

RECRUITING AND STRATEGIC HUMAN RESOURCE MANAGEMENT: HR BUNDLES, ORGANIZATIONAL CULTURE, AND INDIVIDUAL DIFFERENCES IN APPLICANT ATTRACTION

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For my family:

I present this dissertation to my parents, Kyungjin, Jiyeon (daughter), Jihoon (son), and my brother.

| RECRUITING AND STRATEGIC HUMAN RESOURCE MANAGEMENT: HR |
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| APPLICANT ATTRACTION |

ABSTRACT

I examine the responses of job applicants to the human resources (HR) system and organizational culture to explain why individuals vary in their choice of potential workplaces. Prospective applicants subjectively interpret various signals from organizations, and they make decisions as to whether to apply for jobs at a particular organization based on those signals. While there is a growing body of research identifying the linkage between individual HR practices and recruiting outcomes, little research addresses how different vocation interests differentiate preferences for particular HR bundles. Utilizing signaling theory and personorganization fit (P-O fit) theory, I explore the impact of individual differences on organizational attractiveness to organizations described by two factors: HR bundle (cost reducing and performance enhancing) and culture type (bureaucratic and innovative). Through this research, I also examine how different HR bundles deliver different signals to applicants and the way in which these signals are supplemented by appropriate contextual factors (e.g., organizational culture). I found a strong main effect of high-performance work systems---it attracts most people. This main effect becomes stronger when combined with a higher social person. When applicants' socialness is high, they are even more likely to choose high-performance work systems than cost-reducing bundles. Linking the bundling research to recruiting, this study provides insightful evidence of interactions among HR bundles and job applicants' individual differences for organizational attractiveness as well as evidence of interactions among HR practices and job applicants' individual differences for organizational attractiveness.

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CHAPTER 1

INTRODUCTION

Much of organizational success is contingent on recruiting qualified applicants, which is a critical component of personnel selection (Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005). Defined as "encompass[ing] all organizational practices and decisions that affect either the number, or types, of individuals that are willing to apply for, or to accept, a given vacancy" (Rynes, 1991, p. 429), employee recruitment covers organizations' purposeful and unintended effects on applicant attraction (Chapman et al., 2005). Researchers have examined the effects of numerous predictors on applicant attraction over several decades. For example, outcome variables of recruiting, such as job pursuit intentions and acceptance intentions, are associated with numerous factors, including organizational characteristics such as a firm's corporate social performance (Turban & Greening, 1997), recruiter characteristics (Harris & Fink, 1987), the recruitment process (Gilliland, 1994), person-organization fit (Cable & Judge, 1996), perceived alternatives (Bauer, Maertz, Dolen, & Campion, 1998), and hiring expectations (Rynes & Lawler, 1983). Although traditional recruiting research has focused on individual selection and recruiting practices, scant attention has been paid to the role of strategic human resource management (SHRM) on organizational attractiveness.

Researchers in the area of SHRM are usually interested in achieving high levels of organizational performance by strategically using human resource management (HRM) (Delery & Doty, 1996; Lepak & Shaw, 2008). One of the most central ways to improve organizational performance in the SHRM framework is the concept of "horizontal fit," or "bundling" HR practices, coupled with the notion of "vertical fit." Vertical fit aligns individual HR practices or

HR bundles with different levels of organizational factors, such as business strategies and HR strategies. Human resource (HR) bundles, often referred to as HR systems, are composed of an array of HR practices, which are expected to be synergistic and complementary (Dyer & Reeves, 1995). Because the bundle is a possible combination of HR practices, one can generate numerous types of HR systems. For example, high-performance work systems (HPWS), one of the most studied issues in the macro human resource management literature, are just one of a number of HR bundles. Nonetheless, HPWS have dominated the HR bundling research. It seems to be regarded as a panacea by presuming to bring desirable outcomes (i.e., high performance) to organizations. Recently, scholars have labeled HPWS with alternative labels, such as high-commitment or high-involvement work systems. These alternatives are favored because (a) they make a more explicit reference to the theoretical mechanisms underlying such practices and (b) the available evidence regarding the superior performance of so-called high-performance practices seems inconclusive. This notion resonates with Cappelli and Neumark's (2001) standpoint:

In our view, labeling work practices "high-performance" is potentially confusing. The highly influential America's Choice (National Commission on Skills of the Workforce 1989) report appears to have made the phrase "high-performance work practices" popular. The confusion comes from assumptions about the etymology of the name—whether these practices have already been identified as associated empirically with superior performance on some dimension (either of employees or of the organization), as many assume and some assert, or whether it is just a name. (Cappelli & Neumark, 2001, p. 738)

Despite the controversy with respect to labels, which presume outcomes in the form of greater "involvement," "commitment," or "performance" on the part of workers, important issues remain regarding whether HPWS apply equally to all individuals. Individual differences in responding to these systems might be a key in explaining the inconsistent evidence of HPWS. Thus, I aim to test the idea that aspects of individuals, such as values and expectations, play a critical role in the individuals choosing organizations whose characteristics can be described by specific HR systems. I also investigate the role of individual differences in favoring dissimilar organizational culture types.

Organizational attractiveness can be predicted by an interaction between HR systems and organizational culture. The contingent configurational perspective integrates horizontal and vertical fit by focusing on the alignment between the HR bundles and the contingencies (Lepak & Shaw, 2008). This perspective argues that the bundles augment performance only in certain situations (Lepak & Shaw, 2008). Thus, the effectiveness of the bundles depends on contingencies that include organizational types (Miles & Snow, 1978), corporate strategies (Arthur, 1992), HR strategies (Doorewaard & Meihuizen, 2000), country cultures (Gooderham, Nordhaug, & Ringdal, 1999), and employment types (Lepak & Snell, 1999). Fit in SHRM is based on the traditional premise that more fit leads to more synergy. Therefore, in theory, firm performance is maximized when both horizontal and vertical fit occur perfectly. Because performance is usually considered to be financial performance, other aspects of performance are largely ignored in SHRM research. For example, using accounting (growth rate of return on capital) and economic (Tobin's q) measures, Huselid (1995) showed that financial performance is positively linked with HPWS. A study has also shown that HPWS with a conjunction of diversity and equality management can increase company revenue created per employee

(Armstrong et al., 2010). However, there is no research concerning the positive signals to prospective employees when organizations properly match their HR bundles and cultures as a contingency. I also test the idea that applicants' choices of organizations that are characterized by specific HR systems are increased when organizational culture fits with the HR systems.

Prospective applicants subjectively interpret various signals from organizations, and they make decisions as to whether to apply for jobs at a particular organization based on those signals. Signaling theory holds a prominent position in a variety of management literatures because it is useful for describing behavior when two parties (individuals or organizations) have access to different information (Connelly, Certo, Ireland, & Reutzel, 2011). Accordingly, signaling theory is important to human resource management, and a number of studies have examined signaling that occurs during the recruitment process (Suazo, Martínez, & Sandoval, 2009). While scholars have expanded the range of potential signals and the contexts in which signaling occurs (Connelly et al., 2011), they have not yet identified the role of signaling when looking at how strategic efforts related to human resource management affect organizational attractiveness.

Person-organization fit (P-O fit) is another theoretical framework that has been used to predict the effects of recruiting. P-O fit is defined as "the congruence between the norms and values of organizations and the values of persons" (Chatman, 1989, p. 339). This interactional concept can be traced to the central premise that behavior is a function of the person and environment (Lewin, 1951). P-O fit has been a prominent predictor of recruiting outcomes. Applicants make a decision whether to apply for an organization with a subjective interpretation of organizational characteristics in light of their personal characteristics (Kristof, 1996). While an HR bundle is a critical characteristic of organizations, few studies has examined how different HR bundles attract different person types.

In sum, utilizing signaling theory and P-O fit theory, I aim to address the impact of individual differences on organizational attractiveness in organizations that are described by two factors: HR bundle (HPWS and non-HPWS) and culture type (bureaucratic, or hierarchy, and innovative, or adhocracy). While I am mainly interested in knowing how personal orientation interacts with HR bundles, HR practices, and organizational culture in predicting organizational attractiveness (i.e., two-way interactions), I also test a three-way interaction among HR bundle, culture, and personal orientation on applicant attraction. The specific research questions I seek to answer in this study are (a) how do personal orientation and HR bundle types interact in predicting organizational attractiveness (i.e., applicant attraction); (b) how do personal orientation and cultural preferences interact in predicting organizational attractiveness; (c) how do personal orientation, cultural preferences, and HR bundle types interact (i.e., three-way interaction) in predicting organizational attractiveness; and (d) how do personal orientation and individual HR practices in an HR bundle interact in predicting organizational attractiveness?

Several factors differentiate the theoretical models I use from previous recruiting research that has contributed to both research and practice. First, I consider the HR bundle as a key predictor of applicant attraction. Although there is a growing body of research identifying the linkage between individual HR policies and recruiting outcomes, few studies offer roles for collective HR practices (i.e., HR bundle). Prospective employees assess corporate attractiveness based on the organizations' attributes, such as pay, benefits, security, advancement, and working conditions (Jurgensen, 1978). For example, Schwoerer and Rosen (1989) found that job applicants are more attracted to a company with a leading rather than an average compensation policy. However, little research addresses how job applicants will react to a signal from a collection of practices. In particular, I examine how different personal orientations of job

applicants differentiate their preferences of HR bundles, a phenomenon that has yet to receive attention in the recruiting literature.

Second, many scholars of strategic human resource management have focused on linking human resources to strategic or organizational conditions (Lengnick-Hall & Lengnick-Hall, 1988). Schuler and Jackson (1987) proposed that different strategy types (cost reduction, quality improvement, and innovation) require different types of employee role behaviors, and HR practices should be used to ensure those behaviors occur. Like the vertical fit between HR practices and business strategies, I consider the fit between HR bundles and organizational culture. Thus, I seek to assess the moderating role of individual differences in the relationship between the organizational culture and HR bundle preferences. This information should provide evidence of effective contextual factors of bundles with respect to recruiting.

This dissertation is organized as follows. Chapter 2 discusses the theoretical background of the study. It is divided into two sections: a review of the literature related to fit theory in strategic management, leadership, and strategic human resource management, especially as emphasized in person–organization (P-O) fit theory, and a discussion of signaling theory in light of applicant attraction. Theoretically derived hypotheses and a model developed from the relationships shown in the hypotheses are presented in Chapter 3. The research design, subjects, measures, and statistical analyses that I used to test the model and the hypotheses are presented in Chapter 4. The results of the model tests and the hypotheses tests are presented in Chapter 5. Chapter 6 is a discussion of the results and limitations of the study and includes suggestions for future areas of research.

CHAPTER 2

THEORETICAL BACKGROUND

In this chapter, I discuss the theoretical background of the study. I highlight how fitted HR practices may deliver specific signals to job applicants and how the prospective employees may interpret the signals in light of their personal orientations. Thus, this chapter begins with a review of the literature related to fit theory in strategic management, leadership, and strategic human resource management, especially emphasizing person—organization (P-O) fit theory. Signaling theory in terms of applicant attraction then follows.

Fit Theory in Strategic Management

The concept of fit has been ubiquitous as an important building block for theory construction in many areas of research (Venkatraman, 1989). A classic premise noted by strategic management researchers is that fit is desirable because of its synergistic benefits. Consequently, fit and synergy have been examined in a variety of contexts, including mergers and acquisitions in strategic management, leader–follower fit in leadership, horizontal and vertical fit in human resource systems, and person–organization fit in recruitment.

Relatedness has been used as a measure of fit in acquisitions (e.g., Lubatkin, 1983; Singh & Montgomery, 1987). Relatedness consists of two dimensions (Zaheer, Castaner, & Souder, 2013): similarity (the extent to which two firms have a high degree of overlap in their technologies, operations, products, customers, or distribution channels) and complementarity (the potentially mutual value-creating essence of a firm's components). While most traditional research on mergers and acquisitions tends to focus on the role of similarity in explaining

acquisition performance, Kim and Finkelstein (2009) suggested that complementarity is an important antecedent of acquisition performance. Zaheer, Castaner, and Souder (2013) also found that high levels of both integration and autonomy are possible when complementarity rather than similarity is the primary source of synergy. A widely used classification scheme to identify acquisition types is the strategic fit concept developed by Salter and Weinhold (1979). It classifies firms as (a) unrelated, (b) related supplementary, (c) related complementary, and (d) identical. Using these four types of potential synergy, Shelton (1988) showed that strategic fit is important in determining the total gains created in acquisitions. Specifically, she found that both related supplementary and identical fits offer significant opportunities for value creation and related supplementary fits create value with the least amount of variance. These studies imply that the synergistic effect of fit may occur when not only similar but also idiosyncratic components interact with each other.

