and Snell and Dean (1992). All items were measured using a seven-point scale.

Nine items were used to measure ability-enhancing practices, including staffing

(i.e., formal job analysis, recruitment, and selection) and training and development practices (e.g., "How much importance is placed on the staffing process in this company?") Six questions relating to motivation-enhancing practices were designed to measure both performance management and compensation practices. Three scale items were used to measure performance management practices (e.g., "What proportion of employees receive formal performance appraisals and feedback each 12 months?"). These items were adopted from Flood et al. (2008) and Huselid (1995). Three items were used to measure compensation practices, taken from Flood et al. (2008) and Snell and Dean (1992), including, for example, "How would you rate pay level in this company relative to other companies?" Finally, opportunity-enhancing practices reflect communication and participation practices. Six items were used to measure the opportunity-enhancing practices dimension, taken from previous work by Flood et al. (2008) (e.g., "What proportion of employees are routinely administered attitude surveys to investigate employee morale?").

### Moderator Variable: Devolvement

Based on Budhwar's (2000a) study, devolvement was measured on the basis of three sets of items: the primary responsibility with line managers for HRM, change of responsibility of line managers for HRM, and the increased training of line managers in HRM. The approach used by Budhwar is consistent with the approaches used by a number of authors (Brewster & Larsen, 1992; Gautam & Davis, 2007; Larsen & Brewster, 2003; Perry & Kulik, 2008; Zhu et al., 2008). The level of devolved decision making in areas of HPHRPs was measured by asking respondents to indicate the extent of line managers' involvement in HR decisions regarding the following HPHRPs: recruitment and selection, training and development, performance management, compensation, incentives, communication, and participatory practices. In addition, respondents were also asked the extent of an increase of line managers' responsibility with regard to the same set of HR practices mentioned



earlier over the last five years. Finally, respondents were asked to estimate the extent of line managers' formal training to perform a set of HR-related skills.

### Control Variable

Consistent with previous studies on performance effect of HPHRPs (Arthur, 1994; Huselid, 1995), a number of organizational variables were included as potential control variables: company size, company age, company ownership, and the sector within which the company operated. Company size was measured in terms of the number of working employees. The control variable for company age was in the form of the number of years the company has been in operation in Jordan. Company ownership reflects whether the company is foreign or locally owned.

### Analysis and Results

Means, standard deviations, alpha values, and correlations for all variables appear in Table I. All of the index reliabilities, as measured by Cronbach's alpha, exceeded the cut-off point of .70 (Hair, Anderson, Tatham, & Black, 1998).

Partial least squares (PLS) structural equation modeling (SEM) was employed to analyze the data. Partial least squares is increasingly used as an analytical technique, particularly in health and organizational studies research (Sosik, Kahai, & Piovosio, 2009). A number of recent reviews of PLS structural equation modeling have generated evidence supporting its advantages over covariance-based modeling. In particular, PLS SEM can be used to analyze data from small samples, which is a factor pertinent to the current study (Sosik et al., 2009). Results of a Monte Carlo simulation indicate that PLS SEM was able to produce estimates for a six-variable model with low Type-I error probability and satisfactory power, based on a sample size of 17 (Majchrzak, Beath, Lim, & Chin, 2005). In addition, PLS is capable of producing more accurate coefficients when there is correlation between independent variables (Sosik et al., 2009). PLS SEM provides information relating to measurement and structural model components.

PLS SEM generates factor loadings for each scale item, which can be used to assess the measurement model. A matrix of factor coefficients is provided in Table II. The matrix shows that all coefficients are greater than .6, except the sixth item for HR strategic role

**TABLE I** Means, Standard Deviations, and Correlations for Study Variables

Variables	Mean	SD	Alpha	1	2	3	4	5	6	7
1. Financial performance	3.98	.96	.78							
2. HR strategic role	4.41	.81	.82	.449**						
3. HPHR	4.28	.82	.88	.660**	.692**					
4. Devolvement	4.44	.76	.92	.573**	.686**	.828**				
5. Number of employees	2.35	.65		.547**	.251**	.396**	.344**			
6. Company size	3.21	.77		.385**	-.002	.248**	.083	.589**		
7. Company ownership	2.15	.50		.005	.099	.103	.078	-.007	-.107	
8. Company sector	1.42	.50		.069	-.084	.025	-.063	.133	.148	.191*

*N* = 118.

\*Correlation is significant at the .05 level (two-tailed).

\*\*Correlation is significant at the .01 level (two-tailed).

TABLE II Factor Matrix				
Item	HR Strategic Role	HPHR	Devovement	Performance
Strategic1	.72			
Strategic2	.83			
Strategic3	.77			
Strategic4	.77			
Strategic5	.77			
Strategic6	.29			
HPHRAbility1		.60		
HPHRAbility2		.71		
HPHRAbility3		.62		
HPHRAbility4		.73		
HPHRAbility5		.75		
HPHRAbility6		.70		
HPHRAbility7		.72		
HPHRAbility8		.73		
HPHRAbility9		.78		
HPHRMotivation10		.60		
HPHRMotivation11		.71		
HPHRMotivation12		.71		
HPHRMotivation13		.82		
HPHRMotivation14		.82		
HPHRMotivation15		.80		
HPHROpportunity16		.79		
HPHROpportunity17		.60		
HPHROpportunity18		.75		
HPHROpportunity19		.68		
HPHROpportunity20		.58		
Devovement1			.64	
Devovement2			.65	
Devovement3			.71	
Devovement4			.70	
Devovement5			.68	
Devovement6			.74	
Devovement7			.75	
Devovement8			.76	
Devovement9			.71	
Devovement10			.70	
Devovement11			.69	
Devovement12			.71	
Devovement13			.78	
Devovement14			.77	
Devovement15			.74	
Performance1				.81
Performance2				.82
Performance3				.81
Performance4				.77
Performance5				.75

TABLE III Average Variance Extracted

	Average Variance Extracted (AVE)
HR Strategic Role	.60
HPHR	.52
Devolvement	.52
Performance	.63

and the final item for HPHRPs, which were removed from subsequent analysis. The factor coefficients presented in Table II indicate homogeneity within scales (Thompson, 1997). Evidence of acceptable validity is also provided in Table III, which shows the Average Variance Extracted (AVE), or average squared loading, for each latent variable. To show acceptable validity, each construct should have an AVE greater than 0.5 (Chin, 1998).

