THREE ESSAYS ON THE IMPLEMENTATION OF HIGH PERFORMANCE WORK PRACTICES

A Dissertation

Presented to the Faculty of the Graduate School

of Cornell University

In Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

by

Michel Hermans

December 2018

THREE ESSAYS ON THE IMPLEMENTATION OF HIGH PERFORMANCE WORK PRACTICES

Michel Hermans, Ph. D.

Cornell University 2018

While a considerable body of research on the effects of high performance work practices (HPWPs) on organizational performance exists, we know only little about the factors that condition their implementation. Among the few studies that have been conducted on this topic, two perspectives can be identified. The first suggests that HPWPs implementation depends on decision making in organizations and the role of managers in executing those decisions. A second perspective attributes variation to contextual factors, such as the comparative institutional context or the industry the organization operates in.

This dissertation adds to our knowledge about the implementation of HPWPs as it considers both contextual and intra-organizational factors. The first study draws on a political perspective to address how the influence of the HR function on the organization's strategic decision making relates to HPWPs implementation. The second study examines the effects of HPWPs implementation in the context of organizational change and finds a moderating effect on the association between perceived organizational change intensity and voluntary employee turnover. Finally, in the third study I use multi-level analysis of ratings of HPWPs implementation, and simultaneously test the effects of comparative institutional context, industry,

organization and rater characteristics on individual-level ratings of HPWPs implementation.

BIOGRAPHICAL SKETCH

Michel Hermans is a Dutch native. He holds Bachelor and Master of Science degrees in Business Administration from the Rotterdam School of Management, Erasmus University in the Netherlands. He started his professional career at Price Waterhouse in the Corporate Finance practice in Amsterdam. He moved to Argentina for an Associated Researcher position in the Buenos Aires office of the United Nation's Economic Commission for Latin America and the Caribbean (UN-ECLAC) and was an internal Management Consultant for the Telecom Italia Group in Latin America.

Prior to enrolling in Cornell University's PhD program, Michel was a lecturer in the Department of Organizational Behavior and Human Resource Management at IAE Business School, in Argentina, where he taught in the MBA, EMBA, and Executive Education programs. Currently, Michel lives in Buenos Aires with his wife and two children.

To my family

ACKNOWLEDGMENTS

This dissertation has been in the making for a considerable amount of time. It would not have come to its final stage without the support and guidance I feel privileged to have received from many people. First and foremost, I would like to thank Rosemary Batt for being a mentor and a constant source of motivation and encouragement. As a graduate student I have learned a lot from you and hope to live up to your standards. At the personal level, I consider I have learned even more from our conversations. The very first --over the phone because I had not been able to make it to Ithaca because of a snow storm— convinced me to go to Cornell. My transfer to International and Comparative Labor studies, finding a balance between dissertation, family and professional concerns, and finishing this dissertation would not have happened without you being there for me, even at times when you needed to focus on yourself.

Second, I would like to thank my Special Committee members Pamela Tolbert and Thomas DiCicio for their guidance throughout my studies. From advice to take specific courses that could complement my research ideas to conversations about academic life, your input has been very important to me.

Third, there is the group of people and organizations that I would like to thank for their interest and support. Dave Ulrich and the staff at the RBL Group accepted me as a member of the research team in several rounds of the Human Resource Competency Study (HRCS). In this dissertation, I use the data obtained in the HRCS. Moreover, the encouragement to pursue a PhD and the feedback on my work are greatly appreciated. Alejandro Sioli at IAE Business School in Argentina deserves a

special mention. He has opened many doors on the way to Cornell and continues to be an inspiring source of support. Among the organizations that have contributed are IAE Business School, the Fulbright Commission and the Institute for International Education. Their financial and operational support have contributed to make this academic endeavor possible.

Finally, I would like to thank my wife, Laura, and children, Octavio and Bernardita, for accompanying me to Ithaca, for their patience and understanding. I hope we can share many more journeys together.

TABLE OF CONTENTS

LIST OF FIGURES

Essay 1:

Essay 2:

LIST OF TABLES

LIST OF ABBREVIATIONS

CEO	Chief Executive Officer
CFI	Comparative Fit Index
CME	Coordinated Market Economy
HME	Hierarchical Market Economy
HPWPs	High Performance Work Practices
HR function	Human Resource function
HRM	Human Resource Management
ICC	Intraclass Correlation
LME	Liberal Market Economy
RBV	Resource Based View
RMSEA	Root Mean Square Error of Approximation
TLI	Tucker-Lewis Index
TMT	Top Management Team

ESSAY 1: THE INFLUENCE OF THE HUMAN RESOURCE MANAGEMENT FUNCTION AND THE IMPLEMENTATION OF HIGH PERFORMANCE WORK PRACTICES

Introduction

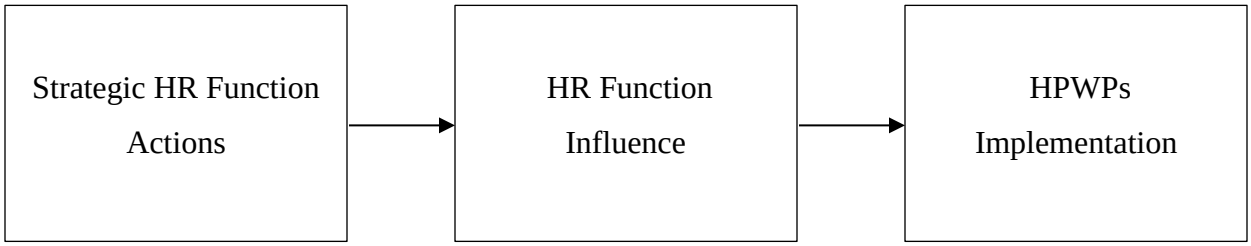
In contrast to claims that "our employees are our most important asset", the organizational department entrusted to manage those 'assets', the Personnel or Human Resource function, has historically been considered to have little influence on managerial decision making (Drucker, 1954; Guest & King, 2004; Legge, 1978; 2005; (Kaufman, 2014)). Its activities have been described as a 'hodgepodge' of 'necessary chores' (Drucker, 1954), and perceptions of the HR function only started to change with the emergence of a strategic approach to HRM. Fombrun et al. suggested that the "objective of injecting human resource management into the strategic arena is not to enhance the status of traditional personnel resource staff, but rather it is to alter the way managers set priorities and make decisions" (1984: 26).

Guest and King (2004) identified two developments that renewed researchers' interest in the influence of the HR function. First, a growing body of empirical evidence for HRM-performance linkages suggested that organizations can enhance their performance by implementing High Performance Work Practices (HPWPs) (Combs, Liu, Hall, & Ketchen, 2006; Wright, Gardner, Moynihan, & Allen, 2005). As organizations differ in the extent to which they implement HPWPs, scholars have called for research on the HR function and its ability to implement HPWPs (B. Becker & Gerhart, 1996). Second, the emergence of alternative models for the organization of work within the HR function emphasizing involvement in strategic decision making through Business Partner roles (Lawler, 2003; Mohrman & Lawler, 1997; Ulrich, 1996) increased research interest in the influence of the HR function and how to increase

it. Extant research relates factors such as HR professionalism (Elaine Farndale, 2005), board membership (Sheehan, Cooper, Holland, & Cieri, 2007), CEO and top management team attitudes towards HRM (Aldrich, Dietz, Clark, & Hamilton, 2015; Brandl & Pohler, 2010), and HR function legitimacy (Haggerty & Wright, 2010) to HR function influence and organizational contexts that are receptive to the implementation of HPWPs. However, many studies rely on a qualitative research design (Brandl & Pohler, 2010; Sheehan, De Cieri, Cooper, & Brooks, 2014), limit their scope to factors that increase HR function influence (e.g. Brandl & Pohler, 2010), or link HR function influence directly to organizational performance (Sheehan, Cooper, Holland, & De Cieri, 2007). A comprehensive examination of how the HR function can enhance its influence and whether such influence favors the implementation of HPWPs would integrate this incipient and fragmented stream of research.

In this study, I draw on political perspectives from organizational behavior and build on Ferris and Judge's definition of political influence as "the management of shared meaning by individuals, groups or organizations" (Ferris & Judge, 1991) 450). Political perspectives question the notion of shared overall goals in organizations and suggest that the implementation of HRM practices is conditioned by dynamics of power and political influence (Ferris, Galang, Thornton, & Wayne, 1995). I examine the effects of strategic HR function actions on the perceived influence of the HR function, and the relationship between HR function influence and the implementation of HPWPs. I posit that the influence of the HR function can be enhanced by developing strategic HR function actions, such as measuring the impact of HRM practices or interacting with the organization's board of Directors. To the extent that the HR function gains influence relative to other functions in the organization, it will be in a stronger position to implement of HPWPs. Figure 1 represents the model that will be tested.

Figure 1: Theoretical model of the study



This study makes several contributions to the SHRM literature. First, it builds on existing research that identifies strategic actions that professionals in the HR function can develop to create an organizational context that favors the implementation of HPWPs. Second, it addresses whether the HR function should strive to increase its influence relative to other functions of the corporation to be able to push for the implementation of HPWPs. Third, given the incipient stage of research on the influence of the HR function and its relationship to HPWPs implementation, most studies have used a qualitative research design. This study draws on survey data that was obtained in different institutional contexts, across different industries, and from multiple raters.

This paper is organized as follows. In the next section, I present the theoretical background for the study, drawing on political perspectives on organizational behavior to develop hypotheses. In the methods section I explain how I conducted our study and present the outcomes in the results section. Finally, I reflect on our findings and identify the implications for HRM research and practice.

Theory and Hypotheses

SHRM researchers have drawn on the resource based view (RBV) (Barney, 1991; Barney, Wright, & Ketchen, 2001) as a theoretical framework to explain the association between HPWPs and organizational performance (Delery, 1998). Firms develop unique HR systems in which HRM practices lead to the development of individual employees' knowledge, skills and abilities. Aggregation of individual level outcomes to the unit level explains the emergence of human capital that represents a valuable, rare, inimitable and non-substitutable organizational resource that can allow for competitive advantage (Ployhart, Van Iddekinge, & Mackenzie, 2011; Wright, Dunford, & Snell, 2001).

However, critiques that apply to the RBV in general are increasingly extended to the SHRM field. For example, Priem and Butler's (2001) observation that RBV theory needs a more precise specification of the type of resources that give organizations competitive advantage is mirrored in Coff's (1997) observation that persons have a free will and hence may not be managed the same way as other kinds of resources. Also, the RBV's failure to specify characteristics of the organizational context required for the deployment of resources (Kraaijenbrink, Spender and Groen 2010) has led scholars to identify boundary conditions under which employees with specific skills and abilities contribute to competitive advantage (Campbell, Coff, & Kryscynski, 2012). Finally, RBV theory ignores the influence of constituents who provide resources on how those resources are deployed (Coff, 1999). In the context of SHRM, such influence is relevant because investments in HRM practices require resources such as capital and managers' time. For example, the interests of different financial actors who provide capital condition the extent to which and how firms make investments in HRM practices (Liu, van Jaarsveld, Batt, & Frost, 2014). Taken together, these studies suggest that our

understanding of why and how organizations invest in their workforce –such as by implementing HPWPs—is at best incomplete. In particular, the organizational factors and the actors who drive the implementation of HPWPs need careful consideration.

The origin of RBV theory in economics and its assumption of managerial rationality (Barney, 1986; Makadok, 2001) limit its usefulness to explain differences between organizations in the implementation of HPWPs. The decision to adopt a set of HRM practices per se does not generate value until those practices are actually implemented within the organization (Wright, Dunford, et al., 2001). Therefore, HR managers need to evaluate under what conditions implementation occurs and what the consequences will be for the organization. This evaluation process involves rational actor behavior such as information-seeking, interpretation, comparison and projecting future conditions, but is also likely to be influenced by other individuals in the organization. HR managers need to interact with and gain support from decision makers in other functions of the organizations to gain support for the implementation of HPWPs. Instead of resulting from rational choice, as suggested by the RBV, the implementation of HPWPs involves features of a political process as well.

Organization theorists have suggested that political perspectives allow for more complete explanations of decision-making in organizations because they account for social processes beyond economic rationality (Mintzberg, 1983; Pfeffer, 1981). Consideration of the diversity of perspectives, competing interests, scarcity of resources, and power struggles characterize decision-making in organizations and --more specifically-- the implementation of organizational practices. At the individual level, members of organizations are assumed to pursue their own interests, whether they are personal or professional, and to actively influence events in the organization to achieve their goals (Pfeffer, 1981). However, aggregation of influencing

strategies of individual members of an organizational unit does not suffice to explain power and influence at the sub-unit level. Among the more accepted theories for explaining sub-unit power, two theories stand out: resource dependency theory (Pfeffer & Salancik, 1978), which focuses on power derived from access to resources, and structural contingency theory (Hinings, Hickson, Pennings, & Schneck, 1974), which suggests that organizational sub-units derive power from their ability to control strategic contingencies.

In the case of the HR function, structural explanations for variation in power across organizational units would suggest it can only have limited influence. In one of the first studies of the power of the HR function, Tsui (1990) found that HR professionals focused their efforts on those organizational actors who decide upon the financial resources that will be assigned to the HR function. This finding suggests that the HR function has limited resources and needs to convince line managers of its performance to obtain such resources. Likewise, the actions of the HR function are frequently not critical to the organization's functioning. In a survey conducted in the higher education sector in the UK, the HR function is was rated lowest on centrality and second lowest on non-substitutability compared to other departments (Elaine Farndale & Hope-Hailey, 2009).

An alternative explanation for organizational units' influence on decision-making can be derived from the notion of political skill (Galang & Ferris, 1997). The social construction of reality allows units that have low power based on their control of resources or centrality in workflows to influence decision-making in the organization. They can use political language and symbols to influence how strategic contingencies are defined, how important different types of resources are, and what criteria are used in assessments of the effectiveness of organizational units. As Ferris and Judge suggest, socially constructed political influence involves the

"management of shared meaning by individuals, groups or organizations" (1991: p. 450) and allows for shaping organizational behavior. Political influence derived from impression management and structuring of reality through symbolic action is particularly relevant to the HR function, as it frequently lacks control over resources and needs to demonstrate its relevance to organizational performance when it doesn't have clear measures of effectiveness (Galang & Ferris, 1997).

Sources of HR function influence

Early twentieth century descriptions of the HR function typically portray it as a rather powerless department that supported business operations through staffing, training, and managing employee relations and welfare (Kaufman, 2014). Even though the scope of the HR function changed over time as the result of –among other things—Human Relations approaches to management, tight post-World War II labor markets, innovations in HRM derived from the emerging Organizational Development field, and Japanese approaches to management (see: (Guest, 1990; Kaufman, 2014), at the end of the 1970s personnel managers were perceived to have ambiguous roles and limited power to contribute to the organization's goal achievement (Legge, 1978).

How, then, can the HR function enhance its influence on organizational decision making? As Galang and Ferris (1997) observed, having a dedicated HR function or the decision to implement a particular set of HRM policies does not guarantee that the HR function will have sufficient political influence in the organization so that a shared understanding of HRM will emerge. Extant research suggests several ways for HR functions to enhance their influence, mainly through symbolic actions.

The first and most frequently examined source of influence refers to the understanding of and commitment to HRM of the organization's CEO and its top management team (TMT). Tsui (1990) argued that representatives of the HR function will try to ingratiate themselves with the CEO and the TMT to secure financial resources. However, a sound relationship with the CEO and the TMT also allows for the ongoing development of shared meanings (Galang and Ferris 1997) and signals the importance of the HR function to other constituents in the organization (Sheehan, Cooper et al. 2007).

Several studies illustrate the importance of CEO or TMT support. For example, Farndale (2005) found that in the UK, HR functions that were represented on their organizations' board were more involved in strategic decision making. Bartram et al. (Bartram, Stanton, Leggat, Casimir, & Fraser, 2007) found significant differences in perceptions of SHRM and actual HR priorities among CEOs, senior managers, and HR directors at large Australian public healthcare providers. In a sample of 441 Australian HR managers, Sheehan et al. (2007) found that CEOs' substantive value commitment indicated support for HRM was related to positive organizational outcomes.

Brandl and Pohler (2010) examined Austrian CEOs' perceptions of the role of the HR function and found that CEO commitment may not be sufficient. They interpreted that beyond commitment to SHRM ideas and a positive evaluation of the HR function, CEOs also need assurance that the HR function will be able to successfully implement practices. A similar finding was obtained among Korean firms, in which CEO emphasis on strategic HRM as a significant antecedent to the implementation of commitment-based HR systems (Chadwick, Super, & Kwon, 2015).

Taken together, these studies suggest that the HR function can increase its influence in

the organization by developing positive working relationships with the CEO and the TMT. They identify contributing to the CEO's and TMT's understanding of the business environment and explaining how the effective management of human resources can contribute to organizational success as one of the principal strategic HR function actions that allow for such relationships.

A second source of HR function influence is its relationship with line managers and employees. Several authors have actively promoted shifting responsibility for people management from the HR function to line managers and employees (e.g. Guest, 1987; Schuler & Jackson, 2001; Ulrich, 1996) and many organizations have followed suit (Brewster, Brookes, & Gollan, 2015). From a structural perspective, this trend of 'devolvement' of responsibility for HRM could limit the influence of the HR function. However, other studies suggest that devolvement allows for increases of HR influence as the result of symbolic action. Instead of taking care of Drucker's (1954) 'hodge-podge' of 'necessary chores', the HR function can develop activities that signal strategic focus, such as alignment of HR practices with business strategies or can improve line manager perceptions of the HR function. For example, in a sample of managers and professionals in subsidiaries of 11 Nordic multinational corporations, perceptions of the HR function's capabilities improved when HRM practices were more visible, when organizational members experienced a link between their individual performance and HRM-related benefits, and when the HR function relied on e-HRM delivery (John & Björkman, 2015).

Third, the empirical evidence for HRM-performance linkages (Arthur, 1994; Batt, 2002; Huselid, 1995; Pfeffer, 1998; Wright, Smart, & McMahan, 1995) may be used by HR professionals to convince line managers of the potentially positive to be derived from HPWPs. In order to report similar indicators of activity and effectiveness in the context of their organization,

HR functions can use HR scorecards (B. Becker, Huselid, & Ulrich, 2001) or develop alternative ways to signal the relevance of their initiatives and practices.

Fourth and combining both structural and symbolic influence, new organizational structures for the HR function based on a division of tasks between shared service centers, centers of expertise, and HR Business Partners (Lawler, 2003; Mohrman & Lawler, 1997; Ulrich, 1996), allow for enhancing the influence of the HR function. In particular, HR Business Partner roles were specifically designed to "have a seat at the table" (Ulrich 1996) and influence strategic decision making (Aldrich et al., 2015).

Taken together, the HR function can develop activities that enhance its influence in the organization. Whereas previous research identified and assessed sources separately, I suggest that the organization-level influence of the HR function results from the combination of strategic activities it develops. Therefore, I propose:

H1: The greater the use of strategic HR function activities, the stronger is the comparative influence of the HR function.

HR function influence and the implementation of HPWPs

Several researchers have pointed to the distinction between an intended HR strategy and its associated practices and the realized HR strategy and the HRM practices that are actually implemented within the organization (B. Becker & Gerhart, 1996; Khilji & Wang, 2006; Truss & Gratton, 1994). Process models of SHRM (Wright & Nishii, 2013) explain such differences by considering the effects of managerial and employees' motivations, information processing and reactions in HRM-performance linkages. The HR function may reduce such differences using

both its structural power and influence derived from symbolic action.

Even though the HR function has limited structural power (Elaine Farndale & Hope-Hailey, 2009; Tsui, 1990) and control of resources (Guest & King, 2004; Legge, 2005), it can use specific situations or needs to promote HPWPs. For example, situations of labor conflict, high turnover or failure to attract qualified workers temporarily increase the criticality of the HR function. In those situations, the HR function can suggest managers implement HPWPs to make such challenges less likely to occur in the future. Likewise, the HR function can leverage its resources in decisions that affect individual line managers and employees. For example, it can make its support in decisions about compensation and benefits, promotions, transfers, or training and development contingent on managers' implementation of HPWPs.

The symbolic actions that sustain the HR function's influence are closely related to Bowen and Ostroff's (2004) notion of "HR system strength". They suggested that HR functions can use the implementation of salient and observable HRM practices and HR function activities that are related to organizational goal achievement to "send signals to employees that allow them to understand the desired and appropriate responses and form a collective sense of what is expected" (Bowen & Ostroff, 2004). A necessary precondition for sending 'strong' signals is that the HR function is considered to be legitimate (Haggerty & Wright, 2010). Stated differently, the HR function needs to have sufficient influence in the organization so that managers and employees will pay attention to information it shares, consult the HR professionals on the human resource implications of business decisions, and follow up on its advice.

Researchers have identified several obstacles to the development of a strong HR system. First, Guest and King (2004) observed that HRM interventions are not always well received by managers as they may have different personal opinions with regard to how to manage their

employees. Managerial interpretation of HRM practices and discretion in their implementation has become more relevant as the HR function has devolved responsibilities for the management of human resources to line managers. Differences between managers are associated with divergent perceptions of HPWP implementation among employees (Purcell & Hutchinson, 2007). HR functions can use their influence to convince managers that implementation of HPWPs is associated with positive employee and performance outcomes or stress the need for consistency across the organization in the implementation of HPWPs.

Second, line managers do not always have or apply the individual capabilities that are necessary to effectively implement HPWPs. The HR function can use influence derived from its staff's professional capabilities, such as financial, leadership and communicative skills, to encourage, support and complement line managers in the implementation of HRM practices (Huselid, Jackson, & Schuler, 1997). Likewise, influential HR functions are in a better position to develop initiatives that foster line managers' implementation abilities, motivation and opportunities to implement HRM practices (Trullen, Stirpe, Bonache, & Valverde, 2016).

Third, the devolvement of human resource management to line managers is based on a relationship in which responsibilities are shared between the HR function and line managers. Conflicts and misunderstandings may obstruct this relationship and affect how HPWPs are implemented across the organization. In organizations in which the HR function is more influential, perceptual discrepancies between line managers and the HR function regarding the degree of HR devolvement are smaller (Op de Beeck, Wynen, & Hondeghem, 2016).

Fourth, employees may attribute intended HRM practices to different employer motives (Nishii, Lepak, & Schneider, 2008). These differences are associated with divergence in employee attitudes and behavioral reactions (Kehoe & Wright, 2013; Liao, Toya, Lepak, &

Hong, 2009; Takeuchi, Chen, & Lepak, 2009), which may condition HPWP-performance linkages and employee-level perceptions of the implementation of HPWPs. Influential HR functions are more likely to have communication channels that allow them to convey the motives for and content of HPWPs throughout the organization without line managers' support.

Taken together, the HR function can use their influence to enhance the implementation of HPWPs across the organization. Whether by leveraging its limited structural power or using influence derived from symbolic actions, the HR function can avoid or attenuate the effects of obstacles to implementation of HPWPs related to managerial interpretation or discretion and to employees' reactions to HPWPs. Thus, I hypothesize:

H2: The greater the level of influence of the HR function, the greater is the extent of HPWPs implementation.

Methods

Sample and survey development

As described in the General Appendix included at the end of this dissertation, data for this study were collected in 2012 through an online survey of HR professionals and line managers. The survey is part of a research project that was initiated in 1987 to study the HR profession based on data collection every five years. For the 2012 wave, a team of researchers from business schools in the USA, Latin America and Asia collaborated with regional and national HRM associations to implement multiple-stage snowball sampling strategy. The global and regional project leaders at business schools invited regional HRM associations, which then promoted participation in the study by its corporate members. The invitation required participating companies to register

multiple HR professionals and line managers. This approach yielded an initial sample that comprised more than 17,000 individual raters.

For the purpose of this study, I included only business units at which a minimum of 4 HR professionals and 8 line managers had completed the survey. This reduced the sample to 9,622 individual respondents at 274 business units, distributed across manufacturing, service and other industries, such as agriculture or extractive industries. Likewise, data were collected from business units in different geographical locations. I drew on Hall and Soskice's (2001) classification of economies based on their institutional characteristics to cluster business units by context. Thus, I distinguish between liberal market economies (LMEs) such as the US, UK or Australia, coordinated market economies (CMEs) such as Germany and the Scandinavian countries, developed Asian economies and a final cluster of emerging economies. The composition of the sample is presented in Table 1 at the business unit level of analysis and at the level of individual raters.

The questionnaire was originally developed in English, translated into Mandarin Chinese, Japanese, Arab, Spanish, and Portuguese, and back-translated into English following the procedure proposed by (Brislin, 1970). To account for regional differences in the use of certain languages, in particular regarding the use of terms that refer to specific HRM concepts, the research team requested HRM practitioners who were members of the regional and national HRM Associations' management team to give feedback on the wording of the translated questionnaire.

Table 1: Characteristics of the sample

Business Units	LMEs	CMEs	Developed Asia	China	Other Emerging Economies	**Global**
Industry:						
Manufacturing	23	9	5	6	42	85
Services	69	23	12	13	54	171
Other	3	4	-	-	11	18
Total	95	36	17	19	107	**274**
Employees:						
< 250	5	3	1	1	8	18
250 – 1,000	14	7	5	7	13	46
1,000 – 10,0000	43	18	7	9	70	144
10,000+	33	8	4	2	16	66
Total	95	36	17	19	107	**274**

Individual Raters	LMEs	CMEs	Developed Asia	China	Other Emerging Economies	**Global**
Line manager	1,684	335	277	250	1,057	3,603
HR professional	2,435	646	565	424	2,131	6,019
Total	4,119	981	843	674	3,188	**9,622**

Measures

Strategic HR Function Activities. Definitions of strategic HRM typically refer to internal consistency of HRM practices and activities that contribute to the organization's achievement of strategic objectives (e.g. (Baird & Meshoulam, 1988; Wright & McMahan, 1992). However, whereas most SHRM research has focused on HRM practices and their impact (Langevin-Heavey et al., 2013), there is less agreement on what HR function activities are strategic or not.

The development of a Strategic HR Function Activities measure was initiated in the study's 2007 round of data collection (see General Appendix), drawing on guidelines presented by (Hinkin, 1995). As a first step, items were derived from the existing SHRM literature, drawing mainly on contributions that had a focus beyond specific HRM practices (Huselid et al., 1997; Russ, Galang, & Ferris, 1998; Sheehan, Cooper, Holland, & De Cieri, 2007; Tsui, 1990; Ulrich, 1996; Ulrich & Brockbank, 2005). Additionally, the initial measure was informed by the results of a series of roundtable encounters with Human Resource executives to complement the items obtained from the literature review. In line with the arguments presented in the theory section, an initial list of nine items referred to aligning the strategy of the HR function to the overall business strategy, interaction with the Board of Directors, involvement of line managers in HRM, consistency between the organizational structure of the HR function and the organization as a whole, measurement of the impact of HR practices and initiatives, and outsourcing of HR activities.

As a second step, I tested the initial measure of nine items with the data obtained in the 2007 wave of the study. An exploratory factor analysis indicated that individual items loaded on a single factor (Eigenvalue: 7.00), and that no individual item had a loading below 0.40. Also, the internal consistency of the measure was high (Cronbach's alpha: 0.93). Notwithstanding

these indicators of unidimensionality, and a possible argument that all the individual items were related to the functioning of a strategically oriented HR function, I relied on an additive index measure for several reasons. First, the theoretical rationale for an underlying construct would be weak at best. Second, the actions are additive with regard to their contribution to the HR department's functioning and different actions can be substituted for one another to obtain similar effects. Third, activities are not necessarily related, nor is there any evidence of synergies between individual items. Finally, the use of an additive index measure generally leads to more conservative parameter estimates.

As a third step, I assessed the reliability of the measure by examining its stability over time. Huselid et al. (1997) observed that the design and implementation of HRM practices and HR initiatives occurs in an organizational context in which the HRM department needs to gain legitimacy. One way to do so is by adopting practices and developing activities that are presented as best practices in the practitioner literature, adopted by leading firms and copied by other organizations, or promoted by consulting firms, HRM associations and business schools. However, common HRM practices and activities are less likely to differentiate an organization from its competitors. In order to be strategic, HRM activities typically involve innovations (Huselid et al., 1997). Given that the data for this study was collected in 2012, five years after the initial measure of Strategic HRM Function Activities had been created, I reviewed recent contributions in the SHRM literature and requested suggestions from HR executives at roundtable discussions. Except for minor changes in the wording of items and removal of two items that were considered to be redundant, the additive scale remained the same. The items of additive scale that I used in this study are listed in the Appendix to this paper. They were measured on a 5-point Likert scale ranging from 1 ("to a very little extent") to 5 ("to a very large

extent"). The internal consistency of the measure was high (Cronbach's alpha 0.91).

