

The Impact of Human Resource Differentiation on Corporate Strategic and Financial Performance

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Abstract

Human resource (HR) differentiation refers to the degree to which an organization uses differential human resource management (HRM) treatments on different individuals or groups of employees. This study hypothesizes and tests a causal model in which HR differentiation enhances the strategic performance of HRM that then positively affects a firm's strategic and financial performance. We found that HR differentiation improves the strategic performance of HRM on top of the positive effects of high-performance work practices. Particularly, firms with a greater degree of HR differentiation reported a significantly higher strategic performance of their HRM systems. This positive relationship was moderated by the adoption of high-performance work practices, firm size, and environmental dynamism.

Keywords HR differentiation; strategic HRM; HR strategy; high-performance work practices

JEL: O15

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1. Introduction

HR differentiation refers to the degree to which an organization uses differential human resource management (HRM) treatments on different individuals or groups of employees. Proposed by Becker and Huselid (2006), the concept of HR differentiation emphasizes the importance of functional and strategic HR differentiation within firms. The essence of HR differentiation rests on the assumption that “some jobs are more valuable (strategic) than others” (Huselid & Becker, 2011). In other words, strategic employees are more “equal” than others because they make disproportionately higher contributions to their organizations. HR differentiation is built on Lepak and Snell’s (1999, 2002) concept of HRM architecture and it is a result of a differentiated HRM architecture, which refers to differential HRM treatments based on workforce or job heterogeneity (Becker & Huselid, 2006 & 2010; Becker, Huselid, & Beatty, 2009). Zhou and Hong (2008) conceptualized two approaches to differentiation: workforce-based and job-based. They argued that workforce-based differentiation, which builds upon a resource-based view of firms (e.g., Barney, 1991), is a bottom-up approach because it is a result of workforce heterogeneity. In contrast, job-based differentiation is a top-down approach that emphasizes the unique and inimitable strategic process of an organization. Whichever approach a firm chooses to use, HR differentiation aims to achieve the same goals: improving strategic and financial performance. There are several mechanisms by which HR differentiation can help create competitive advantages, including enabling firms to better allocate resources to improve their ability to attract and retain strategic employees. It can also enhance HRM flexibility in terms of nonstrategic employees, which provides a cost advantage to organizations and strengthens the organization’s strategic capability by more efficient investments in human capital. Theoretically, well-designed and well-implemented HR differentiation should enhance a firm’s strategic and financial performance.

The main distinction between HR differentiation and strategic HRM research is that most prior HRM research focuses on HR practices and performance outcomes between organizations. In contrast, HR differentiation centres on how HR practices differ among different employees within organizations. Therefore, HR differentiation provides insights to “the substantial differences in HR management ‘quality’ across firms” and why organizations exhibit significant differences in the “HRM strength” (Bowen & Ostroff, 2004; Ostroff & Bowen, 2016) since organizations employing the same set of high-performance work practices (HPWPs) can differ significantly in the implementation these HRM practices on different individual or groups of employees within organizations.

Despite theoretical advancements in the concept HR differentiation, few empirical studies have measured HR differentiation and tested its impact systematically. This study aims to explore the relationship between HR differentiation and a firm’s financial performance. It also aims to enhance our understanding of the variability in the “quality” and “strength” of HRM systems across organizations. We propose and test a moderated mediation model explaining the relationship between HR differentiation and a firm’s financial performance. Our results suggest that HR differentiation has a significant positive impact on both strategic and financial performance of organizations. HR differentiation does pay off, but the positive effect

is stronger for firms with more HPWPs and a greater number of employees that are engaged in more dynamic environments.

2. Theory and hypotheses

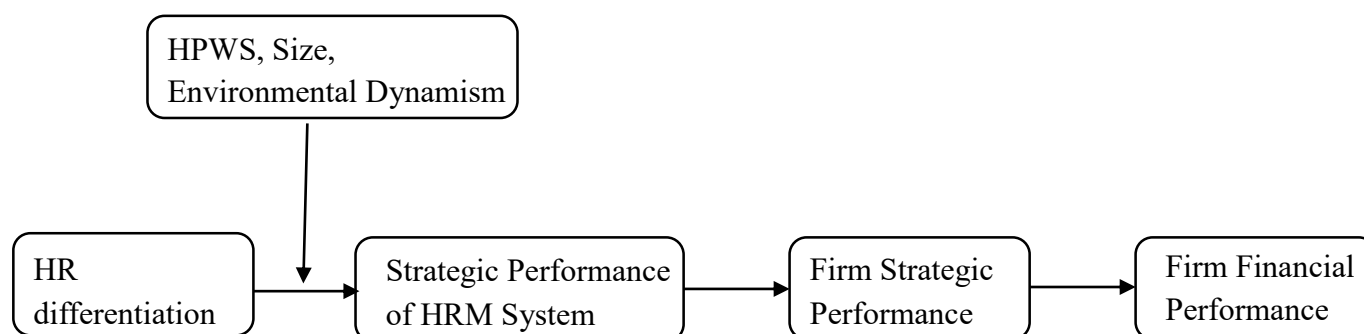
The concept of differentiated HRM is based on earlier studies of employee-organization relationship frameworks (Tsui, Pearce, Porter, & Tripoli, 1997) and concepts of HRM architectures (Lepak & Snell, 1999, 2002). Tsui and colleagues (1996) were among the first to conceptualize different employee-organization relationships, and they found that overinvestment or mutual investment relationships outperformed “quasi-spot contracts” (i.e., temporary) and underinvestment relationships. Lepak and Snell (1999) later conceptualized HRM architecture as having two dimensions: the value and the uniqueness of human capital. When both value and uniqueness of human capital are low, the employment mode is described as “contracting” and the HRM configuration is considered “compliance”. In contrast, when both value and uniqueness of human capital are high, the employment mode is “internal development” and the HRM configuration is “commitment”. They note that these employment modes should not be reduced to either/or distinctions because a variety of approaches to managing human capital can exist simultaneously. The value of a differentiated HRM architecture forms the theoretical basis of using HR differentiation.

Huselid and Becker (2011) built on this research and suggested that organizations should develop an architecture that differentiates between strategic employees who make disproportionate strategic contributions to the organization and nonstrategic employees who do not. Huselid and Becker (2011) found no clear distinction between strategic and nonstrategic jobs, and this paper supports this idea by suggesting that the level of strategic contribution made by different groups of employees can be conceptualized as a continuum. Drawing on Lepak and Snell’s (1999, 2002) work, we define strategic jobs as those that are valuable and unique. What this means will vary by industry, organization and even time. Drawing on the contingency perspective, we posit that a variety of environmental and organizational characteristics will influence a firm’s categorization of strategic and nonstrategic employees. It is important to note that HR differentiation processes do not all use the same criteria for identifying strategic versus nonstrategic employees, and some may recognize more than two different groups of employees. For example, Lepak, Taylor, Tekleab, Marrone and Cohen (2007) distinguished between core and support employees, and find that core employees’ exposure to high-investment HRM systems is significantly greater than that of the support employees in nonmanufacturing contexts. These binary conceptualizations of HR differentiation, whatever their terminology, remain highly simplified, and many organizations develop more complex HRM architectures to facilitate various types of HR differentiation. Zhou and Hong (2008), for example, considered two types of HR differentiation: job-based differentiation (which centres on the strategic contributions of jobs) and workforce-based differentiation (which focuses on workforce characteristics). This paper combines the two to consider not only HR differentiation that occurs between different jobs, but also those that occur between different employees in the same job.