In addition, confirmatory factor analyses using AMOS were conducted to further investigate the validity of the variables used in this study. These results suggest that the variables measured are distinct constructs. Assessment of model fit was based on multiple criteria, which reflect theoretical and statistical considerations (Byrne, 2001). This study adopts the following indices to assess model fit: the chi-square ( $\chi^2$ ), root-mean-square error of approximation (RMSEA), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), and comparative fit index (CFI) (Hox, 2002; Kline, 2005). The HPHRP model consists of three factors: ability-enhancing, motivation-enhancing, and opportunity-enhancing practices. The improved CFA model for ability-enhancing practices parameter showed satisfactory fit ( $\chi^2 = 26.52$ ,  $df = 20$ ,  $p = .14$ , GFI = .95, AGFI = .91, RMSEA = .05, CFI = .98), as did the models for both motivation-enhancing practices ( $\chi^2 = 10.70$ ,  $df = 5$ ,  $p = .06$ , GFI = .96, AGFI = .89, RMSEA = .09, CFI = .98) and opportunity-enhancing practices ( $\chi^2 = 5.14$ ,  $df = 5$ ,  $p = .40$ , GFI = .98, AGFI = .95, RMSEA = .02, CFI = .99). The CFA model of financial performance measures achieved satisfactory model fit ( $\chi^2 = 3.57$ ,  $df = 4$ ,  $p = .47$ , GFI = .99, AGFI = .96, RMSEA = .00, CFI = 1.00), as did the model for HR strategic role ( $\chi^2 = .98$ ,

$df = 2$ ,  $p = .61$ , GFI = .99, AGFI = .98, RMSEA = .00, CFI = 1.00). Also, the high-order factor model of devolvement ( $\chi^2 = 69.31$ ,  $df = 53$ ,  $p = .07$ , GFI = .91, AGFI = .87, RMSEA = .05, CFI = .98) showed a good fit.

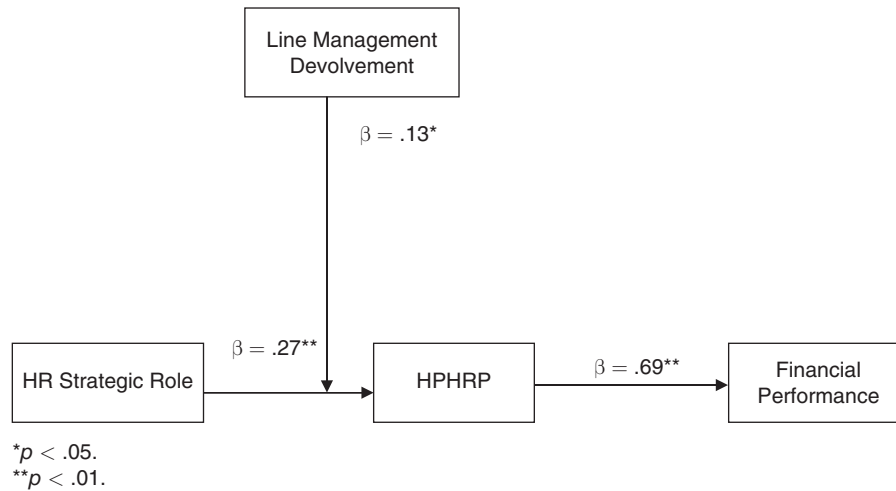
PLS SEM generates parameter estimates for the structural model. Path significance was assessed using bootstrapping, which generates *t*-test statistics for path coefficients. Bootstrapping involves the generation of a large number of random samples by sampling with replacement from the original data (Sosik et al., 2009). Following recommendations made by Chin (1998), 1,000 bootstrap samples were run to generate test statistics.

To investigate interaction (moderating) hypotheses, a standardized cross-product interaction construct was computed and included in the model as suggested for PLS analysis, and in common with approaches advocated for multiple linear regression (Chin, Marcolin, & Newsted, 2003).

Our PLS SEM results, depicted in Figure 1, support all hypotheses. The PLS SEM data indicate a positive relationship between HR strategic role and HPHRPs ( $\beta = .27$ ,  $t = 4.1$ ,  $p = .00$ ), and between HPHRPs and financial performance ( $\beta = .69$ ,  $t = 7.5$ ,  $p = .00$ ). The partial least squares analysis also revealed a significant positive path coefficient for the HR strategic role interaction variable regressed on HPHRPs ( $\beta = .13$ ,  $t = 2.1$ ,  $p = .05$ ).

PLS SEM does not provide a test for model fit (Fornell & Bookstein, 1982); however, the *R*-square statistic has been argued to enable researchers to approximate the model's utility by reflecting the extent to which independent variables account for variance in the dependent construct. PLS SEM generated an  $R^2$  of .70 for our model, which indicates that the overall model accounted for 70 percent of the variance in financial performance. According to Chin (1998), this indicates good model fit and suggests that the pathways predicted by our hypotheses were able to account for a good proportion of all performance variance. The model is diagrammatically depicted in Figure 1.

In order to explore the data further, we used ordinary least squares (OLS) regression analysis. Tests of the first two hypotheses