The original sample comprised data obtained from both HR professionals and line managers. However, HR professionals are more informed with regard to the activities that the HR function as a whole develops. Hence, I only used data obtained from HR professionals and aggregated individual-level responses to obtain a measure that was representative of the HR function. As HR professionals may differ in their perceptions of the activities of the HR function because they fulfilled different roles within the HR function or interacted with different actors, I report the statistics that justify the aggregation of individual-level ratings into a business unit-level measure. I calculated ICC-(1) and ICC-(2) values (Bliese, 1998). ICC(1) provides an estimate of the total variance of a measure that is explained by unit membership or to what extent one rater from a group represents all raters in a group. The ICC(1) value was 0.15 which is within the recommended range of .05-.20 (Bliese, 2000). ICC(2) represents the reliability of group means within a sample. The ICC(2) value was 0.85 which is above the 0.60 cutoff proposed by (Glick, 1985). Finally, the F-test was significant, indicating the appropriateness of aggregation (Bliese, 2000).

HR Function Influence. In line with the political perspective on the definition of priorities in managers' agendas, allocation of resources that allow for implementation, and actual behavior, we measured the influence of the HR function as compared to other functional departments, including Operations, Finance, Marketing, Research and Development, and Information Technology. Respondents rated the influence of the HR function compared to other functions in response to the following question: "Compared to the following functions, how much influence does the HR function have in strategic business decisions?" Ratings ranged from 1

("Significantly less") to 5 ("Significantly more"). The internal consistency of the measure was high (Cronbach's alpha 0.82).

To avoid self-serving bias induced by HR professionals' ratings of their function's influence (Wright, McMahan, Snell, & Gerhart, 2001), I used data obtained from line managers. I aggregated individual line managers' ratings into a business unit level measure of HR function influence. Such aggregation was justified as the ICC(1) value was 0.13, the ICC(2) value was 0.65, and the F-test was significant (Bliese, 2000; Glick, 1985).

High Performance Work Practices Implementation. Measures of the HPWP construct have received considerable attention from researchers (e.g. Becker & Gerhart, 1996; Langevin-Heavy et al., 2013). In early SHRM research, the HPWP construct was frequently operationalized as the extent to which HR professionals applied specific HR practices (Arthur, 1994; Huselid, 1995). This implied a risk of measurement error as such measures capture variation in the intended effects of HRM (B. Becker & Gerhart, 1996; Gerhart, Wright, Mc Mahan, & Snell, 2000). I was interested in the actual implementation of HPWPs at the business unit level of analysis, so I focused on outcomes that are obtained when HPWPs are implemented in an organization.

Given the international scope of the study, the generalizability of the measure of HPWPs Implementation across contexts was an important consideration. For example in cultures characterized by a relatively high power distance between managers and employees, such as China, HR practices that promote status equality may not necessarily be HPWPs as people may not value status equality (Gong, Law, Chang, & Xin, 2009). Such differences warrant researchers pay attention to the measures used, especially when they are 'exported' from one context to

another.

The items for the HWPs Implementation measure were derived from the commitment HRM practices scale developed by Lepak and Snell (2002) and are listed in Appendix 1. The measure includes outcomes of the HR practices most commonly included in measures of HPWPs, including selection, training, incentive compensation, employee involvement or empowerment, and participative work design (Jiang, Lepak, Hu, & Baer, 2012). In their meta-analysis of SHRM studies, Combs et al. (2006) reported an average of 6.2 practices across measures of the HPWP construct. The practices they observed most frequently coincide with the practices in Lepak and Snell's (2002) scale. The measure used in this study includes 7 items. Second, the items most frequently mentioned in Posthuma et al's (2013) cross-cultural ranking of HPWPs overlap to a large extent with the items used in this study. Third, the items from this scale have been used in numerous studies conducted outside the United States, including Taiwanese department stores (Chuang & Liao, 2010), a cross-industry sample of Chines firms (Su, Wright, & Ulrich, 2018).

Line managers reported to what extent they observed outcomes associated with the implementation of HPWPs in the non-managerial employee group of their business unit on a 5-point Likert scale that ranged from 1 ("to a very little extent") to 5 ("to a very large extent"). To obtain a business unit-level measure of HPWPs implementation, I aggregated ratings of individual line managers into a business unit level measure of HPWP Implementation. The aggregation statistics supported this: ICC(1) value was 0.14, the ICC(2) value was 0.66, and the F-test was significant, indicating the appropriateness of aggregation (Bliese, 2000; Glick, 1985). The internal consistency of the scale (Cronbach's alpha) was 0.88.

Control variables. Institutional context. Researchers of HRM in an international context increasingly integrate comparative institutional approaches (e.g. Amable, 2003; Hall & Soskice, 2001; Whitley 1999) into their work to explain variation in firms' implementation of HRM practices (Batt & Hermans, 21012). In particular, Hall and Soskice's (2001) varieties of capitalism (VoC) framework has been used to highlight and account for the effects of institutional variation in empirical research (e.g. Batt, Holman & Holtgrewe, 2009; Dencker, 2004; Farndale, Brewster & Poutsma, 2008; Parry, Dickmann & Morley, 2008) as the parsimony of the framework renders it well suited for statistical hypothesis testing (Deeg and Jackson 2007). These studies suggest that organizations in liberal market economies (LMEs), such as the US, the UK, or Australia, have more discretion in their management of people due to deregulated labor markets, low union density, and no mandatory rules for employee involvement or consultation in firms' strategic decision making. To account for the absence of institutional arrangements that reinforce the HR function's influence in strategic decision making in LMEs, I included a control variable (1 = LMEs, 0 = other comparative institutional contexts,).

Industry. The importance of employees' knowledge, skills, attitudes and other characteristics, and the behaviors through which employees contribute to organizational performance differs across industries and has implications for how employees are managed. For example, Combs et al. (2006) argued that manufacturing jobs have more to gain from HPWPs as they help increase workers' flexibility in responding to technological change, enhance the development of organization-specific skills, and have more direct effects on worker motivation and quality of outputs. By contrast, SHRM studies conducted in service industries stress the importance of outcomes of HPWPs implementation to enhancing front-line employees' interaction with customers as a driver of organizational performance (Batt, 2002; Chuang &

Liao, 2010; Liao et al., 2009). To account for sectoral differences in how workers are managed and their potential effects on both the influence of the HR function in strategic decision making and the implementation of HPWPs, I included a manufacturing industries dummy variable (1 = manufacturing industries, 0 = other industries).

Organization Size. Larger organizations are more likely to have a professional HR department that implements HPWPs due to the need to formalize HR practices as well as take advantage of economies of scale (Datta et al., 2005; Huselid, 1995). Also, because of the visibility of larger organizations they are more likely to implement progressive HR practices such as HPWPs to maintain their reputation. Finally, large organizations are more likely to be exposed to the influence of consultants, business schools and other organizations that promote the implementation of HPWPs. To account for differences in the availability of resources and the institutional pressure to adopt progressive HR practices, I controlled for organization size measured as the logarithm of the number of employees.

Quality of measurements

Given extensive methodological debates surrounding SHRM studies (B. Becker & Gerhart, 1996; Gerhart, Wright, Mc Mahan, et al., 2000; Huselid & Becker, 2000), I took several steps to minimize measurement error and avoid common method bias. First, I carefully chose the sources of the data. SHRM research suggests that HR managers may be overly optimistic in their ratings of the actual implementation of HPWPs (Gerhart, Wright, & McMahan, 2000; Wright, Gardner, et al., 2001). As I was interested in the actual implementation of HPWPs at the business unit level of analysis, I chose to use ratings by line managers. Likewise, I used ratings by line managers for my measure of HR Function Influence. HR professionals are more likely to

attribute strategic decisions made by the CEO or TMT to their actions than respondents from other functional departments whose ratings of HR function influence are more likely to be conservative. By contrast, given that many strategic HR function activities occur within the HR department and considering that line managers may not be knowledgeable about the more technical aspects of human resource management, I relied on HR professionals' ratings of the Strategic HR Function Activities measure.

Second, I enhanced the reliability of my measures by avoiding single-rater responses to questions that referred to business unit level characteristics. Considering the effect of group size on reliability of aggregate measures (Bliese, 1998), I excluded business units for which I had less than four HR professional respondents or eight line management respondents. Aggregation statistics for each measure are reported above.

Third, I minimized the potential for common method bias following recommendations by Podsakoff and colleagues (P. M. Podsakoff, MacKenzie, Jeong-Yeon, & Podsakoff, 2003). More specifically, independent and dependent variable were located in different sections of the questionnaire to reduce the potential for respondents to make causal connections. Also, I used a split-sample procedure to obtain two groups of line management respondents. This allowed me to use ratings of one group of line managers for the measure of HR Function Influence, and ratings of the second group of line managers for the measure of HPWPs implementation. ANOVAs at the business unit level indicated no significant differences between groups in their average ratings of either variable.

Fourth, I assessed the psychometric properties of the measures based on confirmatory factor analyses. A three-factor model that included Strategic HR Function Activities (7 items), HR Function Influence (5 items), and High Performance Work Practices Implementation

(7items) fitted the data well (Hu & Bentler, 1999; Steiger, 2007): $\chi^2(142)$: 299.41 (p = .000, n = 274), χ^2/ df = 2.28, root mean square error of approximation (RMSEA) = 0.06 (c.i. 0.05 to 0.07), TLI = 0.95, and CFI = .96. Tests of alternative models confirmed the proposed model and its measures. A model in which the items of the Strategic HR Function Activities and the High Performance Work Practices Implementation measures were combined had inferior fit: $\chi^2(144)$: 447.54 (p = .000, n = 274), χ^2/ df = 3.11, RMSEA = 0.09 (c.i. 0.08 to 0.10), TLI = 0.91, and CFI = 0.93. Additionally, a chi-square difference test indicated that this model's fit was significantly worse: χ^2_{diff} (2, n = 274) = 148.13, p < .01. Finally, I tested a one-factor model with a single variable underlying all nineteen items. The fit indices for this model were: $\chi^2(145)$: 618.12 (p = .000, n = 274), χ^2/ df = 4.26, RMSEA = 0.11 (c.i. 0.10 to 0.12), TLI = 0.86, and CFI = 0.89. Compared to the three-factor model, this model also had significantly worse fit, χ^2_{diff}(3, n = 274) = 318.71, p < .01. Thus, the confirmatory factor analyses provide evidence that the proposed model provides the best fit for the data.

Results

Descriptive statistics

Table 2 reports the descriptive statistics and correlations between the variables of the study. The Strategic HR Function Activities index was significantly and positively correlated with HR Function Influence and with HPWPs Implementation. Likewise, HR Function Influence was significantly and positively correlated with HPWPs Implementation.

Table 2: Descriptive Statistics

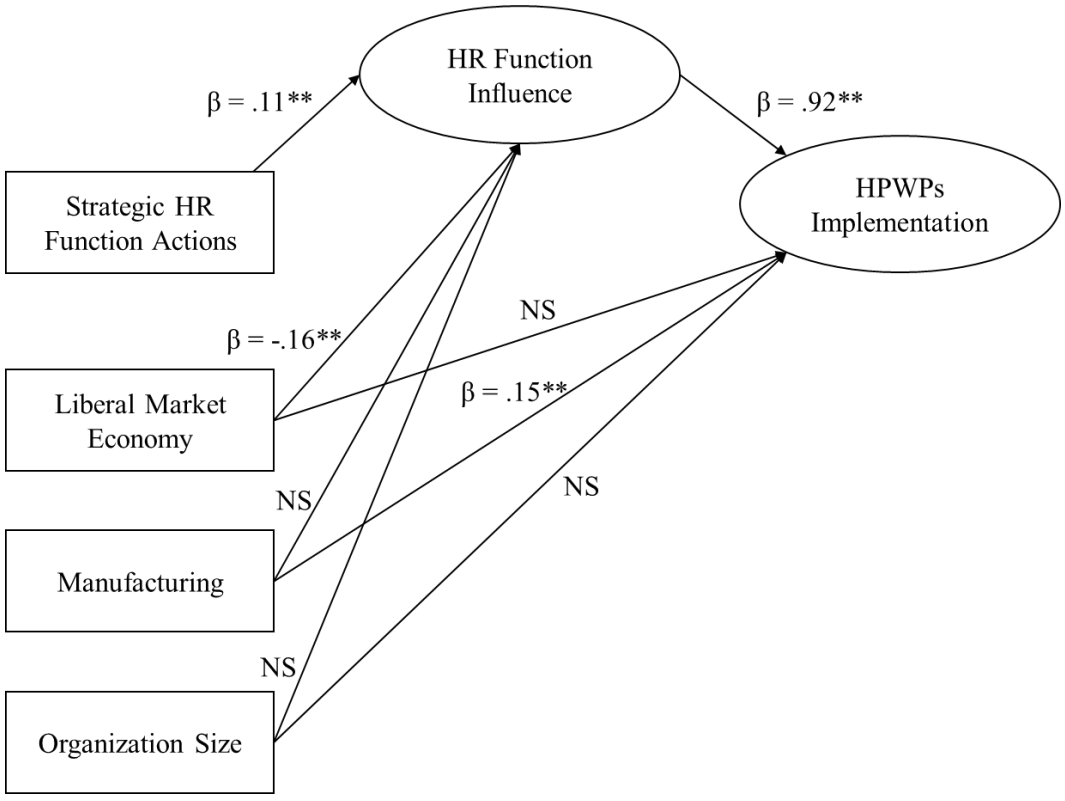
Variable	Mean	SD	1	2	3	4	5
1. Institutional Context (1 = LME)	0.35	0.48					
2. Industry (1 = Manufacturing)	0.31	0.46	-0.11				
3. Employees (log)	8.15	1.63	0.18 **	0.04			
4. Strategic HR Function Actions	28.33	3.10	-0.17 **	-0.03	-0.02		
5. HR Function Influence	3.32	0.56	-0.17 **	-0.09	-0.01	0.59 **	
6. HPWPs Implementation	3.43	0.45	-0.30 **	0.08	-0.03	0.70 **	0.32 **

Hypotheses tests

In order to test a model with both an index scale and latent variables, I relied on structural equations modeling (SEM) using AMOS 25.0 software. The overall fit of the data to the model was adequate (Hu & Bentler, 1999; Steiger, 2007): $\chi^2(85)$: 209.05 (p = .000, n = 274), χ^2/ df = 2.46, root mean square error of approximation (RMSEA) = 0.07 (c.i. 0.06 to 0.08), TLI = 0.93, and CFI = 0.95. I report the results of the simultaneous test of my hypotheses in Figure 2.

As regards the individual hypotheses, the Strategic HR Function Activities index was significantly related to HR Function Influence ($\beta = 0.11$, $p < 0.01$). This finding supported Hypothesis 1. Looking next at the hypothesized relationship between HR Function Influence and HPWPs Implementation, I found a significant positive effect ($\beta = 0.92$, $p < 0.01$). Hence, Hypothesis 2 was supported too.

Figure 2: Structural Equations Model Results



Following suggestions in James, Mulaik, and Brett (2006), I tested a full and a partial mediation model. Compared to the fit indices of the full mediation model reported above, the fit of the data with the partial mediation model was similar: $\chi^2(84)$: 209.04 ($p = .000$, $n = 274$), $\chi^2/df = 2.49$, RMSEA = 0.07 (c.i. 0.06 to 0.08), TLI = 0.92, and CFI = 0.95. However, additional direct path from Strategic HR Function Activities to HPWPs Implementation was slightly negative but insignificant ($\beta = -0.00$, $p > .10$).

Regarding the effects of control variables, the findings were mixed. The control variable for comparative institutional context, a dummy variable for LMEs, had a significant negative effect on HR Function Influence ($\beta = -0.16$, $p < 0.01$) but an insignificant negative effect on HPWPs implementation ($\beta = -0.03$, $p > 0.10$). The association between Industry and HR Function Influence was negative but though only marginally significant ($\beta = -0.05$, $p < 0.10$), while the effect on HPWPs implementation was positive and significant ($\beta = 0.15$, $p < 0.01$). Finally, organization size did not have a significant effect on either HR Function Influence ($\beta = 0.00$, $p > 0.10$), or HPWPs Implementation ($\beta = 0.01$, $p > 0.10$).

Discussion

While researchers have found consistent evidence for HRM-performance linkages (Combs et al., 2006; Wright et al., 2005) and have made progress in unraveling the mechanisms through which the effects of HPWPs materialize (Jiang et al., 2012), the organizational context in which HPWPs are implemented has received surprisingly little attention. This study examined the context in which HPWPs are implemented by assessing the effect of strategic actions of the HR function on the influence of the HR function on the organization's strategic decision making, and whether such influence affects the implementation of HPWPs.

Earlier studies that consider HR function influence identify its sources (e.g.(Brandl & Pohler, 2010; Sheehan et al., 2014)) or examine the organizational outcomes that are associated with influencing (Sheehan, De Cieri, Cooper, & Brooks, 2016; Trullen et al., 2016). Building on the specific insights derived from these contributions, this study is among the first to consider simultaneously whether HR function influence is related to the actual implementation HPWPs and how such influence can be obtained. I identified strategic HR function activities and found that these activities can enhance its influence in the organization. In line with political perspectives on organizational behavior, HR function influence was positively related to the implementation of HPWPs. Moreover, strategic HR function activities were not directly associated with HPWPs implementation. This suggests that the HR function needs to develop its political clout as a prerequisite for implementation of HPWPs in the organization. I look at the results of the study and their implications in more detail below.

The main finding of this study, a positive effect of HR function influence on the implementation of HPWPs, confirms earlier research in which the difference between intended and implemented HRM practices is explained to result from different political interests. While recent studies suggest that organizations may rely on control-based or compliance-oriented approaches to managing employees in order to enhance their performance (Boxall, Ang, & Bartram, 2011; Hauff, Alewell, & Hansen, 2014; Su et al., 2018), the results of this study suggest that the HR function can use its political clout to encourage implementation of commitment-oriented HPWPs.

A second finding of this study is that the development of an organizational context that is receptive to the implementation of HPWPs involves a subtle process that requires the HR function to do more than crafting HPWPs and proposing their implementation to line managers. I

identify a variety of strategic HR function activities that enhance the function's influence. This finding is consistent with Trullen et al. (2016) who found that effective implementation of HR practices are characterized by line manager involvement in HRM and support from the CEO. Likewise, Brandl and Pohler (2010) concluded that while HR professionals may try to enhance CEOs' commitment to HPWPs, they also need to show to demonstrate that they have the capabilities required to implement such practices.

Managerial implications

The notion of 'having a seat at the table' is not new (Ulrich, 1996) but continues to be a challenge to HR professionals. The strategic HR function activities identified in this study include building a positive relationship with the CEO and the TMT, frequent interaction with line managers, or developing a scorecard that links HR indicators to business outcomes. These activities are positively associated with the political clout of the HR function, which allows it to develop an organizational context that is more receptive to implementing HPWPs.

The positive associations found in this study may need to be interpreted with caution as there may be a limit to influencing behavior. Line managers are likely to prefer having discretion with regard to the implementation of HPWPs in their organizational unit (Khilji & Wang, 2006). Using political clout to push the implementation of HPWPs without considering the particular circumstances and receptiveness of the line manager who is responsible for an organizational unit may lead to a negative reception of HRM interventions by line managers (Guest & King, 2004). While HR professionals may be tempted to pursue accumulation of their political weight in an organization, they should focus on developing an organizational context in which line managers are more likely to implement HPWPs.

Conclusion

The scope of HR functions has widened from simply providing administrative support in employee-related matters to active involvement in business-related strategic decision making. As several researched have linked such increased influence with the possibilities for the HR function to implement HPWPs, we examined how the HR function can develop its influence and to what extent having political weight favors the implementation of HPWPs. Within a sample of 9,622 raters who work at 274 business units, distributed across different industries and comparative institutional contexts, I found that a set of strategic HR function activities contributes to enhancing its influence on strategic decision making as compared to other functions and that such influence was positively associated with line managers' ratings of HPWPs implementation.

While I believe that this study brings several insights to the SHRM field, it also has number of limitations. First, the sample was developed through a snowball approach, which may have introduced bias. Because of the collaboration with HRM Associations, it is likely that organizations with larger and more sophisticated HR functions are overrepresented in the sample. However, snowball sampling approaches give researchers little control over their sample and introduce less bias than pure convenience samples in which researchers directly approach companies (e.g. Takeuchi et al., 2009) or choose one single company that has numerous branches (e.g. Chuang & Liao, 2010).

Second, scholars have discussed the appropriate level of analysis for measures of HPWPs (Langevin et al., 2013). Whereas some argue that corporate-level measures are representative (Huselid & Becker, 2000), others suggest measures at the establishment level (Wright, Gardner, et al., 2001) or the job group level (Wright & Nishii, 2013). This study focused on the business unit level of analysis because it is the most likely to have a dedicated HR function that actively

manages HR practices. While establishments or job groups are unlikely to have a dedicated HR function, corporate HR functions may be more concerned with HR policies. That said, organizations use different definitions of business units. In some cases, a business unit managed different lines of business in a particular geography, in other cases a business unit managed a particular line of business in multiple countries. We removed business units that could not be clearly assigned to an industry category or that spanned multiple comparative institutional contexts to avoid error in our findings.

Third, we assumed that HR functions will try to implement HPWPs given the positive association with organizational performance outcomes across many different contexts, including blue-collar factory work (Youndt, Snell, Dean, & Lepak, 1996), call center agents across the globe (Batt, 2002), knowledge workers in the US (Collins & Smith, 2006), and retail employees in Taiwan (Chuang & Liao, 2010). There is a possibility that HR functions may not promote HPWPs in their organizations due to short term efficiency considerations but this is more likely to occur with temporary employees or contract workers (Lepak & Snell, 2002). In general, employers overinvest in their full-time employees (Tsui, Pearce, Porter, & Tripoli, 1997). I assume that HR functions will be among the organizational functions to most actively promote such investments and implementing HPWPs would be a logical way to make those investments.

Despite these limitations, this study contributes to SHRM research by focusing on the political dynamics that condition the implementation of HPWPs. While earlier research has identified the benefits that organizations and workers can derive from HPWPs, less is known about the organizational context that favors their implementation. Huselid et al. (1997) suggested that HR professionals need to have the capabilities to effectively implement HPWPs. Likewise, a growing stream of research (Brandl & Pohler, 2010; Haggerty & Wright, 2010; Sheehan et al.,

2014; Trullen et al., 2016) provides evidence that the HR function's influence is instrumental to creating an organizational context that favors the implementation of HPWPs. I hope that this study helps to further integrate this second stream of research and that it contributes to understanding how HR functions can be more effective.

References

Aldrich, P., Dietz, G., Clark, T., & Hamilton, P. (2015). Establishing HR Professionals' Influence and Credibility: Lessons from the Capital Markets and Investment Banking Sector. *Human Resource Management, 54*(1), 105-130. doi: 10.1002/hrm.21626

Amiot, C. E., Terry, D. J., Jimmieson, N. L., & Callan, V. J. (2006). A Longitudinal Investigation of Coping Processes During a Merger: Implications for Job Satisfaction and Organizational Identification. *Journal of Management, 32*(4), 552-574. doi: 10.1177/0149206306287542

Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. (2000). *Manufacturing advantage why high-performance work systems pay off*. Ithaca: Cornell University Press.

Armenakis, A. A., & Bedeian, A. G. (1999, 1999 May-June). Organizational change: a review of theory and research in the 1990s. *Journal of Management, 25*, 293+.

Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating Readiness for Organizational Change. *Human Relations, 46*(6), 681-703. doi: 10.1177/001872679304600601

Arthur, J. B. (1994). Effects of Human Resource Systems on Manufacturing Performance and Turnover. *Academy of Management Journal, 37*(3), 670.

Ashford, S. J. (1988). Individual Strategies for Coping with Stress during Organizational Transitions. *The Journal of Applied Behavioral Science, 24*(1), 19-36. doi: 10.1177/0021886388241005

Baird, L., & Meshoulam, I. (1988). Managing Two Fits of Strategic Human Resource Management. *Academy of Management Review, 13*(1), 116.

Barney, J. (1986). Strategic Factor Markets: Expectations, Luck, and Business Strategy. *Management Science, 32*(10), 1231-1241.

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management, 17*(1), 99-120. doi: 10.1177/014920639101700108

Barney, J. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management, 27*, 643+.

Barney, J., Wright, M., & Ketchen, D. J. (2001). The resource-based view of the firm: Ten years after 1991. *Journal of Management, 27*(6), 625-641. doi: 10.1016/s0149-2063(01)00114-3

Bartram, T., Stanton, P., Leggat, S., Casimir, G., & Fraser, B. (2007). Lost in translation: exploring the link between HRM and performance in healthcare. *Human Resource Management Journal, 17*(1), 21-41. doi: 10.1111/j.1748-8583.2007.00018.x

Batt, R. (2002). Managing Customer Services: Human Resource Practices, Quit Rates, and Sales Growth. *The Academy of Management Journal, 45*(3), 587-597. doi: 10.2307/3069383

Batt, R., & Colvin, A. J. S. (2011). An employment systems approach to turnover: Human resources practices, quits, dismissals, and performance. *Academy of Management Journal, 54*(4), 695-717.

Becker, B., & Gerhart, B. (1996). The Impact of Human Resource Management on Organizational Performance: Progress and Prospects. *Academy of Management Journal, 39*(4), 779.

Becker, B., Huselid, M. A., & Ulrich, D. (2001). *The HR Scorecard: Linking People, Strategy, and Performance*: Harvard Business School Press.

