

A Contextual, Flexibility-Based Model of the HR-Firm Performance Relationship

J. Bruce Tracey

Cornell University

Author Note:

J. Bruce Tracey is the Editor-in-Chief of the *Cornell Hospitality Quarterly* and an Associate Professor of Management at Cornell University, School of Hotel Administration, Ithaca, NY 14853 jbt6@cornell.edu

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Abstract

Purpose - The purpose of this paper is to present a more refined and comprehensive explanation of the HR-firm performance relationship. Based on the recent conceptual and empirical research that is grounded in attribution theory, the model posits that flexibility regarding firm's HR system is a key mediator in the focal relationship, and that environmental dynamism determines the extent to which flexibility may be required. Specifically, the model specifies that a firm's high commitment work system will have a direct influence on the flexibility of the HR system, as well as climate perceptions about commitment and performance. HR flexibility and climate will in turn influence employees' evaluative attributions regarding the effectiveness of the firm's HR system, which will in turn affect employee commitment and performance and ultimately, firm-level performance outcomes. And finally, the model specifies that environmental dynamism will have a direct influence on HR flexibility and the resulting employee- and firm-level outcomes. This explanation is designed to have broad utility in light of the adaptive requirements for firms that operate in rapidly changing and highly competitive conditions.

Design/methodology/approach - This is a conceptual paper.

Findings - The proposed model provides a more comprehensive explanation of the mechanisms by which a firm's high commitment work practices may influence firm performance, and as such, offers both a diagnostic and prescriptive basis for improving and enhancing the firm's competitive position.

Originality/value - The analysis and discussion presented in this paper demonstrates the need for a broader perspective on the internal and external contingencies that influence the HR-firm performance relationship. The proposed model addresses this need and offers a more detailed, flexibility-based explanation of how HCWS affect individual and organizational performance

outcomes. It is hoped that this expanded framework offers new insights that will help scholars and practitioners to consider the ways in which HR practices can be leveraged to promote committed, high-performing employees that help organizations achieve sustained levels of superior performance.

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Introduction

Research that has examined the HR-firm performance relationship has evolved considerably over the past two and a half decades. And while we have learned a great deal about the nature and impact of HR, it has become apparent that additional consideration must be given to the means by which HR practices may lead to desired outcomes, as well as the conditions that may mitigate or enhance the utility of HR practices. Specifically, recent conceptualizations and empirical findings suggest that employee attributions about why firms adopt particular HR practices and strategies may play an important role in achieving several important individual and unit-level outcomes (e.g. Nishii *et al.*, 2008). However, it is likely that such attributions go beyond “why” particular practices may have been adopted and include those that are associated with “how well” those practices have been implemented. Moreover, it is evident that a variety of contextual factors associated with the firm’s internal and external environment may dictate the extent to which HR practices achieved desired results. In particular, nature and strength of the organization’s climate (e.g. Bowen and Ostroff, 2004) that stems from high commitment work systems (HCWS) and the extent to which the firm’s HR system is responsive to the dynamic conditions within the firm’s competitive environment (e.g. Kim and Wright, 2010) will dictate the extent to which firms can leverage their HR practices to achieve high levels of individual and organizational performance.

The purpose of this paper is to extend the extant research in this domain and present a model of the HR-firm performance that incorporates flexibility associated with the HR system, climate perceptions associated with commitment and performance, and environmental dynamism as key variables that may further explain how HR practices may lead to sustained levels of

individual and organizational performance. I will begin by presenting a brief overview of the studies that have examined the HR-firm performance relationship. Next, I will discuss three recent conceptualizations that offer insights regarding the focal relationship and contingencies that may affect the causal chain. Then, based on my analysis of these conceptualizations, I will present a refined model that incorporates HR flexibility, climate perceptions about commitment and performance, and environmental dynamism in an effort to provide a more comprehensive explanation of how HR practices may affect individual and organizational performance.