**FIGURE 1.** Model of HR Strategic Role, HPHRP, and Line Management Devolvement Effects on Financial Performance

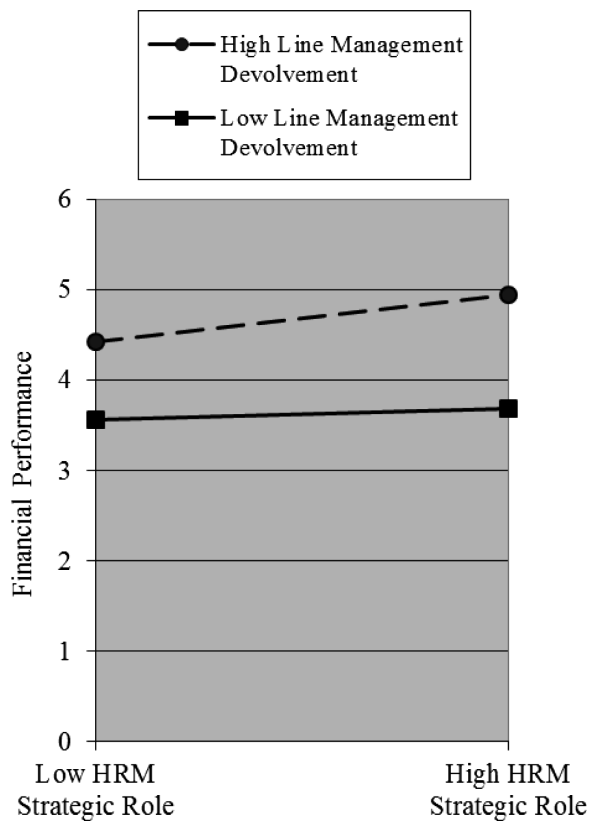
produced similar results to the PLS SEM. The analysis revealed a significant positive path coefficient for the impact of the HR strategic role on HPHRPs ( $\beta = .26$ ,  $t = 3.77$ ,  $p < .00$ ) supporting Hypothesis 1, and a significant path coefficient for HPHRP regressed on organizational financial performance ( $\beta = .76$ ,  $t = 7.49$ ,  $p < .00$ ), supporting Hypothesis 2. Mediation was investigated using the causal steps approach to testing mediated effects (Kenny, Kashy, & Bolger, 1998). These results support Hypothesis 3. Regression analysis found that the initially significant relationship between the HR strategic role and financial performance ( $\beta = .27$ ,  $t = 2.89$ ,  $p = .00$ ) is weakened, and is not significant, when HPHRPs are included in the regression equation ( $\beta = .08$ ,  $t = .97$ ,  $p = .17$ ). In addition, the product of coefficients analysis, in this case a Sobel test, revealed support for a mediated relationship between the HR strategic role and financial performance via HPHRP ( $z = 3.23$ ,  $p = .00$ ).

To test Hypothesis 4, a standardized cross-product interaction construct was computed for line management devolvement  $\times$  HR strategic role and included in the model as is usual in regression analysis (Aiken & West, 1991). The results show that line management devolvement moderated that impact of the HR strategic role on HPHRPs, supporting

Hypothesis 4. The OLS analysis revealed a significant path coefficient for the interaction variable regressed on HPHRPs ( $\beta = .16$ ,  $t = 3.43$ ,  $p < .00$ ).

In order to explore the nature of this interaction further, we used simple slopes computations and graphed the interactions using high (1 SD above the mean) and low (1 SD below the mean) levels of the moderator, line management devolvement. These analyses revealed that the HR strategic role was associated with HPHRP when line management devolvement was high (simple slope =  $.32$ ,  $t = 5.26$ ,  $p < .00$ ) but that the HR strategic role was not related to HPHRPs when line management devolvement was at a low level (simple slope =  $.08$ ,  $t = .94$ ,  $p = .35$ ), as depicted in Figure 2. These results provide support for Hypothesis 4 by indicating that the HR strategic role impacts HPHRPs when line management devolvement is high.

Hypothesis 5 posited that the indirect effect of HR strategic role on financial performance via HPHRPs depends on line management devolvement. To test moderated mediation, the data was investigated to assess whether the strength of the mediation via HPHRPs differs across two levels (high and low) of the moderator, line management devolvement (Preacher, Rucker, & Hayes, 2007). Moderated mediation is evidenced



**FIGURE 2.** Moderating Effect of Line Management Development on HR Strategic Role Impact on HPHRPs

when the conditional indirect effect of HR strategic role on financial performance via HPHRPs differs in strength across low and high levels of line management devolvement (Preacher et al., 2007). A statistical significance test was used to analyze the data. This applies Aroian's (1947) exact standard error for indirect effects to compute a  $z$  statistic for the conditional indirect effect. Again, high and low line management devolvement were operationalized as 1 standard deviation above and below the mean, respectively. The results of this analysis indicate that the relationship between the HR strategic role and financial performance via HPHRPs was weaker when line management devolvement was low ( $z = .95, p = .34$ ) and stronger when line management devolvement was high ( $z = 3.74, p < .00$ ). This analysis supports Hypothesis 5.

To investigate this effect further, an extension of the Johnson-Neyman technique to moderated mediation was applied (Preacher

et al., 2007). This technique involves testing the significance of the indirect effect of the HR strategic role at a range of values of line management devolvement until the value of the moderator is found for which the direct effect becomes significant ( $\alpha = 0.05$ ). Table IV shows the results of this investigation, which indicate that, at line management devolvement values above 4.1, the mediating effect of HPHRPs is significant.

## Discussion

The purpose of this research was to investigate the impact of the HR strategic role on organizational performance and the pathways through which this effect is generated. To achieve this objective, this study investigated the relationship between the HR strategic role and organization financial performance, the mediating role of HPHRPs, and line management devolvement as a contingency of this relationship. The results provide support for a positive relationship between the HR strategic role and organizational performance mediated by HPHRPs. Results also support a moderating role for line management devolvement on this relationship.

## Theoretical Implications

This study's findings are important for several reasons. First, although the HR strategic role is widely discussed in the literature, extant empirical evidence about its value is limited. Our findings provide strong support for the argument that HR professionals' holding a more strategic role can lead to significant benefits at the firm level. This suggests that investing more in strategic HRM is an appropriate strategy for organizations to gain competitive advantage.

Second, our study is unique in that it provides empirical evidence for the mediating role of HPHRPs on the effect of the HR strategic role on performance. From a theoretical perspective, the results contribute to previous research into the value of strategic human resource management. Our research focus on the pathway through which the HR strategic role generates its impact represents a

**TABLE IV** Conditional Indirect Effect at Range of Values of Line Management Devolvement

Line Management Devolvement Value	Z Statistic	Significance
3.2	.02	$p = .98$
3.7	1.08	$p = .28$
4.1	1.96	$p = .05$
4.5	2.94	$p = .00$
5.1	3.65	$p < .00$

pioneering study in this area. We demonstrate that the HR strategic role has implications on the adoption of innovative high-performance human resource practices and, through this, financial performance. This suggests that the position of the HR professional as a strategic partner enhances the legitimacy of HR initiatives while also facilitating the resourcing and broad top management support for their implementation. Our results also provide enhanced understanding of the antecedents to HPHRP adoption, and direct future research to undertake a more comprehensive investigation of the impact of strategic leadership on the effectiveness of HPHRPs and their implementation.