Becker, G. S. (1964). *Human capital; a theoretical and empirical analysis, with special reference to education*: distributed by Columbia University Press.
Bentler, P. M., & Chou, C. P. (1987). Practical Issues in Structural Modeling. *Sociological Methods & Research, 16*(1), 78-117. doi: 10.1177/0049124187016001004
Bergström, O., & Arman, R. (2017). Increasing commitment after downsizing: the role of involvement and voluntary redundancies. [Article]. *Journal of Change Management, 17*(4), 297-320. doi: 10.1080/14697017.2016.1252784
Blau, P. M. (1964). *Exchange and power in social life*. New York: J. Wiley.
Bliese, P. D. (1998). Group Size, ICC Values, and Group-Level Correlations: A Simulation. *Organizational Research Methods, 1*(4), 355-373. doi: 10.1177/109442819814001
Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations* (pp. 349-381). San Francisco, CA: Jossey-Bass.
Bowen, D. E., & Ostroff, C. (2004). Understanding HRM-Firm Performance Linkages: The Role of the "Strength" of the HRM System. *The Academy of Management Review, 29*(2), 203-221. doi: 10.2307/20159029
Boxall, P., Ang, S. H., & Bartram, T. (2011). Analysing the 'Black Box' of HRM: Uncovering HR Goals, Mediators, and Outcomes in a Standardized Service Environment. *Journal of Management Studies, 48*(7), 1504-1532. doi: doi:10.1111/j.1467-6486.2010.00973.x
Brandl, J., & Pohler, D. (2010). The human resource department's role and conditions that affect its development: Explanations from Austrian CEOs. *Human Resource Management, 49*(6), 1025-1046. doi: 10.1002/hrm.20392
Brenes, E. R., Camacho, A. R., Ciravegna, L., & Pichardo, C. A. (2016). Strategy and innovation in emerging economies after the end of the commodity boom—Insights from Latin America. *Journal of Business Research, 69*(10), 4363-4367. doi: https://doi.org/10.1016/j.jbusres.2016.03.059
Brewster, C., Brookes, M., & Gollan, P. J. (2015). The Institutional Antecedents of the Assignment of HRM Responsibilities to Line Managers. *Human Resource Management, 54*(4), 577-597. doi: 10.1002/hrm.21632
Brislin, R. W. (1970). Back-Translation for Cross-Cultural Research. *Journal of Cross-Cultural Psychology, 1*(3), 185-216. doi: 10.1177/135910457000100301
Brown, S. L., & Eisenhardt, K. M. (1997). The Art of Continuous Change: Linking Complexity Theory and Time-Paced Evolution in Relentlessly Shifting Organizations. *Administrative Science Quarterly, 42*(1), 1-34. doi: 10.2307/2393807
Cable, D. M., & Parsons, C. K. (2001). Socialization tactics and person-organization fit. *Personnel Psychology, 54*(1), 1-23. doi: 10.1111/j.1744-6570.2001.tb00083.x
Caldwell, S. D., Herold, D. M., & Fedor, D. B. (2004). Toward an Understanding of the Relationships Among Organizational Change, Individual Differences, and Changes in Person-Environment Fit: A Cross-Level Study. *Journal of Applied Psychology, 89*(5), 868-882. doi: 10.1037/0021-9010.89.5.868
Campbell, B. A., Coff, R., & Kryscynski, D. (2012). Rethinking Sustained Competitive Advantage from Human Capital. [Article]. *Academy of Management Review, 37*(3), 376-395.
Chadwick, C., Super, J. F., & Kwon, K. (2015). Resource orchestration in practice: CEO emphasis on SHRM, commitment-based HR systems, and firm performance. *Strategic*

Management Journal, 36(3), 360-376. doi: 10.1002/smj.2217
Chan, D. (1998). Functional Relations Among Constructs in the Same Content Domain at Different Levels of Analysis: A Typology of Composition Models. *Journal of Applied Psychology, 83*(2), 234-246. doi: 10.1037/0021-9010.83.2.234
Chuang, C.-H., & Liao, H. (2010). Strategic human resource management in service context: Taking care of business by taking care of employees and customers. *Personnel Psychology, 63*(1), 153-196. doi: 10.1111/j.1744-6570.2009.01165.x
Coff, R. W. (1997). Human Assets and Management Dilemmas: Coping with Hazards on the Road to Resource-Based Theory. *The Academy of Management Review, 22*(2), 374.
Coff, R. W. (1999). When Competitive Advantage Doesn't Lead to Performance: The Resource-Based View and Stakeholder Bargaining Power. *Organization Science, 10*(2), 119-133.
Colbert, B. A. (2004). The Complex Resource-Based View: Implications for Theory and Practice in Strategic Human Resource Management. *The Academy of Management Review, 29*(3), 341-358. doi: 10.5465/amr.2004.13670987
Collins, C. J., & Smith, K. G. (2006). Knowledge Exchange and Combination: The Role of Human Resource Practices in the Performance of High-Technology Firms. *The Academy of Management Journal, 49*(3), 544-560.
Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel Psychology, 59*(3), 501-528.
Cook, M. L. (2007). *The politics of labor reform in Latin America between flexibility and rights*. University Park, Pa.: The Pennsylvania State University Press.
Cuervo-Cazurra, A. (2008). The multinationalization of developing country MNEs: The case of multilatinas. *Journal of International Management, 14*(2), 138-154. doi: https://doi.org/10.1016/j.intman.2007.09.001
Cuervo-Cazurra, A. (2016). Multilatinas as sources of new research insights: The learning and escape drivers of international expansion. *Journal of Business Research, 69*(6), 1963-1972. doi: 10.1016/j.jbusres.2015.10.142
Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry, 11*(4), 227-268. doi: 10.1207/s15327965pli1104_01
Delery, J. E. (1998). Issues of fit in strategic human resource management: Implications for research. *Human Resource Management Review, 8*(3), 289-309. doi: https://doi.org/10.1016/S1053-4822(98)90006-7
Devos, G., Buelens, M., & Bouckenooghe, D. (2007). Contribution of Content, Context, and Process to Understanding Openness to Organizational Change: Two Experimental Simulation Studies. *The Journal of Social Psychology, 147*(6), 607-629.
Drucker, P. F. (1954). *The practice of management* ([1st ed.] ed.). New York: Harper.
ECLAC. (2017). Economic Survey of Latin America and the Caribbean, 2016: The 2030 Agenda for Sustainable Development and the Challenges of Financing for Development.
Elias, S. M. (2009). Employee Commitment in Times of Change: Assessing the Importance of Attitudes Toward Organizational Change †. *Journal of Management, 35*(1), 37-55. doi: 10.1177/0149206307308910
Farndale, E. (2005). HR department professionalism: a comparison between the UK and other European countries. *The International Journal of Human Resource Management, 16*(5), 660-675. doi: 10.1080/09585190500082626

Farndale, E., & Hope-Hailey, V. (2009). Personnel Departmental Power: Realities from the UK Higher Education Sector. *Management Revue, 20*(4), 392-412.
Ferris, G. R., Galang, M. C., Thornton, M. L., & Wayne, S. (1995). A power and politics perspective on human resource management. In G. R. Ferris, S. D. Rosen & D. T. Barnum (Eds.), *Handbook of human resource management* (Vol. 13, pp. 100-114). Oxford, UK: Blackwell Publishers.
Ferris, G. R., & Judge, T. A. (1991). Personnel/Human Resources Management: A Political Influence Perspective. *Journal of Management, 17*(2), 447-488. doi: 10.1177/014920639101700208
Fugate, M., Prussia, G. E., & Kinicki, A. J. (2012). Managing Employee Withdrawal During Organizational Change:The Role of Threat Appraisal. *Journal of Management, 38*(3), 890-914. doi: 10.1177/0149206309352881
Galang, M. C., & Ferris, G. R. (1997). Human Resource Department Power and Influence Through Symbolic Action. *Human Relations, 50*(11), 1403-1426. doi: 10.1177/001872679705001104
Gerhart, B., Wright, P. M., Mc 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*(4), 803-834. doi: 10.1111/j.1744-6570.2000.tb02418.x
Gerhart, B., Wright, P. M., & McMahan, G. C. (2000). MEASUREMENT ERROR IN RESEARCH ON THE HUMAN RESOURCES AND FIRM PERFORMANCE RELATIONSHIP: FURTHER EVIDENCE AND ANALYSIS. *Personnel Psychology, 53*(4), 855-872. doi: 10.1111/j.1744-6570.2000.tb02420.x
Glick, W. H. (1985). Conceptualizing and Measuring Organizational and Psychological Climate: Pitfalls in Multilevel Research. *The Academy of Management Review, 10*(3), 601-616. doi: 10.5465/amr.1985.4279045
Gong, Y., Law, K. S., Chang, S., & Xin, K. R. (2009). Human Resources Management and Firm Performance: The Differential Role of Managerial Affective and Continuance Commitment. *Journal of Applied Psychology, 94*(1), 263-275. doi: 10.1037/a0013116
Guest, D. E. (1990). Human resource management and the American dream. *Journal of Management Studies, 27*(4), 377-397. doi: 10.1111/j.1467-6486.1990.tb00253.x
Guest, D. E., & King, Z. (2004). Power, Innovation and Problem-Solving: The Personnel Managers' Three Steps to Heaven? *Journal of Management Studies, 41*(3), 401-423. doi: 10.1111/j.1467-6486.2004.00438.x
Haggerty, J. J., & Wright, P. M. (2010). The SAGE Handbook of Human Resource Management. London: SAGE Publications Ltd.
Hancock, J. I., Allen, D. G., Bosco, F. A., McDaniel, K. R., & Pierce, C. A. (2013). Meta-Analytic Review of Employee Turnover as a Predictor of Firm Performance. *Journal of Management, 39*(3), 573-603. doi: 10.1177/0149206311424943
Hatch, N. W., & Dyer, J. H. (2004). Human Capital and Learning as a Source of Sustainable Competitive Advantage. *Strategic Management Journal, 25*(12), 1155-1178. doi: 10.1002/smj.421
Hauff, S., Alewell, D., & Hansen, N. K. (2014). HRM systems between control and commitment: occurrence, characteristics and effects on HRM outcomes and firm performance. *Human Resource Management Journal, 24*(4), 424-441. doi: 10.1111/1748-

8583.12054
Hausknecht, J. P., & Trevor, C. O. (2011). Collective Turnover at the Group, Unit, and Organizational Levels: Evidence, Issues, and Implications. *Journal of Management, 37*(1), 352-388. doi: 10.1177/0149206310383910
Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis a regression-based approach
Heavey, A. L., Holwerda, J. A., & Hausknecht, J. P. (2013). Causes and consequences of collective turnover: A meta-analytic review. *Journal of Applied Psychology, 98*(3), 412-453. doi: 10.1037/a0032380
Heckmann, N., Steger, T., & Dowling, M. (2016). Organizational capacity for change, change experience, and change project performance. *Journal of Business Research, 69*(2), 777-784. doi: https://doi.org/10.1016/j.jbusres.2015.07.012
Hermelo, F. D., & Vassolo, R. (2010). Institutional development and hypercompetition in emerging economies. *Strategic Management Journal, 31*(13), 1457-1473. doi: 10.1002/smj.898
Hernandez, E., & Guillén, M. F. (2018). What's theoretically novel about emerging-market multinationals? [journal article]. *Journal of International Business Studies, 49*(1), 24-33. doi: 10.1057/s41267-017-0131-7
Herscovitch, L., & Meyer, J. P. (2002). Commitment to Organizational Change: Extension of a Three-Component Model. [Article]. *Journal of Applied Psychology, 87*(3), 474-487. doi: 10.1037//0021-9010.873.3.474
Hinings, C. R., Hickson, D. J., Pennings, J. M., & Schneck, R. E. (1974). Structural Conditions of Intraorganizational Power. *Administrative Science Quarterly, 19*(1), 22-44. doi: 10.2307/2391786
Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management, 21*(5), 967-988. doi: 10.1016/0149-2063(95)90050-0
Hitt, M. A., Bierman, L., Shimizu, K., & Kochhar, R. (2001). Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. *Academy of Management Journal, 44*(1), 13-28.
Hom, P. W., Lee, T. W., Shaw, J. D., & Hausknecht, J. P. (2017). One hundred years of employee turnover theory and research. *Journal of Applied Psychology, 102*(3), 530-545. doi: 10.1037/apl0000103
Hu, L.-t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1-55. doi: 10.1080/10705519909540118
Huselid, M. A. (1995). The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance. *The Academy of Management Journal, 38*(3), 635-672. doi: 10.2307/256741
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?" by Gerhart, Wright, McMahan, and Snell. *Personnel Psychology, 53*(4), 835-854.
Huselid, M. A., Jackson, S. E., & Schuler, R. S. (1997). Technical and strategic human resource management effectiveness as determinants of firm performance. *Academy of Management Journal, 40*(1), 171-188.
James, L. R. (1982). Aggregation bias in estimates of perceptual agreement. *Journal of Applied*

Psychology, 67(2), 219-229. doi: 10.1037/0021-9010.67.2.219
Jiang, K., Lepak, D. P., Hu, J. I. A., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *The Academy of Management Journal, 55*(6), 1264-1294.
John, S., & Björkman, I. (2015). In the eyes of the beholder: the HRM capabilities of the HR function as perceived by managers and professionals. *Human Resource Management Journal, 25*(4), 424-442. doi: 10.1111/1748-8583.12078
Judge, T. A., Thoresen, C. J., Pucik, V., & Welbourne, T. M. (1999). Managerial Coping With Organizational Change: A Dispositional Perspective. *Journal of Applied Psychology, 84*(1), 107-122. doi: 10.1037/0021-9010.84.1.107
Karim, S., Carroll, T. N., & Long, C. P. (2016). Delaying Change: Examining How Industry and Managerial Turbulence Impact Structural Realignment. *Academy of Management Journal, 59*(3), 791.
Kaufman, B. E. (2014). The historical development of American HRM broadly viewed. *Human Resource Management Review, 24*(3), 196-218. doi: https://doi.org/10.1016/j.hrmr.2014.03.003
Kehoe, R. R., & Collins, C. J. (2017). Human resource management and unit performance in knowledge-intensive work. *Journal of Applied Psychology, 102*(8), 1222-1236. doi: 10.1037/apl0000216
Kehoe, R. R., & Wright, P. M. (2013). The Impact of High-Performance Human Resource Practices on Employees' Attitudes and Behaviors. *Journal of Management, 39*(2), 366-391. doi: 10.1177/0149206310365901
Khilji, S. E., & Wang, X. (2006). 'Intended' and 'implemented' HRM: the missing linchpin in strategic human resource management research. *The International Journal of Human Resource Management, 17*(7), 1171-1189. doi: 10.1080/09585190600756384
Lawler, E. E. (2003). *Creating a strategic human resources organization an assessment of trends and new directions*. Stanford, Calif.: Stanford University Press.
Lee, T. W., & Mitchell, T. R. (1994). An Alternative Approach: The Unfolding Model of Voluntary Employee Turnover. *The Academy of Management Review, 19*(1), 51-89. doi: 10.5465/amr.1994.9410122008
Legge, K. (1978). *Power, Innovation, and Problem-Solving in Personnel Management*. London: McGraw-Hill.
Legge, K. (2005). *Human resource management rhetorics and realities* (Anniversary ed ed.). Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.
Lepak, D. P., Liao, H., Chung, Y., & Harden, E. E. (2006). A Conceptual Review of Human Resource Management Systems in Strategic Human Resource Management Research (Vol. 25, pp. 217-271): Emerald Group Publishing Limited.
Lepak, D. P., & Snell, S. A. (1999). The Human Resource Architecture: Toward a Theory of Human Capital Allocation and Development. *The Academy of Management Review, 24*(1), 31.
Lepak, D. P., & Snell, S. A. (2002). Examining the Human Resource Architecture: The Relationships Among Human Capital, Employment, and Human Resource Configurations. *Journal of Management, 28*(4), 517-543. doi: 10.1177/014920630202800403
Liao, H., Toya, K., Lepak, D. P., & Hong, Y. (2009). Do they see eye to eye? Management and employee perspectives of high-performance work systems and influence processes on

service quality. *Journal of Applied Psychology, 94*(2), 371-391. doi: 10.1037/a0013504
Lines, R. (2004). Influence of participation in strategic change: resistance, organizational commitment and change goal achievement. [Article]. *Journal of Change Management, 4*(3), 193-215. doi: 10.1080/1469701042000221696
Liu, X., van Jaarsveld, D. D., Batt, R., & Frost, A. C. (2014). The Influence of Capital Structure on Strategic Human Capital: Evidence From U.S. and Canadian Firms. [Article]. *Journal of Management, 40*(2), 422-448. doi: 10.1177/0149206313508982
Locke, E. A. (1976). The nature and causes of job satisfaction *Handbook of industrial and organizational psychology* (pp. 1297-1349). Chicago, IL: Rand McNally.
Makadok, R. (2001). Toward a Synthesis of the Resource-Based and Dynamic-Capability Views of Rent Creation. *Strategic Management Journal, 22*(5), 387-401.
McDermott, G. A., & Corredoira, R. A. (2010). Network Composition, Collaborative Ties, and Upgrading in Emerging-Market Firms: Lessons from the Argentine Autoparts Sector. *Journal of International Business Studies, 41*(2), 308-329.
McKenzie, J., Truc, A., & van Winkelen, C. (2001). Winning commitment for knowledge management initiatives. [Article]. *Journal of Change Management, 2*(2), 115.
Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review, 1*(1), 61-89. doi: https://doi.org/10.1016/1053-4822(91)90011-Z
Mintzberg, H. (1983). *Power in and around organizations*. Englewood Cliffs, N.J.: Prentice-Hall.
Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablynski, C. J., & Erez, M. (2001). Why People Stay: Using Job Embeddedness to Predict Voluntary Turnover. *The Academy of Management Journal, 44*(6), 1102-1121. doi: 10.2307/3069391
Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology, 62*(2), 237-240. doi: 10.1037/0021-9010.62.2.237
Mobley, W. H., Griffeth, R. W., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin, 86*(3), 493-522. doi: 10.1037/0033-2909.86.3.493
Mohrman, S. A., & Lawler, E. E., III. (1997). Transforming the human resource function. *Human Resource Management, 36*(1), 157-162.
Newburry, W., Gardberg, N. A., & Sanchez, J. I. (2014). Employer Attractiveness in Latin America: The Association Among Foreignness, Internationalization and Talent Recruitment. *Journal of International Management, 20*(3), 327-344. doi: https://doi.org/10.1016/j.intman.2014.01.001
Nicholls-Nixon, C. L., Davila Castilla, J. A., Sanchez Garcia, J., & Rivera Pesquera, M. (2011). Latin America Management Research: Review, Synthesis, and Extension (Vol. 37, pp. 1178-1227). Los Angeles, CA: SAGE Publications.
Nishii, L. H., Lepak, D. P., & Schneider, B. (2008). Employee attributions of the "why" of HR practices: Their effectss on employee attitudes and behaviors, and customer satisfaction. *Personnel Psychology, 61*(3), 503-545.
O'Reilly, C. A., III, Chatman, J., & Caldwell, D. F. (1991). People and Organizational Culture: A Profile Comparison Approach to Assessing Person-Organization Fit. *Academy of Management Journal, 34*(3), 487.
Oh, I.-S., Guay, R. P., Kim, K., Harold, C. M., Lee, J.-H., Heo, C.-G., & Shin, K.-H. (2014). Fit

Happens Globally: A Meta-Analytic Comparison of the Relationships of Person–Environment Fit Dimensions with Work Attitudes and Performance Across East Asia, Europe, and North America. *Personnel Psychology, 67*(1), 99-152. doi: 10.1111/peps.12026

Oi, W. Y. (1962). Labor as a Quasi-Fixed Factor. *Journal of Political Economy, 70*(6), 538-555.

Op de Beeck, S., Wynen, J., & Hondeghem, A. (2016). HRM implementation by line managers: explaining the discrepancy in HR-line perceptions of HR devolution. *The International Journal of Human Resource Management, 27*(17), 1901-1919. doi: 10.1080/09585192.2015.1088562

Peteraf, M. A. (1993). The Cornerstones of Competitive Advantage: A Resource-Based View. *Strategic Management Journal, 14*(3), 179-191. doi: 10.1002/smj.4250140303

Pettigrew, A. M., Woodman, R. W., & Cameron, K. S. (2001). Studying Organizational Change and Development: Challenges for Future Research. *The Academy of Management Journal, 44*(4), 697-713. doi: 10.2307/3069411

Pfeffer, J. (1981). *Power in organizations*. Marshfield, Mass.: Pitman Pub.

Pfeffer, J. (1998). *The human equation building profits by putting people first*. Boston: Harvard Business School Press.

Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations a resource dependence perspective*. New York: Harper & Row.

Ployhart, R. E., Van Iddekinge, C. H., & Mackenzie, W. I. (2011). ACQUIRING AND DEVELOPING HUMAN CAPITAL IN SERVICE CONTEXTS: THE INTERCONNECTEDNESS OF HUMAN CAPITAL RESOURCES. *The Academy of Management Journal, 54*(2), 353-368.

Ployhart, R. E., Weekley, J. A., & Ramsey, J. (2009). The Consequences of Human Resource Stocks and Flows: A Longitudinal Examination of Unit Service Orientation and Unit Effectiveness. *The Academy of Management Journal, 52*(5), 996-1015. doi: 10.5465/amj.2009.44635041

Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology, 92*(2), 438-454. doi: 10.1037/0021-9010.92.2.438

Podsakoff, P. M., MacKenzie, S. B., Jeong-Yeon, L., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. [Article]. *Journal of Applied Psychology, 88*(5), 879.

Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: a critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management, 26*(3), 513-563. doi: https://doi.org/10.1016/S0149-2063(00)00047-7

Pohler, D. M., & Luchak, A. A. (2014). Balancing Efficiency, Equity, and Voice:The Impact of Unions and High-Involvement Work Practices on Work Outcomes. *ILR Review, 67*(4), 1063-1094. doi: 10.1177/0019793914546295

Purcell, J., & Hutchinson, S. (2007). Front-line managers as agents in the HRM-performance causal chain: theory, analysis and evidence. *Human Resource Management Journal, 17*(1), 3-20. doi: 10.1111/j.1748-8583.2007.00022.x

Rafferty, A. E., Jimmieson, N. L., & Armenakis, A. A. (2013). Change Readiness:A Multilevel Review. *Journal of Management, 39*(1), 110-135. doi: 10.1177/0149206312457417

Rafferty, A. E., & Restubog, S. L. D. (2010). The Impact of Change Process and Context on Change Reactions and Turnover During a Merger. *Journal of Management, 36*(5), 1309-1338. doi: 10.1177/0149206309341480

Raineri, A. B. (2011). Change management practices: Impact on perceived change results. *Journal of Business Research, 64*(3), 266-272. doi: https://doi.org/10.1016/j.jbusres.2009.11.011

Rindova, V. P., & Kotha, S. (2001). Continuous "Morphing": Competing through Dynamic Capabilities, Form, and Function. *The Academy of Management Journal, 44*(6), 1263-1280. doi: 10.2307/3069400

Romanelli, E., & Tushman, M. L. (1994). Organizational transformation as punctuated equilibrium: An empirical test. *Academy of Management Journal, 37*(5), 1141.

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*(2), 125-148. doi: https://doi.org/10.1016/S1053-4822(98)80001-6

Sanchez-Burks, J., & Huy, Q. N. (2009). Emotional aperture and strategic change: the accurate recognition of collective emotions. [Article]. *Organization Science, 20*(1), 22+.

Schneider, B. (1987). THE PEOPLE MAKE THE PLACE. [Article]. *Personnel Psychology, 40*(3), 437-453.

Schneider, B. R. (2009). Hierarchical Market Economies and Varieties of Capitalism in Latin America. *Journal of Latin American Studies, 41*(3), 553-575. doi: http://dx.doi.org/10.1017/S0022216X09990186

Schweiger, D. M., & DeNisi, A. S. (1991). Communication with Employees following a Merger: A Longitudinal Field Experiment. *The Academy of Management Journal, 34*(1), 110-135. doi: 10.2307/256304

Shaw, J. D., Park, T. Y., & Kim, E. (2013). A resource based perspective on human capital losses, HRM investments, and organizational performance. *Strategic Management Journal, 34*(5), 572-589. doi: 10.1002/smj.2025

Sheehan, C., Cooper, B., Holland, P., & Cieri, H. D. (2007). The relationship between HRM avenues of political influence and perceived organizational performance. *Human Resource Management, 46*(4), 611-629. doi: 10.1002/hrm.20184

Sheehan, C., Cooper, B., Holland, P., & De Cieri, H. (2007). The relationship between HRM avenues of political influence and perceived organizational performance. *Human Resource Management, 46*(4), 611-629. doi: 10.1002/hrm.20184

Sheehan, C., De Cieri, H., Cooper, B., & Brooks, R. (2014). Exploring the power dimensions of the human resource function. *Human Resource Management Journal, 24*(2), 193-210. doi: 10.1111/1748-8583.12027

Sheehan, C., De Cieri, H., Cooper, B. K., & Brooks, R. (2016). The impact of HR political skill in the HRM and organisational performance relationship. *Australian Journal of Management, 41*(1), 161-181. doi: 10.1177/0312896214546055

Singh, K., Mahmood, I. P., & Natarajan, S. (2017). Capital Market Development and Firm Restructuring During an Economic Shock. *Organization Science, 28*(3), 552-573. doi: 10.1287/orsc.2017.1127

Steiger, J. H. (2007). Understanding the limitations of global fit assessment in structural equation modeling. *Personality and Individual Differences, 42*(5), 893-898. doi: 10.1016/j.paid.2006.09.017

Su, Z.-X., Wright, P. M., & Ulrich, M. D. (2018). Going Beyond the SHRM Paradigm:

Examining Four Approaches to Governing Employees. *Journal of Management, 44*(4), 1598-1619. doi: 10.1177/0149206315618011
Sun, L.-Y., Aryee, S., & Law, K. S. (2007). High-Performance Human Resource Practices, Citizenship Behavior, and Organizational Performance: A Relational Perspective. *The Academy of Management Journal, 50*(3), 558-577. doi: 10.2307/20159873
Sung, W., Woehler, M. L., Fagan, J. M., Grosser, T. J., Floyd, T. M., & Labianca, G. (2017). Employees' responses to an organizational merger: Intraindividual change in organizational identification, attachment, and turnover. *Journal of Applied Psychology, 102*(6), 910-934. doi: 10.1037/apl0000197
10.1037/apl0000197.supp (Supplemental)
Takeuchi, R., Chen, G., & Lepak, D. P. (2009). THROUGH THE LOOKING GLASS OF A SOCIAL SYSTEM: CROSS-LEVEL EFFECTS OF HIGH-PERFORMANCE WORK SYSTEMS ON EMPLOYEES' ATTITUDES. *Personnel Psychology, 62*(1), 1-29.
Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal, 18*(7), 509-533.
Tett, R. P., & Meyer, J. P. (1993). Job Satisfaction, Organizational Commitment, Turnover Intention, and Turnover: Path Analyses Based on Meta-Analytic Findings. *Personnel Psychology, 46*(2), 259.
Trullen, J., Stirpe, L., Bonache, J., & Valverde, M. (2016). The HR department's contribution to line managers' effective implementation of HR practices. *Human Resource Management Journal, 26*(4), 449-470. doi: 10.1111/1748-8583.12116
Truss, C., & Gratton, L. (1994). Strategic human resource management: a conceptual approach. *The International Journal of Human Resource Management, 5*(3), 663-686. doi: 10.1080/09585199400000053
Tsui, A. S. (1990). A Multiple-Constituency Model of Effectiveness: An Empirical Examination at the Human Resource Subunit Level. *Administrative Science Quarterly, 35*(3), 458-483.
Tsui, A. S., Pearce, J. L., Porter, L. W., & Tripoli, A. M. (1997). Alternative Approaches to the Employee-Organization Relationship: Does Investment in Employees Pay off? *The Academy of Management Journal, 40*(5), 1089-1121. doi: 10.2307/256928
Ulrich, D. (1996). *Human Resource Champions: The Next Agenda for Adding Value and Delivering Results*: Harvard Business Review Press.
Ulrich, D., & Brockbank, W. (2005). *The HR Value Proposition*: Harvard Business Review Press.
Van Maanen, J., & Schein, E. H. (1979). Toward a theory of organizational socialization (pp. 209–264). Greenwich, CT: JAI Press.
Virany, B., Tushman, M. L., & Romanelli, E. (1992). Executive Succession and Organization Outcomes in Turbulent Environments: An Organization Learning Approach. *Organization Science, 3*(1), 72-91.
Wanberg, C. R., & Banas, J. T. (2000). Predictors and Outcomes of Openness to Changes in a Reorganizing Workplace. *Journal of Applied Psychology, 85*(1), 132-142. doi: 10.1037/0021-9010.85.1.132
Wanous, J. P. (1980). *Organizational entry recruitment, selection, and socialization of newcomers*. Reading, MA: Addison-Wesley Pub. Co.
Wernerfelt, B. (1984). A Resource-based View of the Firm. *Strategic Management Journal, 5*(2), 171.
Whelan-Berry, K. S., Gordon, J. R., & Hinings, C. R. (2003). Strengthening organizational

change processes: Recommendations and implications from a multilevel analysis. *The Journal of Applied Behavioral Science, 39*(2), 186.
Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample Size Requirements for Structural Equation Models: An Evaluation of Power, Bias, and Solution Propriety. *Educational and Psychological Measurement, 73*(6), 913-934. doi: 10.1177/0013164413495237
Woodman, R. W. (1989). Organizational Change and Development: New Arenas for Inquiry and Action. *Journal of Management, 15*(2), 205-228. doi: 10.1177/014920638901500205
Wright, P. M. (1998). Strategy - HR fit: does it really matter? [Article]. *Human Resource Planning, 21*(4), 56+.
Wright, P. M., Dunford, B. B., & Snell, S. A. (2001). Human resources and the resource based view of the firm. *Journal of Management, 27*(6), 701-721. doi: 10.1177/014920630102700607
Wright, P. M., Gardner, T. M., Moynihan, L. M., & Allen, M. R. (2005). THE RELATIONSHIP BETWEEN HR PRACTICES AND FIRM PERFORMANCE: EXAMINING CAUSAL ORDER. *Personnel Psychology, 58*(2), 409-446. doi: 10.1111/j.1744-6570.2005.00487.x
Wright, P. M., Gardner, T. M., Moynihan, L. M., Park, H. J., Gerhart, B., & Delery, J. E. (2001). Measurement error in research on human resources and firm performance: Additional data and suggestions for future research. *Personnel Psychology, 54*(4), 875-901. doi: 10.1111/j.1744-6570.2001.tb00235.x
Wright, P. M., & McMahan, G. C. (1992). Theoretical Perspectives for Strategic Human Resource Management. *Journal of Management, 18*(2), 295-320. doi: 10.1177/014920639201800205
Wright, P. M., McMahan, G. C., Snell, S. A., & Gerhart, B. (2001). Comparing line and HR executives' perceptions of HR effectiveness: Services, roles, and contributions. *Human Resource Management, 40*(2), 111-123.
Wright, P. M., & Nishii, L. H. (2013). Strategic HRM and Organizational Behaviour: Integrating Multiple Levels of Analysis. In J. Paauwe, D. E. Guest & P. M. Wright (Eds.), *HRM & Performance: Achievements & Challenges* (pp. 97-110). Chichester, West Sussex, UK: Wiley.
Wright, P. M., Smart, D. L., & McMahan, G. C. (1995). Matches between Human Resources and Strategy among NCAA Basketball Teams. *The Academy of Management Journal, 38*(4), 1052-1074. doi: 10.2307/256620
Youndt, M. A., Snell, S. A., Dean, J. W., & Lepak, D. P. (1996). Human Resource Management, Manufacturing Strategy, and Firm Performance. *The Academy of Management Journal, 39*(4), 836-866. doi: 10.2307/256714

APENDIX - VARIABLE DEFINITIONS

Dependent Variable

HPWPs implementation An index of 7 items. Respondents used a 5-point Likert scale to rate their business unit's implementation of the following HPWPs: (i) Select the best all-around candidates when recruiting employees, instead of hiring candidates who fulfill the minimum requirements to fulfill a job; (ii) Provide employees comprehensive training throughout their career (i.e., training beyond the skills required by the trainee's current job); (iii) Conduct performance appraisals that provide employees with feedback they can use for their development; (iv) Establish average employee pay levels (including incentives) that are higher than that of competitors; (v) Consider employees' performance to determine salaries and rewards; (vi) Empower employees to recommend necessary changes in the way they do their work; (vii) Ask for employees' opinion in advance if a decision affects them. Cronbach's alpha: 0.88.