Besides the source of synergy, scholars have focused on the types of synergy in examining the effects of mergers. Chatterjee (1986) used three types of synergy in differentiating the economic values of merging firms: (a) collusive synergy, which represents the class of scarce resources leading to market power; (b) operational synergy, which represents the class of scarce resources that lead to production and administrative efficiencies; and (c) financial synergy, which represents the class of resources that leads to reductions in the cost of capital. He found that collusive synergy is associated with the highest economic value, and the resources behind financial synergy tend to create more value than do the resources behind operational synergy. This suggests that types of fit improve performance in different ways.

Fit Theory in Leadership

The relationship between supervisors and subordinates is an important determinant of how effectively organizational members get their jobs done (Tjosvold, 1985). Although leadership theory has implied that leader–follower fit is important, these notions have not been developed from a fit perspective (Atwater & Dionne, 2007). Dyadic relationships between leaders and followers became the spotlight when leader–member exchange (LMX) was first put forward by Dansereau, Graen, and Haga (1975); Graen (1976); and Graen and Cashman (1975). The central premise behind LMX is that leaders behave in different ways toward different followers. Thus, LMX suggests that the leader needs to develop a good fit with each follower. One of the important determinants of LMX is compatibility, which has been conceptualized as actual similarity (e.g., in age, race, tenure, or beliefs), perceived similarity, or liking (Liden, Sparrowe, & Wayne, 1997). Compatibility represents better dyadic fit between the leader and follower, and this "better" fit results in higher LMX, which in turn results in better individual and organizational outcomes (Pulakos & Wexley, 1983; Turban & Jones, 1988).

Abusive supervision is defined as "subordinates' perceptions of the extent to which supervisors engage in the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact" (Tepper, 2000, p. 178). Over the past 10 years, a growing body of research has examined the antecedents and consequences of abusive supervision. For example, a supervisor's perceived dissimilarity with subordinates produces higher levels of abusive supervision (Tepper, Moss, & Duffy, 2011). This evoked abusive supervision is not only harmful to subordinates because of actual turnover (Tepper, 2000) or psychological distress (Tepper, Moss, Lockhart, & Carr, 2007), but is also detrimental to organizations through subordinates' organizational deviance, such as theft and violation of organizational norms (Tepper, Henle, Lambert,

Giacalone, & Duffy, 2008). Taken together, higher similarity between leaders and subordinates leads to better fit. Contrary to fit research in strategic management, fit in leadership seems to focus on only relatedness (i.e., similarity) rather than complementarity (i.e., dissimilarity).

Fit Theory in Strategic Human Resource Management

Wright and McMahan (1992) defined strategic human resource management (SHRM) as "the pattern of planned human resource management deployments and activities intended to enable an organization to achieve its goals" (p. 298). While some scholars criticize the area of SHRM because of its lack of theoretical development, SHRM has advanced through numerous theories (Delery & Doty, 1996; Lepak & Shaw, 2008). Reviewing the past 20 years of North American research in SHRM, Lepak and Shaw (2008) specified three characteristics differentiating SHRM from HRM research: (a) the level of analysis of SHRM research is at the macro level, such as the organization or business unit; (b) researchers in SHRM specifically highlight fit among practices (horizontal fit) and among the practices and external factors (vertical fit); and (c) the primary dependent variable of SHRM research is organizational performance. Consequently, studies of how aligned HR practices affect organizational performance are abundant in SHRM research. Huselid (1995), for example, evaluated the links between a firm's system of high-performance work practices (HPWP) and its performance. He found that the magnitude of the return on investments for HPWP was substantial: One standard deviation increase in such practices is associated with a 7.05% decrease in turnover. Chuang and Liao (2010) also found that high-performance work systems (HPWS) could enhance organizational performance by two intermediate linkages: concern for customers and concern for employees. Studies such as these usually confirm that fit leads to greater organizational performance.

The basic assumptions of fit among HR practices are that (a) synergy exists (i.e., a group of practices outperform the individual effects of each practice in the group) and (b) synergy is greater as the practices become more aligned. While many scholars have studied the relationship between fitted practices and outcome variables, few have looked at whether complementary practices can yield synergy. Like fit in leadership, SHRM research usually focuses on synergy of similar practices rather than on complementary practices.

Person-Organization Fit in Recruitment

Behling, Labovitz, and Gainer's (1968) theories explain how individuals make their decisions regarding which organization to work for (Tom, 1971): (a) objective factor theory, (b) subjective factor theory, and (c) critical contact theory. Objective factor theory asserts that applicants evaluate job-related attributes (e.g., pay, benefits, nature of work) and organization-related attributes (e.g., company image, size, location) in their organizational choices (Chapman et al., 2005). This theory portrays job candidates as economic beings (Young, Rinehart, & Place, 1989). As economic beings, individuals maximize their economic status such that each organizational attribute "is weighted in terms of its relative worth to an individual and the results are combined into some overall index of desirability" (Behling et al., 1968, p. 5). Thus, this theory assumes that "although the importance of these factors may vary from one person to the next, there is a fairly consistent pattern which, if detected and used as a basis for structuring the firm's offers of employment, will significantly increase the hiring effectiveness of the firm" (Tom, 1971, pp. 574–575).

Subjective theory portrays applicants as psychological beings that are motivated by their psychological needs (Young et al., 1989). It emphasizes fit between person and organization (P-O fit) or fit between person and job (P-J fit) (Cable & Judge, 1996; Kristof-Brown, 2000). As such, an applicant's choice to join the organization is not based on the evaluating of objective factors or on the weighing of recruiting treatments but on a highly personal and emotional basis (Tom, 1971). In other words, applicants' perceived fit results from their assessment of the interaction between their personal characteristics and needs and job—organizational characteristics and supplies (Kristof, 1996).

Critical contact theory emphasizes that candidates rely on the differences that they can readily perceive during their contact with organizations (Tom, 1971). According to critical contact theory, job candidates are rational beings concerned with the work itself rather than being economic beings concerned with pecuniary incentives (objective theory) or psychological beings concerned with the work environment (subjective theory) (Young et al., 1989). Young, Rinehart, and Place (1989) clearly distinguished critical contact theory from objective and subjective theory:

Within the context of the critical contact theory, job choice for rational beings is influenced by the specific job requirements and job expectations communicated during the initial contact with an organization. Neither economic incentives nor psychological aspects are viewed as salient by the critical contact theory, because the variance among competing organizations with respect to economic incentives is too small for any meaningful differentiation, and because the exposure of applicants to the work environment is too brief for an adequate assessment, respectively. (p. 330)

While the three theories are different from each other in light of understanding applicant attraction, they share a critical aspect in that organizations signal something to the individuals. Objective factor theory emphasizes the role of objective signals (e.g., pay and company location) in organizational choices. Subjective factor theory emphasizes how individuals interpret the signals subjectively. According to critical contact point theory, applicants' perceptions of recruiter characteristics and behaviors provide signals about the attractiveness of a given position (Rynes, Bretz, & Gerhart, 1991). I utilize P-O fit theory because it tests the idea that applicants are different in interpreting objective signals (i.e., HR system types) emitted from organizations. Seminal research on person–job fit makes a distinction between subjective fit as it is perceived by an individual and fit as it objectively exists in the environment (French, Rogers, & Cobb, 1974). Researchers in the P-O fit area concluded with some certainty that actual fit has an impact on someone only if that person perceives that the fit exists (Kristof-Brown & Jansen, 2007).

Rynes and Barber (1990) used employment inducements as a strategy for enhancing applicant attraction, defining the employment inducements as a way "to convey the notion of deliberately modifying attributes for the explicit purpose of enhancing the attractiveness of a job to potential applicants" (p. 294). They argued that employers can improve attraction by raising starting salaries; improving benefits; offering flextime, childcare, or elder care; providing internal career paths; and making improvements in working conditions. Accordingly, there has been an increase in the examination of organizational inducements in recruiting. For example, Rau and Hyland (2002) challenged a popular assumption that organizations with flexible work arrangements are more attractive to job seekers than are those with a standard work arrangement. They found that applicants with high role conflict were more attracted to an organization when flextime was offered than when it was not; however, applicants with low role conflict were just

slightly less attracted to an organization when flextime was offered. Recognizing the increasingly common use of organizational websites for recruitment, Cober, Brown, Keeping, and Levy (2004) presented a model that explicates how job seekers respond to website characteristics. These studies indicate that various organizational features can be a stimulus to attract applicants. Nonetheless, although SHRM research points to the importance of horizontal fit (i.e., HR bundle) as a key component of strategic human resources, little is known about how HR bundles affect applicant attraction.

Signaling Theory and Applicant Attraction

Signaling theory is applicable to a variety of management literatures, including strategic management, entrepreneurship, and human resource management (Connelly et al., 2011).

Strategic management scholars have utilized signaling theory in many research contexts, including corporate governance (Zhang & Wiersema, 2009), heterogeneous boards (Miller & Triana, 2009), top management team (TMT) characteristics (Lester, Certo, Dalton, Dalton, & Cannella, 2006), and funding decisions of venture capitalists (Busenitz, Fiet, & Moesel, 2005).

Spence's (1973) seminal work on labor markets initiated numerous studies applying signaling theory to selection scenarios that occur in a range of disciplines, from anthropology to zoology (Bird & Smith, 2005). As a result, signaling theory is important to human resource management, for which various studies have examined signaling that occurs during the recruitment process (Suazo et al., 2009). Rynes, Bretz, and Gerhart (1991), for instance, showed that the perceived signaling value of recruitment experiences (e.g., recruiter competence, sex composition of interview panels, recruitment delays) affect applicants' job choices. Viewing personnel selection as a signaling game, Bangerter, Roulin, and König (2012) highlighted that not only types of

signals but also applicants' subjective interpretations of those signals are important in their decisions.

Signaling theory's primary elements are the signaler, signal, and receiver (Connelly et al., 2011). In strategy and entrepreneurship studies, signalers are usually firms rather than individuals. For example, Coff's (2002) findings suggest that acquirers rely on target firms' reputation to avoid the risk of overbidding. One study shows that young Internet firms signal their corporate governance characteristics to potential investors (Sanders & Boivie, 2004). However, the majority of human resource management studies focus on signals emanating from individuals, such as recruiters, managers, and employees. Few human resource studies "explore firm-level signalers, with a view toward understanding how job seekers and applicants examine visible organizational characteristics to assess unobservable qualities, such as organizational culture" (Connelly et al., 2011, p. 46). My research contributes to the recruiting research by examining firm-level signals (e.g., HR bundle and organizational culture) in applicants' attraction.

Regarding the signal itself, recruiting research focuses primarily on deliberate or unintended efforts to convey organizational attributes through signals, such as hiring processes (Ryan, Sacco, McFarland, & Kriska, 2000), recruiter behaviors (Ehrhart & Ziegert, 2005), and personnel and compensation policies (Schwoerer & Rosen, 1989). Although much research has investigated how individual HR practices influence applicant attraction, no studies have explained how HR bundles and their interactions with culture affect applicant attraction.

In signaling theory, receivers are outsiders who lack information about the organization in question, but would like to receive this information to aid them in making a choice about hiring, purchasing, or investing (Connelly et al., 2011). Recruiting research assumes job

applicants or job seekers as the receivers. My research tests how receivers (i.e., job applicants) react to the manipulated conditions of organizational characteristics. In addition, I explore the role of applicant types in interpreting signals from organizations. Management researchers have found that signaling effectiveness is determined in part by the characteristics of the receiver (Connelly et al., 2011); for instance, Rynes (1991) described how job applicants use signals from recruiters to draw conclusions about facets of organizational quality. Individual applicants may not share the same concerns about their potential employers, so they attend to different signals or interpret the same signal differently (Highhouse, Thornbury, & Little, 2007).

Using an ethnographic approach, Samnani and Singh (2013) suggested that misalignment of HR practices can produce conflicting signals for employees, leading to reduced motivation and commitment. Their findings increase our understanding about how actual SHRM fit can be interpreted subjectively and how this subjective interpretation influences employee motivations, behaviors, and attitudes. However, there is no research about how intended SHRM fit (i.e., HPWS and non-HPWS) will be interpreted by outsiders (i.e., applicants). Thus, my research contributes beyond the existing literature by empirically testing the relationship between innovative dependent variables (i.e., two polarized HR bundles, cultures, and two types of personal orientations) and dependent variables, such as organizational attractiveness, rather than using traditional dependent variables, such as firm performance and employee commitment.

Summary of the Literature and Assumptions

Management scholars have utilized fit concepts in many areas of research, including mergers and acquisitions, leader–member exchange, and strategic human resource management.