An Overview of the HR-Firm Performance Research

Although the importance of HR has a long history in the management and organizational studies literatures, efforts to examine the impact of HR systems on firm performance are relatively recent. One of the first empirical studies to formally examine the HR-firm performance relationship was conducted by Arthur (1994). In his study of manufacturing companies in the US, Arthur demonstrated that a specific set of HR policies, practices, and systems that were designed to promote employee commitment (e.g. decentralization in decision making, general training, due process, high wages and benefits, etc.) was linked to three efficiency measures of firm performance (i.e. productivity and labor efficiency, and employee turnover). A year later, a study by Huselid (1995) showed that a similar set of 13 HR practices, defined as a “high performance work system,” was related to both efficiency (i.e. employee turnover) and financial measures (i.e. sales, profit, and market value) of firm performance. A steady stream of research then ensued in which the HR-firm performance relationship was tested and confirmed in numerous settings around the globe (e.g. Youndt *et al.*, 1996; Guest, 1997; Ichniowshi *et al.*, 1997; Lee and Miller, 1999; Batt, 1999; Brewster, 1999; Bae and Lawler, 2000).

Although the initial efforts broadened our understanding about this important relationship, a number of scholars challenged the veracity of the extant research. One of the most commonly-voiced concerns was that most of the research to date utilized a cross-sectional research design (e.g. Gerhart *et al.*, 2000). As such, inferences regarding causality (i.e. that HR is a leading indicator of firm performance) could not be substantiated. Additional concerns regarding measurement problems were expressed, particularly the over-reliance on single-source perception-based indices of both HR practices and firm-level outcomes (e.g. Gerhart *et al.*, 2000, Wright *et al.*, 2001). And finally, in light of evidence which showed that the effects of HR practices disappeared when controlling for past performance (e.g. Guest *et al.*, 2003), concerns regarding omitted variables and model under-specification were evident.

In addition to a call for improvements in the methods of inquiry, a number of scholars have begun to develop more comprehensive explanations of the link between HR and firm performance. Recent conceptualizations have placed substantial emphasis on opening the proverbial “black box” and identifying the mechanisms by which an organization’s HR program may create economic and competitive value (e.g. Bowen and Ostroff, 2004; Nishii and Wright, 2008). To date, one of the most frequently-used frameworks for examining the HR-firm performance relationship is the resource-based view (RVB) of the firm. Scholars who utilize this explanation generally argue that a firm’s HR practices will have a direct impact on the employee knowledge, skills, motivation, and behavior, which in turn influences proximal indices of organizational performance, such as operational efficiency and quality that ultimately predict more distal outcomes such as financial and market performance. Unfortunately, while elements of this causal chain have been examined and supported (e.g. Youndt *et al.*, 1996; Batt, 1999; Wright *et al.*, 2005), a comprehensive test of the RVB propositions has yet to be conducted.

Moreover, critics have argued that the RVB fails to account for key internal and external contingencies that may affect the nature and magnitude of the links within the posited causal chain (e.g. Priem and Butler, 2001).

Another topic that has been debated in the literature focuses on “best practice” versus “best fit” explanations of HR systems. Scholars who advocate the “best fit” or contingency approach (e.g. Youndt et al., 1996; Wood, 1999) have argued that HR practices must be aligned with a variety of internal and external factors. For example, Way and Johnson (2005) proposed that there at least four types of alignment - structural (e.g. extent to which HR practices support key organizational and functional processes), cultural (e.g. extent to which HR practices support the firm’s espoused values), performance (e.g. extent to which HR practices support the organization’s business objectives), and environmental (e.g. extent to which HR practices account for external influences) - that are needed in order for HR practices to generate desired outcomes. In contrast, others have argued that there is a definable set of HR practices, such as those defined as “high commitment work systems” (HCWS) that are leading indicators of performance in any organizational setting (e.g. Boxall and Purcell, 2008; Delery and Doty, 1996). And although there is no consensus regarding the nature of the HR practices that may characterize HCWS and similar conceptualizations of HR systems (e.g. Boselie et al., 2005; Lepak et al., 2006), which certainly poses limitations to interpreting research that is based on this approach, there is fairly robust evidence that HR does indeed “matter” (e.g. Huselid, 1995; Guest et al., 2003; Wright et al., 2003).