Independent Variables

Strategic HR Department Activities: An index of 7 items. Respondents use a 5-point Likert scale to rate the extent to which their business unit's HR department does the following: (i) Connect HR initiatives to expectations of external stakeholders (e.g. customers,

	investors); (ii) Align the strategy of the HR function to the overall business strategy; (iii) Interact effectively with the Board of Directors; (iv) Involve line managers in the management of human resources (HR devolvement); (v) Define clear roles and responsibilities within the HR function (e.g. shard service center, business partner); (vi) Outsource HR activities; and (vii) Measure the impact of HR practices and initiatives. Cronbach's alpha: 0.91
HR Function Influence:	An index of 5 items. Respondents use a 5-point Likert scale to rate the comparative influence on the business unit's strategic decision making of the HR Department compared to: (i) Operations; (ii) Finance; (iii) Marketing; (iv) Research and Development; (v) Information Technology. Cronbach's alpha: 0.82.
Control Variables	
Institutional context:	Distinction between business environments developed by Hall and Soskice (2001) to account for characteristics of institutional contexts (1 = Liberal Market Economies, e.g. USA, UK, Australia; 0 = other).
Industry:	Distinction between industries to account for effects of different types of work (1 = manufacturing; 0 = other).
Organization Size:	Log-transformed number of employees of the business unit.
Turnover:	Log-transformed voluntary turnover rate of the business

ESSAY 2: PERCEIVED ORGANIZATIONAL CHANGE INTENSITY AND VOLUNTARY EMPLOYEE TURNOVER IN LATIN AMERICA: THE MODERATING EFFECT OF HIGH PERFORMANCE WORK PRACTICES IMPLEMENTATION

Introduction

The Latin American region is characterized by volatility in the economic, political, social and technological arenas (ECLAC, 2017; B. R. Schneider, 2009). These changes have consequences for the management and strategic focus of organizations that operate in the region (Brenes, Camacho, Ciravegna, & Pichardo, 2016; Cuervo-Cazurra, 2016; Hermelo & Vassolo, 2010). For example, in 2012 Latin American CEO's perceived uncertain economic growth and increasing tax burdens as their principal challenges (PwC, 2012). Only five years later, these challenges were populism and insufficient infrastructure (PwC, 2017). To adapt to shifts in the business environment, organizations implement change initiatives; frequently several simultaneously. For example, an organization may upgrade production technologies, reduce staff, hire new employees, and discontinue products while launching new ones. Such organizational changes have implications for how the organization's employees do their work and how they relate to the organization.

Research on organizational change has traditionally focused on organizational-level processes (Armenakis & Bedeian, 1999; Woodman, 1989). However, more recently scholars have called for considering other levels of analysis and linking change to organizational performance outcomes (Pettigrew, Woodman, & Cameron, 2001). Individual-level concerns about being prepared for organizational change (Armenakis, Harris, & Mossholder, 1993; Wanberg & Banas, 2000), having control over how change processes unfold (Elias, 2009), or identifying with the changing organization (Caldwell, Herold, & Fedor, 2004; Sung et al., 2017)

shape organizational change processes and –ultimately-- their organization-level success. As Fugate, Prussia and Kinicki observed: "while change is a strategic imperative for employers, it also is vital to note that (remaining) employees determine the ultimate success of such changes" (2012: 891).

In this study, I develop a resource-based perspective to explore the role of HPWPs in organizations that undergo changes. More specifically, I suggest that the implementation of HPWPs moderates a positive association between organizational change and voluntary employee turnover. I focus on voluntary employee turnover as it hinders organizational change. The replacement of employees not only implies a monetary cost but also costs related to discovering how new employees can contribute to organizational goals (Hatch & Dyer, 2004). More in general, voluntary employee turnover is a strong negative predictor of organizational performance in general (Hancock, Allen, Bosco, McDaniel, & Pierce, 2013), which is what organizations aim to improve when they implement changes. I argue that organizations that have invested in HPWPs as a means to enhance employees' abilities, motivation and opportunities to contribute to organizational goals, will experience less voluntary turnover when they implement organizational changes. Investments in HPWPs, such as selective hiring, intensive training, performance management that includes developmental feedback and rewards, discretion enhancing work design, or sharing information through internal communication are associated with retaining and increasing unit-level human capital (Batt & Colvin, 2011; Jiang et al., 2012) and signal that the organization is committed to its employees. Hence, I suggest that HPWPs implementation moderates the relationship between organizational change and voluntary employee turnover.

I test my hypotheses empirically in the context of Latin America, a region characterized

by high volatility in the economic and socio-political contexts (ECLAC, 2017). Organizations that operate in the region need to adapt to this volatility, while dealing with challenges of technological upgrading (McDermott & Corredoira, 2010) to enhance their competitiveness -- especially if they pursue global competitiveness and aspire to become *Multilatinas* (Cuervo-Cazurra, 2008, 2016). As the larger share of research on organizational change and strategic HRM has been conducted in developed economies, findings obtained in emerging market regions such as Latin America are not only important for the purpose of generalizability (Nicholls-Nixon, Davila Castilla, Sanchez Garcia, & Rivera Pesquera, 2011) but also represent an increasingly important source of insight of their own (Hernandez & Guillén, 2018).

This study is organized as follows. In the next section, I lay out the theoretical framework that supports the proposed hypotheses. In the methods section, I explain how the study was conducted and the characteristics of the measures. Then, I present the results, which are discussed in the final section.

Theory and Hypotheses

Human capital theory (G. S. Becker, 1964) and the notion that labor is not necessarily a variable cost to be minimized but an asset that can be used to enhance firm performance (Oi, 1962) strongly relate to resource based perspectives on competitive advantage (Barney, 1991; Barney et al., 2001; Wernerfelt, 1984). The RBV posits that firms that accumulate resources that are valuable, rare, inimitable and non-substitutable can develop competitive advantage (Barney, 1991; Peteraf, 1993). Human capital derived from employees that have firm-specific individual-level knowledge, skills and abilities can meet these criteria (Campbell et al., 2012; Coff, 1997). Extant research suggests that human capital stocks are positively related to organizational

performance (Batt & Colvin, 2011; Hitt, Bierman, Shimizu, & Kochhar, 2001; Ployhart, Weekley, & Ramsey, 2009), while human capital losses diminish organizational performance (Shaw, Park, & Kim, 2013). In the context of organizational change, the loss of key human capital has negative implications for the organization's competitiveness, which is what organizational changes are supposed to enhance.

Perceived organizational change intensity and voluntary employee turnover

Organizational change represents an important challenge to the management of human capital as it affects variables that are relevant predictors of voluntary employee turnover. At the individual level of analysis, several models of voluntary employee turnover (Mobley, 1977; Mobley, Griffeth, Hand, & Meglino, 1979) emphasize dissatisfaction with the job or the organization. Job satisfaction refers to "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976): 1300) and is associated with lower intentions to leave and less actual turnover (N. P. Podsakoff, LePine, & LePine, 2007; Tett & Meyer, 1993). Organizational change may cause employees to suffer significant levels of stress due to uncertainty, unmet career expectations, reduced status, conflicts, and the threat of job loss (Ashford, 1988; Schweiger & DeNisi, 1991). Also, employees frequently experience negative emotions, including anger, anxiety and frustration, when their employer implements organizational changes (Fugate, Prussia, & Kinicki, 2012). To deal with the uncertainties of organizational change, they rely on coping strategies which have negative effects on job satisfaction (Amiot, Terry, Jimmieson, & Callan, 2006) and ultimately influence whether employees decide to stay at the organization or not.

Dissatisfaction with the organization can also result from organizational changes in terms

of diminished Person-Environment (P-E) fit. P-E fit refers to employees feeling compatible (Cable & Parsons, 2001) with the organization or perceiving congruence with its culture (O'Reilly, Chatman, & Caldwell, 1991). As changes occur in the organization, employees are likely to compare how they fit into the new organization to their past experiences. Such comparisons are especially relevant when organizations have implemented changes in the past that were unsuccessful as cynicism may emerge (Devos, Buelens, & Bouckenooghe, 2007; Rafferty & Restubog, 2010). Also the extent of organizational change and how the change process are managed are important predictors of changes in P-E fit (Caldwell et al., 2004). When employees perceive that they do not fit in the organization, they are unlikely to perform well at their (new) job and eventually may leave the organization (Oh et al., 2014).

Whereas P-E fit refers to congruence, dissatisfaction with the organization and how it implements changes can also have affective implications. For example, when organizations provide poor information to their employees, they experience low affective commitment to the change initiative (Rafferty & Restubog, 2010; Schweiger & DeNisi, 1991). Employee commitment to organizational change refers to "a force (mind-set) that binds an individual to a course of action deemed necessary for the successful implementation of a change initiative" (Herscovitch & Meyer, 2002): 475). Armenakis and Bedeian observed that affective outcomes, such as commitment "mesh nicely with the various models for implementing and understanding reactions to change" (1999: 307). Empirical studies highlight the importance of commitment after downsizing (Bergström & Arman, 2017), implementation of knowledge management initiatives (McKenzie, Truc, & van Winkelen, 2001), and to enhance participation in the implementation of strategic change (Lines, 2004).

Employees' commitment to organizational change is important to the success of change

initiatives but informs less about whether they will leave the organization. In particular, at low levels of commitment to organizational change, employees may decide to leave, suppress their emotional response, or stay until they find suitable employment alternatives. These withdrawal behaviors fit the unfolding model of turnover (Lee & Mitchell, 1994) which emphasizes specific events –such as organizational change-- as triggers of future turnover. More recent research acknowledges the role of delays between affective reactions to organizational change and turnover. For example, Sung et al. (2017) found that organizational attachment declined during a merger, which led to increased voluntary turnover rates.

Finally, organizational change may lead to unit-level outcomes, such as large lay-offs, restructured processes and discontinued products and services. These outcomes affect antecedents of collective turnover, such as collective perceptions of organizational climate, the distribution of work, and distributions of worker age and skills (Hausknecht & Trevor, 2011). High levels of collective turnover may have consequences for individual employees' organizational commitment (Meyer & Allen, 1991). When many colleagues are let go or leave, employees may perceive a lower cost of leaving (continuance commitment) and feel less obliged to remain with the organization (normative commitment).

Taken together, organizational change affects both individual and unit-level predictors of voluntary turnover. Multiple organizational changes that are implemented simultaneously or high intensity of a particular type of change (e.g. merger, massive lay-off) affect employees' job satisfaction and alter how employees relate to the organization. When the perceived intensity of changes is high, employees are more likely to leave the organization:

Hypothesis 1: A higher level of perceived organizational change intensity is positively

associated with voluntary employee turnover.

The moderating effect of HPWPs implementation

Situations of intense or multiple changes cause employees to experience anxiety (Rafferty & Restubog, 2010), perceive change-related threats (Fugate et al., 2012), and lower levels of commitment (Elias, 2009; Rafferty, Jimmieson, & Armenakis, 2013), which increase their likelihood to leave the organization (Sung et al., 2017) and affect the success of change processes (Fugate et al., 2012; Raineri, 2011). However, employees' voluntary turnover varies considerably across organizations, which suggests the existence of factors that condition such withdrawal behaviors. One of these factors is investments in HPWPs (Jiang et al., 2012; Shaw et al., 2013). Investments in HPWPs reflect the notion that labor is not a cost that should be minimized, but rather an asset that can enhance organizational performance (Oi, 1962). Strategic HRM studies provide evidence that organizations that consistently invest in HPWPs develop high commitment employee relations (Batt & Colvin, 2011) and enhance unit-level human capital (Ployhart et al., 2009), which are associated with lower employee turnover.

In the context of implementing organizational change, I expect a similar effect. Organizations that have implemented HPWPs will experience lower levels of voluntary employee turnover when they implement organizational changes. I identify three general mechanisms that explain how the implementation of HPWPs moderates the relationship between perceived organizational change intensity and voluntary employee turnover: HPWPs as a driver of change readiness, HPWPs as a driver of employees' coping strategies, and HPWPs as a driver of firm-specific human capital.

The first mechanism, HPWPs as driver of organizational change readiness refers to

strengthening employees' "beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization's capacity to successfully undertake those changes" (Armenakis et al., 1993): 681). Change readiness is among the most important factors that explain the success of change initiatives (Rafferty et al., 2013) and applies to both individual and unit-level change (Whelan-Berry, Gordon, & Hinings, 2003). At the unit-level, shared emotions and beliefs regarding change can result from aggregation of outcomes of individual-level processes such as communication, participation or justice (Rafferty et al., 2013; Sanchez-Burks & Huy, 2009), but also from top-down processes, such as HRM practices. Processes such as the attraction, selection, and attrition of employees (B. Schneider, 1987) and organizational socialization (Van Maanen & Schein, 1979; Wanous, 1980) shape unit-level affect and beliefs regarding organizational changes. Additionally, to the extent that employees perceive that they are prepared for organizational change and perceive organizational support, they will be less likely to withdraw from the organization.

HPWPs have an important role in employee attraction, selection, development and attrition (Wright, Dunford, et al., 2001). As HPWPs shape collective attitudes and beliefs, increase employees' skills and create opportunities for motivated employees to use their skills (Appelbaum, Bailey, Berg, & Kalleberg, 2000; Batt, 2002; Lepak, Liao, Chung, & Harden, 2006), their implementation contributes to organizational change readiness in several ways. First, the implementation of HPWPs is associated with the development of employees' knowledge, skills, abilities and other characteristics (KSAOs). In particular, practices such as extensive training, learning on the job, and developmental feedback in performance appraisals help employees to become more proficient in their current job and learn new skills that may help them perform other jobs in the future. Examples of the effects of HPWPs on KSAOs include the better

use of recently implemented advanced production techniques by manufacturing workers (Youndt et al., 1996) or accelerated learning curves of engineers in semiconductor production (Hatch & Dyer, 2004). Also, employee selection practices may consider individual differences in predisposition towards organizational change. In particular, personality traits such as openness to experience (Judge, Thoresen, Pucik, & Welbourne, 1999) and individual characteristics such as self-esteem, optimism and perceived control (Elias, 2009; Wanberg & Banas, 2000), or tolerance to ambiguity and risk aversion (Judge et al., 1999; Rafferty & Restubog, 2010) are relevant to increasing organizational change readiness.

Second, organizations can elicit organizational citizenship behaviors (P. M. Podsakoff, MacKenzie, Paine, & Bachrach, 2000) by adopting HPWPs. Supportive extra-role behaviors are important to organizational change readiness because they allow for experimentation of different ways to perform a job, to discuss ideas about the future of the organization, and to overcome potential difficulties during the implementation of changes. HRM practices such as work design that emphasizes employee discretion or rewards that encourage citizenship behaviors contribute to collective change readiness as they develop employee attitudes that are oriented towards the goals of the organization. For example, hotel workers in China were more likely to display service-oriented citizenship behaviors in organizations that had adopted HPWPs, especially when service was more important to their employer's business strategy (Sun, Aryee, & Law, 2007). Also, employees in the food processing industry were more likely to engage in organizational citizenship behaviors such as providing suggestions on how to work more effectively or helping colleagues who had large amounts of work, when they perceived that their employer invested in them through HPWPs (Kehoe & Wright, 2013).

Third, HPWPs empower employees to use their skills and motivation to achieve

organizational objectives. HPWPs such as flexible job design, information sharing and employee consultation increase organizational change readiness as they give employees discretion to perform their job and contribute to organizational goals as they consider best. Self-determination theory (Deci & Ryan, 2000) suggests that intrinsic motivation is associated with employees' pursuit of new challenges and search for learning opportunities. This type of employee behavior facilitates organizational change, especially when change depends on employee's initiative taking. Examples of the effect of HPWPs on employee self-determined behaviors that lead to unit-level performance include knowledge workers at a hydroelectric power organization who were more likely to cross unit boundaries to gain access to knowledge when they perceived their unit had adopted HPWPs (Kehoe & Collins, 2017). Likewise, knowledge workers in the pharmaceutical industry were more likely to contribute to the development of new products by sharing information and ideas when their employer adopted HPWPs (Collins & Smith, 2006).

A second mechanism through which HPWPs moderate the relationship between perceived organizational change intensity and voluntary employee turnover concerns how employees cope with the impact of implemented changes. Organizational change requires employees to learn new skills and experiment with new ways of performing their job. This generally causes work-related stress and lower job satisfaction which may make employees leave the organization unless they find a way to cope with these outcomes.

Consistent investments in HPWPs reflect an organization's commitment to the employment relationship (Huselid, 1995; Tsui et al., 1997). According to social exchange theory (Blau, 1964), employees are likely to reciprocate and invest in the employment relationship too. In the context of changing organizations, reciprocating involves developing coping strategies based on internal work motivation, seeing change as a learning opportunity, and pursuing

participation in or control over the change process (Elias, 2009).

While researchers frequently rely on the Ability-Motivation-Opportunity (AMO) model of HRM to explain the effects of HPWPs (Appelbaum et al., 2000; Lepak et al., 2006), the underlying needs of the framework are also closely connected to strategies for coping with organizational change. The ability component is related to skill-enhancing HPWPs such as rigorous employee selection and extensive training. When applied in situations of organizational change, these practices may contribute to employees' perception of change as a learning process. Similarly, the motivation component is related to HPWPs that enhance employee motivation such as developmental feedback in performance appraisals, opportunities for career development and job security. Organizations that adopt such practices when implementing change may enhance their employees' internal work motivation. Finally, the opportunity component of the AMO framework is related to HPWPs that increase employee discretion in decision-making and contributing to organizational goals. In the context of organizational change, HPWPS such as information sharing, employee consultation and flexible job design may give employees a sense of control over the change process and help them develop coping strategies.

A third general mechanism through which HPWPs have a moderating effect on the relationship between perceived organizational change intensity and voluntary employee turnover relates to the firm-specific value of their individual-level human capital. RBV scholars propose that uniqueness is one of the characteristics of resources that explain sustained competitive advantage (Barney, 1991, 2001). As organizations implement changes, they find that past investments and positions both constrain and enable possibilities to develop new capabilities (Teece, Pisano, & Shuen, 1997) but also that the accumulated experience cannot be imitated easily. Similarly, employees accumulate individual-level human capital through work experience

at a particular organization and past investments in HPWPs (Shaw et al., 2013). When employees are more experienced and the organization has invested in HPWPs, they will be better able to perform their current jobs (Batt & Colvin, 2011) and contribute to organizational change through participation, organizational citizenship behaviors and creativity. To the extent that employees stay at an organization that changes over time, their individual-level human capital is likely to comprise learning experiences that are specific to their organization. The uniqueness of these experiences makes their individual-level human capital firm-specific, which reduces its applicability outside the focal organization (G. S. Becker, 1964) and creates an incentive for employees to stay at their current organization as other employers may not value such specific human capital (Campbell et al., 2012; Lepak & Snell, 1999).

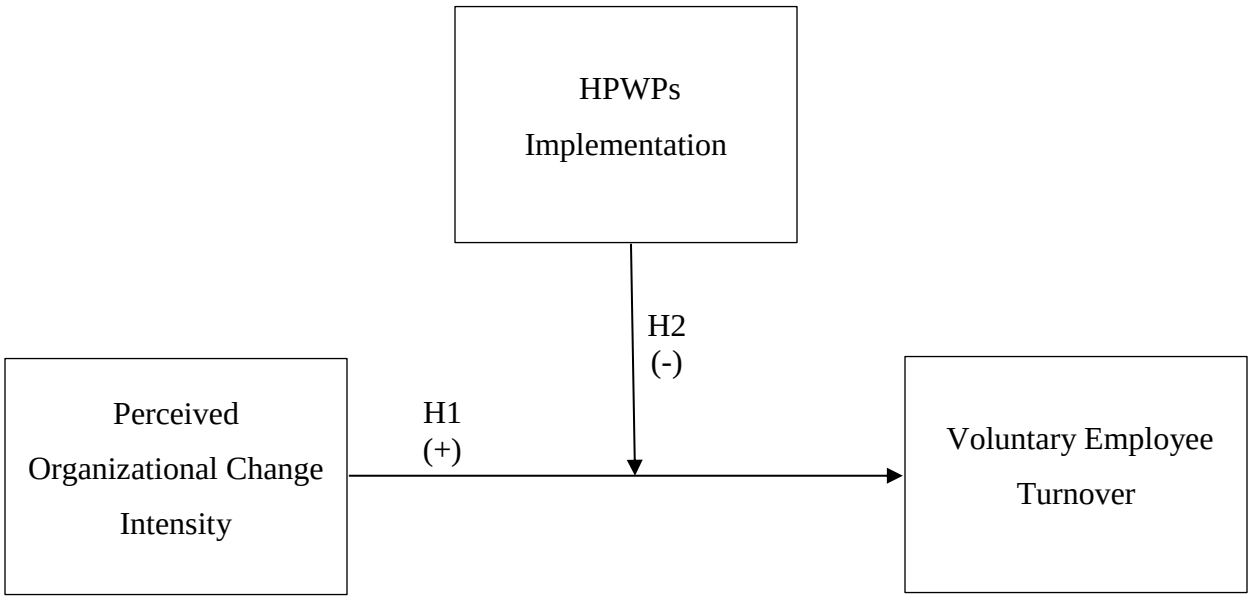
In sum, the implementation of HPWPs allows for three general mechanisms that reduce voluntary employee turnover in organizations that implement changes. Implementation of HPWPs contributes to developing organizational change readiness, encourages employees to develop coping strategies to deal with the stress and uncertainty that are associated with organizational change, and contributes to the development of firm-specific human capital. Thus, I propose:

H2: The implementation of HPWPs will moderate the relationship between perceived organizational change intensity and voluntary employee turnover, such that at higher levels of HPWPs implementation voluntary employee turnover will be lower.

The relationships proposed in hypotheses 1 and 2 of the study are visually represented in Figure 1. As shown, I expect that the intensity of organizational change is positively associated with

voluntary employee turnover. The implementation of HPWPs has a negative moderating effect on this association.

Figure 1: Theoretical model of the study



Methods

Sample and survey development

Data for this study were obtained from an online survey of HR professionals and line managers. As described in the General Appendix included at the end of this dissertation, the researchers partnered with the Federación Interamericana de Asociaciones de Gestión Humana, FIDAGH (Interamerican Federation of Human Capital Management Associations) and its affiliates in Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Paraguay, Panama, Peru, Mexico, Uruguay and Venezuela to implement a snowball sampling strategy.

Local Associations sent a general invitation to member companies to participate in the study. In the invitation letter and description of the study, we explicitly required individual-level responses from at least 4 HR professionals and 4 line managers within a single participating business unit. As a result, the sample is biased towards organizations that are considered large in the Latin American context. The final sample consisted of 1,891 individual raters, subdivided between 910 HR professionals and 981 line managers. Raters were employed at 89 business units that operated in Latin America, and were distributed across manufacturing (40), service (36) and other industries (13), such as construction, mining or energy.

As the research team communicated principally in English, we developed the original questionnaire in that language. Following the procedure proposed by (Brislin, 1970) the questionnaire was translated into Spanish, and Portuguese, and back-translated into English. Specific HRM concepts and business terms in general vary across Latin America countries. For example, in Argentina people refer directly to 'marketing', while Mexicans tend to use the translation '*mercadotecnia*'. I requested representatives of national HRM Associations to give feedback on the wording of the translated questionnaire.

Measures

Perceived Organizational Change Intensity. Researchers have studied employee responses to organizational change in the context of specific events, in particular mergers (Rafferty & Restubog, 2010; Sung et al., 2017) or organizational restructuring (Elias, 2009). A major issue of this approach is that it does not allow for consideration of variation in the intensity of change at the unit-level of analysis. Also, while individual-level perceptions of change could be aggregated to unit-level variables, only few researchers have done so (Rafferty et al., 2013). I was interested

in a collective perception of organizational change intensity in order to predict unit-level outcomes such as voluntary employee turnover rates. Hence, I sought to develop a measure that would capture the extent to which certain dimensions of the organization were perceived to be changing, irrespective of the trend, event or decision that triggered that change.

Following guidelines suggested by (Hinkin, 1995), I generated an initial list of items using the existing literature on organizational change. I focused on changes that organizations commonly implement to position themselves strategically in the business context or improve their internal functioning, and that have implications for employees. Thus, I identified changes related to the organization's product and service offering, technological upgrading and process automation, outsourcing and restructuring, and changes in leadership and top management team.

To develop a measure that would be meaningful in the Latin American context and to account for organizational changes that are more frequent in or specific to the region, I organized round table meetings with Human Resource executives at different locations in Latin America. I asked them about the types of organizational change they implemented most frequently in response to changes in the business environment or as part of a new business strategy. The lists I derived from the literature and the round table meetings had considerable overlap, so I combined them into an initial scale of 9 items. The specific items are included in Appendix 1 to this chapter.

Although the sample comprised both HR professionals and line managers, I considered that HR professionals were more likely to have an adequate notion of organizational changes that were implemented throughout the organization than line managers who were responsible for a specific function or department. An ANOVA did not indicate significant differences between average ratings of items between the sub-groups. This split sample approach allowed me to run

an exploratory factor analysis on the data obtained from line managers. I expected all items to load onto one single factor that represented the aggregated intensity of organizational changes. However, the exploratory factor analysis indicated the existence of three factors (see Table 1). The internal consistency (Cronbach's alpha) of the 9-item scale was 0.79.

Theoretically, unit-level intensity of organizational changes refers to a single perception of changes the organization implements. However, the result of the exploratory factor analysis suggested that items did not load on the same factor. I used structural equations modeling for confirmatory factor analyses to assess the fit of the data obtained from HR professionals to different specifications of the variable. To do so, I first aggregated the ratings obtained from multiple individual HR professionals at each business unit to a unit-level variable.

The first sub-scale, Process Change, combined the items that referred to changes in production technology, output levels and information systems that support production processes. As the items referred to the intensity of organizational changes at the business unit, aggregation did not require referent-shift (Chan, 1998) which could introduce measurement error due to the combination of ratings that refer to individual level of analysis into a shared unit level measure. Also, HR professionals could differ in their perception of the intensity of changes that occurred within the organization due to their specific functional responsibilities or interaction patterns within the organization. The ICC(1) and ICC(2) values (Bliese, 1998, 2000) indicated the reliability of the aggregated Process Change scale. The ICC(1) value, which gives an estimate of the reliability of a single assessment of a group mean (James, 1982), was 0.26. Bliese (2000) observed that the typical range for ICC(1) values is 0.05 to 0.20, suggesting that the inter-rater reliability of the Process Change scale is higher than average. ICC(2) represents the reliability of group means within a sample (Bliese, 2000). The ICC(2) value for the Process Change measure

Table 1: Exploratory Factor Analysis[a,b] Perceived Organizational Change Intensity Items

Organizational Change Items	1	2	3	α
1. Adoption of new production technologies	.243	**.836**	.189	.793
2. Changes in production capacity	.114	**.829**	.068	
3. Implementation of enterprise software (e.g. ERP, CRM)	.015	**.848**	.113	
4. Development and launch of new products and/or services	**.833**	.071	-.017	
5. Restructuring of the sales organization (own salesforce, distributors, franchisees, etc.)	**.863**	.084	.000	
6. Organization of work (e.g. process reengineering, in/outsourcing)	**.739**	.291	.166	
7. Restructuring of organizational units	**.739**	.031	.282	
8. Hiring or layoff of a significant number of employees	.020	.137	**.855**	
9. Changes in the top management team (e.g. new CEO, change of multiple Directors).	.207	.145	**.814**	
Eigenvalues	3.520	1.737	1.188	

[a] Extraction Method: Principal Component Analysis.

[b] Rotation Method: Varimax with Kaiser Normalization.

was 0.79, well above the 0.60 cutoff value proposed by (Glick, 1985). Finally, the F-test was significant, an additional indicator of the reliability of the aggregated scale (Bliese, 2000). The internal consistency among items (coefficient alpha) of the Process Change scale was 0.81.

I named the second sub-scale Business Change because the items alluded to the intensity of changes in how the organization structured its product and service offering and how it approached the market. Similar to the Process Change scale, I aggregated ratings from individual HR professionals to derive the business unit-level measure. The reliability of the aggregated measure was high. The ICC(1) value was 0.41, the ICC(2) value was 0.88 and the F-test was significant. The internal consistency among items (coefficient alpha) of the Business Change sub-scale was 0.84.

I labeled the third sub-scale People Change as the items in the sub-scale referred to the intensity of changes in the organization's staff and leadership team. Again, I aggregated ratings from individual HR professionals to derive the business unit-level measure. The inter-rater reliability of the aggregated measure, measured as ICC(1), was 0.30, while the reliability of the group means, measured as ICC(2), was 0.82. Also, the significance of the F-test provided further support for the reliability of the aggregated sub-scale. The internal consistency among items (coefficient alpha) of the People Change sub-scale was 0.68.