This paper also examines how HR differentiation contributes to financial performance.

Recent meta-analytic studies have shown that HPWPs significantly impact various HR, operational and financial performances (e.g., Combs, Liu, Hall, & Ketchen, 2006; Jiang, Lepak, Hu & Baer, 2012). Furthermore, causal links have been found among HPWPs, human capital, motivation, HRM outcomes (e.g., employee satisfaction and turnover), operational outcomes (e.g., productivity and innovation) and financial performance (Becker & Huselid, 1998; Jiang et al., 2012; Subramony, 2009). Indeed, studies have repeatedly shown that the adoption of HPWPs is positively related to financial performance (e.g., Combs, Liu, Hall, & Ketchen, 2006; Delery & Doty, 1996) by enhancing an employee’s abilities, motivations and opportunities to contribute (Jiang, Lepak, Hu & Baer, 2012). Many scholars have called for increased focus on the strategic contribution of HRM systems (Lengnick-Hall, Lengnick-Hall, Andrad & Drake, 2009). However, this paper will control for HPWPs and focus instead on the strategic processes by which HR differentiation contributes to a firm’s financial success by creating strategic value for the organization. In other words, we will address the link between HR and performance from a strategic perspective. In Figure 1, the hypothesized links among HR differentiation, the strategic performance of HRM, the strategic performance of a firm and the financial performance of a firm is illustrated, as well as the moderating influence of HPWPs, firm size and environmental dynamism.

Figure 1. A conceptual framework on the strategic and financial impact of HR differentiation



2.1 Strategic performance of HRM

The resource-based view of firms suggests that physical resources, financial resources and human resources are three types of strategic resources that are valuable, rare and non-substitutable (Barney, 1991; Wernerfelt, 1984, 1995). Barney and Wright (1998) advanced this idea by suggesting that HRM systems, as opposed to single HRM practices, can make strategic contributions because they are able to create sustained competitive advantages by working as complex, interdependent systems that are difficult to imitate. This paper takes this a step further by suggesting that HR differentiation with respect to employees has positive and unique impacts on the strategic performance of HRM because it allows organizations to better integrate and use their internal resources to add greater strategic value to their HRM systems.

The positive impact of HR differentiation on the strategic performance of HRM can be created in several ways, including providing additional resources to better invest in strategic

jobs to enhance the attraction and retention of strategic employees. HR differentiation also helps organizations create a cost advantage by treating nonstrategic employees differently than strategic employees. The rationale behind this is that strategic employees create more value to organizations and nonstrategic employees are peripheral. Thus, providing different HRM treatments for these groups would better serve organizational goals by improving the efficiency and reward of resource allocation. Matusik and Hill (1998), for example, suggested that contingent workers serve as a source of competitive advantage because they lower costs, increase strategic flexibility and add valuable knowledge to organizations. By separating out contingent workers from standard employees, HR differentiation enhances the strategic and financial performance of organizations.

HR differentiation has been shown to create flexibility in the HRM system. By improving the HRM flexibility of organizations, this can be a source of dynamic capability that is a necessary condition for maintaining a competitive advantage (Eisenhardt & Martin, 2000; Teece and Pisano, 1994; Teece, Pisano, and Shuen, 1997). Drawing on the work of Sanchez (1995), Wright and Snell (1998) distinguished between resource flexibility and coordination flexibility in three respects: flexibility of HRM practices, employee skills and behavior. In other words, they see HRM flexibility as a multidimensional construct (Way, Tracey, Fay, Wright, Snell, Chang & Gong, 2012), which several studies have shown to be linked to financial performance (Ketkar & Sett, 2009, 2010; Bhattacharya, Gibson, & Doty, 2005). We argue that HR differentiation is an important source of HRM flexibility because it provides differential HRM treatments to different groups of employees instead of all employees. This means that organizations are more agile in their use of HRM practices. Furthermore, by strategically allocating resources to different employees, organizations can gain greater flexibility in employee skills and behaviors because a differentiated HRM structure better serves the various developmental and motivational needs of different employees.

In addition, we argue that HR differentiation can better serve the needs of employees. HR differentiation allows employees to select the HRM practices, such as benefits options, that best suit their interests, which leads to higher employee satisfaction. This has a positive impact on the strategic performance of HRM. Thus, HR differentiation enables organizations to benefit from higher value-add by strategic employees, as well as from greater cost advantages and flexibility compared to nonstrategic employees.

Drawing on a resource-based view of firms, we argue that developing a differentiated HRM architecture can serve as a key strategic capability for organizations because these value-creating, complex social structures tend to be difficult to imitate. Furthermore, HR differentiation helps organizations strategize and concentrate resources on the most valuable employees, and these employees are likely to possess rare and unique skills that are difficult for competitors to acquire. Colbert (2004) extends this resource-based view to suggest that HRM systems are complex, interactive, living social systems that follow complexity principles and can be integrated into HRM architectures. HR differentiation can also be explained by a complex, resource-based view (Colbert, 2014), which will provide a competitive advantage to an HRM system. Because HR differentiation represents the strategic processes that allow HRM

architecture to become differentiated, it provides multiple HRM sub-systems to individuals and groups of employees. Consequently, HR differentiation leads to more complex HR architectures and substantially reduces the ability of competitors to imitate the HR system. This makes HR systems a unique source of sustained competitive advantage for a firm as a result of causal ambiguity and path dependency (Becker & Gerhart, 1996)

H1. HR differentiation is positively related to the strategic performance of HRM.

2.2 Moderators of HR differentiation

The contingency perspective of strategic HRM (Miles & Snow, 1984; Schuler & Jackson, 1987) suggests that in order to be effective, organizations should match both internal and external contingencies. Toh, Morgeson and Campion (2008) found that HRM practices could be bundled into five categories: cost minimizers, contingent motivators, competitive motivators, resource makers and commitment maximizers. They argued that this would ensure a good fit between HRM systems and the values and structures of their organizations. Although this and other research have linked HRM to performance, there are still considerable differences in HRM management quality across organizations (Becker, Huselid, & Beatty, 2009). One of the reasons for this may be the lack of studies examining internal contingencies, specifically the differential HRM treatment across different groups of employees within organizations. This is an important gap in the field because internal HR differentiation can influence the performance impact of HPWPs.