An intriguing resolution to some of this conceptual debate was offered by Boxall and Purcell (2008) who suggested that there is merit to both the best fit and best practices approaches. In support of the best practices camp, they argued that some HR practices are

fundamental and universally relevant, such as on-going employee training and development and comparatively high compensation and benefit programs. However, they also emphasized that that the organizational context - such as the nature of the firm's industry segment (e.g. manufacturing versus services) and business strategy (e.g. quality versus efficiency) - as well as the external context - such as the regulatory environment and influence of trade unions - should inform the design and implementation of the HR practices that are utilized to promote individual and organizational performance. Thus, Boxall and Purcell concluded that the best practices-best fit debate reflects a complementary explanation. Indeed, in light of the empirical evidence that supports both explanations, it can be argued that models for explaining HR-firm performance models should acknowledge the relevance of fundamental HR practices, particularly those that have been included in conceptualizations of HCWS, but also address the causal mechanisms and contingencies that may dictate the extent to which HR practices may in fact lead to firm performance.

Accounting for the contingencies in the HR-firm performance relationship

One of the most insightful efforts to account for some of the contingencies and omitted variables was offered by Bowen and Ostroff (2004) who argued that an organization's climate may be a key mediator in the HR-firm performance relationship. They argued that in order to have a positive impact on firm performance, the firm's HR system must generate clear, consistent, and shared perceptions regarding "what is important and what behaviors are expected and rewarded (p. 204). Their model emphasizes the role that perceptions have in realizing the intended outcomes of the HR practices that have been adopted, and that firms which cultivate a "strong climate" (i.e. perceptions are clear, consistent, and shared among all employees) will achieve higher levels of performance than firms with a weak climate.

Nishii et al.(2008) built on Bowen and Ostroff's (2004) model and developed an attribution-based framework (e.g. Fiske and Taylor, 1991) which emphasized the importance of how employees interpret "what is important" and how those interpretations may influence individual- and unit-level outcomes. They argued that "[I]t is possible for employees to share climate perceptions based on the HR practices they experience [...] but to disagree about why those HR practices were put into place to create that climate" (p. 505). Based on their analysis of data that was gathered from 4,208 line staff and 1,010 department managers who worked in 362 departments across 95 grocery stores in the US, Nishii et al. found that employee attributions (i.e. attitudinal and behavioral responses) regarding HR practices that reflect a quality-focused HR strategy were positively related to individual satisfaction and commitment. They also found that aggregate-level measures of satisfaction and commitment were positively related to organizational citizenship behaviors, and that aggregate-level citizenship behaviors were positively related to unit-level performance (operationalized in terms of customer satisfaction). Nishii et al. also showed that attributions associated with a cost-reduction HR strategy were negatively related to individual-level outcomes. Thus, their study shows that employee interpretations about the firm's HR practices are an important component of the causal chain that is embedded within the HR-firm performance relationship.

However, there are two primary limitations associated with Nishii et al. 's (2008) study. From a research methods standpoint, the cross-sectional design prevents any firm conclusions regarding causality to be made. In addition, because their analysis was based on data from a single organization, they could not formally test the relationship between HR practices and HR attributions (due to the lack of variance in HR practices). From a conceptual standpoint, and germane to the current paper, the basis for their arguments regarding the nature and role of HR

attributions was too narrow. Specifically, an employee's response to the firm's HR practices may be based not only on why the focal practices were adopted, but also the manner in which such practices were implemented (Fiske and Taylor, 1991). For example, employees may understand why their organization offers on-going training and development programs (e.g. to address deficits in knowledge and skills), but if those programs are not executed in an effective manner, then employee attributions about the firm's HR system will most likely be negative. In addition, if training and other functional HR practices are not concurrently aligned with environmental dynamics, such as efforts by competitors to offer a broader set of potentially more attractive training and development opportunities (e.g. to enhance professional development opportunities that stem from organizational growth and increased competitiveness), then the resulting attributions may not elicit attitudinal and behavioral responses that are necessary for achieving high levels of individual and collective performance.