The aggregation of individual-level ratings into unit-level scales allowed for the second step to determine the adequate specification of the perceived organizational change intensity variable. I tested a three-factor CFA model which fitted the data well (Hu & Bentler, 1999; Steiger, 2007): $\chi^2(24)$: 20.36 ($p < 0.67$, $n = 89$), $\chi^2/ df = 0.85$, root mean square error of approximation (RMSEA) = 0.00 (c.i. 0.00 to 0.07), and CFI = 1.00. Tests of alternative models in which items loaded on fewer factors did not fit the individual level data better than the three-

factor model. Finally, I tested a second-order CFA model in which the three sub-scales loaded on an underlying factor. Compared to the three-factor first-order specification, the second order model specification involves estimation of the same number of parameters. Instead of estimating variances and covariances between factors, the second-order model estimates factor loadings and residual variances and –hence– yields the same fit statistics (Muthen & Muthen, 2017). Given that theoretically the variable refers to a single perception of the intensity of changes that are being implemented in an organization, I decided to use the second-order perceived organizational change intensity variable to test my hypotheses.

High Performance Work Practices Implementation. In order to measure the implementation of HPWPs, I followed guidelines suggested by Langevin-Heavy et al. (2013). Contrary to early SHRM research that focused on the extent to which HR professionals applied particular HR practices (Arthur, 1994; Huselid, 1995), I was interested in the actual implementation of HPWPs by line managers and their implications for employees. Scholars refer such outcomes of HPWPs as the HR product (B. Becker & Gerhart, 1996; Colbert, 2004; Wright, 1998) to capture the intended effects of HR practices and policies.

I derived items from the commitment HRM practices scale as developed by Lepak and Snell (Lepak & Snell, 2002) as it includes the most common human resource management practices such as selection, training, incentive compensation, employee involvement or empowerment, and participative work design (Combs et al., 2006). Also, Posthuma et al's (2013) cross-cultural ranking of most frequently used items in measures of HPWPs overlap to a large extent with the practices I included in the scale. Thus, I asked line managers to focus on non-managerial employees and rate their agreement with statements that referred to the

implementation of HPWPs in the business unit they worked in. The specific items are listed in Apendix 1 of this chapter. Finally, considering that I aggregated ratings of the second group of individual line managers into a business unit level measure of HPWPs Implementation, I report the statistics that support doing so. The ICC(1) value was 0.20, the ICC(2) value was 0.73, and the F-test was significant, indicating the appropriateness of aggregation (Bliese, 2000; Glick, 1985).

Employee Turnover. In line with previous research on organization-level antecedents and consequences of turnover (e.g. (Batt, 2002; Batt & Colvin, 2011; Hancock et al., 2013; Heavey, Holwerda, & Hausknecht, 2013) and suggestions by (Hom, Lee, Shaw, & Hausknecht, 2017), I measured my dependent variable, collective voluntary employee turnover, as the percentage of employees that had voluntarily quit their jobs at the organization in the year of my study. The measure was reported by the Senior HR person of the business unit. Given that the distribution of employee turnover was skewed, I performed a log-transformation to obtain a normal distribution. The results of my analyses are reported for log-transformed turnover rates.

Control variables. Industry. I control for the effect of industry as employee turnover is likely to vary according to the type of activity. Although Latin American manufacturing firms historically underinvested in sophisticated production technologies (ECLAC, 2017), some sectors have witnessed significant technological upgrading (McDermott & Corredoira, 2010) which is associated with investments in employees (Youndt et al., 1996) who are more likely to stay at the organization. Also, I also expect differences in employee turnover between manufacturing industries and other industries because of differences in union density and use of collective

bargaining agreements. In Latin American manufacturing sectors, union density and the use of collective bargaining agreements is higher (Cook, 2007). Unions typically increase employment stability which workers may value in volatile economic environments such as Latin America. Collective bargaining agreements in Latin America frequently include seniority-based pay conditions. Workers with longer tenure at an organization have an incentive to continue employment, even if the organization is changing. I included a manufacturing industries dummy variable (0 = other industries, 1 = manufacturing industries) to account for the potential differences in the hypothesized associations between the variables of my study.

Organization Size. In Latin America, larger organizations may provide more employment stability. Considering the economic volatility that has historically characterized the region (ECLAC, 2017), employees may choose to stay at more stable organizations even though they perceive that their employer implements changes they do not support. A similar preference for employment stability was identified by (Newburry, Gardberg, & Sanchez, 2014), who found that Latin American employees prefer to work for multinational companies because they are perceived to have better chances to survive economic crises. To account for differences related to the availability of organizations' resources, I controlled for organization size measured as the logarithm of the number of employees.

Quality of measurements

Measurement issues have been debated extensively by SHRM scholars (B. Becker & Gerhart, 1996; Gerhart, Wright, Mc Mahan, et al., 2000; Huselid & Becker, 2000). I tried to minimize measurement error and avoid common method bias by taking the following steps. First, I carefully chose the sources of my data. As line managers are directly affected by organizational

change initiatives, they are likely to focus exclusively on how such initiatives affect their department. In order to obtain ratings of the intensity of organizational change at the business unit level of analysis, I relied on the sub-sample of HR managers. I used the same split-sample approach for the HPWPs implementation measure. SHRM research suggests that because of their professional interest, HR managers may be overly optimistic in their ratings of HPWPs implementation (Gerhart, Wright, & McMahan, 2000; Wright, Gardner, et al., 2001). As I was interested in the actual implementation of HPWPs at the business unit level of analysis, I chose to use ratings obtained from line managers.

Second, I enhanced the reliability of my measures by avoiding single-rater responses to questions that referred to business unit level characteristics. Considering the effect of group size on reliability of aggregate measures (Bliese, 1998), I excluded business units for which I had less than four HR professional respondents or four line manager respondents. Aggregation statistics for each measure are reported above.

Third, I minimized the potential for common method bias following recommendations by (P. M. Podsakoff et al., 2003). More specifically, I measured variables in different sections of the questionnaire to reduce the potential for respondents to make causal connections.

Fourth, I assessed the psychometric properties of my measures based on confirmatory factor analyses. I tested a four-factor model that included HPWP Implementation (7 items) and the second-order Organizational Change Intensity scale with three sub-scales: Process Change (3 items), Business Change (4 items), and People Change (2 items). The model fitted the data well (Hu & Bentler, 1999; Steiger, 2007): $\chi^2(92)$: 113.25 (p = .07, n = 89), χ^2/df = 1.23, root mean square error of approximation (RMSEA) = 0.05 (c.i. 0.00 to 0.08), TLI = 0.954, and CFI = .965. Tests of alternative models confirmed the proposed model and its measures.

Table 2: Descriptive Statistics

Variable	Mean	SD	1	2	3	4
1. Manufacturing	0.55	0.50				
2. Organization Size (log)	7.52	1.20	0.03			
3. Perceived Organizational Change Intensity	3.73	0.30	0.14	0.12		
4. HPWP Implementation	3.42	0.41	0.16	0.12	-0.14	
5. Employee Turnover (log)	2.18	0.62	0.00	0.10	0.57 **	0.39 **

** Correlation is significant at the 0.01 level (2-tailed).

Results

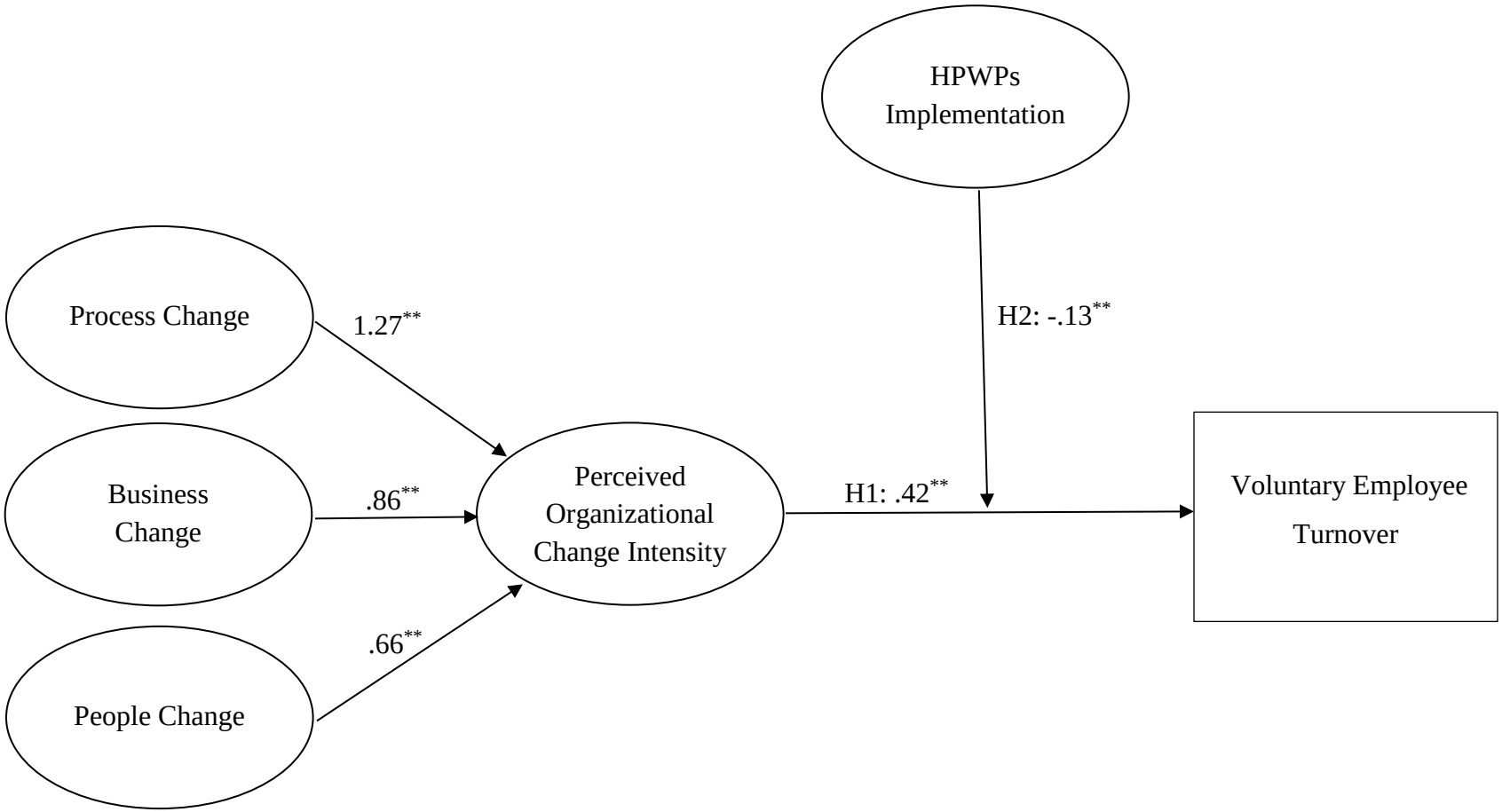
Table 2 reports the descriptive statistics and correlations between the variables of the study. Focusing specifically on the hypotheses of my study, Figure 2 depicts the results of analysis run in Mplus invoking the XWITH command for a Latent Moderated Structural Equations (LMS) approach (Klein & Moosbrugger, 2000). LMS allows for analyzing general interaction models that utilize the mixture distribution and provides a maximum likelihood estimation of model parameters by adapting the expectation maximation algorithm.

Hypothesis 1, which proposed a positive association between perceived organizational change intensity and voluntary employee turnover, was supported. The association was positive and significant ($\beta = 0.42$, $p > 0.01$).

Hypothesis 2 proposed a positive moderating effect of HPWPs implementation on the association between perceived organizational change intensity and the voluntary employee turnover. The interaction between HPWPs implementation and perceived organizational change intensity had a negative and significant effect ($\beta = -0.13$, $p > 0.01$). Thus, hypothesis 2 was supported as well.

The control variables that I included in the analysis were not significantly related to voluntary employee turnover. This suggests that dicates that organizations in manufacturing industries were more likely to adopt HPWPs than their counterparts in service industries or extractive industries such as mining or oil and gas.

Figure 2: Results of Latent Structural Equations Modeling tests of H1 and H2



Discussion

The results of this study provide further evidence that employees who perceive a high intensity of change implementation are more likely to leave their organization voluntarily. This finding represents a contribution as it allows to generalize findings obtained from research on organizational change and its impact on employees and their relationship with their organization conducted in the United States (Fugate et al., 2012; Sung et al., 2017) to the Latin American context. This finding is particularly interesting when considering the functioning of Latin American labor markets, where frequent episodes of contextual volatility (ECLAC, 2017) and employment protection based on the length of tenure (Cook, 2007) could represent an incentive for employees to continue employment. Moreover, comparative institutional perspectives on the political economy of Latin America (e.g., B.R. Schneider, 2009) stress the importance of hierarchies and ascribe much power to corporations such as those in my sample. The results of this study suggest that notwithstanding contextual volatility and power asymmetries, individual employees assess whether they should continue their employment at a changing organization or not.

The second finding of this study is that organizations that invest in the implementation of HPWPs experience lower levels of human capital loss than organizations that invest less. The strategic HRM literature suggests that organizations can enhance their performance by implementing HPWPs (Combs et al., 2006; Wright et al., 2005) and proposes lower voluntary turnover to be one of the principal mechanisms (Batt, 2002; Jiang et al., 2012). Avoiding loss of required human capital at organizations that need to implement changes is a clear illustration of this mechanism. One important observation is that the development of high commitment employee relations is not the result of a one-time investment in the implementation of HPWPs.

As empirically demonstrated in several studies (Batt & Colvin, 2011; Ployhart et al., 2011; Ployhart et al., 2009), enhanced human capital stocks as the result of HPWPs implementation require time and consistency in the investments. The moderating effect found in this study challenges suggestions by Youndt et al. (1996) who found that organizations that invest in advanced production technologies, also invest in HPWPs to achieve higher performance. In the context of this study, such investments may be perceived to be made too late.

As any study, this one also has several limitations. First, the design of the study is cross-sectional --implying a cut-off point for change-related employee turnover-- when employees' withdrawal may need to be analyzed using a wider timeframe. While I chose the annual employee turnover rate as reported by the senior HR person at the business unit, a wider timeframe could have been more appropriate. However, even when researchers apply longitudinal research designs to account for delayed effects, associations may not materialize. For example, Rafferty and Restuborg (2010) found that job satisfaction –a well-established predictor of turnover-- was not related to turnover during a merger between two construction companies in the Philippines. Potential explanations may refer to the importance of job satisfaction compared to job security, or the effects of job embeddedness which blur the relationships between organization or job related variables and turnover (Mitchell, Holtom, Lee, Sablynski, & Erez, 2001). An additional consideration is that much research on organizational change is conducted in situations where a clear trigger of change, such as a merger, can be identified (e.g. (Rafferty & Restubog, 2010; Sung et al., 2017). However, organizations increasingly implement multiple changes simultaneously and need to adapt continuously to the changing business environment, especially in volatile emerging markets. As a result, the notion of a clear starting point of organizational change does not necessarily apply. My focus on

perceived organizational change intensity as a predictor of employee turnover may make the definition of a specific timeframe less relevant. I consider that the cross-sectional analysis serves the purpose of this study.

Second, while my hypothesis regarding the moderating effect of HPWPs implementation was supported, organizational change typically implies people leave the organization, either through lay-offs or on their own decision. Investments in HPWPs may be counter-productive when turnover is anticipated. Shaw et al (2012) found that at high turnover levels (> 50% per year), organizations that had made significant investments in HPWPs achieved similar or lower workforce productivity than organizations that invested less. As the reported annual turnover rates in my sample did not exceed the 50% level, my findings should be interpreted with caution.

Third, notwithstanding my sample size I relied on SEM analysis to test the hypothesized relationships between the variables of the model simultaneously. While a benefit of simultaneous testing is reduced omitted variable bias, it also raises concerns regarding the statistical power of my results. In order to achieve recommended levels of statistical power, rule of thumb approaches (Bentler & Chou, 1987) would suggest the need for a larger sample. However, given that the factor loadings of my variables were high, the sample size approximated the recommended size based on Monte Carlo simulations (Wolf, Harrington, Clark, & Miller, 2013).

Conclusion

This study contributes to understanding the relationships between perceived organizational change intensity and voluntary employee turnover in the context of Latin America, and suggests that the implementation of HPWPs can pair the loss of human capital. Higher perceived organizational change intensity was positively associated with higher levels of voluntary

employee turnover, and HPWPs implementation had a negative moderating effect on this association.

The main managerial implication of this study is that in a region characterized by high volatility and a need for technological upgrading such as Latin America, managers should be aware of the relationship between employee perceptions of change intensity and their withdrawal behavior. If, as Fugate et al. suggest, "the (remaining) employees determine the ultimate success" (2012: 891) of organizational change, managers may need to anticipate potential loss of human capital and implement HRM practices allow for the development of high commitment employee relations well before they implement changes.

A second managerial implication concerns employees' attributions of why the organization implements HPWPs. Whereas the development of high commitment employee relations allow for retaining human capital stocks (Batt & Colvin, 2011; Ployhart et al., 2009), employees may also perceive that other factors explain HPWPs implementation, such as subsidiaries' alignment of HRM practices with those used at the organization's headquarters or institutional pressure to have 'world class' HRM practices. Employees may react differently when they perceive the organization implements HRM practices for reasons they don't share (Nishii et al., 2008). This may be especially true for employees at organizations that implement changes that employees do not support.

Looking forward, this study provides further support for the role of HPWPs in reducing collective voluntary employee turnover. Future research may address when organizations should invest in HPWPs implementation to pair voluntary employee turnover, whether employees in particular job groups react differently, or under what conditions the implementation of intended organizational changes is affected by collective voluntary turnover. As contextual volatility and

the need for adaptation increasingly affects companies in markets historically considered stable, these questions will be relevant beyond Latin America.

References

Aldrich, P., Dietz, G., Clark, T., & Hamilton, P. (2015). Establishing HR Professionals' Influence and Credibility: Lessons from the Capital Markets and Investment Banking Sector. *Human Resource Management, 54*(1), 105-130. doi: 10.1002/hrm.21626

Amiot, C. E., Terry, D. J., Jimmieson, N. L., & Callan, V. J. (2006). A Longitudinal Investigation of Coping Processes During a Merger: Implications for Job Satisfaction and Organizational Identification. *Journal of Management, 32*(4), 552-574. doi: 10.1177/0149206306287542

Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. (2000). *Manufacturing advantage why high-performance work systems pay off*. Ithaca: Cornell University Press.

Armenakis, A. A., & Bedeian, A. G. (1999, 1999 May-June). Organizational change: a review of theory and research in the 1990s. *Journal of Management, 25*, 293+.

Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating Readiness for Organizational Change. *Human Relations, 46*(6), 681-703. doi: 10.1177/001872679304600601

Arthur, J. B. (1994). Effects of Human Resource Systems on Manufacturing Performance and Turnover. *Academy of Management Journal, 37*(3), 670.

Ashford, S. J. (1988). Individual Strategies for Coping with Stress during Organizational Transitions. *The Journal of Applied Behavioral Science, 24*(1), 19-36. doi: 10.1177/0021886388241005

Baird, L., & Meshoulam, I. (1988). Managing Two Fits of Strategic Human Resource Management. *Academy of Management Review, 13*(1), 116.

Barney, J. (1986). Strategic Factor Markets: Expectations, Luck, and Business Strategy. *Management Science, 32*(10), 1231-1241.

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management, 17*(1), 99-120. doi: 10.1177/014920639101700108

Barney, J. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management, 27*, 643+.

Barney, J., Wright, M., & Ketchen, D. J. (2001). The resource-based view of the firm: Ten years after 1991. *Journal of Management, 27*(6), 625-641. doi: 10.1016/s0149-2063(01)00114-3

Bartram, T., Stanton, P., Leggat, S., Casimir, G., & Fraser, B. (2007). Lost in translation: exploring the link between HRM and performance in healthcare. *Human Resource Management Journal, 17*(1), 21-41. doi: 10.1111/j.1748-8583.2007.00018.x

Batt, R. (2002). Managing Customer Services: Human Resource Practices, Quit Rates, and Sales Growth. *The Academy of Management Journal, 45*(3), 587-597. doi: 10.2307/3069383

Batt, R., & Colvin, A. J. S. (2011). An employment systems approach to turnover: Human resources practices, quits, dismissals, and performance. *Academy of Management Journal, 54*(4), 695-717.

Becker, B., & Gerhart, B. (1996). The Impact of Human Resource Management on Organizational Performance: Progress and Prospects. *Academy of Management Journal, 39*(4), 779.

Becker, B., Huselid, M. A., & Ulrich, D. (2001). *The HR Scorecard: Linking People, Strategy, and Performance*: Harvard Business School Press.

Becker, G. S. (1964). *Human capital; a theoretical and empirical analysis, with special*

reference to education: distributed by Columbia University Press.
Bentler, P. M., & Chou, C. P. (1987). Practical Issues in Structural Modeling. *Sociological Methods & Research, 16*(1), 78-117. doi: 10.1177/0049124187016001004
Bergström, O., & Arman, R. (2017). Increasing commitment after downsizing: the role of involvement and voluntary redundancies. [Article]. *Journal of Change Management, 17*(4), 297-320. doi: 10.1080/14697017.2016.1252784
Blau, P. M. (1964). *Exchange and power in social life*. New York: J. Wiley.
Bliese, P. D. (1998). Group Size, ICC Values, and Group-Level Correlations: A Simulation. *Organizational Research Methods, 1*(4), 355-373. doi: 10.1177/109442819814001
Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations* (pp. 349-381). San Francisco, CA: Jossey-Bass.
Bowen, D. E., & Ostroff, C. (2004). Understanding HRM-Firm Performance Linkages: The Role of the "Strength" of the HRM System. *The Academy of Management Review, 29*(2), 203-221. doi: 10.2307/20159029
Boxall, P., Ang, S. H., & Bartram, T. (2011). Analysing the 'Black Box' of HRM: Uncovering HR Goals, Mediators, and Outcomes in a Standardized Service Environment. *Journal of Management Studies, 48*(7), 1504-1532. doi: doi:10.1111/j.1467-6486.2010.00973.x
Brandl, J., & Pohler, D. (2010). The human resource department's role and conditions that affect its development: Explanations from Austrian CEOs. *Human Resource Management, 49*(6), 1025-1046. doi: 10.1002/hrm.20392
Brenes, E. R., Camacho, A. R., Ciravegna, L., & Pichardo, C. A. (2016). Strategy and innovation in emerging economies after the end of the commodity boom—Insights from Latin America. *Journal of Business Research, 69*(10), 4363-4367. doi: https://doi.org/10.1016/j.jbusres.2016.03.059
Brewster, C., Brookes, M., & Gollan, P. J. (2015). The Institutional Antecedents of the Assignment of HRM Responsibilities to Line Managers. *Human Resource Management, 54*(4), 577-597. doi: 10.1002/hrm.21632
Brislin, R. W. (1970). Back-Translation for Cross-Cultural Research. *Journal of Cross-Cultural Psychology, 1*(3), 185-216. doi: 10.1177/135910457000100301
Cable, D. M., & Parsons, C. K. (2001). Socialization tactics and person-organization fit. *Personnel Psychology, 54*(1), 1-23. doi: 10.1111/j.1744-6570.2001.tb00083.x
Caldwell, S. D., Herold, D. M., & Fedor, D. B. (2004). Toward an Understanding of the Relationships Among Organizational Change, Individual Differences, and Changes in Person-Environment Fit: A Cross-Level Study. *Journal of Applied Psychology, 89*(5), 868-882. doi: 10.1037/0021-9010.89.5.868
Campbell, B. A., Coff, R., & Kryscynski, D. (2012). Rethinking Sustained Competitive Advantage from Human Capital. [Article]. *Academy of Management Review, 37*(3), 376-395.
Chadwick, C., Super, J. F., & Kwon, K. (2015). Resource orchestration in practice: CEO emphasis on SHRM, commitment-based HR systems, and firm performance. *Strategic Management Journal, 36*(3), 360-376. doi: 10.1002/smj.2217
Chan, D. (1998). Functional Relations Among Constructs in the Same Content Domain at Different Levels of Analysis: A Typology of Composition Models. *Journal of Applied Psychology, 83*(2), 234-246. doi: 10.1037/0021-9010.83.2.234

Chuang, C.-H., & Liao, H. (2010). Strategic human resource management in service context: Taking care of business by taking care of employees and customers. *Personnel Psychology, 63*(1), 153-196. doi: 10.1111/j.1744-6570.2009.01165.x
Coff, R. W. (1997). Human Assets and Management Dilemmas: Coping with Hazards on the Road to Resource-Based Theory. *The Academy of Management Review, 22*(2), 374.
Coff, R. W. (1999). When Competitive Advantage Doesn't Lead to Performance: The Resource-Based View and Stakeholder Bargaining Power. *Organization Science, 10*(2), 119-133.
Colbert, B. A. (2004). The Complex Resource-Based View: Implications for Theory and Practice in Strategic Human Resource Management. *The Academy of Management Review, 29*(3), 341-358. doi: 10.5465/amr.2004.13670987
Collins, C. J., & Smith, K. G. (2006). Knowledge Exchange and Combination: The Role of Human Resource Practices in the Performance of High-Technology Firms. *The Academy of Management Journal, 49*(3), 544-560.
Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel Psychology, 59*(3), 501-528.
Cook, M. L. (2007). *The politics of labor reform in Latin America between flexibility and rights*. University Park, Pa.: The Pennsylvania State University Press.
Cuervo-Cazurra, A. (2008). The multinationalization of developing country MNEs: The case of multilatinas. *Journal of International Management, 14*(2), 138-154. doi: https://doi.org/10.1016/j.intman.2007.09.001
Cuervo-Cazurra, A. (2016). Multilatinas as sources of new research insights: The learning and escape drivers of international expansion. *Journal of Business Research, 69*(6), 1963-1972. doi: 10.1016/j.jbusres.2015.10.142
Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry, 11*(4), 227-268. doi: 10.1207/s15327965pli1104_01
Delaney, J. T., & Huselid, M. A. (1996). The Impact of Human Resource Management Practices on Perceptions of Organizational Performance. *Academy of Management Journal, 39*(4), 949.
Delery, J. E. (1998). Issues of fit in strategic human resource management: Implications for research. *Human Resource Management Review, 8*(3), 289-309. doi: https://doi.org/10.1016/S1053-4822(98)90006-7
Devos, G., Buelens, M., & Bouckenooghe, D. (2007). Contribution of Content, Context, and Process to Understanding Openness to Organizational Change: Two Experimental Simulation Studies. *The Journal of Social Psychology, 147*(6), 607-629.
Drucker, P. F. (1954). *The practice of management* ([1st ed.] ed.). New York: Harper.
ECLAC. (2017). Economic Survey of Latin America and the Caribbean, 2016: The 2030 Agenda for Sustainable Development and the Challenges of Financing for Development.
Edwards, T., & Kuruvilla, S. (2005). International HRM: national business systems, organizational politics and the international division of labour in MNCs. *The International Journal of Human Resource Management, 16*(1), 1-21. doi: 10.1080/0958519042000295920
Elias, S. M. (2009). Employee Commitment in Times of Change: Assessing the Importance of Attitudes Toward Organizational Change †. *Journal of Management, 35*(1), 37-55. doi: 10.1177/0149206307308910

Farndale, E. (2005). HR department professionalism: a comparison between the UK and other European countries. *The International Journal of Human Resource Management, 16*(5), 660-675. doi: 10.1080/09585190500082626

Farndale, E., Brewster, C., Ligthart, P., & Poutsma, E. (2017). The effects of market economy type and foreign MNE subsidiaries on the convergence and divergence of HRM. *Journal of International Business Studies, 48*(9), 1065-1086. doi: 10.1057/s41267-017-0094-8

Farndale, E., & Hope-Hailey, V. (2009). Personnel Departmental Power: Realities from the UK Higher Education Sector. *Management Revue, 20*(4), 392-412.

Ferris, G. R., Galang, M. C., Thornton, M. L., & Wayne, S. (1995). A power and politics perspective on human resource management. In G. R. Ferris, S. D. Rosen & D. T. Barnum (Eds.), *Handbook of human resource management* (Vol. 13, pp. 100-114). Oxford, UK: Blackwell Publishers.