The positive effects of HR differentiation can be influenced by a number of organizational and environmental factors. It is well-established that HPWPs have a positive impact on a variety of HR, operational and financial outcomes. Firms with more HPWPs generally see higher strategic performance outcomes from their HRM system because these systems are difficult to imitate and are more likely to create strategic value (e.g., flexibility). Organizations with sophisticated HRM systems are more likely to be successful in their use of HR differentiation because well-developed HPWPs are needed to identify strategic and nonstrategic jobs using either a job-based or a workforce-based differentiation approach, as well as to conduct HR differentiation. Thus, it is expected that the relationship between HR differentiation and the strategic performance of HRM will be positive for firms with a greater number of HPWPs.

Firm size is another important variable in the HR-performance relationship because firm size is a key determinant of an organization's choice of HRM practices (Guthrie 2001; Huang & Verma, 2016) and the development of HRM architecture. It is expected that HR differentiation will be more effective in larger organizations for several reasons. A greater number of employees creates an economy of scale for implementing differential HRM treatments and also allows for increased HR differentiation alternatives. This means that firms have an increased chance of achieving effective HR differentiation. In addition, the negative aspects of HR differentiation, including potential justice issues and administrative cost concerns, are more likely to be mitigated in larger organizations.

Environmental dynamism is a third factor that can significantly influence the impact of HRM systems. Datta, Guthrie and Wright (2005) found that the impact of HPWPs on labor productivity is stronger in more dynamic industries, possibly because these firms face changing and uncertain environments, which requires greater flexibility than firms in stable and predictable environments. Lepak, Takeuchi and Snell (2003) argued that environmental dynamism moderates the relationship between the employment mode and financial performance because employees in dynamic environments have greater task flexibility and, thus, create more value for organizations. Providing flexibility in an HRM system is a central feature of HR differentiation. Its effect is likely to be more pronounced in dynamic environments than in predictable and stable environments because there is more need for flexibility. Thus, it is expected that the strategic impact of HR differentiation will be more pronounced in more dynamic environments.

H2a. HPWPs moderate the positive relationship between HR differentiation and the strategic performance of HRM such that the relationship is more positive when the number of HPWPs is high.

H2b. Firm size moderates the positive relationship between HR differentiation and strategic performance of HRM such that the relationship is more positive when firm size is high.

H2c. Environmental dynamism moderates the positive relationship between HR differentiation and the strategic performance of HRM such that the relationship is more positive when environmental dynamism is high.

2.3 Corporate strategic performance

The strategic performance of organizations can be manifested in several ways, such as gaining competitive advantages, greater market share or being more successful than competitors (Schilke, 2014). A resource-based view of the firm (Barney, 1991, 1995; Wernerfelt, 1984) suggests that organizations can develop internal resources to create valuable, rare and inimitable competencies, and Becker and Gerhart (1996) argued that HRM can serve as an organization's unique source of sustained competitive advantage because of causal ambiguity and path dependence. In addition to the positive impact of HPWPs on a firm's strategic performance, HR differentiation can be a significant source of value creation because it allocates internal resources to enhance the strategic performance of HRM. Thus, it is expected that there will be a positive relationship between HR differentiation, the strategic performance of HRM and a firm's strategic performance.

H3a. HR differentiation is positively related to firm strategic performance.

H3b. The strategic performance of an HRM mediates the positive relationship between HR differentiation and firm strategic performance.

2.4 Corporate financial performance

In a resource-based view, the strategic performance of a firm's HRM system offers a competitive advantage and, consequently, positively influences the firm's financial performance. The strategic HRM literature has established that the adoption of a set of HPWPs is related to superior HR, operational and financial outcomes. Crook, Ketchen, Combs and Todd's (2008) meta-analysis of more than 29,000 organizations in 125 studies found that 22% of the variance in a firm's performance could be explained by strategic resources. Because an HRM system serves as an integral part of a firm's strategic resources, we expect that the strategic performance of HRM positively related to a firm's strategic performance, which will then influence a firm's financial performance.

H4a. The strategic performance of HRM is positively related to a firm's financial performance.

H4b. The strategic performance of a firm mediates the positive relationship between the strategic performance of HRM and a firm's financial performance.

3. Methods

3.1 Sample

Our study sample contained 240 enterprises in 27 cities in China. One of the authors collected data in 2015. The survey respondents were general managers (87%) and HRM managers or directors (13%). The average tenure in their current job was 5.8 years. Respondents were asked to complete a survey using one of three methods: (1) a paper survey, (2) an online survey distributed via e-mail, and (3) a mobile survey using the smartphone application WeChat. In total, 250 surveys were distributed using these three methods, and 240 respondents completed the survey (response rate of 96%). Specifically, 15 surveys were collected on paper, eight online (through e-mail), and 217 through the WeChat mobile survey application.

3.2 Measures

This section offers a brief summary of the measures. Participants were asked to rate the following variables on a 7-point scale (1 = strongly disagree, 7= strongly agree). The variable definitions are tabulated in the Appendix Table 1.

3.2.1 Independent variables

Building on the work of Huselid and Becker (2011) and Sun, Aryee and Law (2007), we developed an index for HR differentiation using six items on scale of 1 to 7 ($\alpha=0.90$). Questions included the following: "We use different HRM practices on groups of employees (e.g., administrative support, marketing, sales and production workers)" and "Our HRM system differentiates between core and support employees".

3.2.2 Mediators

We also developed an index for strategic performance of HRM, which was the mean of four items on a scale of 1 to 7 ($\alpha=0.80$). Questions included the following: “Our HRM system cannot be easily imitated by our competitors”. The firm’s strategic performance index was adapted from Schilke (2014). It was based on three items on a scale of 1 to 7 ($\alpha =0.89$).

3.2.3 Dependent variables

The firm’s financial performance index measured return on investment (ROI). It determined whether the firm’s ROI was consistently above the industry average on a scale of 1 to 7.

3.2.4 Moderators

The HPWPs index was adapted from Sun, Aryee and Law (2007), Becker and Huselid (2011) and Lepak, Taylor, Teklleab, Marrone and Cohen (2007). It was the average of eight items on a scale of 1 to 7 ($\alpha=0.90$). The firm size was calculated by the natural logarithm of the number of employees (Datta et al., 2005; Huselid, 1995; Koch & McGrath, 1996), and the environmental dynamism index was adapted from Schilke (2014), which consisted of an average of five items on a scale of 1 to 7 ($\alpha=0.82$). Questions included the following: “Environmental changes in our industry are unpredictable” and “Marketing practices in our industry are constantly changing”.

3.2.5 Control variables

We included several control variables to account for organizational characteristics. Union presence was a dichotomous variable denoting whether a union was present in the firm. Firm age was the number of years since the organization opened. Industry was one of three categories: manufacturing, service and other industries. Firm ownership was operationalized as a set of four variables: privately-owned enterprises (POE), state-owned enterprises (SOE), foreign-owned enterprises or joint ventures (FOE) and Hong Kong, Macau or Taiwan-owned enterprises or joint ventures (HMTOE). Four dummy variables were created to represent firm locations and these were categorized into four groups: Beijing and surrounding cities, Shandong province, Guangdong province and Shanghai and surrounding cities.