Moreover, Nishii *et al.*'s (2008) finding that cost-reduction HR strategies were related to negative HR attributions may be mitigated when the climate for HR - characterized by a focus on employee commitment and performance that results from the use and implementation of HCWS - is positive. That is, if employees not only understand why cost-reduction efforts may be needed (e.g. due to an economic downturn), but also view the organization's efforts to manage cost-reduction efforts in an effective manner (e.g. changes made to incentive programs were implemented in a just and fair manner, but remain at the higher range of that which may be offered by the firm's direct competitors), then the resulting HR attributions may in fact be positive and lead to enhancements in the resulting individual and organizational outcomes. Therefore, the assumption that cost-reduction strategies send signals that employees are simply replaceable commodities (e.g. Bamberger and Meshoulam, 2000) may not hold if employees

understand: a) the reasons for pursuing cost-reduction efforts; and b) the implementation of cost-reduction efforts is perceived as effective.

Another recent conceptualization that incorporates employee attributions about HR practices as a key internal contingency was offered by Kim and Wright (2010). They emphasized that employee attributions about the firm's HR system may be quite variable, and as such, may have differential impact on subsequent attitudes, motivation, and performance. For example, they noted that "[c]ommitment-based HR practices [...] can be interpreted as a measure of enhancing employee well-being or, alternatively, as a slick way of extracting additional labour" (p. 158). So although not an explicit element of their model, Kim and Wright's assertions further support the notion that employee HR attributions reflect interpretations that not only include why the firm has implemented a particular set of HR practices, but also how well the focal practices have been implemented.

Kim and Wright's (2010) model also accounts for two additional contingencies that further explain the links between HR and firm performance. Specifically, their contextual moderation model posits that a firm's HCWS will elicit higher levels of employee- and firm-level performance when:

- the organizational context is characterized by "high trust" which results in positive attributions regarding the organization's efforts to implement HR practices that support employee well-being and welfare; and
- the environmental context is characterized by a "loosely regulated legal environment" (p. 165) that affords managers a greater latitude of control to make decisions and solve problems.

Kim and Wright's contentions regarding the importance and roles of trust are rooted in research on cultural values (e.g. Huff and Kelly, 2003), social networks (e.g. Putnam, 1993; Locke, 1995), and institutional forces (Zucker, 1986), but emphasized that trust in management was the most salient factor in generating positive individual and organizational outcomes. They argued that "if employees do not find their management trustworthy, it is possible for them to view HCWS as a potentially exploitative managerial strategy than as an employer's genuine favour towards them" (p. 162). In terms of the external context, the central argument regarding the role of regulatory influences was grounded in research that has examined the roles that governments and unions play in protecting employee rights and limiting managerial discretion and autonomy (e.g. Boselie *et al.*, 2001). As such, Kim and Wright contended that external contexts that are more highly regulated will have a more negative impact on employer-employee relationships and thus, employees' HR attributions, compared to less regulated environments.

The model articulated by Kim and Wright (2010) offers one of the most detailed explanations of the internal and external contingencies that may affect the HR-firm performance. But while trust and regulatory influences are certainly important, similar to the limitations noted previously regarding Nishii *et al.*'s (2008) conceptualization, these factors reflect specific types of more general internal and external contingencies, respectively, that may explain how HR practices affect individual and organizational outcomes. In terms of the internal context, as noted previously, Bowen and Ostroff (2004) argued that the firm's HR practices will have a direct affect on climate perceptions associated with the HR system. So if a firm adopts HR practices that are consistent with HCWS, then it follows that the resulting climate perceptions will be based on the core elements of HCWS - commitment and performance. Similar arguments have been supported in research that has examined the effects of perceived organizational support

(e.g. Eisenberger et al., 1990; Shore and Wayne, 1993; Rhoades and Eisenberger, 2002). Moreover, and consistent with other climate scholars (e.g. Schneider, 1990, 2000), when such perceptions are “high in distinctiveness, consistency, and consensus, it will create a strong situation” (Bowen and Ostroff, 2004, p. 208), which in turn, reduces the variability in employee attributions about the climate for commitment and performance. For example, when employees share perceptions about the means by which they were selected, trained, assessed, and rewarded, the resulting climate for commitment and performance can be characterized as “strong”. If these HR practices are implemented in a manner that is consistent with HCWS (i.e. individuals are selected using rigorous methods of assessment, participate in high-quality training and development programs, receive constructive feedback on a regular basis, receive valued incentives based on their accomplishments, etc.), then employee attributions regarding the climate for commitment and performance will be positive.