Ferris, G. R., & Judge, T. A. (1991). Personnel/Human Resources Management: A Political Influence Perspective. *Journal of Management, 17*(2), 447-488. doi: 10.1177/014920639101700208

Fugate, M., Prussia, G. E., & Kinicki, A. J. (2012). Managing Employee Withdrawal During Organizational Change:The Role of Threat Appraisal. *Journal of Management, 38*(3), 890-914. doi: 10.1177/0149206309352881

Galang, M. C., & Ferris, G. R. (1997). Human Resource Department Power and Influence Through Symbolic Action. *Human Relations, 50*(11), 1403-1426. doi: 10.1177/001872679705001104

Gerhart, B., Wright, P. M., Mc 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*(4), 803-834. doi: 10.1111/j.1744-6570.2000.tb02418.x

Gerhart, B., Wright, P. M., & McMahan, G. C. (2000). MEASUREMENT ERROR IN RESEARCH ON THE HUMAN RESOURCES AND FIRM PERFORMANCE RELATIONSHIP: FURTHER EVIDENCE AND ANALYSIS. *Personnel Psychology, 53*(4), 855-872. doi: 10.1111/j.1744-6570.2000.tb02420.x

Glick, W. H. (1985). Conceptualizing and Measuring Organizational and Psychological Climate: Pitfalls in Multilevel Research. *The Academy of Management Review, 10*(3), 601-616. doi: 10.5465/amr.1985.4279045

Gong, Y., Law, K. S., Chang, S., & Xin, K. R. (2009). Human Resources Management and Firm Performance: The Differential Role of Managerial Affective and Continuance Commitment. *Journal of Applied Psychology, 94*(1), 263-275. doi: 10.1037/a0013116

Guest, D. E. (1990). Human resource management and the American dream. *Journal of Management Studies, 27*(4), 377-397. doi: 10.1111/j.1467-6486.1990.tb00253.x

Guest, D. E., & King, Z. (2004). Power, Innovation and Problem-Solving: The Personnel Managers' Three Steps to Heaven? *Journal of Management Studies, 41*(3), 401-423. doi: 10.1111/j.1467-6486.2004.00438.x

Guest, D. E., Michie, J., Conway, N., & Sheehan, M. (2003). Human resource management and corporate performance in the UK. *British Journal of Industrial Relations, 41*, 291+.

Haggerty, J. J., & Wright, P. M. (2010). Strong Situations and Firm Performance. In A. Wilkinson, N. Bacon, T. Redman & S. A. Snell (Eds.), *The SAGE Handbook of Human Resource Management*

London: SAGE Publications Ltd.
Hancock, J. I., Allen, D. G., Bosco, F. A., McDaniel, K. R., & Pierce, C. A. (2013). Meta-Analytic Review of Employee Turnover as a Predictor of Firm Performance. *Journal of Management, 39*(3), 573-603. doi: 10.1177/0149206311424943
Hatch, N. W., & Dyer, J. H. (2004). Human Capital and Learning as a Source of Sustainable Competitive Advantage. *Strategic Management Journal, 25*(12), 1155-1178. doi: 10.1002/smj.421
Hauff, S., Alewell, D., & Hansen, N. K. (2014). HRM systems between control and commitment: occurrence, characteristics and effects on HRM outcomes and firm performance. *Human Resource Management Journal, 24*(4), 424-441. doi: 10.1111/1748-8583.12054
Hausknecht, J. P., & Trevor, C. O. (2011). Collective Turnover at the Group, Unit, and Organizational Levels: Evidence, Issues, and Implications. *Journal of Management, 37*(1), 352-388. doi: 10.1177/0149206310383910
Heavey, A. L., Holwerda, J. A., & Hausknecht, J. P. (2013). Causes and consequences of collective turnover: A meta-analytic review. *Journal of Applied Psychology, 98*(3), 412-453. doi: 10.1037/a0032380
Hermelo, F. D., & Vassolo, R. (2010). Institutional development and hypercompetition in emerging economies. *Strategic Management Journal, 31*(13), 1457-1473. doi: 10.1002/smj.898
Hernandez, E., & Guillén, M. F. (2018). What's theoretically novel about emerging-market multinationals? [journal article]. *Journal of International Business Studies, 49*(1), 24-33. doi: 10.1057/s41267-017-0131-7
Herscovitch, L., & Meyer, J. P. (2002). Commitment to Organizational Change: Extension of a Three-Component Model. [Article]. *Journal of Applied Psychology, 87*(3), 474-487. doi: 10.1037//0021-9010.873.3.474
Hinings, C. R., Hickson, D. J., Pennings, J. M., & Schneck, R. E. (1974). Structural Conditions of Intraorganizational Power. *Administrative Science Quarterly, 19*(1), 22-44. doi: 10.2307/2391786
Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management, 21*(5), 967-988. doi: 10.1016/0149-2063(95)90050-0
Hitt, M. A., Bierman, L., Shimizu, K., & Kochhar, R. (2001). Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. *Academy of Management Journal, 44*(1), 13-28.
Hom, P. W., Lee, T. W., Shaw, J. D., & Hausknecht, J. P. (2017). One hundred years of employee turnover theory and research. *Journal of Applied Psychology, 102*(3), 530-545. doi: 10.1037/apl0000103
Hu, L.-t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1-55. doi: 10.1080/10705519909540118
Huselid, M. A. (1995). The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance. *The Academy of Management Journal, 38*(3), 635-672. doi: 10.2307/256741
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?" by Gerhart, Wright, McMahan, and Snell. *Personnel Psychology,*

53(4), 835-854.
Huselid, M. A., Jackson, S. E., & Schuler, R. S. (1997). Technical and strategic human resource management effectiveness as determinants of firm performance. *Academy of Management Journal, 40*(1), 171-188.
James, L. R. (1982). Aggregation bias in estimates of perceptual agreement. *Journal of Applied Psychology, 67*(2), 219-229. doi: 10.1037/0021-9010.67.2.219
Jiang, K., Lepak, D. P., Hu, J. I. A., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *The Academy of Management Journal, 55*(6), 1264-1294.
John, S., & Björkman, I. (2015). In the eyes of the beholder: the HRM capabilities of the HR function as perceived by managers and professionals. *Human Resource Management Journal, 25*(4), 424-442. doi: 10.1111/1748-8583.12078
Judge, T. A., Thoresen, C. J., Pucik, V., & Welbourne, T. M. (1999). Managerial Coping With Organizational Change: A Dispositional Perspective. *Journal of Applied Psychology, 84*(1), 107-122. doi: 10.1037/0021-9010.84.1.107
Kaufman, B. E. (2014). The historical development of American HRM broadly viewed. *Human Resource Management Review, 24*(3), 196-218. doi: https://doi.org/10.1016/j.hrmr.2014.03.003
Kehoe, R. R., & Collins, C. J. (2017). Human resource management and unit performance in knowledge-intensive work. *Journal of Applied Psychology, 102*(8), 1222-1236. doi: 10.1037/apl0000216
Kehoe, R. R., & Wright, P. M. (2013). The Impact of High-Performance Human Resource Practices on Employees' Attitudes and Behaviors. *Journal of Management, 39*(2), 366-391. doi: 10.1177/0149206310365901
Khilji, S. E., & Wang, X. (2006). 'Intended' and 'implemented' HRM: the missing linchpin in strategic human resource management research. *The International Journal of Human Resource Management, 17*(7), 1171-1189. doi: 10.1080/09585190600756384
Klein, A., & Moosbrugger, H. (2000). Maximum likelihood estimation of latent interaction effects with the LMS method. *Psychometrika, 65*(4), 457-474. doi: 10.1007/bf02296338
Lawler, E. E. (2003). *Creating a strategic human resources organization an assessment of trends and new directions*. Stanford, Calif.: Stanford University Press.
Lee, T. W., & Mitchell, T. R. (1994). An Alternative Approach: The Unfolding Model of Voluntary Employee Turnover. *The Academy of Management Review, 19*(1), 51-89. doi: 10.5465/amr.1994.9410122008
Legge, K. (1978). *Power, Innovation, and Problem-Solving in Personnel Management*. London: McGraw-Hill.
Legge, K. (2005). *Human resource management rhetorics and realities* (Anniversary ed ed.). Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.
Lepak, D. P., Liao, H., Chung, Y., & Harden, E. E. (2006). A Conceptual Review of Human Resource Management Systems in Strategic Human Resource Management Research (Vol. 25, pp. 217-271): Emerald Group Publishing Limited.
Lepak, D. P., & Snell, S. A. (1999). The Human Resource Architecture: Toward a Theory of Human Capital Allocation and Development. *The Academy of Management Review, 24*(1), 31.
Lepak, D. P., & Snell, S. A. (2002). Examining the Human Resource Architecture: The Relationships Among Human Capital, Employment, and Human Resource

Configurations. *Journal of Management, 28*(4), 517-543. doi: 10.1177/014920630202800403
Liao, H., Toya, K., Lepak, D. P., & Hong, Y. (2009). Do they see eye to eye? Management and employee perspectives of high-performance work systems and influence processes on service quality. *Journal of Applied Psychology, 94*(2), 371-391. doi: 10.1037/a0013504
Lines, R. (2004). Influence of participation in strategic change: resistance, organizational commitment and change goal achievement. [Article]. *Journal of Change Management, 4*(3), 193-215. doi: 10.1080/1469701042000221696
Liu, X., van Jaarsveld, D. D., Batt, R., & Frost, A. C. (2014). The Influence of Capital Structure on Strategic Human Capital: Evidence From U.S. and Canadian Firms. [Article]. *Journal of Management, 40*(2), 422-448. doi: 10.1177/0149206313508982
Locke, E. A. (1976). The nature and causes of job satisfaction *Handbook of industrial and organizational psychology* (pp. 1297-1349). Chicago, IL: Rand McNally.
Makadok, R. (2001). Toward a Synthesis of the Resource-Based and Dynamic-Capability Views of Rent Creation. *Strategic Management Journal, 22*(5), 387-401.
McDermott, G. A., & Corredoira, R. A. (2010). Network Composition, Collaborative Ties, and Upgrading in Emerging-Market Firms: Lessons from the Argentine Autoparts Sector. *Journal of International Business Studies, 41*(2), 308-329.
McKenzie, J., Truc, A., & van Winkelen, C. (2001). Winning commitment for knowledge management initiatives. [Article]. *Journal of Change Management, 2*(2), 115.
Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review, 1*(1), 61-89. doi: https://doi.org/10.1016/1053-4822(91)90011-Z
Mintzberg, H. (1983). *Power in and around organizations*. Englewood Cliffs, N.J.: Prentice-Hall.
Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablynski, C. J., & Erez, M. (2001). Why People Stay: Using Job Embeddedness to Predict Voluntary Turnover. *The Academy of Management Journal, 44*(6), 1102-1121. doi: 10.2307/3069391
Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology, 62*(2), 237-240. doi: 10.1037/0021-9010.62.2.237
Mobley, W. H., Griffeth, R. W., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin, 86*(3), 493-522. doi: 10.1037/0033-2909.86.3.493
Mohrman, S. A., & Lawler, E. E., III. (1997). Transforming the human resource function. *Human Resource Management, 36*(1), 157-162.
Newburry, W., Gardberg, N. A., & Sanchez, J. I. (2014). Employer Attractiveness in Latin America: The Association Among Foreignness, Internationalization and Talent Recruitment. *Journal of International Management, 20*(3), 327-344. doi: https://doi.org/10.1016/j.intman.2014.01.001
Nicholls-Nixon, C. L., Davila Castilla, J. A., Sanchez Garcia, J., & Rivera Pesquera, M. (2011). Latin America Management Research: Review, Synthesis, and Extension (Vol. 37, pp. 1178-1227). Los Angeles, CA: SAGE Publications.
Nishii, L. H., Lepak, D. P., & Schneider, B. (2008). Employee attributions of the "why" of HR practices: Their effectss on employee attitudes and behaviors, and customer satisfaction. *Personnel Psychology, 61*(3), 503-545.

O'Reilly, C. A., III, Chatman, J., & Caldwell, D. F. (1991). People and Organizational Culture: A Profile Comparison Approach to Assessing Person-Organization Fit. *Academy of Management Journal, 34*(3), 487.

Oh, I.-S., Guay, R. P., Kim, K., Harold, C. M., Lee, J.-H., Heo, C.-G., & Shin, K.-H. (2014). Fit Happens Globally: A Meta-Analytic Comparison of the Relationships of Person–Environment Fit Dimensions with Work Attitudes and Performance Across East Asia, Europe, and North America. *Personnel Psychology, 67*(1), 99-152. doi: 10.1111/peps.12026

Oi, W. Y. (1962). Labor as a Quasi-Fixed Factor. *Journal of Political Economy, 70*(6), 538-555.

Op de Beeck, S., Wynen, J., & Hondeghem, A. (2016). HRM implementation by line managers: explaining the discrepancy in HR-line perceptions of HR devolution. *The International Journal of Human Resource Management, 27*(17), 1901-1919. doi: 10.1080/09585192.2015.1088562

Peteraf, M. A. (1993). The Cornerstones of Competitive Advantage: A Resource-Based View. *Strategic Management Journal, 14*(3), 179-191. doi: 10.1002/smj.4250140303

Pettigrew, A. M., Woodman, R. W., & Cameron, K. S. (2001). Studying Organizational Change and Development: Challenges for Future Research. *The Academy of Management Journal, 44*(4), 697-713. doi: 10.2307/3069411

Pfeffer, J. (1981). *Power in organizations*. Marshfield, Mass.: Pitman Pub.

Pfeffer, J. (1998). *The human equation building profits by putting people first*. Boston: Harvard Business School Press.

Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations a resource dependence perspective*. New York: Harper & Row.

Ployhart, R. E., Van Iddekinge, C. H., & Mackenzie, W. I. (2011). ACQUIRING AND DEVELOPING HUMAN CAPITAL IN SERVICE CONTEXTS: THE INTERCONNECTEDNESS OF HUMAN CAPITAL RESOURCES. *The Academy of Management Journal, 54*(2), 353-368.

Ployhart, R. E., Weekley, J. A., & Ramsey, J. (2009). The Consequences of Human Resource Stocks and Flows: A Longitudinal Examination of Unit Service Orientation and Unit Effectiveness. *The Academy of Management Journal, 52*(5), 996-1015. doi: 10.5465/amj.2009.44635041

Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology, 92*(2), 438-454. doi: 10.1037/0021-9010.92.2.438

Podsakoff, P. M., MacKenzie, S. B., Jeong-Yeon, L., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. [Article]. *Journal of Applied Psychology, 88*(5), 879.

Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: a critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management, 26*(3), 513-563. doi: https://doi.org/10.1016/S0149-2063(00)00047-7

Purcell, J., & Hutchinson, S. (2007). Front-line managers as agents in the HRM-performance causal chain: theory, analysis and evidence. *Human Resource Management Journal, 17*(1), 3-20. doi: 10.1111/j.1748-8583.2007.00022.x

Rafferty, A. E., Jimmieson, N. L., & Armenakis, A. A. (2013). Change Readiness:A Multilevel

Review. *Journal of Management, 39*(1), 110-135. doi: 10.1177/0149206312457417
Rafferty, A. E., & Restubog, S. L. D. (2010). The Impact of Change Process and Context on Change Reactions and Turnover During a Merger. *Journal of Management, 36*(5), 1309-1338. doi: 10.1177/0149206309341480
Raineri, A. B. (2011). Change management practices: Impact on perceived change results. *Journal of Business Research, 64*(3), 266-272. doi: https://doi.org/10.1016/j.jbusres.2009.11.011
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*(2), 125-148. doi: https://doi.org/10.1016/S1053-4822(98)80001-6
Sanchez-Burks, J., & Huy, Q. N. (2009). Emotional aperture and strategic change: the accurate recognition of collective emotions. [Article]. *Organization Science, 20*(1), 22+.
Schneider, B. (1987). THE PEOPLE MAKE THE PLACE. [Article]. *Personnel Psychology, 40*(3), 437-453.
Schneider, B. R. (2009). Hierarchical Market Economies and Varieties of Capitalism in Latin America. *Journal of Latin American Studies, 41*(3), 553-575. doi: http://dx.doi.org/10.1017/S0022216X09990186
Schweiger, D. M., & DeNisi, A. S. (1991). Communication with Employees following a Merger: A Longitudinal Field Experiment. *The Academy of Management Journal, 34*(1), 110-135. doi: 10.2307/256304
Shaw, J. D., Park, T. Y., & Kim, E. (2013). A resource based perspective on human capital losses, HRM investments, and organizational performance. *Strategic Management Journal, 34*(5), 572-589. doi: 10.1002/smj.2025
Sheehan, C., Cooper, B., Holland, P., & Cieri, H. D. (2007). The relationship between HRM avenues of political influence and perceived organizational performance. *Human Resource Management, 46*(4), 611-629. doi: 10.1002/hrm.20184
Sheehan, C., Cooper, B., Holland, P., & De Cieri, H. (2007). The relationship between HRM avenues of political influence and perceived organizational performance. *Human Resource Management, 46*(4), 611-629. doi: 10.1002/hrm.20184
Sheehan, C., De Cieri, H., Cooper, B., & Brooks, R. (2014). Exploring the power dimensions of the human resource function. *Human Resource Management Journal, 24*(2), 193-210. doi: 10.1111/1748-8583.12027
Sheehan, C., De Cieri, H., Cooper, B. K., & Brooks, R. (2016). The impact of HR political skill in the HRM and organisational performance relationship. *Australian Journal of Management, 41*(1), 161-181. doi: 10.1177/0312896214546055
Steiger, J. H. (2007). Understanding the limitations of global fit assessment in structural equation modeling. *Personality and Individual Differences, 42*(5), 893-898. doi: 10.1016/j.paid.2006.09.017
Su, Z.-X., Wright, P. M., & Ulrich, M. D. (2018). Going Beyond the SHRM Paradigm: Examining Four Approaches to Governing Employees. *Journal of Management, 44*(4), 1598-1619. doi: 10.1177/0149206315618011
Sun, L.-Y., Aryee, S., & Law, K. S. (2007). High-Performance Human Resource Practices, Citizenship Behavior, and Organizational Performance: A Relational Perspective. *The Academy of Management Journal, 50*(3), 558-577. doi: 10.2307/20159873
Sung, W., Woehler, M. L., Fagan, J. M., Grosser, T. J., Floyd, T. M., & Labianca, G. (2017). Employees' responses to an organizational merger: Intraindividual change in

organizational identification, attachment, and turnover. *Journal of Applied Psychology, 102*(6), 910-934. doi: 10.1037/apl0000197
10.1037/apl0000197.supp (Supplemental)
Takeuchi, R., Chen, G., & Lepak, D. P. (2009). THROUGH THE LOOKING GLASS OF A SOCIAL SYSTEM: CROSS-LEVEL EFFECTS OF HIGH-PERFORMANCE WORK SYSTEMS ON EMPLOYEES' ATTITUDES. *Personnel Psychology, 62*(1), 1-29.
Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal, 18*(7), 509-533.
Tett, R. P., & Meyer, J. P. (1993). Job Satisfaction, Organizational Commitment, Turnover Intention, and Turnover: Path Analyses Based on Meta-Analytic Findings. *Personnel Psychology, 46*(2), 259.
Trullen, J., Stirpe, L., Bonache, J., & Valverde, M. (2016). The HR department's contribution to line managers' effective implementation of HR practices. *Human Resource Management Journal, 26*(4), 449-470. doi: 10.1111/1748-8583.12116
Truss, C., & Gratton, L. (1994). Strategic human resource management: a conceptual approach. *The International Journal of Human Resource Management, 5*(3), 663-686. doi: 10.1080/09585199400000053
Tsui, A. S. (1990). A Multiple-Constituency Model of Effectiveness: An Empirical Examination at the Human Resource Subunit Level. *Administrative Science Quarterly, 35*(3), 458-483.
Tsui, A. S., Pearce, J. L., Porter, L. W., & Tripoli, A. M. (1997). Alternative Approaches to the Employee-Organization Relationship: Does Investment in Employees Pay off? *The Academy of Management Journal, 40*(5), 1089-1121. doi: 10.2307/256928
Ulrich, D. (1996). *Human Resource Champions: The Next Agenda for Adding Value and Delivering Results*: Harvard Business Review Press.
Ulrich, D., & Brockbank, W. (2005). *The HR Value Proposition*: Harvard Business Review Press.
Van Maanen, J., & Schein, E. H. (1979). Toward a theory of organizational socialization (pp. 209–264). Greenwich, CT: JAI Press.
Wall, T. D., Michie, J., Patterson, M., Wood, S. J., Sheehan, M., Clegg, C. W., & West, M. (2004). ON THE VALIDITY OF SUBJECTIVE MEASURES OF COMPANY PERFORMANCE. *Personnel Psychology, 57*(1), 95-118. doi: doi:10.1111/j.1744-6570.2004.tb02485.x
Wanberg, C. R., & Banas, J. T. (2000). Predictors and Outcomes of Openness to Changes in a Reorganizing Workplace. *Journal of Applied Psychology, 85*(1), 132-142. doi: 10.1037/0021-9010.85.1.132
Wanous, J. P. (1980). *Organizational entry recruitment, selection, and socialization of newcomers*. Reading, MA: Addison-Wesley Pub. Co.
Wernerfelt, B. (1984). A Resource-based View of the Firm. *Strategic Management Journal, 5*(2), 171.
Whelan-Berry, K. S., Gordon, J. R., & Hinings, C. R. (2003). Strengthening organizational change processes: Recommendations and implications from a multilevel analysis. *The Journal of Applied Behavioral Science, 39*(2), 186.
Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample Size Requirements for Structural Equation Models: An Evaluation of Power, Bias, and Solution Propriety. *Educational and Psychological Measurement, 73*(6), 913-934. doi: 10.1177/0013164413495237

Woodman, R. W. (1989). Organizational Change and Development: New Arenas for Inquiry and Action. *Journal of Management, 15*(2), 205-228. doi: 10.1177/014920638901500205

Wright, P. M. (1998). Strategy - HR fit: does it really matter? [Article]. *Human Resource Planning, 21*(4), 56+.

Wright, P. M., Dunford, B. B., & Snell, S. A. (2001). Human resources and the resource based view of the firm. *Journal of Management, 27*(6), 701-721. doi: 10.1177/014920630102700607

Wright, P. M., Gardner, T. M., Moynihan, L. M., & Allen, M. R. (2005). THE RELATIONSHIP BETWEEN HR PRACTICES AND FIRM PERFORMANCE: EXAMINING CAUSAL ORDER. *Personnel Psychology, 58*(2), 409-446. doi: 10.1111/j.1744-6570.2005.00487.x

Wright, P. M., Gardner, T. M., Moynihan, L. M., Park, H. J., Gerhart, B., & Delery, J. E. (2001). Measurement error in research on human resources and firm performance: Additional data and suggestions for future research. *Personnel Psychology, 54*(4), 875-901. doi: 10.1111/j.1744-6570.2001.tb00235.x

Wright, P. M., & McMahan, G. C. (1992). Theoretical Perspectives for Strategic Human Resource Management. *Journal of Management, 18*(2), 295-320. doi: 10.1177/014920639201800205

Wright, P. M., McMahan, G. C., Snell, S. A., & Gerhart, B. (2001). Comparing line and HR executives' perceptions of HR effectiveness: Services, roles, and contributions. *Human Resource Management, 40*(2), 111-123.

Wright, P. M., & Nishii, L. H. (2013). Strategic HRM and Organizational Behaviour: Integrating Multiple Levels of Analysis. In J. Paauwe, D. E. Guest & P. M. Wright (Eds.), *HRM & Performance: Achievements & Challenges* (pp. 97-110). Chichester, West Sussex, UK: Wiley.

Wright, P. M., Smart, D. L., & McMahan, G. C. (1995). Matches between Human Resources and Strategy among NCAA Basketball Teams. *The Academy of Management Journal, 38*(4), 1052-1074. doi: 10.2307/256620

Youndt, M. A., Snell, S. A., Dean, J. W., & Lepak, D. P. (1996). Human Resource Management, Manufacturing Strategy, and Firm Performance. *The Academy of Management Journal, 39*(4), 836-866. doi: 10.2307/256714

Appendix - Variable Definitions

Dependent Variable

Voluntary Employee Turnover:	Log-transformed voluntary turnover rate of the business unit

Independent Variables

Perceived Organizational Change Intensity	A scale of 9 items, divided in 3 subscales. Respondents used a 5-point Likert scale to rate the following question: "To what extent is your organization currently engaged in the implementation of the following changes?" Items of each of the subscales were: Subscale 1 - Process Change: (i) Adoption of new production technologies; (ii) Changes in production capacity; (iii) implementation of enterprise software (e.g. ERP, CRM); Coefficient alpha: 0.81 Subscale 2 - Business Change: (i) Development and launch of new products and/or services; (ii) Restructuring of the sales organization (own salesforce, distributors, franchisees, etc.); (iii) Organization of work (e.g. process reengineering, in/outsourcing); (iv) Restructuring of organizational units; Coefficient alpha: 0.84 Subscale 3 - People Change: (i) Hiring or layoff of a significant number of employees; and (ii) Changes in the top management team (e.g. new CEO, change of multiple Directors); Coefficient alpha: 0.68

HPWPs implementation	A scale of 7 items. Respondents used a 5-point Likert scale to rate their business unit's implementation of the following HPWPs: (i) Select the best all-around candidates when recruiting employees, instead of hiring candidates who fulfill the minimum requirements to fulfill a job; (ii) Provide employees comprehensive training throughout their career (i.e., training beyond the skills required by the trainee's current job); (iii) Conduct performance appraisals that provide employees with feedback they can use for their development; (iv) Establish average employee pay levels (including incentives) that are higher than that of competitors; (v) Consider employees' performance to determine salaries and rewards; (vi) Empower employees to recommend necessary changes in the way they do their work; (vii) Ask for employees' opinion in advance if a decision affects them. Cronbach's alpha: 0.88.

Control Variables

Manufacturing:	Distinction between industries to account for effects of different types of work (1 = manufacturing; 0 = other).
Organization Size:	Log-transformed number of employees of the business unit.

ESSAY 3: EFFECTS OF INSTITUTIONAL CONTEXT, INDUSTRY, ORGANIZATION AND RATER CHARACTERISTICS ON RATINGS OF HIGH PERFORMANCE WORK PRACTICES IMPLEMENTATION

Introduction

Strategic human resource management (SHRM) researchers have presented ample empirical support for the claim that investments in High Performance Work Practices (HPWPs) (Huselid, 1995) or in the strategic combination of such practices into High Performance Work Systems (HPWSs) (Appelbaum et al., 2000) (Appelbaum, Bailey, Berg & Kalleberg, 2000; MacDuffie, 1995; Toh, Morgeson, & Campion, 2008) are positively associated with organizational performance (Combs, Liu, Hall & Ketchen, 2006; Jiang, Lepak, Hu & Baer, 2012; Subramony, 2009). More recently, researchers' interest has shifted to developing an understanding of the mediating mechanisms that allow for this association occurs (e.g. Jiang, Takeuchi & Lepak, 2013). Within the context of these efforts, researchers increasingly call for multi-level perspectives (Jiang, et al., 2013; Lengnick-Hall, Lengnick-Hall, Andrade, & Drake, 2009; Peccei & Van de Voorde, forthcoming; Wright & Boswell, 2002) to analyze how organizational-level HRM practices have effects on individual employees whose aggregated efforts, behaviors or attitudes are associated with organizational outcomes.

While the increased use of multi-level analysis allows for a more complete understanding of HRM-performance linkages, researchers' current focus on intra-organizational mediating mechanisms seems to have deviated attention from the factors that lead to or condition the implementation of HPWPs. Most SHRM research relies on the assumption that managers have wide discretion and the ability to plan and execute their strategies rationally and independently

(Brewster, 2007). However, findings from studies focused on the strategic alignment of HRM practices provide only weak or unconvincing support (Wright & Sherman, 1998; Gerhart, 2007). Alternative explanations attribute observed variation in the implementation of HPWPs to intra-organizational factors such as discretion of front-line managers in the implementation (Hutchinson & Purcell, 2007) or employees' perceptions of HPWPs (Nishii, Lepak & Schneider, 2008). A lack of focus on extra-organizational factors that explain the implementation of HPWPs is surprising considering that early SHRM frameworks (e.g. Beer, Spector, Lawrence, Quinn Mills & Walton, 1984; Fombrun, Tichy & Devanna, 1984) included variables such as labor market characteristics, government politics, laws and societal values. Yet, a review of leading HRM journals in the period ranging from 1996 to 2008 confirmed that SHRM research largely ignores such contextual characteristics (Batt & Banerjee, 2012).

International and comparative HRM research may complement SHRM research in responding whether and why organizations adopt HPWPs. Similar to the early contributions in SHRM (e.g. Beer, Spector, Lawrence, Quinn Mills & Walton, 1984; Fombrun, Tichy & Devanna, 1984), scholars in these fields attribute variance in the implementation of HRM practices largely to contextual factors. In doing so, researchers have drawn on cross-cultural perspectives (Hofstede 1980; Laurent 1986) and increasingly integrate comparative institutional approaches (Amable, 2003; Hall & Soskice, 2001; Whitley 1999) into their work (Batt & Hermans, 2012). Although these fields acknowledge managerial agency, they place more importance on contextual determinants of HRM, such as economic policy and regulation, industry structures, or education systems.