5. Results

5.1 Descriptive statistics and bivariate correlations

Table 1 presents the means, standard deviations and bivariate correlations for the variables. The average enterprise size was 16,158 people, and 85 percent of the enterprises had 100 or more employees. The number of firms in manufacturing, service and other industries were 78, 73 and 89, respectively. Of these, 173 enterprises were unionized.

Table 1. Descriptive statistics and bivariate correlations for variables ^a

Variable	Mean	SD	1	2	3	4	5	6	7	8	9
1. HPWPs	4.71	1.2									
2. HR differentiation	4.64	1.29	0.78*								
3. Strategic performance of HRM	3.98	1.33	0.70*	0.65*							
4. Firm strategic performance	4.48	1.44	0.62*	0.56*	0.70*						
5. ROI	4.5	1.51	0.50*	0.49*	0.51*	0.59*					
6. Firm size	7.11	2.42	0.23*	0.14*	0.18*	0.28*	0.19*				
7. Environmental dynamism	4.69	1.21	0.45*	0.36*	0.42*	0.31*	0.26*	0.01			
8. Union presence	0.72	0.45	0.11	-0.03	0.04	0.02	0.08	0.43*	-0.06		
9. Age	23.84	23.51	0.02	-0.02	-0.05	0.00	-0.05	0.36*	-0.08	0.27*	
10. Manufacturing	0.33	0.47	0.11	0.19*	0.22*	0.14*	0.06	0.23*	-0.01	0.19*	0.13*
11. Service	0.3	0.46	-0.15*	-0.16*	-0.24*	-0.19*	-0.06	-0.10	-0.11	-0.01	-0.06
12. Other industries	0.37	0.48	0.03	-0.03	0.01	0.04	0.00	-0.13*	0.12	-0.18*	-0.06
13. POE	0.38	0.49	-0.03	0.12	0.02	0.07	-0.01	-0.38*	0.01	-0.47*	-0.32*
14. FOE	0.22	0.41	0.18*	0.09	0.18*	0.11	0.16*	0.25*	0.14*	0.08	0.20*
15. HMTOE	0.04	0.19	-0.02	-0.02	0.03	0.04	-0.07	0.00	-0.05	-0.02	-0.05
16. SOE	0.37	0.48	-0.11	-0.20*	-0.19*	-0.17*	-0.1	0.17*	-0.11	0.42*	0.17*
17. Beijing	0.30	0.46	-0.11	-0.12	0.03	-0.05	-0.09	-0.05	-0.13*	-0.02	-0.13*
18. Shandong	0.09	0.29	-0.09	-0.01	-0.04	-0.01	-0.09	-0.20*	0.06	-0.16*	-0.02
19. Guangdong	0.55	0.50	0.10	0.10	-0.04	-0.02	0.06	0.07	0.03	0.12	-0.02
20. Shanghai	0.07	0.25	0.10	0.04	0.07	0.14*	0.13*	0.19*	0.12	-0.02	0.30*

N=240; * p<0.05

^a Natural logarithm of the number of employees

Table 1.
(continued)

Variable	10	11	12	13	14	15	16	17	18	19
1. HPWPs										
2. HR differentiation										
3. Strategic performance of HRM										
4. Firm strategic performance										
5. ROI										
6. Firm size										
7. Environmental dynamism										
8. Union presence										
9. Age										
10. Manufacturing										
11. Service	-0.46*									
12. Other industries	-0.53*	-0.51*								
13. POE	-0.12	-0.07	0.18*							
14. FOE	0.39*	-0.22*	-0.17*	-0.41*						
15. HMTOE	0.05	0.01	-0.06	-0.15*	-0.10					
16. SOE	-0.23*	0.25*	-0.01	-0.59*	-0.40*	-0.15*				
17. Beijing	-0.14*	0.03	0.11	0.1	-0.16*	0.16*	-0.02			
18. Shandong	0.03	0.01	-0.03	0.14*	-0.1	0.01	-0.06	-0.21*		
19. Guangdong	0.11	-0.02	-0.1	-0.12	0.03	-0.13*	0.14*	-0.71*	-0.35*	
20. Shanghai	-0.01	-0.03	0.04	-0.11	0.35*	-0.05	-0.17*	-0.17*	-0.08	-0.29*

5.2 Multivariate analyses

Three sets of multivariate regressions were conducted to test the moderated mediation model depicted in Figure 1. Table 2 presents the regression results for the strategic performances of the HRM systems. Model 1 includes all control variables and HPWPs, which showed a significantly positive impact on the strategic performance of HRM ($p < .001$). As shown in Model 2, HR differentiation positively the strategic performance of HRM ($p < .05$). Hypothesis 1 is supported.

Table 2. Predictors of strategic performance of HRM^a

	Model 1	Model 2	Model 3	Model 4	Model 5
HPWPs	0.68*** (0.06)	0.47*** (0.09)	0.23 (0.14)	0.47*** (0.08)	0.47*** (0.08)
HR differentiation		0.25** (0.08)	0.01 (0.14)	-0.2 (0.15)	-0.01 (0.16)
Firm size	0.03 (0.03)	0.02 (0.03)	0.02 (0.03)	-0.30** (0.10)	0.02 (0.03)
Environmental dynamism	0.16** (0.06)	0.16** (0.06)	0.13* (0.06)	0.12* (0.06)	-0.1 (0.15)
Interaction terms					
HPWPs x HR differentiation			0.06* (0.03)		
Size x HR differentiation				0.07*** (0.02)	
ED x HR differentiation					0.06 ⁺ (0.03)
Control variables					
Union presence	-0.04 (0.17)	0.03 (0.16)	0.01 (0.16)	0.00 (0.16)	0.00 (0.16)
Firm age	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Service	-0.56** (0.17)	-0.47** (0.17)	-0.50** (0.17)	-0.42* (0.17)	-0.48** (0.17)
Other industries	-0.38* (0.16)	-0.27 ⁺ (0.16)	-0.29 ⁺ (0.16)	-0.26 ⁺ (0.16)	-0.25 (0.16)
FOE	-0.02 (0.19)	0.10 (0.19)	0.07 (0.19)	0.08 (0.19)	0.10 (0.19)
HMTOE	0.06 (0.33)	0.12 (0.32)	0.13 (0.32)	0.24 (0.31)	0.12 (0.32)
SOE	-0.13 (0.17)	-0.06 (0.17)	-0.05 (0.17)	-0.08 (0.16)	-0.07 (0.17)
Shandong	-0.22	-0.27	-0.26	-0.29	-0.28

	(0.23)	(0.23)	(0.23)	(0.22)	(0.23)
Guangdong	-0.40**	-0.43**	-0.42**	-0.35**	-0.45**
	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
Shanghai	-0.28	-0.29	-0.24	-0.17	-0.31
	(0.29)	(0.28)	(0.28)	(0.28)	(0.28)
Constant	0.57	0.29	1.40*	2.51***	1.53*
	(0.36)	(0.36)	(0.64)	(0.73)	(0.77)
R ²	0.56	0.58	0.58	0.60	0.58
Adjusted R ²	0.53	0.55	0.56	0.57	0.55

^a Unstandardized coefficients are reported; the figures in parentheses are standard errors.