In terms of the external context, and consistent with the previous arguments, it is likely that a wide array of environmental forces (e.g. economic, demographic, competitive, etc.), including but not limited to regulatory influences, will affect the manner in which the firm’s HR practices are implemented. Indeed, institutional (e.g. Meyer and Rowen, 1977), resource dependence (e.g. Pfeffer and Salancik, 1978), and transactional cost (e.g. Williamson, 1975) theories acknowledge that numerous factors within the external environment may influence firm performance. For example, downward economic cycles place pressures on firms to reduce expenses. So while firms may continue to utilize selective hiring practices, offer on-going training and develop systems, and provide comparatively higher rates of pay, the HR practices must be adapted to account for the changing economic conditions (e.g. identify and implement alternative, non-financial incentives to maintain and/or enhance employee motivation and

performance) in order to achieve desired outcomes. Similar adjustments to the HR function may also be made in light of increased competition (e.g. initiatives to address retention concerns), diversity (e.g. training for sensitivity and inclusion), and so forth. Thus, it is likely that HR attributions stem from both the organizational context, as well as the manner in which HR practices have been adopted to account for a myriad of environmental influences.

Based on the analysis presented previously, additional clarification and elaboration regarding the contingencies and explanatory mechanisms that explain how HR practices may affect firm performance is needed. In particular, emerging research on HR flexibility and the accompanying influences associated with environmental dynamism provides critical insights regarding the ways in which a firm's HR practices may influence employee-, unit-, and firm-level outcomes. In the following section, I will present an analysis and discussion of the research that has examined HR flexibility and environmental dynamism, and then I will integrate this body of work into a contextual, flexibility-based model of the HR-firm performance relationship. Figure 1 presents a graphical depiction of the posited relationships.

A Refined Model: The Roles of HR Flexibility and Environmental Dynamism

Organizational and strategic management scholars contend that one of the most important managerial roles is developing the firm's capacity to respond to emerging market threats, capitalize on promising opportunities, and the overall competitive dynamics in a timely and effective manner (e.g. Oktemgil and Greenley, 1997; Sanchez and Heene, 1997; Brown and Eisenhardt, 1998; Eisenhardt and Martin, 2000). Several human resource management scholars (e.g. Milliman *et al.*, 1991; Dyer and Shafer, 1999; Snell *et al.*, 2001) have extended these ideas and asserted that HR flexibility may play an instrumental role in enhancing the capacity of firms

to operate effectively in dynamic competitive environments that are characterized by ambiguity, instability, and variability in demand (e.g. Dess and Beard, 1984; Simerly and Li, 2000).

The most comprehensive conceptualization of the HR flexibility construct was offered by Wright and Snell (1998). They argued that HR flexibility includes two general dimensions: HR resource flexibility and HR coordination flexibility. HR resource flexibility is reflected by the versatility of the firm's HR practices and employee capabilities (Wright and Snell, 1998; Lepak *et al.*, 2003) and is greater when there are a larger number of alternative uses of the firm's HR practices and employee capabilities (i.e. skills and behaviors). This dimension includes at least two main components. The first component is resource flexibility in HR practices, which reflects the degree to which the current methods for selecting, developing, motivating, and retaining employees can be applied to a wide range of environmental contexts (Wright and Snell, 1998; Hayton, 2006). For example, selection, training, performance management, and incentive practices which cultivate employee innovation and adaptability may enable the firm to more easily introduce a new line of services to meet changes in its customers' needs without having to change those practices. As such, the firm's current HR practices, and particularly those that promote high levels of commitment and performance, can be used to improve or enhance the manner in which employees respond to new or changing environmental influences.