Taken together, the SHRM literature stresses intra-organizational factors as drivers of variation in the implementation of HPWPs, while the contextual determinism of cross-cultural

perspectives and comparative institutional approaches suggest the opposite. In this study, I focus on the factors that each stream of HRM research has presented independently to analyze their relevance in explaining the implementation of HPWPs. To do so, I use data obtained from more than 11,000 respondents in both line and HR positions, who work at 426 business units, in 9 industrial sectors, and 8 comparative institutional contexts. The structure of the paper is as follows. In the next section, I will present the main factors that explain the implementation of HPWPs as presented in both streams of HRM research to develop my hypotheses. In the methods section I explain how I conducted the study and present the outcomes in the results section. Finally, I will reflect on the findings and identify the implications for HRM research and practice in an increasingly globalized context.

Hypotheses

While the development of an understanding of HRM in the global context has benefitted from progress in more narrowly defined fields of study such as SHRM, IHRM, or comparative HRM, the integration of insights obtained in these fields has been limited. Researchers increasingly call for such integration. For example, drawing on HRM research from the major sub-fields of HRM research Batt and Hermans (2012) provided several guidelines for bridging strategic and institutional perspectives on HRM. Likewise, Cerdin and Brewster (2014) argued that bringing together the research areas of talent management and expatriate management has significant and useful implications for both research and practice, and Farndale et al. (2017) highlighted the importance of placing IHRM research in its macro context without losing sight of the micro-level implications of organizational-level practices. The following sections aim to provide empirical support for these calls as they consider sources of variance that are relevant to explaining ratings

of the implementation of HPWPs at the most macro-level of analysis and the individual-level of analysis.

Institutional context and variation in the implementation of HPWPs

To the extent that scholars of international business have accepted that 'institutions matter' (North, 1990), researchers of HRM in an international context increasingly integrate comparative institutional approaches (e.g. Amable, 2003; Hall & Soskice, 2001; Whitley 1999) into their work to explain variation in the implementation of HRM practices (Batt & Hermans, 21012). Building on research in political science, sociology, economics and industrial relations, comparative institutional analysis focuses on "…how the forms, outcomes, and dynamics of economic organization (firms, networks, markets) are influenced and shaped by other social institutions (e.g., training systems, legal systems, political systems, educational systems, etc.) and with what consequences for economic growth, innovation, employment, and inequality. Institutions are usually defined by our contributors as being formal and informal rules, regulations, norms, and understandings that constrain and enable behavior (e.g., Scott, 2008; Campbell, 2004)" (Morgan et al. (2010:2).

Consideration of institutional domains such as law and regulation, education, finance, and governance mechanisms (e.g., Crouch, Finegold and Sako 1999; Deeg 1999; Vitols 2001; Colvin 2006) – and their combination into institutional arrangements has spurred a stream of research that compares capitalist economies. Emphasizing different features of institutional arrangements and their effects on economic agents, scholars have put forth more specific research programs such as the national business systems approach (Whitley 1999, 2007), the regulation school approach (Amable 2003; Hollingsworth and Boyer 1997), the varieties of capitalism approach

(Hall and Soskice 2001), or the societal effects approach (Maurice and Sorge 2000). The comparative capitalism literature suggests that national economies are characterized by distinct institutional configurations that shape the collective supply of inputs, such as capital or skills, available to firms and other economic actors (Jackson and Deeg 2006). It sets forth a theory of comparative institutional advantage that attributes differences in economic behavior and economic organization to differences between institutional arrangements. Such arrangements are more or less suited for different types of economic activity, and provide the economic actors with different constraints or institutional resources (Streeck and Thelen 2005). Firms may leverage comparative institutional advantage by engaging in activities that are favored by the institutional context, but will need to adjust their organizational structures and management practices accordingly.

In the context of HRM research, Hall and Soskice's (2001) varieties of capitalism (VoC) framework is increasingly used to highlight and account for institutional constraints (e.g. Batt, Holman & Holtgrewe, 2009; Dencker, 2004; Farndale, Brewster & Poutsma, 2008; Parry, Dickmann & Morley, 2008(E. Farndale, Brewster, Ligthart, & Poutsma, 2017)). Among its advantages is the framework's parsimony which renders it well suited for statistical hypothesis testing (Deeg and Jackson 2007). The VoC approach proposes a firm-centric perspective and emphasizes strategic interaction among economic actors in producing economic and political outcomes. Hall and Soskice (2001) identified five spheres in which firms need to solve coordination problems: industrial relations, vocational training and education, corporate governance, inter-firm relations, and employee relations. The extent to which market relationships and competition among actors underlie solutions to collective coordination problems in these spheres allows for classification of production regimes along a continuum. At

one extreme, liberal market economies (LMEs), such as the US, the UK, or Australia, are characterized by deregulation of labor markets, generalist training, short-term orientation in corporate finance, open and strong competition between firms, and potentially antagonistic employee relations. At the other extreme, coordinated market economies (CMEs), such as Germany, Sweden, or Switzerland, are characterized by more cooperative industrial relations, widely available vocational training allowing for specialization, collaboration between firms in the development of technology and industry standards, and consensus-oriented employee relations. More recently, scholars have made progress in developing varieties for emerging markets. Schneider (2008; 2009) developed a Hierarchical Market Economies (HME) model that fits the political economy of Latin American countries. Witt and Redding (2014) identified significant differences between Asian countries, suggesting varieties for China, India and clusters of other Asian countries. Finally, Nattrass (2014) has started to chart the African region. A comparison of the different models, highlighting the sphere of employment relations, suggests that organizations in LMEs have more discretion in their management of human resources due to low state intervention, generally low union membership rates, and little mandatory employee involvement and consultation in firms' strategic decision making (Brewster, 2007). By contrast, in CMEs higher institutional density means that regulation and implicit norms restrict the range of HRM practices firms can adopt (Farndale et al, 2008). With regard to the implementation of HPWPs, comparative research (Batt et al., 2009; Doellgast, 2008; Farndale et al., 2017) suggests that higher institutional density and worker representation in CMEs is associated with higher levels of HPWP implementation. A similar finding was obtained by Lawler, Chen, Wu and Bai (2011) who observed that the institutional density of CMEs was associated with HPWP implementation. However, they also found that workers in affluent economies were less

receptive to HPWPs than workers in economies characterized by high growth, institutional change and investment in education, such as those in Asia. Taken together I expect:

Hypothesis 1: On average, raters in CMEs report higher implementation of HPWPs by their employer.

Industrial sector and variation in implementation of HPWPs

Characteristics of the industrial context in which operate have received limited attention in strategic HRM research (Batt & Banerjee, 2012), even though scholars frequently acknowledge that organizations in particular sectors should benefit more from adopting HPWPs than others. For example, Huselid (1995) controlled for industrial sector but did not report significant differences.

Researchers in the field of industrial relations have made considerable progress in addressing questions regarding why organizations in a particular industrial sector are more or less likely to adopt HPWPs. Examples include in-depth studies that focus on the logic of production in a particular sector such as MacDuffie's (1995) consideration of the use of buffers in the production of automobiles and it impact on the implementation of HRM practices, or Ichniowski, Shaw and Prennushi's (1997) analysis of the effects of HPWPs in steel mills with different types of finishing lines. More recently, Bamber, Gittell, Kochan, and colleagues (2009a, 2009b) examined to what extent industry-specific institutions condition the implementation of HRM practices in the international low-cost airline sector.

In a meta-analysis, Combs, Liu, Hall and Ketchen (2006) found that HPWP-performance linkages were stronger in manufacturing sectors than in service sectors. They concluded that

organizations in manufacturing industries have more to gain from HPWPs as they help increase workers' flexibility in responding to technological change, enhance the development of organization-specific skills, and have more direct effects on worker motivation and quality of outputs.

By contrast, a study of firms in different manufacturing sub-industries indicated that higher capital intensity negatively moderated the effect of HPWPs on labor productivity (Datta et al., 2005). Thus, HPWPs implementation is not necessarily a complement of more extensive use of technology. Especially in standardized mass production, the pursuit of efficiency and the technology-based structuring of work may induce organizations to adopt compliance oriented HRM practices instead of HPWPs.

Organizations in service industries have an incentive to adopt HPWPs because workers have more discretion in deciding how to perform their jobs (Baily, 1993). In many service industries, front-line employees' contact with customers is an important determinant of performance outcomes (Liao & Chuang, 2004). Even in service industries where interaction with customers is highly structured, such as scripted conversations in call centers (Batt, 2002), regulation of service offerings in banks (Takeuchi et al. 2008), or standard operating procedures in fast-food restaurants (Ployhart et al., 2011), HPWPs implementation is associated with enhanced employee performance.

Because of the importance of employee KSAOs to performance in work contexts characterized by employee discretion, organizations in service industries will adopt HPWPs to a larger extent than organizations in other industries:

Hypothesis 2: On average, raters in service industries report higher implementation of HPWPs

by their employer.

Organization characteristics and variation in HPWPs implementation

Building on the notion of alignment of HR practices, scholars have explored different organizational characteristics as possible drivers of implementation of HPWPs. In particular, early strategic HRM research suggested HR practices be aligned with the organization's competitive strategy to achieve strategic fit (Baird & Meshoulam, 1988). However, as empirical support for such claims was only weak or unconvincing (Wright & Sherman, 1998; Gerhart, 2007), scholars have proposed alternative organizational factors that condition the implementation of HPWPs.

The implementation of HPWPs implies investment of resources in the organization's workers. As a result, researchers frequently include organization size as a control variable in studies on the association between HPWPs and performance outcomes (e.g. Aryee et al., 2013; Datta et al., 2005; Huselid, 1995). Larger organizations are more likely to have a professional HR department that implements HPWPs due to economies of scale. Additionally, larger organizations are more visible and more likely to be exposed to the influence of consultants, HR associations and business schools. Therefore, I propose:

Hypothesis 3: On average, raters who work at large organizations report higher implementation of HPWPs by their employer.

The availability of resources to invest in HPWPs may not only be due to structural characteristics such as organization size but may also be the result of the organization's past financial

performance. Indeed, much of the debate on the direction of causality in the HRM-performance relationship has centered on the question whether the implementation of HPWPs leads to higher performance or the other way around (B. Becker & Gerhart, 1996; Wright et al., 2005). To address this question, Wright et al. (2005) and (Guest, Michie, Conway, & Sheehan, 2003) examined HRM-performance linkages controlling for past performance. Whereas cross-sectional results suggested a positive association between the implementation of HPWPs and concurrent performance outcomes, consideration of business units' past financial performance rendered most of these correlations insignificant. More recently, researchers have applied longitudinal research designs to examine the effects of investments in HPWPs on indicators of human capital (Ployhart et al., 2011; Ployhart et al., 2009) and employee quit rates (Batt & Colvin, 2011).

Taken together, these studies suggest that the effects of investments in HPWPs require time to materialize and highlight the importance of the availability of resources at previous moments in time to make such investments. Among the possible explanations for HRM-performance linkages Wright et al. suggested that "business units that perform well, invest more in HR practices, and this investment pays off in increased performance" (2005: 433). To account for the effects of past performance on the implementation of HPWPs, I hypothesize:

Hypothesis 4: On average, raters who work at organizations that have achieved higher past performance report higher implementation of HPWPs by their employer.

Rater characteristics and variation in HPWPs implementation

Researchers have discussed how the implementation of HPWPs should be measured to avoid biased findings (for an overview, see Langevin-Heavey et al., 2013). Beyond issues related to the

definition of measures, much of the debate has focused on the source of data. Early SHRM studies typically drew on single respondent designs, collecting data from HR managers. Gerhart et al. (2000a) observed that the reliability of such measurements could be low as a result of the size and complexity of organizations, and because of HR managers' potential vested interest in HRM practices. Gerhart et al. (2000a) and Wright, McMahan, Snell and Gerhart (2001) reported limited convergent validity of measures of the effectiveness of the HR function, as rated by HR managers and line managers. This finding may be explained by the difference between intended effects of HRM practices and their real outcomes (Becker & Gerhart, 1996; Capelli & Neumark, 2001), or line managers' unwillingness to recognize the HR function's contributions to organizational success (Wright et al., 2001). In line with these findings, I hypothesize that:

Hypothesis 5: On average, raters who are HR professionals report higher implementation of HPWPs by their employer.

Researchers have proposed to study HRM-performance linkages at the corporate (Becker & Huselid, 1996; 1998), business unit (Rogers & Wright, 1998), establishment (Batt, 2002) and individual (Wright & Boswell, 2002) levels of analysis, suggesting that measuring at a lower level allows for more accurate measures. Structures of managerial responsibilities may follow a similar progression, ranging from individual contributor, to supervisor, manager, and director. Huselid and Becker (2000) argued that managers and directors are better positioned to provide cross-departmental or organization-wide perspectives. However, in doing so, they are more likely to provide a biased rating. Considering the social desirability of HPWPs and the diffusion of HRM performance linkages in the management literature, we expect that raters of higher

levels of seniority report higher implementation of HPWPs:

Hypothesis 6: On average, raters of higher levels of seniority report higher implementation of HPWPs by their employer.

Methods

Sample

To test my hypotheses, I used data obtained through an international on-line survey, as described in the general appendix to this dissertation. The survey yielded useable data from a total of 11,276 line managers and HR executives at 409 business units, in 9 SIC-coded industrial sectors, and in 8 different institutional contexts. The survey was conducted by a global research team in which I contributed to general survey design and held responsibility for data collection in Latin America. Organizations participated in the study as the result of a two-tiered invitation process. The research team partnered with regional HRM associations or leading business schools. These regional partners collaborated with local HRM associations to communicate the study to as broad an audience as possible to have organizations from different countries, different industries and of different sizes participate in the study. While I cannot establish a response rate, an initial analysis of the sample indicated that the organizations that participated were generally larger organizations, whose HRM staff was actively involved in local and regional HRM associations.

At each organization, the senior HR person coordinated the data collection process. In addition to registering respondents in the HRM department and in line management functions, the senior HR person also completed a survey with additional questions regarding the organization. As organizations could have operations in multiple countries and across different

comparative institutional contexts, we asked individual raters where they were physically located. I crossed this information with the information provided by the senior HR person. When an individual rater indicated that she worked in a country that was not included in the region where the senior HR person reported that the organization was active, I removed this rater from the sample.

I performed a similar procedure to reduce error in measurement of industrial sector. As organizations can be active in multiple industrial sectors, Senior HR persons reported in which industrial sector the organization developed its principal activities. Again, when an individual respondent indicated that her main activity corresponded to a different industrial sector, I removed that respondent from the sample.

Although the focus of this study was on individual-level ratings of HPWPs implementation, I only included organizations with a minimum of 4 HR function respondents and 4 line function respondents. The average number of respondents per organization was 27.57.

Survey translation

The questionnaire was originally designed in English as the research team communicated in that language. We applied a translation and back-translation procedure (Brislin, 1980) to administer the questionnaire in Chinese, French, German, Spanish and Portuguese. Translations and back-translations were performed by professional translators. The content adequacy of specific translated HRM concepts was reviewed by the researchers in charge of each region and verified by a professor of HRM, whose native language was the target language and who was proficient in English.

Variables and measures

High Performance Work Practices Implementation – Measures of the HPWP construct have received considerable attention from researchers (e.g. Becker & Gerhart, 1996; Langevin-Heavy et al., 2013). An important consideration given the purpose of our study referred to the generalizability of measures of the HPWP construct across contexts. For example, Gong, Law, Chang, and Xin (2009) observed that a HR subsystem, which consisted of typical HPWPs such as employment security and status equality, was not significantly related to affective commitment. They speculated that in China these practices may not necessarily be HPWPs as employment security has gradually lost appeal and because in a culture characterized by a relatively high power distance managers may not prefer status equality. Such differences warrant researchers pay attention to the measures used, especially when they are 'exported' from one context to another.

In departing from the SHRM literature to assess factors that could affect the implementation of HPWPs, the research team decided to use items derived from the measure for commitment HRM practices as developed by Lepak and Snell (2002) for the following reasons. First, items from this scale have been used in many studies and across contexts. For example, Chuang and Liao (2010) used items from this measure to study the effects of a HPWP system on climate for service in Taiwanese department stores. Second, while Combs et al. (2006) reported an average of 6.2 practices across measures of the HPWP construct, the practices they observed most frequently largely coincide with the practices in Lepak and Snell's (2002) measure. Third, the items most frequently mentioned in Posthuma et al's (2013) cross-cultural ranking of HPWPs overlap to a large extent with the items I selected.

The items were the following: (a) My HR department selects the best all around

candidates when recruiting employees instead of hiring candidates who fulfill the minimum requirements to fulfill a job; (b) Employees are provided comprehensive training throughout their career (i.e., training beyond the skills required by the trainee's current job); (c) Performance appraisals provide employees feedback for personal development; (d) On average, the pay level (including incentives) of our employees is higher than that of our competitors; (e) Employee salaries and rewards are determined by their performance; (f) Employees are empowered to recommend necessary changes in the way they perform work; and (g) If a decision affects employees, we usually ask for their opinions in advance. Items were rated from 1 (= very little extent) to 5 (very large extent). Notwithstanding evidence for synergistic effects of individual HPWPs (e.g. MacDuffie, 1995; Toh et al., 2008). I combined the items into an additive scale in order to obtain a more conservative estimate (cf. Batt, 2002; Wright et al., 2005). In line with findings obtained in other studies, the internal consistency of the HPWPs implementation scale was .86.

Institutional Context (H1). In order to test for the influence of characteristics of the national institutional context, I drew on the VoC-framework as developed by Hall and Soskice (2001) and expanded by Schneider (2008, 2009), Witt and Redding (2014), and Nattrass (2014). Taken together, the differences in the institutional context as suggested by these authors allow for the definition of the following categories: (1) Africa; (2) developed Asian economies such as Japan and Korea; (3) China; (4) CMEs, comprising countries such as Germany or the Scandinavic countries; (5) India; (6) HMEs, comprising most Latin American countires; (7) the Middle East; and (8) LMEs, comprising countries such as the United States, the United Kingdom, Ireland and Australia. Raters indicated the country or countries in which they performed their job.

Industry (H2). Characteristics of the industrial context were derived from the two-digit Standard Industry Classification (SIC). I distinguished between the following categories: (1) Agriculture, Fishery and Forestry; (2) Mineral industries (mining, oil and gas); (3) Construction; (4) Public administration; (5) Transportation and public utilities; (6) Trade (wholesale and retail); (7) Finance, insurance and real estate; (8) Services; and (9) Manufacturing. Individual raters indicated in which industrial sector their business unit operated.

Organization size (H3). To account for differences in the availability of resources and potential institutional pressure to adopt HPWPs, I measured organization size as the number of the business unit's employees as reported by the senior HR person. Given the non-normal distribution of this variable, I performed a log-transformation. Results are reported for the log-transformed variable.

Past performance (H4). To measure the availability of financial resources to make investments in HPWPs, the senior HR person of each organization reported on its financial performance of the last three years as compared to its competitors. Responses were measured on a 5-point Likert scale that ranged from 1 (significantly worse) to 5 (significantly better). While objective measures of financial performance, such as Tobin's q or return on assets, may be preferred under certain circumstances, in the case of HRM research in the global context this may not necessarily be the case. First, researchers often suffer the lack of availability of or access to archival data on firm performance, especially in emerging markets. Second, objective measures of performance in cross-national studies may not be comparable and arguably less reliable given different national financial reporting requirements, exchange rate fluctuations, transfer pricing, etc. (Edwards & Kuruvilla, 2005). Third, (Wall et al., 2004) found that subjective and objective measures of firm performance were positively associated. Moreover,

they did not find any significant differences in correlations between various management practices and either subjective or objective measures of performance. As a result, researchers have relied on perceptive measures of organizational performance for studies conducted in countries such as Greece (Vlachos, 2008), Japan (Takeuchi et al., 2007), the Philippines (Audea, Teo & Crawford, 2005), India (Singh, 2004) and the United States (Delaney & Huselid, 1996).

Human Resource Rater (H5). Raters were asked in which functional department they worked in the demographics section of the questionnaire. Raters who indicated they worked in HR were coded as 1, raters in all other functions were rated as 0.

Rater Seniority (H6). Raters reported their level of seniority in the demographics section of the questionnaire. I identified the following categories: (1) Individual contributor; (2) Supervisor; (3) Manager; and (4) Director.

Analytical Procedure

While the focus of this study is on individual-level ratings of HPWPs implementation, respondents were clustered within organizations, and organizations within institutional contexts and industries. I calculated ICC(1) values for the additive HPWPs implementation scale to examine whether the analytical procedure to be used needed to account for nested data. The ICC(1) of the additive scale was 0.19. Similarly, ICC(1) values indicated clustering of individual-level ratings in institutional contexts and industries. The values for the additive HPWPs implementation scale were 0.80 and 0.45, respectively.

To account for the embeddedness of business units in regional and industrial contexts, while accounting for both clustering variance at the level of individual raters of HPWPs, I used a multi-level crossed fixed effects model. I relied on the MIXED procedure in SPSS 23.0 because

of its versatility for the analysis of hierarchical linear models for continuous outcome variables and because it allows for an easy inclusion of crossed fixed coefficients (Snijders & Bosker, 2012).

Results

Table 1 presents the descriptive statistics and a correlation matrix. In general, correlations between the independent variables are low, suggesting that the sample was sufficiently balanced.

Table 2 presents the results of my analyses. I report six different models with their corresponding information criteria for comparison across models. The log likelihood (LL) ratio and Akaike's Information Criterion (AIC) are reported in a smaller is better format, as they refer to a relative estimate of the information lost when a given model is used to represent the data. These ratios inform regarding the trade-off between the goodness of fit of the model and the complexity of the model. Consideration of only contextual factors, such as the institutional or industry characteristics (Model 2), or only factors associated with individual raters, such as whether they are HRM professionals or their seniority (Model 4), improve the fit indices compared to the baseline model. Consideration of organizational characteristics, in addition to either contextual factors (model 3) or rater characteristics (model 5), further improve fit. However, the best fit to the data is achieved when the model spans three levels of analysis, including contextual, organizational and rater-related characteristics (model 6).

As regards my hypotheses, model 6 presents the effects of the variables of the study on ratings of HPWPs. Contrary to Hypothesis 1, ratings of HPWPs in CMEs were not higher across the board. While ratings were higher than those in LMEs ($\beta = -0.24$, $p < .05$) and in developed Asian countries ($\beta = -0.64$, $p < .01$), they were significantly lower than ratings in the emerging

TABLE 1 - Descriptive Statistics

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Africa	0.01	0.11										
2. Developed Asia	0.09	0.28	-.035**									
3. China	0.05	0.22	-.027**	-.072**								
4. CMEs	0.12	0.33	-.043**	-.115**	-.088**							
5. India	0.09	0.29	-.036**	-.097**	-.074**	-.118**						
6. HMEs	0.18	0.38	-.053**	-.142**	-.109**	-.174**	-.146**					
7. Middle East	0.06	0.23	-.028**	-.075**	-.058**	-.092**	-.078**	-.114**				
8. LMEs	0.40	0.49	-.094**	-.251**	-.192**	-.307**	-.258**	-.380**	-.201**			
9. Agriculture, Fishery & Forestry	0.01	0.08	-0.01	-.023*	-0.02	.026**	-.024*	.101**	-.019*	-.050**		
10. Mineral Industries (mining, oil & gas)	0.04	0.19	0.01	-.062**	-.047**	-0.02	-.024*	.074**	.238**	-.091**	-0.02	
11. Construction	0.03	0.17	-.020*	-.050**	-.022*	.021*	-.055**	.151**	-.043**	-.036**	-0.01	-.035**
12. Public Sector	0.04	0.18	-.022*	.453**	-.045**	-.025**	-.060**	-.089**	-.047**	-.090**	-0.01	-.038**
13. Transportation & Utilities	0.08	0.27	.131**	-.090**	-.069**	-.025**	.066**	.115**	-.019*	-.049**	-.022*	-.060**
14. Trade (retail & wholesale)	0.05	0.22	-.027**	-.072**	-0.01	-.042**	-.064**	.033**	.121**	.037**	-0.02	-.047**
15. Finance, Insurance & Real Estate	0.17	0.38	0.02	.194**	.027**	.236**	-.135**	-.057**	-.072**	-.127**	-.035**	-.093**
16. Services	0.21	0.41	-0.01	-.109**	.043**	-.097**	.162**	-.071**	-.107**	.120**	-.039**	-.105**
17. Manufacturing	0.37	0.48	-.057**	-.103**	.034**	-.065**	0.02	-.039**	.044**	.100**	-.058**	-.154**
18. Organization Size (log)	8.78	1.53	-.094**	-0.01	-.148**	.029**	.163**	-.240**	-.019*	.178**	.021*	-.053**
19. Past Financial Performance	3.74	0.95	-0.01	-.102**	.067**	-.081**	.039**	.207**	-.080**	-.062**	-.040**	0.01
20. HR Rater (1=HR)	0.63	0.48	0.00	.021*	.023*	.032**	0.01	0.00	-0.02	-.043**	0.00	-0.01
21. Rater Rank - Director	0.27	0.45	0.01	-0.01	-.029**	.022*	-0.01	-.067**	-.028**	.075**	0.01	-.037**
22. Rater Rank - Manager	0.25	0.43	-0.02	.033**	.037**	-0.01	-.039**	.080**	.038**	-.083**	-0.01	.031**
23. Rater Rank - Supervisor	0.32	0.47	0.00	-0.01	.038**	-0.01	.044**	.084**	.044**	-.123**	0.01	.040**
24. Rater Rank - Individual Contributor	0.16	0.37	0.01	-0.02	-.056**	-0.01	0.00	-.120**	-.066**	.165**	-.023*	-.042**
25. HPWPs Implementation	23.59	5.15	.035**	-.065**	.104**	-.042**	.082**	.114**	0.01	-.133**	-0.02	-.020*

** Correlation is significant at the 0.01 level
* Correlation is significant at the 0.05 level
n = 11,276

11	12	13	14	15	16	17	18	19	20	21	22	23	24
-.033**													
-.052**	-.056**												
-.041**	-.045**	-.069**											
-.080**	-.088**	-.136**	-.108**										
-.091**	-.100**	-.154**	-.123**	-.240**									
-.133**	-.146**	-.226**	-.179**	-.352**	-.399**								
-.048**	-.033**	-.078**	.051**	.061**	.096**	-.063**							
-.037**	-.117**	0.00	-.041**	.057**	.122**	-.066**	-.078**						
0.01	0.01	0.01	0.00	.033**	0.00	-.037**	.038**	0.00					
-0.02	0.00	-.030**	0.01	0.00	.033**	0.00	.065**	-.028**	-.128**				
.036**	.047**	0.01	-0.01	0.02	-.027**	-.037**	-.086**	0.00	.230**	-.355**			
0.00	-0.01	.060**	-0.01	-.025**	-.045**	0.01	-.040**	.030**	.039**	-.418**	-.395**		
-.027**	-.042**	-.056**	0.00	0.01	.050**	.030**	.074**	-0.01	-.167**	-.266**	-.251**	-.296**	
-.036**	-.026**	.073**	0.01	-0.01	.027**	-.026**	-.033**	.084**	.075**	0.01	-.043**	.028**	0.00

economies of Africa (β= 1.71, p < .01), China (β = 2.91, p < .01), India (β = 1.75, p < .01), Latin America (β = 1.97, p < .01) and the Middle East (β = 1.26, p < .01). Thus, Hypothesis 1 was not supported.

Hypothesis 2 referred to the characteristics that are specific to an industry and their effects on ratings of HPWPs. I found only limited support for Hypothesis 2 as ratings in some industries were lower, but ratings in other industries were higher although not always significant. Compared to manufacturing industries, ratings of HPWPs in the agriculture, fishery and forestry industries (β = -1.55, p < .05), mineral industries such as mining, oil and gas (β = -.72, p < .05), and construction industries (β = -1.17, p < .01) were lower. However, ratings in the public sector (β = 1.11, p < .01), utilities, communications and transportation industries (β = .78, p < .05), and services industries (β = .22, p < .05) were significantly higher, while ratings in wholesale and retail trade industries (β = .21, p > .1) and finance, insurance and real estate industries (β = .28, p < .10), were not significantly different from ratings in manufacturing industries. Thus, hypothesis 2 was only partially supported.

At the organizational level of analysis, Hypothesis 3 referred to the effect of organizational size, measured as the number of employees, on ratings of HPWPs implementation. While the effect was positive (β = .01, p > .10) it was not significant. Hence, hypothesis 3 was rejected. Hypothesis 4 predicted a positive association between past performance and ratings of HPWPs implementation. The effect was both positive and significant (β = .22, p < .01), so hypothesis 4 was supported.