N=240 for all models. +p<.10; * p<0.05; ** p<0.01; *** p<0.001.

The interaction terms between HR differentiation and three moderators—HPWPs (p<0.05), firm size (p<0.001) and environmental dynamic (p<0.10)—were added independently in Models 3–5. Hypotheses 2a, 2b and 2c are supported. See Figures 2.1–2.3 for plots of the interaction effects.

Figure 2.1. The moderation of HPWPs on the relationship between HR differentiation and strategic performance of HRM

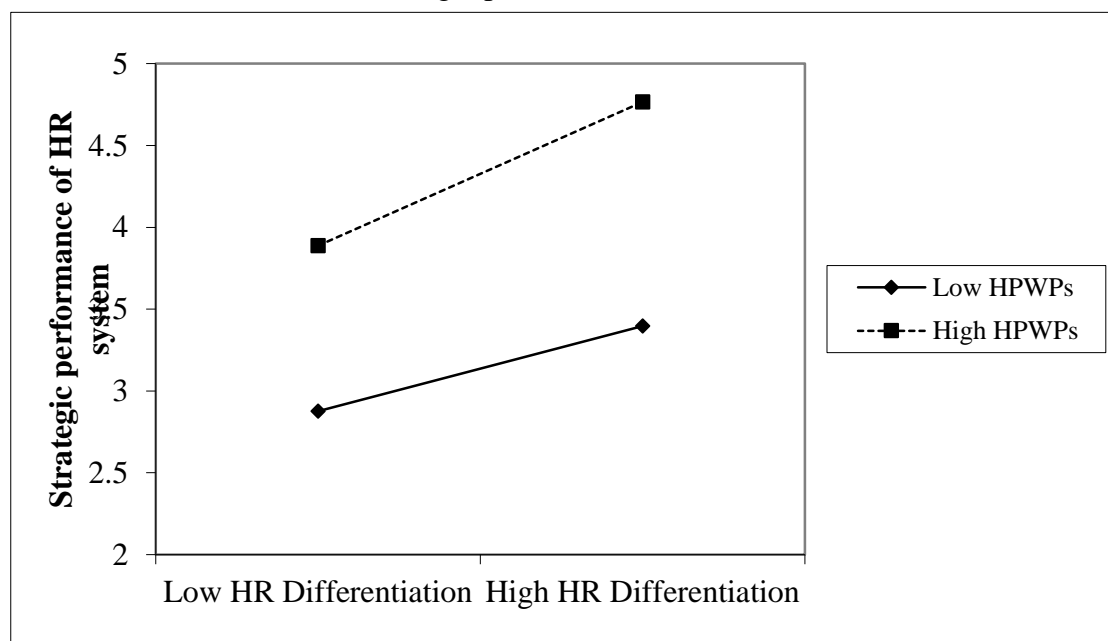


Figure 2.2. The moderation of firm size on the relationship between HR differentiation and strategic performance of HRM

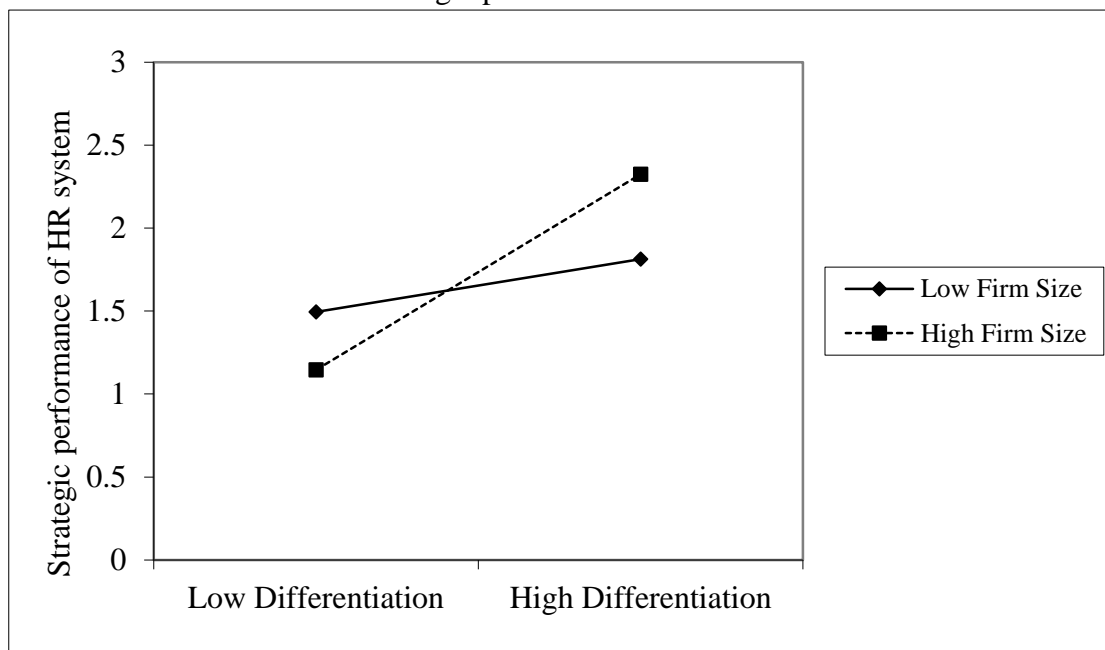


Figure 2.3. The moderation of environmental dynamism on the relationship between HR differentiation and strategic performance of HRM