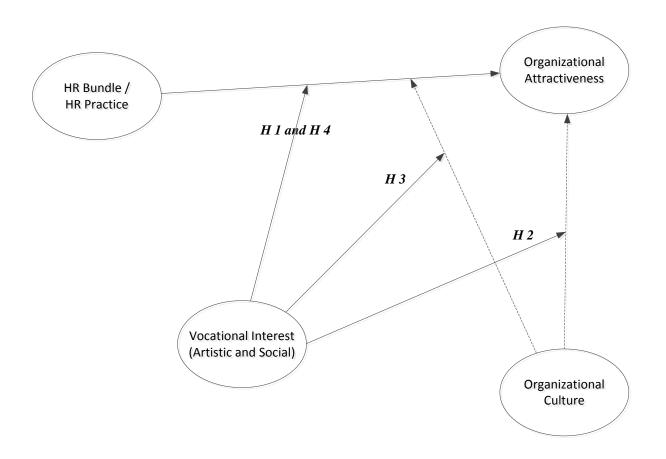
My approach to the study of applicant attraction is rooted in fit theory in SHRM. The

combination of HR practices (i.e., horizontal fit) can produce numerous HR bundles. These packages boost firm performance in conjunction with specific conditions (i.e., vertical fit). I apply horizontal fit to applicant attraction by assuming different HR bundles attract different person types. In doing so, person-organization fit plays a critical role in that organizations whose characteristics are described by specific HR bundles deliver particular signals and attract people who like the signaled outcomes. In this regard, signaling theory is important to applicant attraction. I also hypothesize that different HR bundles deliver different signals to applicants and the signal is supplemented by an appropriate contextual factor (i.e., organizational culture). As a result, I propose a model (see Figure 1) that depicts the moderating role of personal orientation in the relationship between organizational attractiveness and HR bundles (hypothesis 1), culture types (hypothesis 2), and individual HR practices in an HR bundle (hypothesis 4). Finally, I hypothesize a three-way interaction among HR bundles, organizational culture, and personal orientations in predicting organizational attractiveness (hypothesis 3). Specifically, my independent variables (IV), dependent variables (DV), and moderators (M) are suggested as follows:

- Hypothesis 1: organizational attractiveness (DV), HR bundle (IV), and personal orientation (M)
- Hypothesis 2: organizational attractiveness (DV), organizational culture (IV), and personal orientation (M)
- Hypothesis 3: organizational attractiveness (DV), HR bundle (IV), organizational culture (M1), and personal orientation (M2)
- Hypothesis 4: organizational attractiveness (DV), HR practices in an HR bundle (IV), and personal orientation (M)

In a following section, I explain the model in detail, specifically the dependent variable (organizational attractiveness), independent variables (HR bundles, HR practices, and organizational culture), and moderators (personal orientations and organizational culture) in terms of applicant attraction. In doing so, I propose specific hypotheses.

FIGURE 1. The Effects of HR bundle, Organizational Culture, and Vocational Interest on Organizational Attractiveness



CHAPTER 3

DEVELOPMENT OF HYPOTHESES

There is considerable consensus among SHRM scholars about what an HR system is: HR system means HR bundle (Lepak & Shaw, 2008). So, it seems that scholars are using the terms *HR system* and *HR bundle* interchangeably. Human resource (HR) bundles comprise an array of HR practices, which are expected to be synergistic and complementary to each other (Dyer & Reeves, 1995). The use of bundles is based on a presumption that "more effective systems of HRM practices, which simultaneously exploit the potential for complementarities or synergies among such practices, provide a significant contribution to firm performance" (Huselid, 1995, p. 636).

HR bundles are usually studied concerning their impact on firm-level performance. While the primary reason for organizations' use of HR bundles is to achieve better performance, there are numerous ways (i.e., types) to do so. For instance, Gibson, Porath, Benson, and Lawler (2007) showed that different bundles have different relationships with firm-level outcomes: a relationship between information-sharing practices and lagged firm financial performance in the year following implementation, between boundary-setting practices (e.g., clear mission statement) and firm-level customer service, and between team-enabling practices and firm-level quality. This implies that different HR bundles affect firm performance in different ways. Hence, it appears there are numerous ways of bundling HR practices to obtain certain synergies.

HR bundles are usually labeled by the characteristics of the practices they include. For instance, Perry-Smith and Blum (2000) identified work–family HR bundles as those composed of HR practices such as help with day care costs, paid parental leave, and flexible scheduling.

Although HR bundles are distinguished by their names, some seem to be similar because their practices largely overlap. Whitener (2001) examined whether an employee's commitment is related to the organization's human resource practices. Exploring this relationship, Whitener focused on the high-commitment HR practices, which are selective staffing, comprehensive training, development appraisal, and externally and internally equitable reward systems. Another study showed human capital—enhancing HR practices, which include selective staffing, comprehensive training, developmental appraisal, group incentives, and external equity, can substantially influence performance when aligned with quality manufacturing strategy (Youndt, Snell, Dean, & Lepak, 1996). The high-commitment bundles and human capital—enhancing bundles may be nearly identical but have been given different labels.

Likewise, in SHRM research, there is "a lack of agreement regarding what HR systems [i.e., bundles] are, which practices comprise these systems, how these systems operate, and how they should be studied" (Lepak, Liao, Chung, & Harden, 2006, p. 217). To explore the number and types of specific HR bundles, I conducted an extensive search of research on HR bundles. I found 15 different HR bundles in the literature, each of which has a different set of practices (see Appendix 1). The HR bundles are (a) cost-reduction bundle (Arthur, 1992); (b) commitment-maximizing bundle (Arthur, 1992); (c) high-performance work system (Huselid, 1995), high-involvement or high-performance work system (Bae, Chen, Wan, Lawler, & Walumbwa, 2003), high-performance work practices (Kochan & Osterman, 1994; MacDuffie, 1995); (d) work–family HR bundles (Perry-Smith & Blum, 2000); (e) best practices (Arthur, 1992); (f) administrative HR practices (Youndt et al., 1996); (g) human capital–enhancing HR practices (Youndt et al., 1996); (h) high-commitment practices (Wood & de Menezes, 1998); (i) work/family programs (Osterman, 1995); (j) calculative practices (Gooderham et al., 1999); (k)

collaborative practices (Gooderham et al., 1999); (I) developmental HR practices (Kuvaas, 2008); (m) empowerment-enhancing bundles (Subramony, 2009); (n) motivation-enhancing bundles (Subramony, 2009); and (o) skill-enhancing bundles (Subramony, 2009). However, when comparing the practices, I also found that they overlap in many bundles. This opens up the possibility that similar bundles whose practices overlap can be integrated into one bundle type.

In HR bundling research, a common theme of two polarized bundles emerges: cost reduction and commitment maximizing (Arthur, 1992). Cost-reduction approaches aim to increase efficiency and reduce direct labor costs (Arthur, 1994) while controlling employee behavior through rules, sanctions, and monitoring (Wood & de Menezes, 1998). Contrarily, commitment-maximizing approaches aim to increase effectiveness and productivity, encouraging employees to work hard to accomplish organizational goals (Arthur, 1994; Wood & de Menezes, 1998). My research (see Appendix 2) supports the two-pole notion. The 15 different bundles of HR practices can be readily classified into two overarching bundles (see Appendix 2): (a) cost reducing—type bundles and (b) performance enhancing—type bundles (i.e., high-performance work systems).

It is relatively common for scholars to classify organizational policies into two polarized types. For instance, organizations adapt their pay strategies to their business strategies (Balkin & Gomez-Mejia, 1990). The pay strategies can be classified into two opposite poles: mechanic and organic (Balkin & Gomez-Mejia, 1990). The mechanic pay strategy focuses on the job rather than on the individual. Under this strategy, organizations choose a hierarchical (dispersed) pay system, and pay secrecy is prevalent. The organic pay strategy focuses on the individual rather than on the job. Under this strategy, organizations choose an egalitarian pay system, and the pay

policy is open to employees. Following this two-pole notion, I use the cost-reducing HR bundle and performance-enhancing HR bundle to test my hypotheses.

I first compare 12 standard HR practices in the performance-enhancing bundle types. These practices include those that are usually used in research of high-performance work systems. Therefore, I use the terms *performance-enhancing HR bundle* and *high-performance work systems* interchangeably. Then I suggest standard HR practices for the cost-reducing HR bundle. To emphasize the mirror image of HPWS, I selected and adapted HR practices in cost-reducing bundles that are paired with HR practices in HPWS. Thus, the suggested bundle is a type of theoretically-based cost-reducing HR bundle, highlighting the opposite side of HPWS. I refer to this bundle as non-HPWS, or cost-reducing HR bundle hereafter.

Finally, I suggest standard HR practices for the non-HPWS and HPWS (see Appendix 3). For each of the HR bundles proposed, Appendix 3 identifies examples of specific HR practices consistent with the two defined HR bundles. For example, corresponding to the non-HPWS bundle, staffing functional goals can be achieved by "job tasks narrowly defined," "straightforward and stable job," and "promotion based on seniority." For the performance management and appraisal function, practices such as a mix of "administrative use" and "appraisals are not used for raises" would be consistent. The non-HPWS bundle also includes "relatively low wages and benefits," "pay variation is low among employees," and "high base-pay portion" (compensation and benefits function); "limited training efforts" (training and development); and "very little employee influence over 'management' decisions," "little communication/socialization efforts," and "low collaboration needed" (employee relations).

Based on the HPWS bundle, staffing functional goals can be achieved by "job tasks broadly defined," "dynamic and challenging job," and "promotion based on performance." For

the performance management and appraisal function, practices such as "developmental use" and "appraisals are used for raises" would be consistent. The HPWS bundle also includes "relatively high wages and benefits," "pay variation is high among employees," and "low base-pay portion" (compensation and benefits function); "extensive training for general and specialized skills" (training and development); and "high level of employee participation/involvement," "direct communication (e.g., quality circles, team briefing, top management briefing)," and "high collaboration needed" (employee relations). Taken together, I depict five different HR subfunctions for each HR bundle, and each subfunction includes the same number of HR practices.

In developing a comprehensive high-performance work practices taxonomy, Posthuma, Campion, Masimova, and Campion (2013) classified 61 specific practices into nine categories. My suggested five HR subfunctions and their HR practices for the HPWS largely overlap with Posthuma et al.'s (2013) categorization. The "job tasks broadly defined," "dynamic and challenging job," and "promotion based on performance" in my staffing function are identical with "job enlargement and enrichment" and "promotions objectively based on merit" in their "job and work design" and "promotions" category, respectively. For my performance management and appraisal, "developmental use" and "appraisals are used for raises" are consistent with "appraisals for development/potential" and "appraisals based on objective results/behaviors" under their performance management and appraisals category. The "relatively high wages and benefits," "pay variation is high among employees," and "low base-pay portion" in my compensation and benefits function are comparable with "external pay equity/competitiveness," "pay for performance," and "incentive compensation" in their "compensation and benefits" category. For my training and development, "extensive training for

general and specialized skills" is consistent with "training extensiveness" and "evaluation of training" under their training and development. Finally, for my employee relations, "high level of employee participation/involvement," "direct communication (e.g., quality circles, team briefing, top management briefing)," and "high collaboration needed" are consistent with "decentralized participative decisions," "formal information sharing program," and "self-managed work teams" (quality circles) under their "job and work design," "employee relations," and "communication" category. This congruence justifies my classifications for the HR bundles and their practices.

Because Boxall and Macky (2009) suggested that high-performance work systems (HPWS), high-involvement work systems (HIWS), and high-commitment work practices (HCWP) are all similar companion bundles, HPWS may lead to improved organizational performance through higher employee commitment and involvement. While HPWS have gained popularity among SHRM scholars, it is also true that some scholars are skeptical about the effect of HPWS. High-performance work systems, for instance, substantially increase labor costs, while employee production may be minimally increased (Cappelli & Neumark, 2001). Thus, although HPWS can lead to high employee commitment, this positive effect can be offset by the negative effect on labor costs. This implies that HPWS are not a panacea. Because the opposite pole of HPWS (i.e., performance-enhancing HR bundle) is the cost-reducing HR bundle, the latter is superior to HPWS in terms of saving costs. Yet, the positive effect can be offset by the negative effect on employee commitment. For this reason, it is difficult to say whether specific HR bundles are universally beneficial or harmful to organizations, making it important to test which bundle is to preferable to another for different aspects of performance, one aspect being its effect on applicant attraction. Further, each bundle may appeal to applicants differently, depending on their individual differences

Individual Differences in Choosing Organizations

For decades, person–environment (P-E) fit has been a central concept in explaining numerous organizational behavior research topics such as job satisfaction, job stress, vocational choice, recruitment and selection, and organizational climate and culture (Edwards, 2008). The central premise of P-E fit is that there is a congruence, match, or similarity between the person and environment (Muchinsky & Monahan, 1987). Holland's (1959, 1973, 1997) theory of vocational choice suggested that "vocational satisfaction, stability, and achievement depend on the congruence between one's personality and the environment in which one works" (Holland, 1973). Holland classified personal orientations and occupational environment into six types (conventional, realistic, investigative, artistic, social, and enterprising), using the hexagonal model. The model depicts the conceptual similarities among the six types in terms of their distances from one another (Edwards, 2008); for example, the social type is considered most similar to the artistic and enterprising types and least similar to the realistic type. According to the theory, a person whose primary type is realistic is most congruent with a realistic environment and progressively less congruent with environments that are investigative and conventional, artistic and enterprising, and social, as indicated by the distances of these five types from the realistic position on the hexagon (Edwards, 2008).