Third, our findings enhance our understanding of the moderating role of devolvement on the indirect effect of the HR strategic role on adopting HPHRPs. Historically, HR professionals spent more time on administrative HRM, but more recently, researchers have stressed the need for HR work to be shared between HR professionals and line managers (Brewster, Mayrhofer, & Morley, 2000; Renwick, 2003). Our research provides strong support for this approach and suggests that sharing HR activities with line managers provides more opportunity for the increased use of HPHRPs in organizations. This is consistent with previous arguments that the adoption of more commitment-oriented HPHRPs requires line managers to be involved in the initiation and implementation of “high-performance” models (Boxall & Purcell, 2008).

In conclusion, the findings of this study make a valuable theoretical contribution by demonstrating that HR strategic input enhances the likelihood that

high-performance HR practices will be successfully implemented, and that this is a critical mechanism through which strategic HRM enhances organizational—particularly financial—outcomes. By specifying an important moderator of this relationship, we integrate three key SHRM constructs into a comprehensive model of HR strategic effect. Our model clarifies the mechanisms through which, and circumstances under which, a strategic approach for HR management can be successfully adopted. Our model does not support a simple, direct effect of the HR strategic role on financial performance, which may account for previous ambiguous findings related to its organizational impact. In addition, by specifying the indirect pathway through which a strategic role of HR managers enhances organizational performance, this study validates the utility of complex mediating and moderated relationships in predicting HR strategic impact. This has significant implications for future research into SHRM, which should encompass indirect and contingent models of effect.

### *Managerial Implications*

The modern business environment generates pressures for organizations to constantly improve their processes and work structures. Developing and implementing new ways of doing work enable an organization to enhance its performance. The findings of this study suggest that HR professionals need to recognize that their role as strategic partners should incorporate the implementation of HPHRPs into the strategic planning process. These practices are required in order to

enhance employees' ability, improve their motivation at work, and increase their participation and involvement. This is particularly important for organizations as they are seeking new ways to compete and to respond to pressures from the external environment.

This research points to the moderating role of line management devolvement and suggests that a strategic role for HR professionals is dependent on having reduced administrative HR responsibility. Thus, one of the implications of this study is the need to support the trade-off between a strategic and operational focus that was suggested in previous research (Cleland et al., 2000; Papalexandris & Panayotopoulou, 2005). For HR professionals, it is important to devolve HR work to line managers in order to be able to advance into a more HR strategic role within the organization. Only then will HR practices be upgraded to the more innovative HPHRPs.

However, past research has emphasized the potential pitfalls associated with line management devolution of HRM practices. Much evidence suggests that line management resistance to increased HRM-related responsibility is likely to dilute, and potentially undermine, efforts to translate HRM policy into effective practice (Thornhill & Saunders, 1998). This is potentially amplified by the lack of involvement of line managers in the design of HR policies (Harris, Doughty, & Kirk, 2002), which means that operational impediments to their implementation may be unforeseen (Whittaker & Marchington, 2003). Many studies have reported inadequate training provided to operational managers (Priestland & Hanig, 2005), and the absence of a supportive climate and enabling systems and structures (Guest, Conway, & Dewe, 2004). Operational demands tend to be prioritized by line managers, which results in them taking a minimalist approach to HRM (Whittaker & Marchington, 2003). These issues may be amplified in Arab countries. Organizations can experience difficulties in successfully importing Western human resource policies and practices into operations based in developing countries because of a range of institutional and cultural barriers (Aycan, Al-Hamadi, Davis, & Budhwar, 2007;

Namazie, 2003). Such difficulties have been shown to exist in Arabic countries; for example, Al-Husan, Brennan, and James (2009) found that the implementation of HPHRPs in a privatized Jordanian utility, including enhanced performance appraisal and training responsibilities and devolution of responsibility for HR practices to line management, met with resistance and staff discontent. Therefore, while this study indicates the benefits of devolution, and suggests that devolution is a critical element in successful SHRM enactment, its implementation requires careful management and support.

A valuable feature of this research relates to its empirical setting. There is significant empirical support to uphold the importance of the HR strategic role and HPHRPs for financial performance across different organizational setting in Anglo-U.S. samples (Delery, 1998; Guthrie, 2001; Huselid, 1995). Our research allows these findings to be extended to a novel empirical setting, Jordan. In doing so, the findings reinforce the validity of the contention that strategic HRM practices can help create distinctive competencies that are a source of sustained competitive advantage for Jordanian companies (Barney, 1991).

However, this empirical contribution raises some issues regarding generalizability. While not a limitation, the study findings may not be generalizable outside Arab countries due to differences between Arab, Eastern, and Western contexts. The existing literature highlights a number of HRM-related studies focused on the Middle East region (Agnala, 1997; Al-Rasheed & Al-Qwasmeh, 2003). Much of this research explores the influence of Arab culture (Al-Faleh, 1987; Bakhtari, 1995) and Arab value systems (Elsayed-Elkhouly & Buda, 1997) on management practices and management systems. Some studies have examined issues related to the transfer of management

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practices from Western countries to the Arab region, including Jordan (Al-Husan et al., 2009; Anwar, 2003). In combination, this literature indicates that Jordan is likely to have management systems that are sensitive to cultural norms and may traditionally limit participation in decision making (Tayeb, 1997). However, while past studies indicate similarities in management practices exist across Middle Eastern countries, there is also considerable variation across countries. Since the mid-1990s, the levels of state ownership in several Middle Eastern countries, including Jordan, have been significantly reduced due to a process of privatization (Budhwar & Mellahi, 2007). This has led to an economic

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*Our study provides guidance for top management by reinforcing the utility of strategic partnership with the organization's HR professional function.*

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system where market-driven forces rather than government-sponsored and government-protected initiatives drive the economy. Jordanian research reports a focus on competitiveness by investing in human resource development and training (Yaghi, Goodman, Holton, & Bates, 2008). There is also some recent evidence that Jordan continues to adopt and develop contemporary HRM practices, although some of these are at a preliminary stage (Al-Husan & James, 2009). This suggests that, while the findings of this study represent an important contribution to our understanding of HPHRPs, particularly in an Arab setting, additional study utilizing more diverse sample specifications, across Arabic, Eastern, and Western countries, will increase the generalizability of our conclusions.