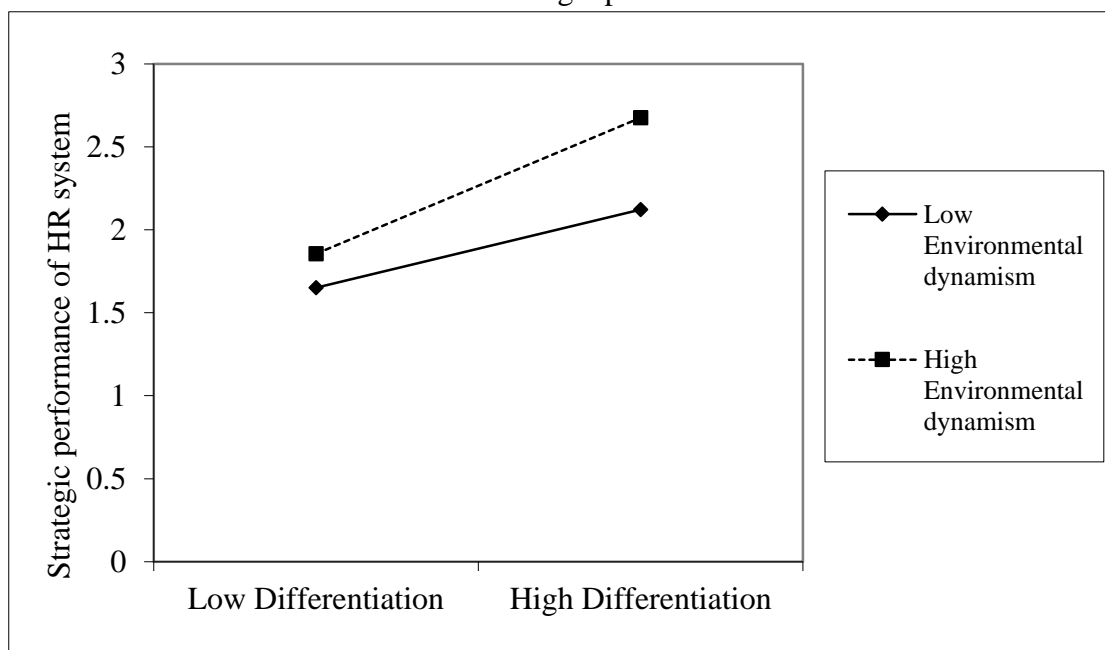


Table 3 shows the regression results for strategic performance. In Model 1, HPWPs is a significant predictor of a firm’s strategic performance ($p < 0.001$). HR differentiation was added to the regression in Model 2, and HR differentiation significantly related to strategic performance ($p < 0.10$). Hypothesis 3a is supported. The mediator (the strategic performance of HRM) was added in Model 3. In this model, the strategic performance of HRM was a significant determinant of a firm’s strategic performance ($p < 0.001$), and HR differentiation was no longer significant when compared to Model 2. Additional analyses based on Baron and

Kenny's (1986) casual steps method were conducted, and the results supported the mediation suggested by Hypothesis 3b.

Table 3. Predictors of firm strategic performance^a

	Model 1	Model 2	Model 3
HPWPs	0.66*** (0.07)	0.52*** (0.10)	0.26** (0.10)
HR differentiation		0.16 ⁺ (0.09)	0.02 (0.09)
Strategic performance of HRM			0.56*** (0.07)
Control variables			
Firm size	0.14*** (0.04)	0.14*** (0.04)	0.12*** (0.03)
Environmental dynamism	0.06 (0.07)	0.06 (0.07)	-0.03 (0.06)
Union presence	-0.15 (0.20)	-0.11 (0.20)	-0.13 (0.18)
Firm age	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Service	-0.29 (0.21)	-0.23 (0.21)	0.03 (0.19)
Other industries	-0.1 (0.19)	-0.04 (0.20)	0.11 (0.18)
FOE	-0.46* (0.23)	-0.38 (0.23)	-0.43* (0.21)
HMTOE	0.07 (0.39)	0.12 (0.39)	0.05 (0.35)
SOE	-0.39 ⁺ (0.20)	-0.34 (0.21)	-0.31 ⁺ (0.18)
Shandong	0.25 (0.28)	0.22 (0.28)	0.37 (0.25)
Guangdong	-0.08 (0.17)	-0.1 (0.17)	0.14 (0.15)
Shanghai	0.40 (0.35)	0.39 (0.35)	0.55 ⁺ (0.31)
Constant	0.69 (0.44)	0.51 (0.45)	0.35 (0.40)
R ²	0.45	0.45	0.57
Adjusted R ²	0.42	0.42	0.54

^a Unstandardized coefficients are reported; the figures in parentheses are standard errors. N=240 for all models.

⁺p<.10; * p<0.05; ** p<0.01; *** p<0.001

As shown in Table 4, HPWPs ($p < 0.001$) are a significant predictor of ROI in Model 1. In Model 2, HR differentiation ($p < 0.05$) is positively related to ROI. Thus, Hypothesis 4a is supported. Additional analyses using Baron and Kenny's (1986) casual steps method show that a firm's strategic performance is a significant mediator of the relationship between the strategic performance of HRM and ROI. Table 5 summarizes the hypothesized relationships and empirical findings of this study. Furthermore, robustness tests are conducted using bootstrapping procedures discussed by Hayes (2013). Results support the above-mentioned relationships.

Table 4. Predictors of ROI^a

	Model 1	Model 2	Model 3	Model 4
HPWPs	0.56*** (0.08)	0.28* (0.12)	0.12 (0.13)	0.01 (0.12)
HR differentiation		0.33** (0.11)	0.25* (0.11)	0.24* (0.10)
Strategic performance of HRM			0.33*** (0.09)	0.09 (0.10)
Firm strategic performance				0.44*** (0.08)
Control variables				
Firm size	0.07 (0.04)	0.06 (0.04)	0.05 (0.04)	0.00 (0.04)
Environmental dynamism	0.04 (0.08)	0.04 (0.08)	-0.02 (0.08)	0.00 (0.07)
Union presence	0.15 (0.24)	0.24 (0.24)	0.23 (0.23)	0.28 (0.22)
Firm age	-0.01 ⁺ (0.00)	-0.01 ⁺ (0.00)	-0.01 ⁺ (0.00)	-0.01 (0.00)
Service	0.13 (0.24)	0.25 (0.24)	0.41 ⁺ (0.24)	0.40 ⁺ (0.23)
Other industries	0.04 (0.23)	0.18 (0.23)	0.27 (0.23)	0.22 (0.22)
FOE	0.06 (0.27)	0.22 (0.27)	0.19 (0.27)	0.38 (0.25)
HMTOE	-0.47 (0.47)	-0.39 (0.46)	-0.43 (0.45)	-0.45 (0.42)
SOE	-0.21 (0.24)	-0.11 (0.24)	-0.09 (0.24)	0.04 (0.22)
Shandong	-0.03 (0.33)	-0.08 (0.33)	0.01 (0.32)	-0.16 (0.30)
Guangdong	0.10 (0.20)	0.06 (0.20)	0.20 (0.20)	0.14 (0.19)
Shanghai	0.56	0.55	0.65	0.4

	(0.42)	(0.41)	(0.40)	(0.38)
Constant	1.22*	0.85	0.75	0.6
	(0.52)	(0.53)	(0.51)	(0.48)
R ²	0.29	0.31	0.35	0.43
Adjusted R ²	0.25	0.27	0.31	0.39

^aUnstandardized coefficients are reported; the figures in parentheses are standard errors.