The second component of HR resource flexibility is resource flexibility in employee capabilities, which reflects the degree current employees possess the skills and motivation that are required to perform a wide array of task, duties, and responsibilities, including those that may go beyond current job assignments (e.g. Milliman *etal.*, 1991; Wright and Snell, 1998). For example, if a firm's customers desire a wider range or higher level of services than the firm currently offers, resource flexibility in employee capabilities are evident when the firm's current

employees possess the skills and motivation to meet, exceed, and even anticipate changing customer demands. That is, employees are not only able (i.e. “can do”), but also desire (i.e. “will do”) to adapt and respond to the changing environmental demands.

The second general type of HR flexibility is coordination flexibility, which refers to the firm’s capacity to acquire, deploy, or redeploy the employees that are necessary to meet the firm’s current objectives, but also to pursue strategic alternatives (e.g. Snell et *al.*, 2001; Wright and Snell, 1998; Hayton, 2006;). Similar to HR resource flexibility, HR coordination flexibility includes two primary components. The first component is coordination flexibility in HR practices, which refers to the firm’s capacity to quickly and effectively deploy or implement alternative HR processes and structures in response to environmental changes (e.g. Milliman et *al.*, 1991; Wright and Snell, 1998; Hayton, 2006). For example, if a firm’s competitor introduces a new product or service, coordination flexibility in HR practices is reflected when the firm can quickly implement new and different HR practices that enable the firm to acquire, develop, and/or motivate employee capabilities to implement alternative products or services (e.g. cheaper, higher quality, additional features, etc.).

The second component of HR coordination flexibility is coordination flexibility in employee capabilities, which reflects the extent to which firm can acquire, deploy, redeploy, and/or dismiss employees - including contingent workers - who possess (or lack) the requisite versatility of skills and motivation that are required to perform their assigned tasks, duties, and responsibilities. For example, when firms identify opportunities to expand operations to different markets, coordination flexibility is evident when the company can quickly identify, select and deploy current employees to facilitate the expansion plans. Similarly, coordination flexibility in employee capabilities is also demonstrated when firms can acquire and utilize contingent

workers for temporary work assignments that stem from unplanned business opportunities that arise.

Recent empirical work has supported the conceptual framework described previously, as well as provided some initial evidence regarding the manner in which HR flexibility may influence firm performance. For example, in their study of 117 publicly traded companies in the US, Bhattacharya et al. (2005) found that three general dimensions of HR flexibility - flexibility of HR practices, flexibility of employee skills, and employee behavior flexibility - explained unique variance in several accounting-based measures of firm financial performance (i.e. operating profit per employee, return on sales, etc.) after accounting for the effects of high performance HR practices (which are similar to the practices embedded within HCWS) and several control variables (e.g. industry segment, size, unionization, debt-equity ratio, capital intensity, etc.). Similarly, using data from 226 Spanish companies, Beltran-Martin et al. (2008) found that a similar measure of HR flexibility mediated the relationship between high performance HR practices and a perceptual measure of customer service performance. These and related studies (e.g. Wei and Lau, 2010) reveal two key insights regarding the nature of the HR-firm performance relationship. First, it appears that HR flexibility plays a critical role in linking HCWS to firm performance. Specifically, it appears that HCWS are necessary to cultivate employee capabilities that are required to achieve the firm's strategic objectives. But in order to develop the necessary capabilities, the HR practices that are embedded within HCWS must also be responsive to or informed by the dynamic qualities associated with the firm's competitive environment (Becker and Huselid, 1998; Wright and Snell, 1998). As such, the extent to which HCWS influence employee HR attributions will be based on the effectiveness of the firm's adaptive HR efforts (i.e. HR flexibility). Therefore, as indicated in the proposed model, it is

likely that HR flexibility mediates the relationship between HCWS and employee HR attributions. In addition, and consistent with Kim and Wright's (2010) model, the model shows that employee HR attributions regarding HR flexibility will have a proximal impact on employee outcomes (i.e. commitment and performance), which in turn influence more distal organizational outcomes (e.g. operational efficiency, quality, financial performance, etc.).