The conventional and realistic person prefers activities that entail the explicit, ordered, systematic manipulation of data (Holland, 1973). These behavioral tendencies lead to an acquisition of clerical, computational, and business system competencies and to a deficit in artistic competencies for the conventional person and in turn to an acquisition of manual, mechanical, agricultural, electrical, and technical competencies and to a deficit in social and educational competencies for the realistic person.

Investigative types prefer investigative occupations or situations in which they can engage in their preferred activities and competencies and avoid the activities demanded by enterprising occupations or situations.

Enterprising people prefer activities that entail the manipulation of others to attain organizational goals or economic goals and an aversion to observational, symbolic, and systematic activities. They perceive themselves as assertive, popular, self-confident, sociable, possessing leadership and speaking abilities, and lacking scientific ability.

Artistic people prefer ambiguous, free, unsytematized activities that entail the manipulation of physical, verbal, or human materials to create art forms or products and have an aversion to explicit, systematic, and ordered activities. They perceive themselves as expressive, original, intuitive, feminine, nonconforming, introspective, independent, and disorderly and having artistic and musical ability.

Social people prefer activities that influence others, to inform, train, develop, cure, or enlighten and have an aversion to explicit, ordered, systematic activities involving materials, tools, or machines. The social type tends to be sociable, agreeable, and responsible and is characterized as helpful, kind, understanding, and warm.

Regarding the close relationship between vocational choice and personality, it is a widely accepted principle that "choice of an occupation is (in part) an expression of personality." During the past two decades, a sizable body of research (e.g., Larson, Rottinghaus, & Borgen, 2002) has demonstrated significant associations between vocational interests—typically conceptualized and measured as Holland's (1997) realistic, investigative, artistic, social, enterprising, and conventional (RIASEC) interest domains—and the personality traits of the big five model (neuroticism, extraversion, openness, agreeableness, conscientiousness) (Digman, 1990;

Goldberg, 1993). However, demonstrated relations between interests and personality have typically been modest, and some interest (e.g., realistic) and personality (e.g., neuroticism) constructs have shown minimal overlap with the other domains. One explanation for the modest interest—personality overlap in previous studies is the exclusive focus on the personality traits of the big five model. Recent research has revealed support for a six-factor alternative model of personality trait structure—the HEXACO model—which has demonstrated empirical advantages over the big five model by accounting for more variance in important criteria (see Ashton & Lee, 2007).

The HEXACO model of personality structure contains the six factors of honestyhumility, emotionality, extraversion, agreeableness, conscientiousness, and openness (Ashton & Lee, 2007). The six-factor HEXACO structure, which emerged from the same investigation techniques (i.e., lexical and statistical) that produced the big five model, has been shown in cross-language lexical studies of personality structure to be more replicable than the big five model (Ashton & Lee, 2007). McKay and Tokar's (2012) study extended the empirical research on the overlap of vocational interests and personality by testing hypothesized relations between RIASEC interests and the personality dimensions of the HEXACO model, and exploring the HEXACO personality model's predictive advantage over the big five model in capturing RIASEC interests. Their results support the HEXACO personality model as a viable alternative to the big five model for understanding the relation between personality and RIASEC vocational interests. Larson et al. (2002) conducted a meta-analysis of 12 independent studies of the relations between RIASEC interests and the big five personality dimensions. Results established significant links between interest and personality domains across gender and type of interest measures.

In addition, McKay and Tokar (2012) found that both artistic and social interests related significantly and positively to openness. Bolton (1985) used the 16 Personality Factor Questionnaire to investigate how Holland's six occupational types are associated with the standard personality inventory. He found that Holland's artistic type is by far the most popular and therefore best-defined occupational type. These findings show that artistic and social in RIASEC is highly correlated with openness in the HEXACO and the big five models. Furthermore, given the closest distance of the social type from the artistic position on the hexagon, I use "artistic" and "social" as two personal orientations of organization applicatns.

HR Bundles and Personal Orientations

My research shows that HR bundling research is imbalanced in terms of the number of bundles describing the two types of bundles: performance enhancing and cost reducing (see Appendix 2). This one-sidedness favors the performance-enhancing type bundles, such as high-performance work systems, commitment-enhancing HR bundle, empowerment-enhancing HR bundle, and developmental HR practices over the cost-reducing type of bundles. This may show that SHRM scholars have been more attentive to the potential upside of performance-enhancing type bundles than that of cost-reducing type bundles. Although the contents (i.e., the types of practices) of HPWS are subtly different across studies, there is considerable consensus on the practices that would be included in HPWS. For example, Chuang and Liao (2010) identified the contents of HPWS as (a) extensive recruiting and selective staffing procedures, (b) performance management systems, (c) incentives, and (d) high utilization of training and development. These systems are usually regarded as useful to improve organizational performance through heightened employee capability, commitment, and productivity (Posthuma et al., 2013).

However, although research findings regarding the so-called high-performance work systems are suggestive of important effects, as a group, the effects on various types of performance are not unanimous (Cappelli & Neumark, 2001).

Messersmith and Guthrie (2010) investigated the role of high-performance work systems in emergent organizations. Although their results indicate that the use of HPWS in emerging firms is positively related to sales growth and innovation, they failed to support a hypothesized mediating role for employee voluntary turnover. Furthermore, the costs associated with the productivity rise as a result of HWPS largely have been neglected. One study reveals that, although greater use of high-performance work practices is associated with increased productivity, this effect is offset by increased labor costs (Sels et al., 2006). Lastly, Ramsay et al. (2000) considered negative outcomes (such as work intensification, stress, and job strain) to account for productivity gains, whereas mainstream studies aim at positive employee outcomes (such as worker motivation, commitment, and satisfaction) to account for productivity gains.

Their findings suggest that "the widely held assumptions that positive performance outcomes from HPWS flow via positive employee outcomes has been shown to be highly questionable" (p. 521).

I argue that the variance in effects of HPWS can be understood by considering individual preferences for different HR systems. People who are defined as being low artistic (or social) types might prefer cost-reducing HR bundles (i.e., the opposite pole of HPWS) to HPWS. Conventional (i.e., low artistic) people are more prone to cope with others in a conventional manner (e.g., controlling, conforming, and practical) and to fit themselves within a conventional environment (Holland, 1973). Liao, Toya, Lepak, and Hong (2009) revealed significant differences between management and employee perspectives of HPWS. There were also

significant differences in employee perspectives of HPWS among employees of different employment statuses and among employees of the same status. Distinguishing between calculative practices (aimed at efficient use of human resources) and collaborative practices (aimed at promoting the goals of both employees and employer), Gooderham, Nordhaug, and Ringdal (1999) predicted differences in adoption of organizational practices across countries. Their results showed that institutional determinants, as indicated by the national embeddedness of firms, had a strong effect on the application of both calculative and collaborative human resource management practices. These studies support the importance of individual and organizational differences in applicants picking HR bundles. Overcoming the dominance of HPWS in SHRM research, I investigate the important role of personal orientations in choosing organizations whose characteristics are described by the different types of HR bundles (see Figure 1). I expect that higher artistic or social individuals are more likely to choose HPWS than non-HPWS. Formally,

Hypothesis 1a and 1b. Vocational interest (artistic and social) will moderate the relationship between HR bundle type (HPWS and non-HPWS) and organizational attractiveness, such that organizational attractiveness will be higher for HPWS than for non-HPWS as applicants' (a) artistic level and (b) socialness increase.

Organizational Culture and Personal Orientations

In the strategic human resource management (SHRM) literature, situational factors that moderate the link between individual HRM practices and firm performance have been an important topic (e.g., Toh, Morgeson, & Campion, 2008). This contingent viewpoint is one of

three dominant theoretical frameworks in SHRM research (Delery & Doty, 1996): (a) universalistic, (b) configurational, and (c) contingency perspectives. While the universalistic perspective puts emphasis on the individual or multiple HRM practices themselves, the contingency perspective highlights the situational conditions under which the practices reside, that is, "HRM practices in isolation (universalistic) or in combination (configurational) will be maximally effective only under situational conditions" (Lepak & Shaw, 2008, p. 1488).

Thus, one of the key areas that SHRM has extensively examined is the dependency of HR practices on internal factors, such as organizational strategies (Delery & Doty, 1996). Schuler and Jackson (1987) suggested that different strategy types (e.g., cost reduction, quality improvement, and innovation) require different types of employee role behaviors, and HR practices should be used to ensure those behaviors take place. Besides the internal factors, the environments outside of firms (i.e., external factors) influence the use of HR practices.

Gooderham et al. (1999), for instance, examined how country level differentiates the adoption of HR practices. They found that companies in different countries use different practices, using measures such as embeddedness in the country.

One important internal factor that can be synergistic with HR bundles might be organizational culture. Organizational culture refers to "the set of shared, taken-for-granted implicit assumptions that a group holds and that determines how it perceives, thinks about and reacts to its various environments" (Schein, 1996, p. 236). Carroll, Dye, and Wagar (2011) suggested that HRM practices, organizational culture, and organizational effectiveness are related to each other in certain ways: (a) HRM practices influence the formation of organizational culture, (b) organizational culture influences the choice and adoptions of HRM practices, and (c) organizational effectiveness can be achieved when HRM practices match with

culture. Although it is difficult to definitely conclude whether organizational culture acts as a moderator, an antecedent, or an outcome, studies suggest that fit between HRM practices and organizational culture is crucial in predicting organizational performance (e.g., Hartnell, Ou, & Kinicki, 2011; Howell, Kirk-Brown, & Cooper, 2011).

Research on culture types has been a prominent topic as organizational culture is a key ingredient of organizational effectiveness (Denison & Mishra, 1995; Hartnell et al., 2011; Kotter & Heskett, 1992). Wallach (1983) identified three cultural types: bureaucratic, innovative, and supportive. A bureaucratic culture is based on control and power and is suitable for an organization in a stable market. An innovative culture promotes challenge, risk taking, and entrepreneurship in the workplace. A supportive culture values trust, openness, collaboration, and harmony in the organization. Similarly, Chow and his colleague (Chow, 2012; Chow & Liu, 2009) have used three cultural types referred to as bureaucratic, competitive, and supportive. Four cultural taxonomies based on the competing values framework (CVF) are widely used in the literature (Ostroff, Kinicki, & Tamkins, 2003): (a) clan, (b) adhocracy, (c) market, and (d) hierarchy. The hierarchy culture type achieves efficiency through controlling, routinization, formalization, and precise communication (Quinn & Kimberly, 1984). This type assumes that employees' performance is maximized when their roles are clearly defined (Hartnell et al., 2011). The adhocracy culture stimulates behaviors such as risk taking, creativity, and adaptability to accomplish growth, variety, and autonomy (Quinn & Kimberly, 1984). This culture ultimately cultivates innovation and cutting-edge output, with a flexible organizational structure (Denison & Spreitzer, 1991). The clan culture is similar to the adhocracy culture because both favor flexibility and discretion. However, the clan culture differs from the adhocracy culture in that it is more internally oriented and emphasizes integration rather than differentiation. A core belief in

clan cultures includes attachment, affiliation, membership, and support (Cameron & Quinn, 1999). Employees in the clan culture are expected to value teamwork, participation, and involvement. Finally, the market culture is related to the hierarchy culture in that both focus on control mechanisms, but the latter is more externally oriented and favors differentiation rather than integration. The market culture assumes that its focus on achievement produces competitiveness and aggressiveness (Cameron & Quinn, 1999). In this culture, performance management focuses on clear goals and contingent rewards.

The organizational culture type is important in selection and recruitment as individuals and organizations develop employment relationships, in large part, based on fit (Cable & Yu, 2007). The fit perception is a comparison between a person and an environment in the context of employment relationships (Cable & DeRue, 2002). Consequently, a job applicant compares his or her personal values and skills to an organization's culture (Cable, Aiman-Smith, Mulvey, & Edwards, 2000), job roles (Wanous & Colella, 1989), and personalities of future coworkers (Rynes, 1991). However, the recruitment literature has largely focused on the role of interviews and thus has ignored the importance of organizational culture in predicting applicant attraction. In one exception, Cable et al. (2000) studied some alternative explanations for job applicants' beliefs about organizational culture. They questioned how different information sources (e.g., company information, such as brochures/videos, company advertisements and products, word of mouth, and prior work experience with the company) shape applicants' beliefs about a company's value and how those sources differentiate applicants' underestimating, overestimating, or holding accurate beliefs about different values. Their results suggested that firms can manage job applicants' beliefs about company culture. In particular, they found that company information and product information were related in predictable ways to applicants' culture

beliefs. Although Cable et al.'s (2000) study contributes to the recruitment literature by showing that job applicants use various sources to estimate organizational beliefs and culture, no study has yet shown how individual differences affect applicants' preferences for different culture styles.