Our study provides guidance for top management by reinforcing the utility of strategic partnership with the organization's HR professional function. Further, the pivotal role of line management involvement in HPHRP execution and administration prioritizes systematic training for operation management and the utilization of supports such as HRM IT systems, which have been shown to facilitate day-to-day HR administration (Ruel, Bondarouk, & Van der Velde, 2007).

In summary, our study provides guidance for top management by reinforcing the utility of strategic partnership with the organization's HR professional function. Further, the pivotal role of line management involvement in HPHRP execution and administration prioritizes systematic training for operation management and the utilization of supports such as HRM IT systems, which have been shown to facilitate day-to-day HR administration (Ruel, Bondarouk, & Van der Velde, 2007).

## *Limitations and Suggestions for Future Research*

Like all research, this study has a number of limitations. A limitation of this study is that its sample provides a restricted basis for generalizing our findings. This study focused on firms in two industries in Jordan. The focal setting may limit the generalizability of the findings to organizations within this national context. In addition, the sample size was relatively small and we investigated moderated relationships. Both the small size of our study sample and the focus on moderation increase the risk that significant relationships will not be detected (McClelland & Judd, 1993). However, we received good support for all of our hypotheses and our overall model. Given that the detection of moderation is particularly constrained by small sample size (Cohen, 1988), the results indicate some robustness in our findings.

A second limitation of this study, frequently observed in survey-based research, is bias associated with common method variance (CMV) (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). We acknowledge that Gerhart, Wright, Mahan, and Snell (2000) highlighted the risks associated with single-source methods of data collection. These authors also state, however, that bias is more likely in large firms in which practices and human resource systems are likely to vary considerably. While their mean organizational size was 40,000 employees, the data in the current study was generated from smaller organizations, the majority of which employed between 100 and 300 people. There is support for the argument that smaller firms are unlikely to feature significant within-firm variation in practices and systems, which is likely to improve reliability (Huselid & Becker, 2000).

In addition, previous research indicates that CMV is less of a concern for studies with a moderation effect (Schriesheim & DeNisi, 1981). The logic is that common method bias should be present regardless of the level of the moderator. It follows that when the relationship between the predictor, mediator, and dependent construct varies depending on the moderator, as in our study, responses are unlikely to be the result of using the same method—participants have not rated all



items similarly as is evident when self-report CMV threatens data validity (Schriesheim & DeNisi, 1981). Moderation models are also less likely to risk bias from participants' theorizing about predicted relationships. This risk is more likely in simple linear models (Harrison, McLaughlin, & Coalter, 1996). One approach advocated to minimize common method bias is to specify relationships among the dependent and predictor variables that are complex and therefore not likely to be part of the individual raters' cognitive maps. Our moderated mediation model is, therefore, likely to reduce the risk of bias associated with respondents' theorizing, because such a complex relationship is not likely to be part of the respondents' theory in use (S. J. Chang, Van Witteloostuijn, & Eden, 2010).

Finally, to address the issue of potential common method bias empirically, we used a CMV marker variable (Lindell & Whitney, 2001; Richardson et al., 2009). Analysis using the CMV marker variable indicated that the partial correlation coefficients for all predictor and dependent variables remained statistically significant ( $p = .00$  for all correlations) when the marker variable was controlled. In addition, we used a Harman one-factor test (Podsakoff & Organ, 1986). All scale items used to measure the predictor variables were entered into a principal components factor analysis, and the results of the unrotated solution were explored. Four factors were identified with an eigenvalue greater than 1, and no single factor accounted for the majority of variance. This suggests that common method variance is not a significant issue in this study. If common method variance is a significant issue, it is likely that a single factor would emerge or one general factor would account for a majority of variance (Podsakoff & Organ, 1986).

While the risk of bias is acknowledged and has been addressed by the authors, we also recognize that there is a growing acceptance of research indicating that CMV is unlikely to invalidate study findings, particularly in the investigation of complex models (Crampton & Wagner, 1994; Doty & Glick, 1998; Spector, 2006). We acknowledge, however, that self-report methods may be considered a limitation to this study.

Our research focused on the frequently utilized outcome measure of organizational financial performance. While this is a robust measure of managerial importance, the relationship between the HR strategic role, HPHRPs, and organizational outcomes beyond financial performance is also warranted—for example, investigating the impact of the HR strategic role on employee-level performance such as employee satisfaction and voluntary turnover. The potential effect of different HR roles, such as change agent, employee champion, and administrative expert, on organization performance also merits further exploration, as are the potential contributions of each role to organizational performance. Finally, while we investigated the effect of devolvement as an important contingency factor in the relationship between the HR strategic role and the adoption of HPHRPs, there are other important contingencies that may influence this relationship, such as top management support and IT support. Further research should thus investigate other contingencies affecting this relationship.

Despite these limitations, the findings reported here suggest that there is important research potential in investigating the role of coupling of an HR strategic role with the devolvement of responsibility for HR execution to line management. This study also indicates that our understanding of the impact of the HR strategic role and HPHRPs is significantly enhanced by investigating complex mediating pathways, and also reinforces the merit of investigating relationship contingencies. Furthermore, the value of undertaking this research in Jordan is considerable. The findings provided evidence for the applicability of theory and previous empirical work in a non-Western context, particularly the Jordanian context.