The second key insight from the emerging research on HR flexibility is the role of environmental dynamism. Numerous scholars have acknowledged the importance of the environmental context and have argued that adaptability is a critical requirement for coping with the ongoing changes that characterize many competitive environments (e.g. Eppink, 1978; Chakravarthy, 1982 Sanchez, 1995,1997; Sanchez and Heene, 1997), and that as the competitive environment becomes more dynamic, the need for flexibility increases (e.g. Sanchez, 1997; Sanchez and Heene, 1997; Brown and Eisenhardt, 1998; Dyer and Shafer, 1999; Eisenhardt and Martin, 2000). In order to respond to and cope with environmental dynamism, scholars have argued that firms must be able to effectively utilize and/or acquire resources that are necessary for capitalizing on the opportunities or responding to threats within the firm's external context that are manifest over time (e.g. Barney, 1991; Teece et al., 1997; Priem and Butler, 2001). The underlying assumption is that managers make decisions about how to best utilize the firm's available resources and coordinating/organizing processes based on their perceptions about the nature and demands associated with the firm's competitive environment (e.g. Way and Johnson, 2005; Teece, 2007). Thus, as managers and leaders assess the environmental context, they will seek the most appropriate and sometimes alternative means for utilizing employee capabilities. In other words, environmental dynamism will dictate the nature and extent of HR flexibility that may be needed. For example, when the economy grows and labor markets tighten, firms must

adopt more rigorous and comprehensive recruiting efforts in order to find employees who have the capabilities that are needed to support the firm's growth objectives. Alternatively, and perhaps concurrently, firms may also create new or expand existing positional requirements that may be needed to capitalize on market opportunities (or threats). These examples highlight the direct impact that environmental dynamism will have on the flexibility of the firm's HR practices, and is included as a key element of the proposed model.

Although research in this domain is relatively new, scholars have begun to examine the impact of environmental change and other external factors on the causal links with the HR-firm performance relationship. For example, using data from 201 manufacturing and service firms in India, Ketkar and Sett (2010) showed three dimensions of HR flexibility (i.e. employee skill flexibility, employee behavioral flexibility, and HR practice flexibility) mediated the relationship between perceptions about environmental dynamism and perceptions about employee performance. Thus, it appears that HR flexibility is not only a function of the extent to which firms adopt HR practices that promote commitment and performance, but also the degree of change associated with the environmental context.

Primary Implications

From a theoretical and substantive standpoint, the analysis and discussion presented previously demonstrates the need for a broader view regarding the contextual factors that may influence the HR-firm performance relationships, and well as additional explication regarding the causal mechanisms that are embedded within this relationship. The model presented in this paper advances our understanding of how the HR systems can affect firm performance in three primary ways. First, recent research that has examined the role of the internal context (e.g. Nishii

et al., 2008) suggests HCWS have a direct affect on climate perceptions, and specifically those that are related to the core elements of this type of HR system - commitment and performance. These perceptions will in turn influence employee attributions regarding the HR practices that are embedded in this type of system, which ultimately influence individual and firm performance outcomes. It is important to emphasize that HCWS likely promote a climate that goes beyond perceptions about trust (e.g. Kim and Wright, 2010) and may affect both individual and collective perceptions that are derived from the firm's efforts to promote a commitment-based work environment (e.g. Eisenberger et al., 1990; Tsui et al., 1997). Moreover, if the perceptions about commitment and performance are "strong", then the resulting attributions regarding the HR system will be commensurately high (Bowen and Ostroff, 2004).

Second, building on research that has examined dynamic capabilities (e.g. Sanchez, 1995; Sanchez and Heene, 1997; Teece et al., 1997), there is growing evidence that HCWS may also have a direct on the flexibility of the HR system and the extent to which the firm can acquire and/or develop employees who have capabilities that can be utilized for a wide range of purposes and needs - from temporary cross-functional job assignments, to creating new positions that are needed to take advantage of emerging market opportunities (e.g. Bhattacharya et al., 2005; Beltran-Martin et al., 2008). And although there is little consensus regarding the specific HR practices that define HCWS, most definitions emphasize on-going training and development opportunities, performance-based incentive programs, participatory decision making, and internal promotion (e.g. Collins and Smith, 2006; Xiao and Bjorkman, 2006). Thus, these practices may not only cultivate contexts that provide employees with clarity and direction regarding what is expected, supported, and rewarded (Bowen and Ostroff, 2004), but may also be instrumental in enhancing employee skills and motivation that are required to execute current

and future job responsibilities (Wright and Snell, 1998).