N=240 for all models. +p<.10; * p<0.05; ** p<0.01; *** p<0.001

Table 5. Summary of hypotheses and findings

Hypotheses	Hypothesized relationships	Empirical findings supported?
1	HR differentiation → Strategic performance of HRM	+ Yes
2	Moderators of the positive relationship in hypothesis 1	
2a	Number of HPWPs as a moderator	Yes
2b	Firm size as a moderator	Yes
2c	Environmental dynamism as a moderator	Yes
3a	HR differentiation → Firm strategic performance	+ Yes
3b	Strategic performance of HRM as a mediator	Yes
4a	Strategic performance of HRM → Firm financial performance	+ Yes
4b	Firm strategic performance as a mediator	Yes

6. Discussion and conclusions

Conceptually, HR differentiation can best impact firm performance if it is driven by and serves the firm's strategic goals. Therefore, HR differentiation with various differentiation degrees across and within different employee groups based on various reasons for differentiation (functional, strategic or both) jointly explain the high HR quality across firms. In addition, most previous strategic HRM research assumed that firm-level HR practices are applied consistently to different groups of employees, and the firm's HR practices towards their core employees were used as a proxy for their overall HR system. This approach often overlooks the complexity of firms' differentiated HR architecture. Organizations' differential treatments towards different workforce groups are often missing from the regression analysis. By focusing on the impact of HR differentiation on an organization's strategic and financial performance, this paper aims to address the conceptual and methodological limitations of prior strategic HRM studies.

The strategic HRM literature has established that the adoption of a set of HPWPs has a positive impact on corporate financial performance, which was shown in recent meta-analyses, such as that of Jiang, Lepak, Hu and Baer (2012). It remains unclear why some firms outperform counterparts that adopt similar HR practices. Wright and Nishii (2013) argued that one source of variability is attributed to the differences in the intended HR practices by HR managers, in addition to employee-perceived HR practices. Although previous research focused on employees' perceptions of HRM system strengths (Delmotte, Winne & Sels, 2012), few studies have examined the overall effects of HR differentiation, which is a higher-level construct. This study provides an explanation for the substantial variability in HR quality across firms. Our findings suggest that an organizations' implementation of HPWPs varies significantly across different individuals or groups of employees within organizations.

HR differentiation not only explains variability in HR quality with respect to the effects of HPWPs, but it also makes significant strategic and financial contributions to organizations

and improves the strategic performance of HRM on top of the positive effects of HPWPs. Thus, by developing differentiated HRM architectures to provide multiple HRM treatment alternatives based on the strategic contribution of jobs and the workforce, organizations can better allocate resources to achieve their goals. There are several ways in which HR differentiation enhances the overall strategic performance of HRM. First, HR differentiation means that more favourable and attractive HRM treatments can be offered to employees who are more strategically valuable to the organization. Second, differential HRM treatments for nonstrategic employees allows organizations to gain cost advantages. Third, by developing multiple HRM systems within an organization, HR differentiation improves a firm's overall HRM flexibility to better fit organizational and environmental contingencies. This allows the organization to remain agile in dynamic environments. Fourth, greater HRM flexibility generated by HR differentiation can be a source of dynamic capability. Fifth, following the guidelines of a resource-based view, HR differentiation (as a manifestation of a firm's complex HRM architecture) makes it valuable, rare and non-substitutable (i.e., difficult to imitate by competitors). Sixth, HR differentiation may better serve the unique needs of employees. Overall, differential HRM treatments may improve the utility of employees, which may positively influence employee behaviors. This may result in better performance and HRM outcomes.

Understanding HR differentiation helps explain differences in the amount of positive impacts of HPWPs across different organizations. Decades of theoretical and empirical research in the field of strategic HRM management has established that HPWPs is positively related to a variety of HR, operational, and financial outcomes of organizations. HPWPs can serve as a unique source of competitive advantage; however, such positive effects vary as the quality of implementation differs (Becker & Huselid, 2006). In this paper, we find that a firm's ability to treat their employees differently based on job or workforce heterogeneities creates strategic value to the organization and significantly enhances a firm's financial performance. HR differentiation helps organizations better attract and retain strategic employees and gain greater flexibility and cost advantages by differentiating nonstrategic employees. HR differentiation also allows organizations to develop unique HRM systems that are socially complex and firm-specific. This enhances strategic performance, which strengthens a firm's strategic and financial performance.

Although this study provides theoretical arguments and empirical support for the positive impact of HR differentiation on organizational strategic and financial performance, there are several limitations that need to be acknowledged. There are also some key variables that need to be examined in future studies. First, this study does not explore the determinants of HR differentiation. A firm's ability to implement a differentiated HRM architecture is often restricted by institutional and environmental factors, including unionization. Future research should examine how such factors influence the adoption of HR differentiation. Second, this study operationalizes HR differentiation as an overall index of differential HRM treatments between and within jobs. Future studies should explore the specific types of criteria that organizations use to conduct HR differentiation and investigate the effects of different types of HR differentiation. Third, future research should study the potential negative outcomes of HR

differentiation, such as the cost of administration or organizational injustice.

In conclusion, this paper contributes to the strategic HRM management field in three main ways. First, it shows that HPWPs and HR differentiation both significantly enhance the strategic performance of HRM. By focusing on strategically developing a differentiated HR architecture within an organization, firms can benefit from a positive financial impact, in addition to the positive impact of HPWPs. Notably, the positive impact of HR differentiation is greater for firms with complex HPWPs, a large number of employees, and those working in dynamic environments. Second, drawing on a resource-based view of firms, this study shows a causal link between HR differentiation and the strategic and financial performance of organizations. Overall, this empirical study on HR differentiation offers guidance to businesses and HRM managers for designing and implementing more differentiated and strategic HRM systems. The theoretical framework explaining the causal mechanisms of HR differentiation and a firm's financial performance helps advance strategic HRM management research by showing how HR differentiation can make organizations more strategic and profitable. Third, this paper developed and validated a scale for HR differentiation, which captures both functional and strategic differentiation. It also provides a scale for assessing the strategic performance of HR systems. These research efforts aim to enhance our understanding of the strategic processes by which HRM serves a firm's sustained competitive advantage via HR differentiation within organizations. Together, this paper offers an initial empirical basis for future research on HR differentiation. Future research examine the multi-level and multi-dimensional concept of HR differentiation with greater rigor and precision.