Although cultural types vary in their characteristics and nomenclature, the two overarching cultural taxonomies that I use in this study are bureaucratic (hierarchy) and innovative (adhocracy) types. Consistent with the two-pole structure used in this study for bundle type, I investigate the positive relationships between personal orientations and these two cultural types in predicting applicant attraction (see hypothesis 2 in Figure 1). As I have already hypothesized the positive relationship between personal orientations and organizational choice in terms of HR bundles, I now hypothesize the positive relationship between personal orientations and organizational choice in terms of organizational culture. In other words, higher artistic and social persons are more likely to choose organizations (described by an innovative culture) than are lower artistic persons. Formally,

Hypothesis 2a and 2b. Vocational interest (artistic and social) will moderate the relationship between culture type (innovative and bureaucratic) and organizational attractiveness, such that organizational attractiveness will be higher for an innovative culture than for a bureaucratic culture as applicants' (a) artistic level and (b) socialness increase.

HR Bundles, Organizational Culture, and Individual Differences

Up to this point, I have focused on HR bundles and organizational culture in terms of their separate effects. And while HR bundles and organizational culture are not always coupled, the combination of both is likely to be a potent determinant for applicants' decision-making processes. As suggested in a model (see hypothesis 3 in Figure 1), the positive relationship between conventional people and their preferences for organizations described by cost-reducing HR bundles is strengthened when the organization has a bureaucratic culture. Similarly, the positive relationship between artistic people and their preference for organizations described by performance-enhancing HR bundles is strengthened when the organization has an innovative culture.

The non-HPWS (i.e., cost-reducing HR bundles) can be best matched with the bureaucratic culture. The bureaucratic culture emphasizes hierarchical organizational structure, treating employees with formalized rules and routinized processes. This culture is appropriate in a stable market, and thus individual performance based on creativity and empowerment is relatively not stressed. Cost-reducing HR bundles highlight employees' low skills, administrative performance management, internal equity, and intense supervision. Thus, I argue that organizational performance can be maximized when the cost-reducing HR bundles and bureaucratic culture are paired.

The orthogonal value orientations of the competing value framework (CVF) mean that diagonal quadrants represent competing or conflicting values (Cameron & Quinn, 1999); clan culture values have an insignificant or negative association with market culture values, and adhocracy culture values have an insignificant or negative association with bureaucratic cultures. Because performance-enhancing HR bundles are on the opposite pole of cost-reducing HR

bundles, the former should be matched with the adhocracy, innovative, or competitive types of cultures. I define the innovative culture as encompassing the characteristics of adhocracy and competitive cultures. The innovative culture emphasizes individual risk taking and autonomy to exploit maximized performance. Performance-enhancing bundles include practices such as atrisk pay and significant delegation of authority to lower-level employees, thus it can perform well with the innovative culture. However, the bundle seems to be matched with the clan culture as well. The clan culture emphasizes integration through attachment and mutual support among employees. Because the performance-enhancing bundle usually defines job tasks broadly and encourages high levels of employee participation/involvement, it is suitable with the clan culture. Because I think the performance-enhancing bundle can also be matched with the clan culture, I broadly defined the innovative culture to include both the adhocracy and clan cultures. My argument resonates with Hartnell et al.'s (2011) findings. To determine whether the pattern of relationships is consistent with CVF theory, they analyzed the average correlation among the four types and found that all organizational culture types were positively correlated. They argued that the culture types may not possess mutually independent competing values.

As I have already expected the positive relationship between personal orientations and organizational choice in terms of HR bundles, I hypothesize that the positive relationship is strengthened by organizational culture. In other words, higher conventional persons are more likely to choose organizations described by cost-reducing HR bundles than are lower conventional persons, and this effect is increased when the organization is characterized by a bureaucratic culture. On the contrary, higher artistic or social persons are more likely to choose organizations described by performance-enhancing HR bundles than are lower artistic persons, and this effect is increased when the organization is characterized by an innovative culture.

Hypothesis 3a and 3b. There is a three-way interaction among HR bundle type, culture type, and vocational interest on organizational attractiveness, such that organizational attractiveness will be higher for HPWS in firms with an innovative culture than are the other three scenarios as applicants' (a) artistic level and (b) socialness increase.

HR Practices and Personal Orientations

Although synergy, which creates positive outcomes deriving from the interrelations among a system's components, is labeled in various fields as complementarity, internal fit, bundling, epistasis, supermodularity, congruence, alignment, horizontal fit, coupling, and interdependence, each of these concepts falls under the general notion of "1 + 1 = 3" (Chadwick, 2010). To test that synergy really exists in HR bundles, HRM researchers need to demonstrate that the added effect of separate HR practices (e.g., 1 + 1 = 2) is less than the HR bundle effect (e.g., 3) (Ichniowski, Shaw, & Prennushi, 1997; Tanriverdi & Venkatraman, 2005; Whittington, Pettigrew, Peck, Fenton, & Conyon, 1999). This argument resonates with Whittington et al.'s (1999) remarks that researchers should compare "the contributions of individual practices with the performance payoffs of them all together" to determine whether the estimated effects of an HRM system measure exceed the "sum of the marginal effects from adopting each practice individually" (p. 585). However, few such comparisons have appeared in the HRM literature (Delery, 1998), and an informal consensus that "organizational level HRM systems are qualitatively different than the sum of their parts has been uncritically accepted in most of the HRM literature" (Chadwick, 2010, p. 88).

Historically, SHRM scholars have been concerned about the measurement of HR systems. The majority of empirical studies investigating the relationship between HRM systems and performance have regressed two types (Delery, 1998): (a) grouping individual practices using a factor or principal component analysis and creating a system index by summing scores on groups of practices and (b) classifying firms based on a particular type of HRM system using a cluster analysis and creating a system index by summing scores on practices of classified firms. These studies have in common that they "computed measures of 'systems' of HRM practices by grouping practices together and then taking the average or sum of those practices" to estimate the effect of the HR system on performance (Delery, 1998, p. 299). Both of these approaches have a limitation in finding synergistic effects of HR systems because the holistic effect of the HR system is calculated by just adding the effect of individual practices. In other words, the HR system effect is always the same with the sum of individual practices such as "1 + 1 = 2." This problem stems from the fact that the HR system effect by itself is generally not measured. The unit-weighted additive approach used to combine practices into an index is appropriate only when practices are actually additive in their effects on firm resources and each practice has an equivalent effect (Delery, 1998).

All these scholarly controversies can be attributed to the multilevel nature of HR bundles. Because HR bundles are composed of HR practices, it is heuristic for scholars to test whether the HR system effects are consistent with individual HR practice effect. In SHRM research, to compare the HR system effect with individual HR practice effect, the most widely used criterion (i.e., dependent variable) is organizational level performance, such as turnover (Arthur, 1994), productivity (Ichniowski et al., 1997; MacDuffie, 1995), financial returns (Delery & Doty, 1996), and firm value (Huselid, 1995). However, few studies have explored an association between

HRM and applicant attraction dissecting the effects of HR systems and individual HR practices. This study uses the two HR bundles, and each bundle consists of five subfunctions (staffing, performance management, compensation and benefits, training and development, and employee relations). Each subfunction has a number of HR practices ranging from one to three. Expecting that the roles of personal orientations on choosing HR bundles are consistent with HR practice levels, I examine the effects of individual HR practices in predicting applicant attraction (see Figure 1).

Hypothesis 4-1a and 4-1b. Vocational interest (artistic and social) will moderate the relationship between HR practice type (narrowly defined job tasks and broadly defined job tasks) and organizational attractiveness, such that organizational attractiveness will be higher for "broadly defined job tasks" than for "narrowly defined job tasks" as applicants' (a) artistic level and (b) socialness increase.

Hypothesis 4-2a and 4-2b. Vocational interest (artistic and social) will moderate the relationship between HR practice type (straightforward and stable job and dynamic and challenging job) and organizational attractiveness, such that organizational attractiveness will be higher for "dynamic and challenging job" than for "straightforward and stable job" as applicants' (a) artistic level and (b) socialness increase.

Hypothesis 4-3a and 4-3b. Vocational interest (artistic and social) will moderate the relationship between HR practice type (promotion based on seniority and promotion

based on performance) and organizational attractiveness, such that organizational attractiveness will be higher for "promotion based on performance" than for "promotion based on seniority" as applicants' (a) artistic level and (b) socialness increase.

Hypothesis 4-4a and 4-4b. Vocational interest (artistic and social) will moderate the relationship between HR practice type (administrative use of appraisals and developmental use of appraisals) and organizational attractiveness, such that organizational attractiveness will be higher for "developmental use of appraisals" than for "administrative use of appraisals" as applicants' (a) artistic level and (b) socialness increase.

Hypothesis 4-5a and 4-5b. Vocational interest (artistic and social) will moderate the relationship between HR practice type (appraisals are not used for raises and appraisals are used for raises) and organizational attractiveness, such that organizational attractiveness will be higher for "appraisals are used for raises" than for "appraisals are not used for raises" as applicants' (a) artistic level and (b) socialness increase.

Hypothesis 4-6a and 4-6b. Vocational interest (artistic and social) will moderate the relationship between HR practice type (relatively low wages and benefits and relatively high wages and benefits) and organizational attractiveness, such that organizational attractiveness will be higher for "relatively high wages and benefits" than for "relatively low wages and benefits" as applicants' (a) artistic level and (b) socialness increase.

Hypothesis 4-7a and 4-7b. Vocational interest (artistic and social) will moderate the relationship between HR practice type (pay variation is low among employees and pay variation is high among employees) and organizational attractiveness, such that organizational attractiveness will be higher for "pay variation is high among employees" than for "pay variation is low among employees" as applicants' (a) artistic level and (b) socialness increase.

Hypothesis 4-8a and 4-8b. Vocational interest (artistic and social) will moderate the relationship between HR practice type (high base-pay portion and low base-pay portion) and organizational attractiveness, such that organizational attractiveness will be higher for "low base-pay portion" than for "high base-pay portion" as applicants' (a) artistic level and (b) socialness increase.

Hypothesis 4-9a and 4-9b. Vocational interest (artistic and social) will moderate the relationship between HR practice type (limited training efforts and extensive training) and organizational attractiveness, such that organizational attractiveness will be higher for "extensive training" than for "limited training efforts" as applicants' (a) artistic level and (b) socialness increase.

Hypothesis 4-10a and 4-10b. Vocational interest (artistic and social) will moderate the relationship between HR practice type (only managers make a decision and high level of employee participation) and organizational attractiveness, such that organizational

attractiveness will be higher for "high level of employee participation" than for "only managers make a decision" as applicants' (a) artistic level and (b) socialness increase.

Hypothesis 4-11a and 4-11b. Vocational interest (artistic and social) will moderate the relationship between HR practice type (little communication/socialization needed and much communication/socialization needed) and organizational attractiveness, such that organizational attractiveness will be higher for "much communication/socialization needed" than for "little communication/socialization needed" as applicants' (a) artistic level and (b) socialness increase.

Hypothesis 4-12a and 4-12b. Vocational interest (artistic and social) will moderate the relationship between HR practice type (low collaboration needed and high collaboration needed) and organizational attractiveness, such that organizational attractiveness will be higher for "high collaboration needed" than for "low collaboration needed" as applicants' (a) artistic level and (b) socialness increase.

Overview and Summary of Predictions

Human resource bundles, often referred to as HR systems, are usually labeled by the characteristics of the practices they include. Because each bundle is a possible combination of HR practices, numerous types of HR systems are possible. Nonetheless, high-performance work systems (HPWS), just one of a number of HR bundles, have dominated HR bundling research. These systems appear to be regarded as a panacea because they are presumed to have better performance than any other HR system, although the available evidence regarding the superior

performance of so-called high-performance practices seems inconclusive. My dissertation aims to contribute to the strategic human resource management research area by testing the idea that individual differences in responding to these systems might be a key in explaining the inconsistent performance of HPWS. I propose that applicants' vocational interests play a critical role in choosing organizations that are described by HR bundle type, culture type, and HR practice type. In addition, I expect that the personal orientation functions in a way similar to when the HR bundle and culture type are combined.