TABLE 2 – Results of crossed fixed effects analysis

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	β	se	β	se	β	se	β	se	β	se	β	se
Intercept	23.54	0.04 **	22.64	0.08 **	21.39	0.37 **	23.99	0.09 **	23.62	0.37 **	22.36	0.39 **
Institutional context												
Africa			2.11	0.35 **	2.13	0.43 **					2.03	0.43 **
Developed Asia			0.02	0.17	-0.35	0.21 †					-0.31	0.21
China			3.02	0.16 **	3.13	0.23 **					3.24	0.23 **
CMEs			0.24	0.13 †	0.32	0.16 *					0.32	0.16 *
India			2.17	0.15 **	2.03	0.18 **					2.07	0.18 **
HMEs			2.07	0.12 **	2.15	0.15 **					2.30	0.15 **
Middle East			1.09	0.19 **	1.39	0.22 **					1.59	0.22 **
LMEs			-	-	-	-					-	-
Industries												
Agriculture fishery & forestry			-0.19	0.44	-1.54	0.64 *					-1.55	0.63 *
Mineral industries (mining, oil & gas)			-0.22	0.22	-0.81	0.26 **					-0.72	0.26 *
Construction			-1.12	0.23 **	-1.21	0.29 **					-1.17	0.29 **
Public Sector			-1.04	0.17 **	0.68	0.30 *					0.78	0.30 *
Utilities, Communications & Transportation			0.61	0.16 **	1.06	0.19 **					1.11	0.19 **
Trade (Retail & wholesale)			0.25	0.19	0.23	0.22					0.21	0.22
Finance, Insurance & Real estate			0.32	0.13 *	0.28	0.15 †					0.28	0.15 †
Services			0.10	0.11	0.30	0.13 *					0.28	0.13 *
Manufacturing			-	-	-	-					-	-
Organization Characteristics												
Organization size					0.04	0.03			-0.12	0.03 **	0.01	0.03
Past Performance					0.22	0.05 **			0.44	0.05 **	0.22	0.05 **
Rater Characteristics												
Non-HR							-0.86	0.09 **	-1.00	0.10 **	-1.01	0.10 **
HR							-	-	-	-	-	-
Individual contributor							0.14	0.14	0.05	0.15	0.29	0.15 †
Supervisor							0.03	0.11	-0.07	0.13	-0.38	0.12 **
Manager							-0.60	0.12 **	-0.83	0.14 **	-1.05	0.14 **
Director							-	-	-	-	-	-
-2 Restricted Log Likelihood	97,407.44		96,576.23		68,387.11		97,301.63		68,796.38		68,251.18	
Akaike's Information Criterion	97,409.44		96,578.23		68,389.11		97,303.63		68,798.38		68,253.18	

At the individual level of analysis, I found a strong difference between ratings of HPWPs by HRM professionals and raters who work in other organizational functions. Respondents who worked in line functions or other staff functions rated the implementation of HPWPs significantly lower ($\beta = -1.01$, $p < .01$). As a result, hypothesis 5 was supported.

Finally, hypothesis 6 proposed that rater seniority is positively associated with ratings of HPWPs but was only partially supported. Employees who are individual contributors rated the implementation of HPWPs by their organizations higher ($\beta = .29$, $p > .10$) but the effect was not significant. By contrast, ratings by supervisors ($\beta = -.38$, $p < .01$) and managers ($\beta = -1.05$, $p < .01$) were significantly lower than those of directors. Hence, hypothesis 6 was partially supported.

Discussion and implications

This study examined the impact of contextual and rater-related factors, identified in the comparative, international and strategic HRM literatures as variables that explain and condition the implementation of HPWPs. Within a sample of 11,276 raters who work at 426 business units, distributed across 8 different comparative institutional contexts and 9 industries. I find that characteristics at the contextual, organizational and individual levels of analysis have significant effects on ratings of the implementation of HPWPs. I look at the results of the study and their implications in more detail below.

The main finding of this study is that variation in ratings of the implementation of HPWPs results from contextual factors, such as the comparative institutional context or the industry a rater's organization operates in, from organizational characteristics, such as the availability of resources, and from individual rater characteristics, such as whether the rater is an

HR professional or her seniority. While these explanations of variation in ratings of HPWPs are not new, considering them simultaneously in a single study is. My research provides empirical evidence for claims expressed by Batt and Hermans (2012) that researchers in all sub-fields of HRM need to pay close attention to sources of variance at multiple levels of analysis when designing their studies. More specifically, recent calls for conducting strategic HRM research at multiple levels of analysis (Jiang, et al., 2013; Lengnick-Hall et al., 2009; Peccei & Van de Voorde, forthcoming; Wright & Boswell, 2002), typically refer to a 2-1-2 approach in which organization-level practices have individual-level effects that aggregate into organization-level performance outcomes (see Peccei & Van de Voorde, forthcoming). These calls do little to revert the trend observed by Batt and Banerjee (2012) towards treating organizations as closed systems and, thus, pay little or no attention to the context in which strategic HRM studies are conducted. Whether qualitatively, by including a brief description of the context in which a study was conducted and reflecting upon the implications (e.g. Gong et al, 2009; Sun, Aryee & Law, 2007), or quantitatively by creating 3-2-1-2 models in which level 3 represent contextual factors, strategic HRM researchers need to account for characteristics of the business context in their work.

A similar logic of extending the range of levels of analysis may apply to international and comparative HRM research. Whereas the development of an understanding of the factors that explain differences in the implementation of HRM practices is the *raison d'être* of comparative HRM, this field of research frequently forgoes variance at the level of individual raters, which makes research in this field more vulnerable to rater-induced measurement error. Carefully crafted, large-scale research projects that have yielded important insights into why organizations in particular contexts adopt HRM practices, such as the Cranet or Intrepid projects, rely on

single-rater data collection (e.g. Edwards *et al*., 2016; Lazarova, Morley & Tyson, 2008). These efforts may also benefit from multi-level approaches with a 3-2-1 perspective, ideally for the entire sample but as a minimum for a subset to demonstrate robustness of findings.

The results of this study suggest that different sources of variation in ratings of HPWPs may be more or less relevant when tested simultaneously. Whereas a growing body of HRM research accounts for characteristics of the institutional contexts (e.g. Batt, Holman & Holtgrewe, 2009; Edwards, Marginson and Ferner 2013; Farndale, Brewster & Poutsma, 2008), industry-specific studies on the effects of HRM practices have become scarce after exemplary studies in the car manufacturing sector (MacDuffie, 1995), steel finishing lines (Ichniowski *et al*, 1997), or call centers (Batt, 2002). Even fewer studies have been conducted that combine both a comparative institutional perspective and an industry perspective, making those that do stand out (e.g. Bamber, Gittell, Kochan & von Nordenflycht, 2009; Doellgast, 2008).

As regards the tests of individual hypotheses, lack of support for Hypothesis 1 suggests that raters in LMEs do not necessarily perceive that organizations use managerial discretion to adopt HPWPs. An important contribution of this study is that the largest significant differences were observed between developed and emerging economies. While most comparative institutional research focuses on developed economies (Morgan, 2011) and progress has been made in charting the institutional landscape of emerging economies (e.g. Schneider, 2008; 2009; Witt & Redding, 2014), HRM researchers have yet to build on these advances. Among the exceptions are differences in HPWPs implementation between call centers in industrialized economies and emerging economies found by Batt et al. (2009). However, they combined data from institutionally distinct countries such as Brazil, China and South Africa into one emerging economies group. This study suggests that institutional differences between clusters of emerging

economies have significant implications for ratings of HPWPs.

The effect of industry on ratings of HPWPs did not yield the expected results. While ratings of HPWPs in the agricultural, extractive and construction industries were lower than those in other industries, findings such as those obtained by Combs et al. (2006) were not mirrored in the global sample of this study. One possible explanation for this non-finding could be the use of a high-level industry classification, which allows different types of organizations to co-exist in the same category. At more specific levels of industry classification, characteristics such as capital intensity (Datta et al., 2005) or customer segment (Batt, 2002) moderate HRM-performance linkages. Likewise, a growing body of research illustrates how organizations in some industries escape national or regional institutional pressure. Teipen (2008), for example, showed how employers in the video game industry in Sweden and Germany, where institutional arrangements would restrain innovation, could create sufficient labor flexibility to support innovative activity.

Hypothesis 3 was not supported, suggesting that an organization's number of employees is not a predictor of HPWPs implementation. This non-finding may be due to two alternative explanations. First, this study was designed to allow for a clear distinction between comparative industrial contexts and industries. The focus was on business units instead of corporations as a whole, which may have restricted the range of this variable and affected the findings. Alternatively, the increased likelihood of HPWPs implementation due to higher visibility of large organizations may be offset by approaches to managerial control of employees or the effect of investments in HPWPs on the overall cost structure of the organization.

The availability of resources derived from past performance significantly predicted higher ratings of HPWPs implementation. Compared to the effect sizes of other variables past

performance was less important. However, it confirms concerns regarding when investments in HPWPs have an effect on performance outcomes (Batt & Colvin, 2011; Guest et al., 2003; Wright et al., 2005), and -more importantly in the context of this study- what conditions are required for an organization to invest in HPWPs. The availability of resources derived from past performance suggests that companies that are experiencing a performance slide are less likely to invest in HPWPs, even when they could benefit from the associated positive effects on performance outcomes.

Tests of hypotheses 5 and 6 showed that rater characteristics are significant predictors of ratings of HPWPs. In line with findings by Gerhart et al. (2000a) and Wright et al. (2001), ratings of HPWPs by HRM professionals were higher than those by raters in other functions. Similarly, senior raters such as Directors perceived higher levels of HPWPs implementation than managers and supervisors. By contrast, individual contributors rated HPWPs somewhat higher than Directors, although this effect was only marginally significant. While the latter may have a general perspective of the organization and be able to compare across organizations, ratings of individual contributors are based on their perceptions as receivers of HRM practices. Supervisors and managers are responsible for implementing HPWPs (Purcell & Hutchinson, 2007) and increasingly fulfill HR roles addressing the concerns of employees who report to them. This position may bias their perception of the extent to which their organization has adopted HPWPs.

Conclusion

This study provides an empirical basis for recent calls for enriching HRM research in an international context by considering relevant sources of variance at different levels of analysis. Whereas strategic HRM researchers have made progress in accounting for individual-level

responses to organization-level implementation of practices (Jiang, Takeuchi & Lepak, 2013; Peccei & Van de Voorde, forthcoming), the influence of contextual factors on HRM practices and their outcomes is forgone too frequently. Likewise, comparative and international HRM research tend to pay little attention to intra-organizational sources of variance that are relevant to ratings of HRM practices. Too often, researchers in these fields treat organizations as single entities. In this study, I purposefully tested the effects of contextual (i.e. comparative institutional characteristics and industry), organizational (i.e. size and past profitability), and individual level (i.e. functional background and rater seniority) variables on ratings of HPWPs implementation. The results suggest that researchers need to develop 3-2-1 approaches to contribute to our understanding of HRM in an increasingly international and internationally connected business context.

As any study, this one has several limitations of which I consider the following to be the most relevant. First, I examined how contextual factors, organizational characteristics and individual-level rater characteristics relate to the implementation of HPWPs. In doing so, I do not claim to be exhaustive. Extant research suggests that factors such as founder preferences (Baron et al., 1996), differences in segments of the workforce (Snell & Lepak, 1999, 2002), intra-firm social networks (Burt, 1995), HRM department effectiveness (Huselid, Jackson & Schuler, 1997), production technology (Youndt et al., 1996), the organization of production (MacDuffie, 1995), and employee attributions are associated to ratings of the implementation of HRM practices. Due to omitted variable bias, the results I present here should be interpreted with care. The main conclusion is that variables at multiple levels of analysis are relevant to understanding perceptions of organizations' HPWPs implementation. Neither the 2-1-2 research designs as currently proposed in the SHRM literature (Peccei & Van de Voorde, forthcoming), nor the

exclusively context-driven explanations that are common in comparative HRM research will allow for a more complete understanding of HPWPs implementation in the global context.

A second limitation refers to the composition of the sample. Notwithstanding the limited influence of the research team on which organizations participated in the study, the results are derived from a convenience sample. That said, the results may be interpreted to represent HRM at more progressive organizations or of organizations whose HR staff is actively involved in HRM associations and in pursuit of knowledge about international best practices that they may or may not implement at their organizations. I expect that a sample that were fully representative of organizations in each institutional context and industry would have had a lower average and more variation in ratings of the implementation of HPWPs.

A third and final limitation is the definition of HPWPs. While practices were carefully chosen to represent universal HPWPs (cf. Langevin-Heavey *et al.*, 2013; Posthuma *et al.*, 2013), in certain institutional contexts, under certain job market conditions, in certain industries, in the eyes of individual managers who are responsible for implementing HPWPs, or according to attributions of those employees to whom HRM practices apply, a particular practice may not be associated with lower turnover intentions, enhanced human capital, greater opportunity to apply skills, or higher motivation that aggregate to positive organization-level performance outcomes.

Notwithstanding these limitations, and considering that researchers increasingly call for bridging strategic, comparative and international perspectives on HRM while simultaneously considering multiple level of analysis (Batt & Hermans, 2012; Farndale *et al.*, 2017), I hope that the empirical evidence presented in this study helps to convince researchers to make the effort to overcome the difficulties associated with such endeavors.

References

Amable, B. 2003. *The diversity of modern capitalism*. Oxford: Oxford University Press.

Appelbaum, E., Bailey, T., Berg, P. & Kalleberg, A. 2000. *Manufacturing advantage: Why high performance work systems pay off*. Ithaca, NY: ILR Press

Bailey, T. 1993. *Discretionary effort and the organization of work: Employee participation and work reform since Hawthorne*. Working Paper. Columbia University, New York, NY.

Bamber, G. J., Gittell, G. J., Kochan, T., & von Nordenflycht, A. 2009. *Up in the air: How the airlines can improve performance by engaging their employees*. Ithaca, NY: Cornell University Press.

Batt, R. 2002. 'Managing customer services: Human resource practices, quit rates, and sales growth', *Academy of Management Journal*, Vol. 45, pp. 587-597

Batt, R., & Banerjee, M. 2012. The scope and trajectory of strategic HR research: Evidence from American and British journals. *The International Journal of Human Resource Management*, 23, 1739–1762.

Batt, R. & Hermans, M. 2012. 'Global Human Resource Management: Bridging strategic and institutional perspectives', in: Martocchio, J.J., Joshi, A. & Liao, H. (eds.) *Research in Personnel and Human Resource Management*, Vol. 31, 1-52, Bingley, UK: Emerald Publishing.

Batt, R., Holman, D., & Holtgrewe, U. (2009). The globalization of service work: Comparative institutional perspectives on call centers. Introduction to the Special Issue. *Industrial and Labor Relations Review*, 62(4), 453-488.

Becker, B. E. & Gerhart, B. 1996. 'The impact of human resource management on organizational performance: Progress and prospects', *Academy of Management Journal*, Vol. 39(4), pp. 779-801

Becker, B. E., & Huselid, M. A. 1998. High performance work systems and firm performance: A synthesis of research and managerial implications. In G. Ferris (Ed.), *Research in personnel and human resources management*, Vol. 16, pp. 53–101). Greenwich, CT: JAI Press Inc.

Beer, M., Spector, B., Lawrence, P., Quinn Mills, D. & Walton, R. E. 1984. *Managing human assets*. New York, NY: Free Press

Brewster, C. 2007. Comparative HRM: British views and perspectives, special issue on globalizing HRM. *International Journal of Human Resource Management*, 18(5): 769-787.

Brislin, R. W. 1980. Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1, 185–216.

Cappelli, P. & Neumark, D. 2001. 'Do high performance work practices improve establishment-level outcomes?', *Industrial and Labor Relations Review*, pp. 737-775

Cerdin, J., & Brewster, C. 2014. 'Talent management and expatriation: Bridging two streams of research and practice'. *Journal of World Business*, 49(2), 245-252.

Chuang, C., & Liao, H. 2010. 'Strategic human resource management in service context: Taking care of business by taking care of employees and customers'. *Personnel Psychology*, 63, 153-19.

Colvin, A. J. S. 2006. Flexibility and fairness in liberal market economies: The comparative impact of the legal environment and high performance work systems. *British Journal of Industrial Relations*, 44, 73–97.

Combs, J., Liu, Y., Hall, A., & Ketchen, D. 2006. 'How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance', *Personnel Psychology*, 59, 501-528.

Crouch, C., Finegold, D., & Sako, M. 1999. *Are Skills the Answer? The Political Economy of Skill Creation in Advanced Industrial Economies*, Oxford: Oxford University Press.

Datta, D.K., Guthrie, J.P., & Wright, P.M. 2005. 'Human resource management and labor productivity: Does industry matter?', *Academy of Management Journal*, 48, 135-145.

Deeg, R. 1999. *Finance Capitalism Unveiled: Banks and the German Political Economy*, Ann Arbor, MI: University of Michigan Press.

Doellgast, V. 2008. 'Collective bargaining and high involvement, management in comparative perspective: Evidence from US and German call centers'. *Industrial Relations*, 47, 284–319.

Edwards, T., Sánchez-Mangas, R., Jalette, P., Lavelle, J., & Minbaeva, D. 2016. 'Global standardization or national differentiation of HRM practices in multinational companies? A comparison of multinationals in five countries', *Journal of International Business Studies*, 47, 997-1021.

Farndale, E., Brewster, C. & Poutsma, F. 2008. 'Coordinated vs. liberal market HRM: the impact of institutionalisation on multinational firms'. *International Journal of Human Resource Management*, 19, 2004-2023.

Farndale, E., Raghuram, S., Gully, S., Liu, X., Phillips, J.M., and Vidović, M. 2017. 'Introduction: A vision of international HRM research', *International Journal of Human Resource Management*, published online, 1-15.

Fombrun, C., Tichy, N., & Devanna, M.A. 1984. *Strategic Human Resource Management*, New York, NY: John Wiley and Sons

Gerhart, B., Wright, P.M., McMahan, G.C., & Snell, S.A. 2000a. 'Measurement error in research on the human resources and firm performance relationship: How much error is there and how does it influence effect size estimates?', *Personnel Psychology*, 53, 802-835.

Gerhart, B., Wright, P.M., & McMahan, G.C. 2000b. 'Measurement error in research on the human resources and firm performance relationship: Further evidence and analysis', *Personnel Psychology*, 53, 855-872.

Gerhart, B. 2007. Horizontal and vertical fit in human resource systems. In: C. Ostroff, & T. Judge (Eds.), *Perspectives on organizational fit*. New York, NY: Lawrence Erlbaum Associates.

Gong, Y., Law, K. S., Chang, S., & Xin, K. R. 2009. Human resource management and firm performance in China: The different role of managerial affective and continuance commitment. *Journal of Applied Psychology*, 94: 263-275.

Hall, P., & Soskice, D. 2001. 'An introduction to varieties of capitalism. In: David Soskice (Ed.), *Varieties of Capitalism: The Institutional Foundation of Comparative Advantage*. 1-70, New York, NY: Oxford University Press.

Hofstede, G. 1980. *Culture's consequences: International differences in work-related values*.

Beverly Hills, CA: Sage.

Hollingsworth, J.R. and Boyer, R. 1997, *Contemporary Capitalism: The Embeddedness of Institutions*, Cambridge: Cambridge University Press.

Huselid, M.A. (1995) 'The impact of human resource management on turnover, productivity, and corporate financial performance', Academy of Management Journal, Vol. 38(3): 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?" by Gerhart, Wright, McMahan, and Snell. *Personnel Psychology*, 53(4): 835-854

Ichniowski, C., Shaw, K., & Prennushi, G. 1997. 'The Effects of Human Resource Management Practices on Productivity: A Study of Steel Finishing Lines', *The American Economic Review*, 87(3), 291-313.

Jackson, G., and Deeg, R. 2006. '*How Many Varieties of Capitalism? Comparing the Comparative Institutional Analyses of Capitalist Diversity'*, MPIfG Discussion Paper 06/2, Max-Planck-Institut für Gesellschaftsforschung, Köln.

Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. 2012. 'How does HRM influence organizational outcomes? A metanalytic investigation of mediating mechanisms'. *Academy of Management Journal*, 55: 1264-1294.

Jiang, K., Takeuchi, R., & Lepak, D. 2013. 'Where do we go from here? New perspectives on the black box in SHRM research'. *Journal of Management Studies*, 50: 1448-1480.

Langevin-Heavey, A., Federman, J., Hermans, M., Klein, F., McClean, E., & Martinson, B. 2012. 'Measurement of Human Resource Practices: Isues regarding Scale, Scope, Source and Substantive Content', in: Guest, D., Paauwe, J.P. & Wright, P.M. (Eds.) *HRM and Performance: Achievements and challenges*, 129-148, Chichester: Wiley Publishing.

Lazarova, M., Morley, M., & Tyson, S. (2008). International comparative studies in HRM and performance–the Cranet data: Introduction. *International Journal of Human Resource Management*, 19, 1995–2003.

Lengnick-Hall, M. L., Lengnick-Hall, C. A., Andrade, L. S., & Drake, B. 2009. 'SHRM: The evolution of the field'. *Human Resource Management Review*, 19: 64-85.

Lepak, D., & Snell, S. 2002. 'Examining the human resource architecture: the relationships among human capital, employment and human resource configurations'. *Journal of Management*, 28, 517-543.

MacDuffie, J.P. 1995. Human resource bundles and manufacturing performance: Organizational logic and flexible production systems in the world auto industry. *Industrial and Labor Relations Review*, 48, 197-221.

Morgan, G., Campbell, J. L., Crouch, C., Pedersen, O. K., & Whitley, R. 2010. 'Introduction'. In: G. Morgan, J. L. Campbell, C. Crouch, O. K. Pedersen & R. Whitley (Eds.), *The Oxford handbook of comparative institutional analysis*, 1–14. New York, NY: Oxford University Press Inc.

Morgan, G. 2011. 'Comparative Capitalisms: A Framework for the Analysis of Emerging and Developing Economies', *International Studies of Management and Organization*, 41, 12–34.

Nattrass, N. 2014. A South African variety of capitalism? *New Political Economy*, Vol. 19, pp. 56-78

Nishii, L. H., Lepak, D. P., & Schneider, B. 2008. 'Employee attributions of the "why" of HR practices: Their effects on employee attitudes and behaviors, and customer satisfaction'. *Personnel Psychology*, 61, 503-545.

North, D. 1990. *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University. Press

Parry, E., Dickmann, M., & Morley, M. 2008. 'North American MNCs and Their HR Policies in Liberal and Coordinated Market Economies', *International Journal of Human Resource Management*, 19, 2024–2040.

Peccei, R., & Van de Voorde, K. 2016. 'The Application of the Multilevel Paradigm in Human Resource Management–Outcomes Research: Taking Stock and Going Forward'. *Journal of Management*, published online, doi: 10.1177/0149206316673720

Posthuma, R. A., Campion, M. C., Masimova, M., & Campion, M. A. 2013. A High Performance Work Practices Taxonomy: Integrating the Literature and Directing Future Research. *Journal of Management*, 39(5), 1184-1220.

Purcell, J., & Hutchinson, S. 2007. 'Front-line managers as agents in the HRM-performance causal chain: theory, analysis and evidence'. *Human Resource Management Journal*, 17, 3-20.

Rogers, E.W., & Wright, P.M. 1998. 'Measuring organizational performance in strategic human resource management: Problems, prospects, and performance information markets', *Human Resource Management Review*, 8(3), 311-331.

Schneider, B.R. 2008. *Competing capitalisms: Liberal, coordinated, network and hierarchical varieties*. Northwestern University, Evanston, IL.

Schneider, B.R. 2009. Hierarchical market economies and varieties of capitalism in Latin America. *Journal of Latin America Studies*, 41, 553–575.

Snijders, T.A.B., & Bosker, R.J. 2012. *Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modeling (second edition)*. London: Sage Publishers

Streeck, W., & Thelen, K. 2005. *Beyond Continuity: Institutional Change in Advanced Political Economies*. Oxford: Oxford University Press.

Subramony, M. 2009. A meta-analytic investigation of the relationship between HRM bundles and firm performance. *Human Resource Management*, 48: 745-768.

Sun, L.Y., Aryee, S., & Law, K.S. 2007. 'High performance human resources practices, citizenship behavior and organizational performance: A relational perspective'. *Academy of Management Journal*, 50, 558-577.

Toh, S.M., Morgeson, F.P., & Campion, M.A. 2008. 'Human resource configurations: Investigating fit with the organizational context'. *Journal Of Applied Psychology*, 93(4), 864-882.

Vitols, S. 2001. 'The Origins of Bank-Based and Market-Based Financial Systems: Germany, Japan, and the United States', in: Streeck, W. & Yamamura, K. (Eds) *The Origins of Nonliberal Capitalism: Germany and Japan in Comparison*, 171-199, Ithaca, NY: Cornell University Press.

Whitley, R. 1999. *Divergent capitalisms: The social structuring and change of business systems*.

Oxford: Oxford University Press.

Witt, A. M., & Redding, G. 2014. *The Oxford Handbook of Asian Business Systems*. Oxford: Oxford University Press.

Wright, P.M., & Boswell, W.R. 2002. 'Desegregating HRM: A Review and Synthesis of Micro and Macro Human Resource Management Research', *Journal of Management*, 28, 247-276.

Wright, P.M., Gardner, T.M., Moynihan, L.M., Park, H.J., Gerhart, B., & Delery, J.E. 2001. 'Measurement error in research on human resources and firm performance: Additional data and suggestions for future research', *Personnel Psychology*, 54, 875-901.

Wright, P.M., McMahan, G. C., Snell, S. A., & Gerhart, B. 2001. 'Comparing line and HR executives' perceptions of HR effectiveness: Services, roles, and contributions'. *Human Resource Management*, 40, 111−123.

Wright, P.M., & Sherman, W.W. 1999. 'Failing to find fit in strategic human resource management: Theoretical and empirical problems', *Research in Personnel and Human Resource Management*, Vol. 4, pp. 53-74, Greenwich, CT: JAI Press

GENERAL APPENDIX

Data Collection Process

Overview of the Human Resource Competency Study (HRCS)

In 1987, University of Michigan faculty members Dave Ulrich and Wayne Brockbank launched a research project that would focus on the competencies of HR professionals and their relationship with their individual effectiveness, the effectiveness of the HR function, and the relationship between HRM and organizational performance outcomes. While the first edition of the study was conducted in North America, interest in the study on behalf of senior HR executives of large and frequently multinational organizations allowed for widening the geographical scope of the study in subsequent rounds. In 1992, the second edition of the HRCS included several European countries. From then on, the study is repeated every five years. The 2012 round saw a strong increase in respondents to over 20,000 individuals, employed by 635 business units, located in 8 different geographical regions.

Data collection

The HRCS applies a snowball sampling strategy that is implemented in several phases. The research team develops the questionnaire and organizes a round table discussion with regional partners. In 2012, regional partners were invited to comment on the global questionnaire that was administered to each respondent, and had the possibility to develop a section with questions of specific interest that would be administered only in the partner's region. Regional partners were either business schools or large HR associations.

Partners: Business Schools

- North America – Ross School of Business, University of Michigan
- China – Tsinghua University
- Latin America – IAE Business School

Partners: HR Associations

Within each of the regions, the academic partners reached out to human resource or personnel management associations so that these organizations would invite their members to participate in the study. The regional associations that participated in the study are:

- North America – Society for Human Resource Management (SHRM)
- Europe – HR Norge
- Australia and New Zealand – Australian Human Resource Institute (AHRI)
- China – 51 Job
- India – National Human Resource Development Network (NHRD)
- Middle East – Arabian Society for Human Resource Management (ASHRM)
- Latin America – Federación Interamericana de Asociaciones de Gestión Humana (FIDAGH)
- Africa – Institute of People Management (IPM)

Within each region, and according to the reach of the regional association's member network, local HR or personnel management associations could collaborate in the data collection process. For example, in the case of Latin America, the management board of FIDAGH

consists of representatives of national HR associations. The national HR associations of Argentina, Brazil, Panama, Peru, Colombia, Panama and Mexico endorsed the study and encouraged their most active corporate members to participate in the study. Similarly, local HR associations endorsed participation in Europe, Africa, and the Middle East.

Methodology

The HRCS applies a 360-degree methodology for its data collection on competencies of individual HR professionals. When a business unit's HR function accepts the invitation from a regional or local HR association to participate in the study, it assigns a 'liaison', who acts as the contact person between the research team and the business unit. The 'liaison' selects senior professionals within the HR function as 'HR participants'. Typically, 'HR participants' were HR Directors, Manager of a particular HR area (e.g. Training & Development, Recruitment & Selection), or Business partners.

Individual HR participants enrolled in the study were asked to nominate at least six raters, including their direct supervisor, between three and five HR raters, and between three and five line managers (non-HR raters). This requirement allowed for a sample that consisted of multiple unique respondents at each business unit, comprising both HR professionals' and line managers' perspectives.