And finally, it is also evident that the external context plays an important role determining whether HCWS achieves desired results. As noted previously, there is some initial empirical evidence that links various environmental influences with HR flexibility (e.g. Ketkar and Sett, 2010) and broader indices of adaptive capability (e.g. Wei and Lau, 2010). The extent of change and uncertainty that firms face is variable, and as such, will have differential effects on the degree to which firms must adapt and align their HR practices with the environmental conditions (e.g. Way and Johnson, 2005). So if firms adopt a HCWS that not only builds a strong climate of commitment and performance, but is also congruent with the level of environmental dynamism, then the resulting HR attributions will be positive and yield desired individual and organizational outcomes.

Going forward, two additional considerations are needed to advance our understanding of contingencies and causal chain that characterize the HR-firm performance. First, more robust methods of inquiry must be employed in order to verify (or refute) the relationships that are included in the proposed model. In particular, efforts must be taken to ensure that the operationalizations that have been used to assess the constructs included in the proposed model are reliable and valid. For example, evidence regarding the psychometric qualities of HR flexibility indices is very limited, and none of the empirical studies that have examined this variable have followed the steps that are necessary to establish construct validity (see, Cronbach and Meehl, 1955; Schwab, 1980; Hinkin, 1995). And of course, longitudinal research designs are needed to test the causal propositions.

Second, focused attention to the content domain of the key constructs is warranted. For example, Wright and Snell's (1998) conceptualization of HR flexibility distinguished between

HR resource and HR coordination flexibility, yet none of the subsequent empirical work incorporated this distinction into the conceptual foundation. This is an important oversight, as environmental dynamism may have differential effects on these distinct forms of flexibility and the subsequent influence on employee HR attributions. In addition, there remains substantial variability in the manner in which HR systems, including HCWS, have been defined. For example, Boselie *et al.*'s (2005) review found that scholars have used at least 26 different practices to define HR systems/bundles of practices. Thus, it is difficult to draw firm conclusions about the extant research if there is little consensus about one of the central concepts in the proposed model.

Conclusion

The analysis and discussion presented in this paper demonstrates the need for a broader perspective on the internal and external contingencies that influence the HR-firm performance relationship. The proposed model addresses this need and offers a more detailed, flexibility-based explanation of how HCWS affect individual and organizational performance outcomes. It is hoped that this expanded framework offers new insights that will help scholars and practitioners to consider the ways in which HR practices can be leveraged to promote committed, high-performing employees that help organizations achieve sustained levels of superior performance.

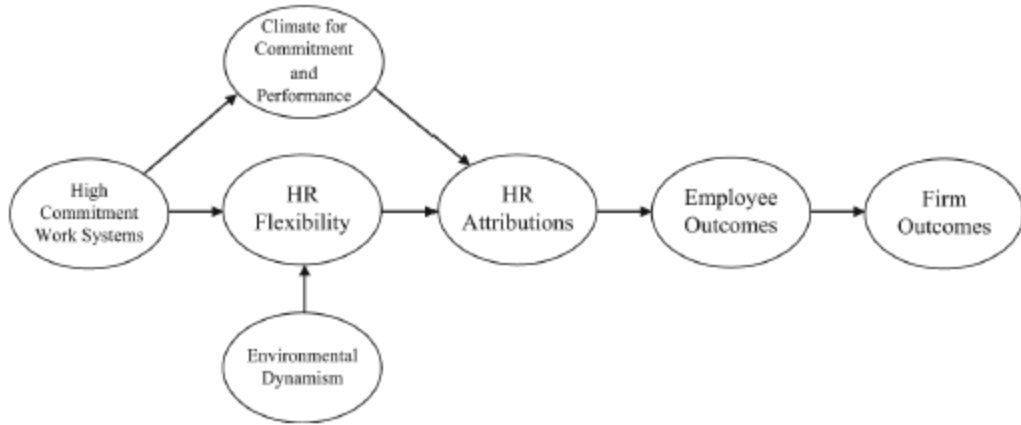


Figure 1. Proposed model.

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