CHAPTER 4

METHODS

In this study, I used three different surveys (type A, B, and C). Each type of survey was given to a different sample. I tested hypothesis 4 using surveys B and C, and hypotheses 1, 2, and 3 were tested using survey A. There are two reasons for this. The first reason is because of oversurveying. Participants would have to answer more than 176 questions at 1 sitting if I were to test all hypotheses in this study with one survey. Because hypothesis 4 tests how 12 components of each HR system (HPWS or non-HPWS) are different in predicting organizational attractiveness (four questions) with a moderator (48 questions), respondents would need to answer at least 160 questions. This would require an unacceptable amount of time to complete the survey. Individuals inundated with survey requests expressed more negative attitudes toward surveys than did individuals with fewer survey solicitations (Goyder, 1986). Furthere, Rogelberg, Fisher, Maynard, Hakel, and Horvath (2001) suggest that the one overarching factor that affects survey value and survey enjoyment is oversurveying. In this sense, they suggest that the number of surveys employees are asked to complete should be critically managed. I believe the same is true for student subjects. The second reason is that hypothesis 4 and the other hypotheses can be separated into two studies. That is, testing the recruiting performance of an HR system as a whole and its subcomponents are distinct enough to be two different studies, requiring 2 different samples. Thus, this dissertation combines the two different studies using three different survey types.

Sample

The stimulus material for this study was administered as part of an in-class assignment to undergraduate students from a large Southern university. Of the 206 respondents in sample A, 57% were female, and 65% were business majors. The average age was 24. For sample B (n = 99), 53% were female, and 54% were business majors. The average age was 23. In terms of sample C (n = 97), 44% were female, and 60% were business majors. The average age was 24.

Some of respondents had missing data. There are several missing data techniques, which include listwise deletion, regression imputation, hot-deck imputation, and two forms of mean substitution (mean substitution across individuals and mean substitution across items within an individual). Substituting the mean response of a person to other items on a scale is a promising approach for multiple-item scales (Roth, Switzer, & Switzer, 1999). Following this recommendation, I imputed missing values from other correlated items designed to measure the same construct. This rule was applied when there was only one missing value in a multi-item measure. Also, if a respondent failed to complete more than two items to measure the same construct, I used listwise deletion technique (deleting all the construct items and all other items for those individuals with any missing data). Therefore, I combined two techniques (mean substitution across items within an individual and listwise deletion) for this study to deal with missing values.

For the survey A, there were 212 respondents. After finishing coding the samples, I found that 201 individuals had no missing data. Six respondents have missing more than 1 item on a construct, so they were removed from the sample. Five respondents missed only one question from their entire questionnaire, and in each case it was one of the vocational interest construct

items. I replaced the 5 missing values with the average of other 7 construct items as each vocational interest is measured with 8 items. This resulted in a final sample size of 206.

Regarding survey B, I collected 101 responses. Of the 101, 98 had complete data. Two respondents failed to complete more than two items to measure the same construct or missed one of demographic variables. One respondent missed only one question from his or her entire questionnaire, measuring the construct of artistic interest. I replaced the missing value with the average of other the 7 items. This resulted in a final sample size of 99.

Regarding survey C, I collected 100 responses. Of the 100, 95 had complete data. Three respondents failed to complete more than two items to measure the same construct. Two respondents missed only one question from their entire questionnaire, measuring the construct of artistic interest. I replaced the missing value with the average of other the 7 items. This resulted in a final sample size of 97.

Data Collection Procedures

Participants were told the purpose of the project was to understand how HR systems and organizational culture affect prospective employees' perceptions of an organization. As an incentive to participate in the study, participants were told that when they submitted their completed survey, they would be given extra credit for their course.

Manipulation of the Organization Characteristics

I randomly distributed one of three types of surveys to participants. All surveys included vocational interest and demographic question. Surveys varied in their descriptions of

organizational culture, HR bundles, and practices. A brief depiction of the three different surveys is as follows (see Appendix 4 for detailed version of summaries and scenarios):

- Type A: 4 combinations of HR bundle type and culture type (HP x IC, HP x BC, Non-HP x IC, Non-HP x BC), vocational interest, and demographic questions
- Type B: Nonperformance-enhancing HR bundle (Non-HP), bureaucratic culture (BC),
 HR practices in Non-HP, vocational interest, and demographic questions
- Type C: Performance-enhancing HR bundle (HP), innovative culture (IC), HR
 practices in HP, vocational interest, and demographic questions

Face Validity

I used HR system statements, which were developed based on HR bundles and their practices as reported, in Appendix 1. I also used culture statements, which were developed based on an extensive review of academic writings on organizational values and culture (cf. Aldrich & Ruef, 2006; O'Reilly, Chatman, & Caldwell, 1991). Face validity is the extent to which a test is subjectively viewed as covering the concept it purports to measure. I checked the face validity of statements (HPWS, non-HPWS, innovative culture, and bureaucratic culture scenarios) before distributing the surveys to subjects. Volunteers (13 doctoral students and 30 undergraduate students) were used as focus groups to read each scenario and the academic definitions of each HR bundle type and culture type. They were then asked whether they agreed that the scenario was a good description of the definitions. For the doctoral students, mean differences of the two sample t-tests showed that high-performance work systems are significantly different from administrative HR systems (t = 30.99, p < .01) and cost-reducing HR systems (t = 30.99, p < .01). For the undergraduate students, mean differences of the two sample t-tests also showed that

high-performance work systems are significantly different from administrative HR systems (t = 4.05, p < .01) and cost-reducing HR systems (t = 5.69, p < .01). Regarding culture, innovative and bureaucratic cultures were significantly different from each other for the doctoral (t = 10.23, p < .01) and undergraduate students (t = 5.40, p < .01). In sum, there was no problem with the face validity of the scenarios used in this research. The finalized scenarios are reported in Appendix 5.

Latin Square Design

I used a Latin square design to control the order effect of combinations of HR bundle type and culture type in survey A. With this design, I need only eight versions in which a, b, c, and d are the four different scenarios (HPWS and innovative culture = a; HPWS and bureaucratic culture = b; non-HPWS and innovative culture = c; non-HPWS and bureaucratic culture = d):

Version 1: abcd

Version 2: badc

Version 3: cdab

Version 4: dcba

Versions 5–8 are the same as versions 1–4 except that in these scenarios culture is before HR system (in versions 1–4 HR system is before culture). Thus, each scenario occupies each order position twice, once with the HR system first and once with culture first.

Measures

Organizational Attractiveness (Dependent Variable)

Respondents' perceptions of organizational attractiveness were measured using four items taken from Turban and Keon (1993), who reported a Cronbach's alpha of .95 for the scale. Four items asked respondents to indicate (via 5-point scales where 1 = strongly disagree and 5 = strongly agree) the extent to which subjects would (a) exert a great deal of effort to work for this company, (b) were interested in pursuing their application with the company, (c) would like to work for the company, and (d) would accept a job offer. Because participants responded to four items repeatedly, with only changing manipulated descriptions, I have multiple Cronbach's alphas for the scale in each type of survey. The averaged Cronbach's alphas of the scale in the current study were 0.93 (survey A), 0.95 (survey B), and 0.94 (survey C).

Vocational Interest (Moderator Variable)

The Interest Item Pool (IIP; Armstrong et al., 2008) version of the O*Net Interest Profiler (Lewis & Rivkin, 1999) was used to measure Holland's (1997) RIASEC interests. Like the IPIP, the IIP is a public domain website where several free measures are located. Specifically, a 48-item questionnaire based on the 180-item measure found on O*Net was used. This brief RIASEC measure was developed by Armstrong et al. (2008) as an alternative to longer, more costly interest measures, such as the SII (Donnay et al., 2005) and the SDS (Holland et al., 1997). Items for the 48-item version were selected from the longer measure, using both rational and statistical considerations (Armstrong et al., 2008). Each of the six RIASEC marker scales contains eight items measuring how much the participant would like to participate in an activity from each of the six Holland themes. Items are measured on a 5-point Likert scale, ranging from strongly

dislike (1) to strongly like (5). Item ratings for each RIASEC domain are averaged, with higher scale scores indicating higher levels of interest in that domain. For example, in this study, items for artistic include "Conduct a musical choir, "Direct a play," "Design artwork for magazines," "Write a song," "Write books or plays," "Play a musical instrument," "Perform stunts for a movie or television show," and "Design sets for plays." Two sets of the 48-item measures (Set A and Set B) were developed and evaluated by Armstrong et al. (2008); in this study, items from Set A were used. Set A scales demonstrated alpha reliabilities ranging from 0.80 to 0.93. Convergent validity evidence for these scales was demonstrated through strong, positive correlations with participants' ratings of interest in similarly themed occupations and corresponding SII General Occupational Theme scale scores (Armstrong et al., 2008).

The Cronbach's alpha of the scale in the current study was as follows:

- Survey A: 0.87 (R), 0.89 (I), 0.85 (A), 0.85 (S), 0.71 (E), 0.86 (C)
- Survey B: 0.87 (R), 0.89 (I), 0.83 (A), 0.80 (S), 0.75 (E), 0.84 (C)
- Survey C: 0.89 (R), 0.87 (I), 0.85 (A), 0.78 (S), 0.70 (E), 0.82 (C)

In all cases, reliability was above 0.7, the minimal acceptable level (Nunnally, 1978).

Demographic Control Variables

To control for possible confounding effects, the following demographic variables were controlled: age, gender and major. The age and gender variables are commonly included as covariates in recruitment-related research to disentangle their effects from those of recruitment, thereby allowing for more accurate attribution of potential findings (cf. Avery, 2003).

Individuals were asked to self-report their gender (0 = "male," 1 = "female") and age was

measured using a self-reported question that asked participants to indicate their age in years.

These variables served as control variables in hierarchical regression analyses.

I added student's major as another control variable. Participants in this study were gathered from undergraduate students who were taking a mandatory course for business majors. The majority of participants were understandably students majoring business. Presumably business students are more likely to be ambitious in starting-up their business thereby active and performance-oriented than other majors. I thus wanted to control the major in this study. Major was coded as 1 if business major, otherwise 0.

CHAPTER 5

RESULTS

Descriptive Statistics

Descriptive statistics and bivariate correlations can be found in Tables 1, 2, and 3.

Because of sample differences in the study design, sample size varies from 206 (survey A) to 99 (survey B) and 97 (survey C).

Survey A (Table 1)

Organizational attractiveness, the dependent variable, has a mean (3.47). Its highest correlation is with high-performance work systems (r = .44, p < .01), indicating that almost 19% of the variance in choosing organizations could be explained by the type of HR system. There was no correlation with culture type.

Two of the vocational interests—namely, artistic and social—are positively correlated with each other (r = .39, p < .01). The opposites of artistic and social—namely, conventional and realistic—are also positively correlated with each other (r = .28, p < .01). These correlations are consistent with existing findings about the closeness of the two sets of vocational types.

Surveys B and C (Tables 2 and 3)

The mean of attraction to non-high-performance work systems was 3.01 (out of 5) and the standard deviation was 1.01. On the contrary, the mean score of high-performance work systems was 3.97 and the standard deviation was 0.90. I did a two-sample *t*-test to test the mean difference of the attraction of the two HR system types and found that the mean difference was

statistically significant (t = -6.984, p < .01). This shows that HPWS are more preferable to job applicants than are non-HPWS in choosing organizations by almost point on the 5 point scale.

The mean scores of bureaucratic culture (3.47) and innovative culture (3.56) only showed a small difference. The standard deviations of bureaucratic culture and innovative culture were 0.98 and 1.06 respectively. I also did a two-sample t-test to test the mean difference of the attraction of the two culture types and found that the mean difference was not statistically significant (t = -0.598, p = .55). This shows that preference for culture type doesn't substantially matter in job applicants' choosing organizations.

Preference for non-high-performance work systems has a positive correlation with the preference for all their HR practices (i.e., the 12 HR practices of non-HPWS). Preference for high-performance work systems are also positively correlated with the preferences for their subcomponents (i.e., the 10 HR practices of HPWS), except two HR practices (much communication/socialization needed and high collaboration needed).

TABLE 1. Correlations and Descriptive Statistics (Survey \mathbf{A})^a

| Variables | Mean | s.d. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|----------------------------------------------------|------|------|-------|-----|-----|-------|-------|-------|-------|-------|-------|------|----|----|
| 1. Organizational attractiveness | 3.47 | 1.05 | | | | | | | | | | | | |
| 2. HR system (1 = "HPWS," 0 = "Non-HPWS.") | 0.50 | 0.50 | .44** | | | | | | | | | | | |
| 3. Culture (1 = "innovative," 0 = "bureaucratic.") | 0.50 | 0.50 | .03 | .00 | | | | | | | | | | |
| 4. Realistic | 2.48 | 0.81 | .09** | .00 | .00 | | | | | | | | | |
| 5. Investigative | 2.86 | 0.93 | .07* | .00 | .00 | .37** | | | | | | | | |
| 6. Artistic | 3.17 | 0.85 | .07* | .00 | .00 | .10** | .34** | | | | | | | |
| 7. Social | 3.44 | 0.78 | .01 | .00 | .00 | 01 | .23** | .39** | | | | | | |
| 8. Enterprising | 3.21 | 0.63 | .09** | .00 | .00 | .22** | .16** | .24** | .24** | | | | | |
| 9. Conventional | 3.09 | 0.76 | .11** | .00 | .00 | .28** | .04 | 18** | .06 | .22** | | | | |
| 10. Age | 23.9 | 5.82 | 08* | .00 | .00 | 02 | .01 | 19** | 01 | 14** | 03 | | | |
| 11. Gender (1 = "female," 0 = "male.") | 0.57 | 0.49 | .00 | .00 | .00 | 32** | 12** | 01 | .17** | .08* | .08* | .01 | | |
| 12. Major (1 = "business," 0 = "others.") | 0.65 | 0.48 | 04 | .00 | .00 | 01 | 19** | 11** | 02 | .03 | .28** | 11** | 00 | |

 a n = 824. * p < .05 ** p < .01 Two-tailed tests.