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## References

- Agnala, A. A. (1997). Management development in the Arab world. *Human Resource Management International Digest*, 5, 38–41.
- Aiken, L., & West, S. G. (1991). *Multiple regression: Testing and interpreting interaction*. Newbury Park, CA: Sage.
- Al-Faleh, M. (1987). Cultural influences on Arab management development: A case study of Jordan. *Journal of Management Development*, 6, 19–33.
- Al-Husan, F., Brennan, R., & James, P. (2009). Transferring Western HRM practices to developing countries: The case of a privatized utility in Jordan. *Personnel Review*, 38, 104–123.
- Al-Husan, F., & James, P. (2009). Multinationals and the process of post-entry HRM reform: Evidence from three Jordanian case studies. *European Management Journal*, 27, 142–154.
- Al-Rasheed, A. M., & Al-Qwasmeh, R. M. (2003). The role of the strategic partner in the management development process: Jordan Telecom as a case study. *International Journal of Commerce & Management*, 13, 144–156.
- Andersen, K., Cooper, B., & Zhu, C. (2007). The effect of SHRM practices on perceived firm financial performance: Some initial evidence from Australia. *Asia Pacific Journal of Human Resources*, 45, 168–179.
- Anwar, S. A. (2003). Globalisation of corporate America and its implications for management styles in an Arabian cultural context. *International Journal of Management*, 20, 43–52.
- Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. (2000). *Manufacturing advantage: Why high performance work systems pay off*. Ithaca, NY: Cornell University Press.
- Aroian, L. A. (1947). The probability function of the product of two normally distributed variables. *Annals of Mathematical Statistics*, 18, 265–271.
- Arthur, J. (1994). Effects of human resource systems on manufacturing performance and turnover. *Academy of Management Journal*, 37, 670–687.
- Aycan, Z., Al-Hamadi, A., Davis, B. A., & Budhwar, P. (2007). Cultural orientations and preferences for HRM policies and practices: The case of Oman. *International Journal of Human Resource Management*, 18, 11–32.
- Bae, J., & Lawler, J. J. (2000). Organizational and HRM strategies in Korea: Impact on firm performance in an emerging economy. *Academy of Management Journal*, 43, 502–517.
- Bakhtari, H. (1995). Cultural effects on management style: A comparative study of American and Middle East management style. *International Studies of Management & Organization*, 25, 97–119.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99–120.
- Barney, J. B., & Wright, P. M. (1997). On becoming a strategic partner: The role of human resources in

- gaining competitive advantage. *Human Resource Management*, 37, 31–46.
- Batt, R. (2002). Managing customer services: Human resource practices, quit rates, and sales growth. *Academy of Management Journal*, 45, 779–801.
- Beatty, R. W., & Schneier, C. E. (1997). New HR roles to impact organizational performance: From “partners” to “players.” *Human Resource Management*, 36, 29–37.
- Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of Management Journal*, 39, 779–801.
- Beer, M. (1997). The transformation of the human resource function: Resolving the tension between a traditional administrative and a new strategic role. *Human Resource Management*, 36, 49–56.
- Bennett, N., Ketchen, D. J., Jr., & Schultz, E. B. (1998). An examination of factors associated with the integration of human resource management and strategic decision making. *Human Resource Management*, 37, 3–16.
- Bhatnagar, J., & Sharma, A. (2005). The Indian perspective of strategic HR roles and organisational learning capability. *International Journal of Human Resource Management*, 16, 1711–1739.
- Boselie, P., Dietz, G., & Boon, C. (2005). Commonalities and contradictions in HRM and performance research. *Human Resource Management Journal*, 15(3), 67–94.
- Boxall, P., & Macky, K. (2007). High-performance work systems and organisational performance: Bridging theory and practice. *Asia Pacific Journal of Human Resources*, 45, 261–270.
- Boxall, P., & Purcell, J. (2003). *Strategy and human resource management*. Basingstoke, UK: Palgrave Macmillan.
- Boxall, P., & Purcell, J. (2008). *Strategy and human resource management*. Hampshire, UK: Palgrave Macmillan.
- Brewster, C., & Larsen, H. H. (1992). Human resource management in Europe: Evidence from ten countries. *International Journal of Human Resource Management*, 3, 409–434.
- Brewster, C., & Larsen, H. H. (2000). *Human resource management in Northern Europe: Trends, dilemmas, and strategy*. Oxford, UK: Blackwell.
- Brewster, C., Mayrhofer, W., & Morley, M. (2000). *New challenges for European human resource management*. Basingstoke, UK: Palgrave Macmillan.
- Budhwar, P. (2000a). Evaluating levels of strategic integration and devolvement of human resource management in the UK. *Personnel Review*, 29, 141–157.
- Budhwar, P. (2000b). Strategic integration and devolvement of human resource management in the UK manufacturing sector. *British Journal of Management*, 11, 285–302.
- Budhwar, P., & Mellahi, K. (2007). Introduction: Human resource management in the Middle East. *International Journal of Human Resource Management*, 18, 2–10.
- Byrne, B. M. (2001). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cabrera, E. F., & Cabrera, A. (2003). Strategic human resource evaluation. *Human Resource Planning*, 26, 41–50.
- Chang, H. T., & Chi, N. W. (2007). Human resource managers’ role consistency and HR performance indicators: The moderating effect of interpersonal trust in Taiwan. *International Journal of Human Resource Management*, 18, 665–683.
- Chang, S. J., Van Witteloostuijn, A., & Eden, L. (2010). From the editors: Common method variance in international business research. *Journal of International Business Studies*, 41, 178–184.
- Chin, W. W. (1998). Issues and opinion on structural equation modeling. *MIS Quarterly*, 22, 7–14.
- Chin, W. W., Marcolin, B. L., & Newsted, P. (2003). A partial least squares latent variable modeling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic mail emotion/adoption study. *Information Systems Research*, 14, 189–217.
- Cleland, J., Pajo, K., & Toulson, P. (2000). Move it or lose it: An examination of the evolving role of the human resource professional in New Zealand. *International Journal of Human Resource Management*, 11, 143–160.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Collins, C. J., & Clark, K. D. (2003). Strategic human resource practices, top management team social networks, and firm performance: The role of human resource practices in creating organizational competitive advantage. *Academy of Management Journal*, 46, 740–751.
- Conner, J., & Ulrich, D. (1996). Human resource roles: Creating value, not rhetoric. *Human Resource Planning*, 19, 38–51.
- Coopey, J., Keegan, O., & Emler, N. (1998). Managers’ innovations and the structuration of organizations. *Journal of Management Studies*, 35, 263–284.