References

- Baron, R.M. and Kenny, D.A., 1986. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), p.1173.
- Barney, J., 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), pp.99-120.
- Barney, J.B., 1995. Looking inside for competitive advantage. *Academy of Management Perspectives*, 9(4), pp.49-61.
- Barney, J.B. and Wright, P.M., 1998. On becoming a strategic partner: The role of human resources in gaining competitive advantage. *Human Resource Management*, 37(1), 31.
- Becker, B. and Gerhart, B., 1996. The impact of human resource management on organizational performance: Progress and prospects. *Academy of Management Journal*, 39(4), pp.779-801.
- Becker, B.E., Huselid, M.A., Becker, B.E. and Huselid, M.A., 1998. High performance work systems and firm performance: A synthesis of research and managerial implications. In *Research in Personnel and Human Resource Management*, 16, pp.53-101.
- Becker, B.E. and Huselid, M.A., 2006. Strategic human resources management: where do we go from here? *Journal of Management*, 32(6), pp.898-925.
- Becker, B.E. and Huselid, M.A., 2010. SHRM and job design: Narrowing the divide. *Journal of Organizational Behavior*, 31(2/3), pp.379-388.
- Becker, B.E., Huselid, M.A. and Beatty, R.W., 2009. *The differentiated workforce: Translating talent into strategic impact*. Harvard Business Press.
- Bhattacharya, M., Gibson, D.E. and Doty, D.H., 2005. The effects of flexibility in employee skills, employee behaviors, and human resource practices on firm performance. *Journal of Management*, 31(4), pp.622-640.
- Bowen, D.E. and Ostroff, C., 2004. Understanding HRM–firm performance linkages: The role of the “strength” of the HRM system. *Academy of Management Review*, 29(2), pp.203-221.
- Colbert, B.A., 2004. The complex resource-based view: Implications for theory and practice in strategic human resource management. *Academy of Management Review*, 29(3), pp.341-358.
- Combs, J., Liu, Y., Hall, A. and Ketchen, D., 2006. How much do high - performance work practices matter? A meta - analysis of their effects on organizational performance. *Personnel Psychology*, 59(3), pp.501-528.
- Crook, T.R., Ketchen Jr, D.J., Combs, J.G. and Todd, S.Y., 2008. Strategic resources and performance: a meta - analysis. *Strategic Management Journal*, 29(11), pp.1141-1154.
- Delmotte, J., De Winne, S. and Sels, L., 2012. Toward an assessment of perceived HRM system strength: scale development and validation. *The International Journal of Human Resource Management*, 23(7), pp.1481-1506.
- Eisenhardt, K.M. and Martin, J.A., 2000. Dynamic capabilities: what are they? *Strategic Management Journal*, 21(10 - 11), pp.1105-1121.

- Guthrie, J.P., 2001. High-involvement work practices, turnover, and productivity: Evidence from New Zealand. *Academy of Management Journal*, 44(1), pp.180-190.
- Hayes, A.F., 2017. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. Guilford Publications.
- Huang, X. and Verma, A., 2018. Industry-and firm-level determinants of employment relations in China: a two-level analysis. *The International Journal of Human Resource Management*, 29(2), pp.399-419.
- Huselid, M.A., 1995. The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3), pp.635-672.
- Huselid, M.A. and Becker, B.E., 2011. Bridging micro and macro domains: Workforce differentiation and strategic human resource management, 37(2), pp.421-428.
- Jackson, S.E. and Schuler, R.S., 1995. Understanding human resource management in the context of organizations and their environments. *Annual Review of Psychology*, 46(1), pp.237-264.
- Jackson, S.E., Schuler, R.S. and Jiang, K., 2014. An aspirational framework for strategic human resource management. *The Academy of Management Annals*, 8(1), pp.1-56.
- Jiang, K., Lepak, D.P., Hu, J. and Baer, J.C., 2012. How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6), pp.1264-1294.
- Ketkar, S. and Sett, P.K., 2009. HR flexibility and firm performance: Analysis of a multi-level causal model. *The International Journal of Human Resource Management*, 20(5), pp.1009-1038.
- Ketkar, S. and Sett, P.K., 2010. Environmental dynamism, human resource flexibility, and firm performance: analysis of a multi-level causal model. *The International Journal of Human Resource Management*, 21(8), pp.1173-1206.
- Koch, M.J. and McGrath, R.G., 1996. Improving labor productivity: Human resource management policies do matter. *Strategic Management Journal*, 17(5), pp.335-354.
- Lengnick-Hall, M.L., Lengnick-Hall, C.A., Andrade, L.S. and Drake, B., 2009. Strategic human resource management: The evolution of the field. *Human Resource Management Review*, 19(2), pp.64-85.
- Lepak, David P., and Scott A. Snell. "The human resource architecture: Toward a theory of human capital allocation and development." *Academy of Management Review* 24, no. 1 (1999): 31-48.
- Lepak, D.P. and Snell, S.A., 2002. Examining the human resource architecture: The relationships among human capital, employment, and human resource configurations. *Journal of Management*, 28(4), pp.517-543.
- Lepak, D.P., Takeuchi, R. and Snell, S.A., 2003. Employment flexibility and firm performance: Examining the interaction effects of employment mode, environmental dynamism, and technological intensity. *Journal of Management*, 29(5), pp.681-703.
- Lepak, D.P., Taylor, M.S., Tekleab, A.G., Marrone, J.A. and Cohen, D.J., 2007. An examination of the use of high - investment human resource systems for core and support

- employees. *Human Resources Management*, 46(2), pp.223-246.
- Matusik, S.F. and Hill, C.W., 1998. The utilization of contingent work, knowledge creation, and competitive advantage. *Academy of Management Review*, 23(4), pp.680-697.
- Miles, R.E. and Snow, C.C., 1984. Designing strategic human resources systems. *Organizational Dynamics*, 13(1), pp.36-52.
- Ostroff, C. and Bowen, D.E., 2016. Reflections on the 2014 decade award: Is there strength in the construct of HR system strength? *Academy of Management Review*, 41(2), pp.196-214.
- Schilke, O., 2014. On the contingent value of dynamic capabilities for competitive advantage: The nonlinear moderating effect of environmental dynamism. *Strategic Management Journal*, 35(2), pp.179-203.
- Schuler, R.S. and Jackson, S.E., 1987. Linking competitive strategies with human resource management practices. *Academy of management perspectives*, 1(3), pp.207-219.
- Subramony, M., 2009. A meta - analytic investigation of the relationship between HRM bundles and firm performance. *Human Resource Management*, 48(5), pp.745-768.
- Teece, D. and Pisano, G., 2003. The dynamic capabilities of firms. In *Handbook on Knowledge Management* (pp. 195-213). Springer, Berlin, Heidelberg.
- Teece, D.J., Pisano, G. and Shuen, A., 1997. Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), pp.509-533.
- Toh, S.M., Morgeson, F.P. and Campion, M.A., 2008. Human resource configurations: investigating fit with the organizational context. *Journal of Applied Psychology*, 93(4), p.864.
- Tsui, A.S., Pearce, J.L., Porter, L.W. and Tripoli, A.M., 1997. Alternative approaches to the employee-organization relationship: does investment in employees pay off? *Academy of Management Journal*, 40(5), pp.1089-1121.
- Way, S.A., Tracey, J.B., Fay, C.H., Wright, P.M., Snell, S.A., Chang, S. and Gong, Y., 2015. Validation of a multidimensional HR flexibility measure. *Journal of Management*, 41(4), pp.1098-1131.
- Wernerfelt, B., 1995. The resource - based view of the firm: Ten years after. *Strategic Management Journal*, 16(3), pp.171-174.
- Wright, P.M. and Nishii, L.H., 2007. Strategic HRM and organizational behavior: Integrating multiple levels of analysis. *CAHRS Working Paper Series*, p.468.
- Wright, P.M. and Snell, S.A., 1998. Toward a unifying framework for exploring fit and flexibility in strategic human resource management. *Academy of Management Review*, 23(4), pp.756-772.
- Zhou, Y. and Hong, Y.I.N.G., 2008. A differentiation perspective of SHRM: strategic capabilities, configurations, and complementarities. In *Proceedings of the 2008 Annual Meeting of the Academy of Management (CD)*.