TABLE 2. $\label{eq:correlations} \mbox{Correlations and Descriptive Statistics (Survey B)}^a$

| Variables | Mean | s.d. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|------------------|------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|----|----|----|----|----|----|----|----|----|
| 1. Non-HPWS | 3.01 | 1.01 | | | | | | | | | | | | | | | | | | | | | | | |
| 2. Bureaucratic | 3.47 | 0.98 | .50** | | | | | | | | | | | | | | | | | | | | | | |
| 3. Realistic | 2.48 | 0.87 | .22* | .31** | | | | | | | | | | | | | | | | | | | | | |
| 4. Investigative | 3.05 | 0.94 | .08 | .04 | .34** | | | | | | | | | | | | | | | | | | | | |
| 5. Artistic | 2.98 | 0.89 | .18 | .17 | .07 | .35** | | | | | | | | | | | | | | | | | | | |
| 6. Social | 3.48 | 0.72 | .07 | .15 | .03 | .30** | .51* | | | | | | | | | | | | | | | | | | |
| 7. Enterprising | 3.13 | 0.69 | .19* | .34** | .16 | 01 | .21* | .22* | | | | | | | | | | | | | | | | | |
| 8. Conventional | 3.23 | 0.77 | .20* | .28** | .37** | .17 | 04 | .12 | .30** | | | | | | | | | | | | | | | | |
| 9. Staffing 1 | 2.95 | 1.15 | .68** | .39** | .27** | .18 | .26** | .25* | .29** | .32** | | | | | | | | | | | | | | | |
| 10. Staffing 2 | 3.71 | 0.82 | .41** | .33** | .21* | .23* | .27** | .20* | .38** | .32** | .60** | | | | | | | | | | | | | | |
| 11. Staffing 3 | 2.96 | 1.08 | .51** | .43** | .29** | .15 | .13 | .11 | .29** | .28** | .44** | .50** | | | | | | | | | | | | | |
| 12. Perf. mgmt 1 | 2.86 | 0.95 | .55** | .35** | .32** | .28** | .16 | .08 | .21* | .38** | .51** | .45** | .65** | | | | | | | | | | | | |
| 13. Perf. mgmt 2 | 2.55 | 1.02 | .51** | .27** | .30** | .24* | .11 | .05 | .06 | .26* | .54** | .42** | .54** | .64** | | | | | | | | | | | |
| 14. Pay 1 | 2.95 | 0.96 | .45** | .29** | .30** | .21 | .29** | .17 | .17 | .18 | .40** | .44** | .48** | .47** | .54** | | | | | | | | | | |
| 15. Pay 2 | 2.58 | 1.10 | .44** | .26** | .19 | .09 | .22* | 00 | .16 | .15 | .36** | .37** | .38** | .42** | .52** | .43** | | | | | | | | | |

TABLE 2. (Continued) Correlations and Descriptive Statistics (Survey B)^a

| Variables | Mean | s.d. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-------------------------|-------|------|-------|-------|-------|------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----|----|
| 16. Pay 3 | 3.16 | 0.99 | .22* | .00 | .15 | .15 | .07 | .03 | .09 | .19 | .08 | .28** | .33** | .32** | .26** | .33** | .42** | | | | | | | | |
| 17. Training | 2.91 | 1.02 | .58** | .40** | .17 | .22* | .20 | .26** | .24* | .37** | .72* | .56** | .46** | .52** | .54** | .41** | .37** | .27** | | | | | | | |
| 18. Employ 1 | 2.53 | 1.08 | .55** | .31** | .42** | .21* | .21* | .12 | .25* | .29** | .58** | .39** | .46** | .49** | .49** | .41** | .42** | .37** | .55** | | | | | | |
| 19. Employ 2 | 2.63 | 1.20 | .49** | .28** | .32** | .16 | .10 | 09 | .19 | .21* | .43** | .30** | .50** | .55** | .43** | .34** | .43** | .19 | .35** | .60** | | | | | |
| 20. Employ 3 | 3.42 | 0.94 | .40** | .24* | .17 | .15 | .08 | .24* | .22* | .21* | .39* | .50** | .46** | .42** | .34** | .27* | .33** | .32** | .42** | .48** | .53** | | | | |
| 21. Age | 23.05 | 4.79 | 24* | 21* | .12 | .04 | .01 | 01 | 16 | .11 | 14 | 07 | 15 | 16 | 17 | 02 | 15 | 04 | 13 | 14 | 12 | 21* | | | |
| 22. Gender ^b | 0.52 | 0.50 | 01 | 06 | 37** | 03 | .16 | .25* | .19* | 01 | .10 | .00 | 08 | 10 | 17 | 14 | 05 | 04 | .07 | 10 | 05 | .01 | .03 | | |
| 23. Major ^c | 0.53 | 0.50 | 00 | 00 | 17 | 26** | 17 | 01 | .22* | .11 | 10 | 02 | 03 | 10 | 14 | 09 | 22* | 11 | 04 | 09 | 04 | .10 | 22* | .05 | |

* p < .05
** p < .01
Two-tailed tests.

^a n = 99. ^b 1 = "female," 0 = "male." ^c 1 = "business," 0 = "others."

TABLE 3. $\label{eq:correlations} \mbox{Correlations and Descriptive Statistics (Survey C)}^a$

| Variables | Mean | s.d. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|------------------|------|------|-------|-------|-------|-------|-------|------|------|------|-------|------|-------|-------|-------|------|----|----|----|----|----|----|----|----|----|
| 1.HPWS | 3.97 | 0.90 | | | | | | | | | | | | | | | | | | | | | | | |
| 2. Innovative | 3.56 | 1.06 | .30** | | | | | | | | | | | | | | | | | | | | | | |
| 3. Realistic | 2.49 | 0.93 | .18 | .38** | | | | | | | | | | | | | | | | | | | | | |
| 4. Investigative | 2.82 | 0.92 | .15 | .27** | .44** | | | | | | | | | | | | | | | | | | | | |
| 5. Artistic | 2.96 | 0.91 | .8 | .04 | .09 | .26** | | | | | | | | | | | | | | | | | | | |
| 6. Social | 3.44 | 0.71 | 03 | .01 | 02 | .14 | .44** | | | | | | | | | | | | | | | | | | |
| 7. Enterprising | 3.13 | 0.66 | .19 | .09 | .10 | .02 | .27** | .24* | | | | | | | | | | | | | | | | | |
| 8. Conventional | 3.01 | 0.74 | .20* | .28** | .27** | .04 | 28** | 06 | .07 | | | | | | | | | | | | | | | | |
| 9. Staffing 1 | 3.66 | 0.98 | .45** | .36** | .03 | .10 | .06 | .17 | .20* | .15 | | | | | | | | | | | | | | | |
| 10. Staffing 2 | 4.11 | 0.71 | .27** | .23* | .03 | .22* | .09 | .03 | .03 | .04 | .41** | | | | | | | | | | | | | | |
| 11. Staffing 3 | 4.17 | 0.86 | .50** | .22* | .07 | .09 | .01 | .10 | .13 | .24* | .29** | .16 | | | | | | | | | | | | | |
| | 3.40 | 0.81 | .38** | .13 | .09 | 17 | .02 | .19 | .21* | .19 | .25* | .07 | .38** | | | | | | | | | | | | |
| 12. Perf. mgmt 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13. Perf. mgmt 2 | 4.01 | 0.82 | .43** | .06 | 04 | .04 | .06 | .13 | .23* | .15 | .37** | .24* | .47** | .47** | | | | | | | | | | | |
| 14. Pay 1 | 4.57 | 0.69 | .38** | .11 | 08 | .00 | .05 | 02 | .20* | .02 | .29** | .22* | .37** | .23* | .49** | | | | | | | | | | |
| 15. Pay 2 | 3.45 | 0.90 | .32** | .17 | .16 | .04 | 04 | .08 | .23* | .08 | .30** | .16 | .37** | .33** | .23* | .21* | | | | | | | | | |

TABLE 3. (Continued) Correlations and Descriptive Statistics (Survey c)^a

| Variables | Mean | s.d. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-------------------------|-------|------|-------|-------|------|------|-----|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----|----|
| 16. Pay 3 | 3.25 | 1.05 | .39** | .07 | .11 | .03 | 01 | .09 | .21* | .19 | .21* | .12 | .40** | .34** | .36** | .15 | .60** | | | | | | | | |
| 17. Training | 4.20 | 0.81 | .48** | .24* | .00 | 00 | .02 | .08 | .18 | .19* | .48** | .24* | .34** | .31** | .50** | .46** | .30** | .18 | | | | | | | |
| 18. Employ 1 | 4.11 | 0.80 | .26* | .38** | .04 | .09 | .02 | .01 | .19 | .14 | .40** | .38** | .28** | .14 | .34** | .34** | .21* | .25* | .47** | | | | | | |
| 19. Employ 2 | 4.03 | 0.85 | .19 | .06 | 04 | 21 | .04 | .21* | .25* | .02 | .20* | .10 | .25* | .38** | .24* | .17 | .20* | .20* | .29** | .44** | | | | | |
| 20. Employ 3 | 3.57 | 0.97 | .17 | .44** | .13 | .06 | .04 | .05 | .16 | .18 | .40** | .23* | .19 | .28** | .26** | .06 | .35** | .32** | .34** | .51** | .37** | | | | |
| 21. Age | 23.74 | 5.98 | .09 | 01 | .05 | .04 | 09 | .08 | 16 | .05 | .07 | .01 | .06 | .15 | .05 | 08 | 01 | .13 | .12 | .07 | .17 | .18 | | | |
| 22. Gender ^b | 0.44 | 0.50 | 01 | 40** | 50** | 34** | .01 | .16 | 03 | 08 | 10 | 07 | 00 | .20* | .14 | .07 | 05 | 07 | 07 | .14 | .15 | 11 | .03 | | |
| 23. Major ^c | 0.60 | 0.49 | .02 | 03 | 14 | 09 | 14 | 12 | .10 | .23* | 17 | 09 | 03 | .09 | 14 | 05 | .00 | .07 | 13 | 08 | 04 | 15 | 08 | .06 | |

* p < .05
** p < .01
Two-tailed tests.

^a n = 97. ^b 1 = "female," 0 = "male." ^c 1 = "business," 0 = "others."

Analysis

The dependent variable of this research was organizational attractiveness. HR bundle type and culture type were independent variables, and vocational interests were moderating variables in the estimation of applicants' self-reported organizational attractiveness (see Figure 1). I used hierarchical moderated regression models to investigate the proposed hypotheses. Following Hayes' (2013) recommendations, main effect and interaction variables were centered in model 3 and 4 to facilitate interpretation. To detect potential multicollinearity, I analyzed the variance inflation factor (VIF) for all variables used in each regression model. Analysis of collinearity showed that the VIF was below 10 (specifically never greater than 1.26) for all multiple regression analyses, indicating an acceptable degree of collinearity (Hair, Black, Babin, Anderson, & Tatham, 2006). I considered statistical significance levels of 1%, 5%, and 10% and two-tailed significance tests.

All four models for organizational attractiveness in Table 4 include control variables related to an individual's potential attributes to engage in applying (age, gender and major). As a baseline, model 1 only includes the control variables. To test the main effects, in model 2, I included HR system (1 = HPWS, 0 = non-HPWS), organizational culture (1 = innovative, 0 = bureaucratic), two types of vocational interest (artistic and social), and the control variables. Model 3 adds all two-way interaction, and model 4 includes the proposed three-way interaction.

Hypotheses 1a and 1b predict two-way interactions of HR bundle type and vocational interest, wherein organizational attractiveness is highest when a higher artistic or social person is associated with HPWS. In Table 4, I report that the two-way coefficient for the interaction between HR system and social is significant ($\beta = .07$, p < .05; model 3, Table 4). However, the two-way coefficient for the interaction between HR system and artistic ($\beta = -.03$, p > .10; model

3, Table 4) is not significant. These findings support hypothesis 1b, but hypothesis 1a must be rejected.