- Crampton, S. M., & Wagner, J. A. (1994). Percept-percept inflation in microorganizational research: An investigation of prevalence and effect. *Journal of Applied Psychology*, 79, 67–76.
- Currie, G., & Procter, S. (2001). Exploring the relationship between HR and middle managers. *Human Resource Management Journal*, 11(3), 53–69.
- DeCieri, H., Kramar, R., Noe, R., Hollenbeck, J., Gerhart, B., & Wright, P. (2008). *Human resource management in Australia*. Sydney, Australia: McGraw-Hill Irwin.
- Delery, J. E. (1998). Issues of fit in strategic human resource management: Implications for research. *Human Resource Management Review*, 8, 289–310.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal*, 39, 802–835.
- Dessler, G. (2001). *A framework for human resource management*. Upper Saddle River, NJ: Prentice-Hall.
- Dessler, G., Griffiths, J., & Lloyd-Walker, B. (2007). *Human resource management*. Frenchs Forest, Australia: Pearson Education Australia.
- Doty, H. D., & Glick, W. H. (1998). Common methods bias: Does common methods variance really bias results? *Organizational Research Methods*, 1, 374–406.
- Dyer, L., & Reeves, T. (1995). Human resource strategies and firm performance: What do we know and where do we need to go? *International Journal of Human Resource Management*, 6, 656–670.
- Elsayed-Elkhouly, S., & Buda, R. (1997). A cross-cultural comparison of value systems of Egyptians, Americans, African and Arab executives. *International Journal of Commerce & Management*, 7, 102–120.
- Flood, P., Mkamwa, T., O'Regan, C., Guthrie, J., Liu, W., Armstrong, C., & MacCurtain, S. (2008). *New models of high performance work system: The business case for strategic HRM, partnership and diversity and equality system*. Dublin, Ireland: National Centre for Partnership and Performance.
- Fornell, C., & Bookstein, F. (1982). Two structural equations models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing Research*, 19, 440–452.
- Frost, P. J., & Egri, C. P. (1991). The political process of innovation. *Research in Organizational Behavior*, 13, 229–295.
- Galang, M. C., Elsik, W., & Russ, G. S. (1999). Legitimacy in human resources management. *Research in Personnel and Human Resources Management*, 17, 41–80.
- Gardner, T., & Wright, P. (2009). Implicit human resource management theory: A potential threat to the internal validity of human resource practices measures. *International Journal of Human Resource Management*, 20, 57–74.
- Gautam, D. K., & Davis, A. J. (2007). Integration and devolvement of human resource practices in Nepal. *Employee Relations*, 29, 711–726.
- Gerhart, B., Wright, P. M., Mahan, G. C., & Snell, S. A. (2000). Measurement error in research on human resources and firm performance: How much error is there and how does it influence effect size estimates? *Personnel Psychology*, 53, 803–834.
- Gooderham, P. N., Nordhaug, O., & Ringdal, K. (1999). Institutional and rational determinants of organizational practices: Human resource management in European firms. *Administrative Science Quarterly*, 44, 507–531.
- Guest, D., Conway, N., & Dewe, P. (2004). Using sequential tree analysis to search for bundles of HR practices. *Human Resource Management Journal*, 14(1), 79–96.
- Guest, D. E. (1997). Human resource management and performance: A review and research agenda. *International Human Resource Management*, 8, 263–276.
- Guest, D. E. (2001). Human resource management: When research confronts theory. *International Journal of Human Resource Management*, 12, 1092–1106.
- Guthrie, J. P. (2001). High-involvement work practices, turnover, and productivity: Evidence from New Zealand. *Academy of Management Journal*, 44, 180–190.
- Hailey, V., Farndale, E., & Truss, C. (2005). The HR department's role in organisational performance. *Human Resource Management Journal*, 15(3), 49–66.
- Hair, J. F., Anderson, R., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis*. Upper Saddle River, NJ: Prentice Hall.
- Harris, L., Doughty, D., & Kirk, S. (2002). The devolution of HR responsibilities—Perspectives from the UK's public sector. *Journal of European Industrial Training*, 26, 218–229.
- Harrison, D. A., McLaughlin, M. E., & Coalter, T. M. (1996). Context, cognition, and common method variance: Psychometric and verbal protocol evidence. *Organizational Behavior and Human Decision Processes*, 68, 246–261.

- Hinkin, T. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, 21, 967–988.
- Howell, J. M., & Higgins, C. A. (1990). Champions of technological innovation. *Administrative Science Quarterly*, 35, 317–341.
- Hox, J. (2002). *Multilevel analysis: Techniques and applications*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Huang, T.-C. (2000). Are the human resource practices of effective firms distinctly different from those of poorly performing ones? Evidence from Taiwanese enterprises. *International Journal of Human Resource Management*, 11, 436–451.
- Huang, T.-C. (2001). The effects of linkage between business and human resource management strategies. *Personnel Review*, 30, 132–151.
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38, 635–672.
- Huselid, M. A., & Becker, B. E. (2000). Comment on measurement error in research on human resources and firm performance: How much error is there and how does it influence effect size estimates. *Personnel Psychology*, 53, 835–854.
- Jennings, P. D. (1994). Viewing macro HRM from without: Political and institutional perspectives. *Research in Personnel and Human Resources Management*, 12, 1–40.
- Kane, R. L. (1994). Perceptions of human resource management effectiveness. Presented at the Fourth Conference on International Human Resource Management. Gold Coast, Australia.
- Kanter, R. M. (1983). *The change masters: Innovation for productivity in American corporations*. New York, NY: Simon & Schuster.
- Kanter, R. M. (1988). When a thousand flowers bloom: Structural, collective, and social conditions for innovation in organization. *Research in Organizational Behavior*, 10, 169–211.
- Katou, A. A., & Budhwar, P. S. (2010). Causal relationship between HRM policies and organizational performance: Evidence from the Greek manufacturing sector. *European Management Journal*, 28, 25–39.
- Kenny, D. A., Kashy, D. A., & Bolger, N. (1998). Data analysis in social psychology. In D. T. Gilbert & S. T. Fiske (Eds.), *Handbook of social psychology* (4th ed., pp. 233–265). New York, NY: McGraw-Hill.
- Ketkar, S., & Sett, P. K. (2009). HR flexibility and firm performance: Analysis of a multi-level causal model. *International Journal of Human Resource Management*, 20, 1009–1038.
- Kline, R. (2005). *Principles and practice of structural equation modeling*. New York, NY: The Guilford Press.
- Kulik, C. T., & Bainbridge, H. T. J. (2006). HR and the line: The distribution of HR activities in Australian organisations. *Asia Pacific Journal of Human Resources*, 44, 240–256.
- Larsen, H., & Brewster, C. (2003). Line management responsibility for HRM: What is happening in Europe? *Employee Relations*, 25, 228–244.
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86, 114–121.
- Macky, K., & Boxall, P. (2008). High-involvement work processes, work intensification and employee well-being: A study of New Zealand worker experiences. *Asia Pacific Journal of Human Resources*, 46, 38–55.
- Majchrzak, A., Beath, C., Lim, R. A., & Chin, W. W. (2005). Managing client dialogues during information systems design to facilitate client learning. *MIS Quarterly*, 29, 653–672.
- Marks, M., Mirvis, P., Hackett, E., & Grady, J. (1986). Employee participation in a quality circle program: Impact on quality of work life, productivity, and absenteeism. *Journal of Applied Psychology*, 71, 61–69.
- McClelland, G., & Judd, C. M. (1993). Statistical difficulties of detecting interactions and moderator effects. *Psychological Bulletin*, 114, 376–390.
- Namazie, P. (2003). Factors affecting the transferability of HRM practices in joint ventures based in Iran. *Career Development International*, 8, 357–366.
- Papalexandris, N., & Panayotopoulou, L. (2005). Exploring the partnership between line managers and HRM in Greece. *Journal of European Industrial Training*, 29, 281–291.
- Perry, E., & Kulik, C. (2008). The devolution of HR to the line: Implications for perceptions of people management effectiveness. *International Journal of Human Resource Management*, 19, 262–273.
- Pfeffer, J. (1994). *Competitive advantage through people: Unleashing the power of the work force*. Boston, MA: Harvard Business School Press.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903.

- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12, 531–544.
- Preacher, K., Rucker, D., & Hayes, A. (2007). Addressing moderated mediation hypotheses: Theory, methods and prescriptions. *Multivariate Behavioral Research*, 42, 185–227.
- Priestland, A., & Hanig, R. (2005). Developing first-level leaders. *Harvard Business Review*, 83(6), 113–120.
- Raub, S., Alvarez, L., & Khanna, R. (2006). The different roles of corporate and unit level human resources managers in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 18, 135–144.
- Renwick, D. (2003). Line manager involvement in HRM: An inside view. *Employee Relations*, 25, 262–280.
- Richardson, H. A., Simmering, M. J., & Sturman, M. C. (2009). A tale of three perspectives. *Organizational Research Methods*, 12, 762–800.
- Ruel, H. J. M., Bondarouk, T. V., & Van der Velde, M. (2007). The contribution of e-HRM to HRM effectiveness: Results from a quantitative study in a Dutch ministry. *Employee Relations*, 29, 280–291.
- Russ, G. S., Galang, M. C., & Ferris, G. R. (1998). Power and influence of the human resources function through boundary spanning and information management. *Human Resource Management Review*, 8, 125–148.
- Schriesheim, C. A., & DeNisi, A. S. (1981). Task dimensions as moderators of the effects of instrumental leadership: A two-sample replicated test of path-goal leadership theory. *Journal of Applied Psychology*, 66, 589–597.
- Sheehan, C. (2005). A model for HRM strategic integration. *Personnel Review*, 34, 192–209.
- Shih, H. A., Chiang, Y. H., & Hsu, C. C. (2006). Can high performance work systems really lead to better performance? *International Journal of Manpower*, 27, 741–763.
- Snell, S., & Dean, J. (1992). Integrated manufacturing and human resource management: A human capital perspective. *Academy of Management Journal*, 35, 467–504.
- Sosik, J., Kahai, S., & Piovosio, M. (2009). Silver bullet or voodoo statistics?: A primer for using the partial least squares data analytic technique in group and organization research. *Group and Organization Management*, 34, 5–36.
- Spector, P. E. (2006). Method variance in organizational research. *Organizational Research Methods*, 9, 221–232.
- Tayeb, M. (1997). Islamic revival in Asia and human resource management. *Employee Relations*, 19, 352–364.
- Thompson, B. (1997). The importance of structure coefficients in structural equation modeling confirmatory factor analysis. *Educational and Psychological Measurement*, 57, 5–19.
- Thornhill, A., & Saunders, M. N. K. (1998). What if line managers don't realize they're responsible for HR? *Personnel Review*, 27, 460–476.
- Tsai, C. J. (2006). High performance work systems and organizational performance: An empirical study of Taiwan's semiconductor design firms. *International Journal of Human Resource Management*, 17, 1512–1530.
- Ulrich, D. (1997). *Human resource champions: The next agenda for adding value and delivering results*. Boston, MA: Harvard Business School Press.
- Ulrich, D., & Brockbank, W. (2005). *The HR value proposition*. Boston, MA: Harvard Business School Press.
- Ulrich, D., & Lake, D. (1990). *Organizational capability: Competing from the inside out*. New York, NY: Wiley.
- Vandeberg, R. J., Richardson, H. A., & Eastman, L. J. (1999). The impact of high involvement work processes on organizational effectiveness: A second order latent variable approach. *Group & Organization Management*, 24, 300–339.
- Voermans, M., & Veldhoven, M. V. (2007). Attitude towards e-HRM: An empirical study at Philips. *Personnel Review*, 36, 887–902.
- Walton, R. E., Allen, C., & Gaffney, M. (1987). *Innovating to compete: Lessons for diffusing and managing change in the workplace*. San Francisco, CA: Jossey-Bass.
- Way, S. A., Lepak, D. P., Fay, C. H., & Thacker, J. W. (2010). Contingent workers' impact on standard employee withdrawal behaviors: Does what you use them for matter? *Human Resource Management*, 49, 109–138.
- Whittaker, S., & Marchington, M. (2003). Devolving HR responsibility to the line: Threat, opportunity or partnership? *Employee Relations*, 25, 245–261.
- Wood, S., & De Menezes, L. (1998). High commitment management in the UK: Evidence from the workplace industrial relations survey, and employers' manpower and skills practices survey. *Human Relations*, 51, 485–515.
- Wright, P. M., Dunford, B. B., & Snell, S. A. (2001). Human resources and the resource based view of the firm. *Journal of Management*, 27, 701–721.
- Wright, P. M., & Haggerty, J. J. (2005). Missing variables in theories of strategic human resource management: Time, cause, and individuals. *Management Review*, 16, 164–173.

Wright, P. M., & Kehoe, R. R. (2008). Human resource practices and organizational commitment: A deeper understanding. *Asia Pacific Journal of Human Resources*, 46, 6–20.

Yaghi, A., Goodman, D., Holton, E., & Bates, R. (2008). Validation of the learning transfer system inventory: A study of supervisors in the public sector in

Jordan. *Human Resource Development Quarterly*, 19, 241–262.

Zhu, C., Cooper, B., De Cieri, H., Thomson, B., & Zhao, S. (2008). Devolvement of HR practices in transitional economies: Evidence from China. *International Journal of Human Resource Management*, 19, 840–855.