The supported hypothesis 1b is depicted in Figure 2. According to West, Aiken, and Krull (1996), the traditional "ANOVA with cut-points," which artificially dichotomizes a continuous variable, greatly reduced the power of statistical tests. Because vocational interest was a continuous variable in this study, I used regression for the analysis following the recommendation.

In Figure 2, the level of self-reported organizational attractiveness increases when an organization's HR system is characterized by HPWS and applicant's socialness increases. On the other hand, the level of self-reported organizational attractiveness decreases when an organization's HR system is characterized by non-HPWS and applicant's socialness increases. These two lines do not cross each other. Regardless of socialness level, HPWS is more preferable than non-HPWS in applicant attraction. However, the gap of self-reported organizational attractiveness between HPWS and non-HPWS become wider as the level of socialness increases. In summary, Figure 2 shows that non-HPWS does not ever overcome HPWS in attracting applicants, but once respondents' socialness level decreases, non-HPWS starts to catch-up HPWS. This also tells us that a higher social person is a better fit with HPWS than with non-HPWS.

Although I do not hypothesize the simple relations, for completeness, I report a significant association between HR system and organizational attractiveness ($\beta = .44$, p < .01; model 2, Table 4). Given the positive coefficient of HPWS, organizational attractiveness is predicted to be 0.44 units higher for HPWS than non-HPWS, holding the other explanatory

variables fixed. This is a promising finding in advancing the research area of strategic HRM because no study has yet tested the recruiting impact of HPWS.

However, there is no relationship between culture and organizational attractiveness (β = .04, p < .10; model 2, Table 4). These patterns are consistent with results in other models. It tells us that applicants generally favor HPWS over non-HPWS but that culture type doesn't matter in attracting job applicants.

Hypothesis 2, that vocational interest (artistic and social) will moderate the relationship between culture type (innovative and bureaucratic) and organizational attractiveness, was not supported. Hypothesis 3, which argued that there is a three-way interaction between HR bundle type, culture type, and vocational interest on organizational attractiveness, was also not supported.

In hypothesis 4, I predict that the expected relationship in hypothesis 1 still holds for the components of the HR system. Each HR system (i.e., HPWS and non-HPWS) consists of 12 HR practices. I anticipated that vocational interest (artistic and social) will moderate the relationship between HR practice type (e.g., narrowly defined job tasks and broadly defined job tasks) and organizational attractiveness, such that organizational attractiveness will be higher for "broadly defined job tasks" than for "narrowly defined job tasks" as applicants' artistic and social level increases. To investigate this, I calculated the unbiased beta weights for each slope along with the *t*-test for each pairwise comparison (Dawson & Ryan, 2006). The results are reported in Table 5, which shows the slope differences for the two-way interaction (HR practice and vocational interest) with organizational attractiveness as the dependent variable. In Table 5, for artistic and social, I report three significant slope differences: (1) the slope of the linear relationship between "relatively low wages and benefits" and "artistic" is significantly different

from the slope between "relatively high wages and benefits" and "artistic" (t=2.123, p<.05; Table 5); (2) the slope of the linear relationship between "pay variation is low among people" and "artistic" is significantly different from the slope between "pay variation is high among people" and "artistic" (t=2.051, p<.05; Table 5); and (3) the slope of the linear relationship between "little communication and socialization needed" and "social" is significantly different from the slope between "much communication and socialization is needed" and "social" (t=-1.971, p<.05; Table 5). However, there were no slope differences for other comparisons of slopes. These findings support hypothesis 4-6a, 4-7a, and 4-10b, but all other hypotheses 4 must be rejected.

The supported hypotheses 4-6a, 4-7a, and 4-10b are depicted in Figure 3-1, Figure 3-2, and Figure 3-3. Regardless of artistic level, self-reported organizational attractiveness of pay practice (relatively high wages and benefits) is higher than that of pay practice (relatively low wages and benefits) in Figure 3-1. This supports hypothesis 4-6a: organizational attractiveness will be higher for "relatively high wages and benefits" than for "relatively low wages and benefits" as applicants' artistic level increases. However, the gap of self-reported organizational attractiveness between high wages and low wages become narrower as artisticness level increases. Figure 3-2, self-reported organizational attractiveness of pay practice (pay variation is high among people) is higher than that of pay practice (pay variation is low among people) regardless of artistic level. This supports hypothesis 4-7a: organizational attractiveness will be higher for "pay variation is high among people" than for "pay variation is low among people" as applicants' artistic level increases. However, the gap of self-reported organizational attractiveness between high variation and low variation become narrower as artisticness level increases.

In Figure 3-3, the slope for "little communication and socialization skills needed" is negative, which means that organizational attractiveness in terms of low communication skills decreases as applicants' socialness increases. On the other hand, the slope for "much communication and socialization skills needed" is positive, which means that organizational attractiveness in terms of high communication skills increases as applicants' socialness increases. These two lines do not cross each other. Regardless of socialness level, much communication is more preferable than little communication with respect to applicant attraction. However, the gap of self-reported organizational attractiveness between high communication and low communication becomes wider as socialness level increases. In summary, Figure 3-3 shows that low communication doesn't overcome high communication in attracting applicants, but once their socialness level decreases, low communication starts to catch-up with high communication. This also tells us that a higher social person is a better fit with high communication than with low communication.

Although I do not hypotheses mean differences for the HR systems and practices, for completeness, I report each mean score along with the *t*-test for pairwise comparison in Table 6. All comparisons are significant except the two mean differences: (a) high base-pay portion (3.16) and low base-pay portion (3.25) and (b) low collaboration needed (3.42) and high collaboration needed (3.57). This result shows that applicants do not distinguish the two compared HR practices in choosing organizations, whatever their vocational interests.

TABLE 4. Hierarchical Moderated Regression Models^a

| | | | Models 6 | estimated | |
|----------------------------------------------|-----|----------------------|-------------------------|-----------------------|----------------|
| Variables | | Model 1: Baseline | Model 2: Main effect | Model 3: H1 and H2 | Model 4: H3 |
| (Intercept) | | 3.93** | 3.20** | 3.87** | 3.87** |
| Control variables | | | | | |
| Age | | -0.09** | -0.08** | -0.08** | -0.08** |
| Gender ^b | | 0.01 | 0.01 | 0.01 | 0.01 |
| Major ^c | | -0.05 | -0.04 | -0.04 | -0.04 |
| Main effect | | | | | |
| HR system ^d | | | 0.44** | 0.44** | 0.44** |
| Organizational Culture ^e | | | 0.04 | 0.04 | 0.04 |
| Artistic | | | 0.05 | 0.05 | 0.05 |
| Social | | | -0.01 | -0.01 | -0.01 |
| Interaction (two-way) | | | | | |
| HR system × Artistic | H1a | | | -0.03 | -0.03 |
| HR system × Social | H1b | | | 0.07* | 0.07* |
| Culture × Artistic | H2a | | | 0.01 | 0.01 |
| Culture × Social | H2b | | | -0.02 | -0.02 |
| HR system \times Culture | | | | -0.00 | -0.00 |
| Interaction (three-way) | | | | | |
| HR system \times Culture \times Artistic | НЗа | | | | 0.02 |
| HR system \times Culture \times Social | H3b | | | | -0.02 |
| F | | 2.812* | 31.347** | 18.730** | 16.064** |
| R^2 | | 0.010 | 0.212 | 0.217 | 0.218 |
| Adjusted R ² | | 0.007 | 0.205 | 0.205 | 0.204 |
| $\Delta \mathring{R}^2$ | | | 0.202** | 0.005 | 0.001 |

a n = 824, Betas are reported.

Main effect and interaction terms are centered in model 3 and 4.
b 1 = "female," 0 = "male.";
c 1 = "HPWS," 0 = "Non-HPWS."
d 1 = "innovative," 0 = "bureaucratic."

^e1 = "business," 0 = "others."

[†] p < .10, * p < .05, ** p < .01, Two-tailed tests.

FIGURE 2. Two-Way Interaction between Social and HR System Type with Organizational Attractiveness as the Dependent Variable.

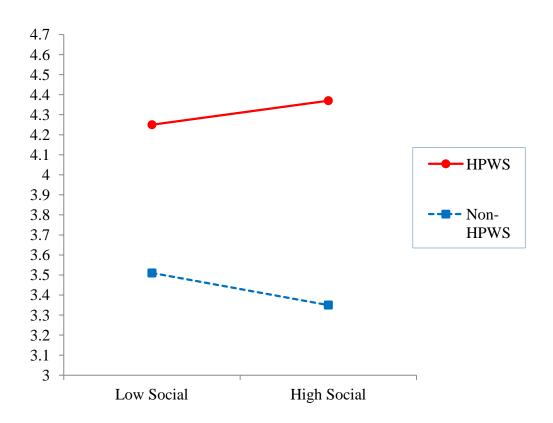


TABLE 5. Slope Differences for the Two-Way Interaction with Organizational Attractiveness as **Dependent Variable**

| Vocational | Pair of HR Practices | | | | | | |
|---------------|------------------------------------|--------------------------------------|---------------------------|---------------------------|--|--|--|
| Interest | Practices of Non-HPWS ^a | Practices of HPWS ^b | t for Slope Difference | p for Slope Difference | | | |
| Realistic | Job tasks narrowly defined | Job tasks broadly defined | 1.951 | 0.051 | | | |
| | Straightforward and stable job | Dynamic and challenging job | 1.399 | 0.162 | | | |
| | Promotion based on seniority | Promotion based on performance | 1.935 | 0.053 | | | |
| | Administrative use | Developmental use | 2.032 | 0.042 | | | |
| | Appraisals are not used for raises | Appraisals are used for raises | 2.710 | 0.007 | | | |
| | Relatively low wages and benefits | Relatively high wages and benefits | 3.020 | 0.003 | | | |
| | Pay variation is low among people | Pay variation is high among people | 0.574 | 0.566 | | | |
| | High base-pay portion | Low base-pay portion | 0.277 | 0.782 | | | |
| | Limited training efforts | Extensive training | 1.406 | 0.160 | | | |
| | Only managers make a decision | High level of employee participation | 3.442 | 0.001 | | | |
| | Little communication needed | Much communication needed | 3.071 | 0.002 | | | |
| | Low collaboration needed | High collaboration needed | 0.350 | 0.726 | | | |
| Investigative | Job tasks narrowly defined | Job tasks broadly defined | 0.692 | 0.489 | | | |
| <u> </u> | Straightforward and stable job | Dynamic and challenging job | 0.264 | 0.792 | | | |
| | Promotion based on seniority | Promotion based on performance | 0.599 | 0.549 | | | |
| | Administrative use | Developmental use | 3.264 | 0.001 | | | |
| | Appraisals are not used for raises | Appraisals are used for raises | 1.613 | 0.107 | | | |
| | Relatively low wages and benefits | Relatively high wages and benefits | 1.637 | 0.102 | | | |
| | Pay variation is low among people | Pay variation is high among people | 0.421 | 0.674 | | | |
| | High base-pay portion | Low base-pay portion | 0.786 | 0.432 | | | |
| | Limited training efforts | Extensive training | 1.729 | 0.084 | | | |
| | Only managers make a decision | High level of employee participation | 1.124 | 0.261 | | | |
| | Little communication needed | Much communication needed | 2.624 | 0.009 | | | |
| | Low collaboration needed | High collaboration needed | 0.571 | 0.568 | | | |
| Artistic | Job tasks narrowly defined | Job tasks broadly defined | 1.601 | 0.108 | | | |
| | Straightforward and stable job | Dynamic and challenging job | 1.498 | 0.134 | | | |
| | Promotion based on seniority | Promotion based on performance | 0.976 | 0.329 | | | |
| | Administrative use | Developmental use | 1.085 | 0.278 | | | |
| | Appraisals are not used for raises | Appraisals are used for raises | 0.563 | 0.573 | | | |
| | Relatively low wages and benefits | Relatively high wages and benefits | 2.123 | 0.034 | | | |
| | Pay variation is low among people | Pay variation is high among people | 2.051 | 0.040 | | | |
| | High base-pay portion | Low base-pay portion | 0.631 | 0.528 | | | |
| | Limited training efforts | Extensive training | 1.397 | 0.162 | | | |
| | Only managers make a decision | High level of employee participation | 1.626 | 0.104 | | | |
| | Little communication needed | Much communication needed | 0.587 | 0.557 | | | |
| | Low collaboration needed | High collaboration needed | 0.265 | 0.791 | | | |

 $^{{}^{}a}_{b} n = 99$ ${}^{b}_{n} n = 97$

TABLE 5 (Continued).

Slope Differences for the Two-Way Interaction with Organizational Attractiveness as

Dependent Variable

| Vocational | Pair of HR Practices | | | | | |
|--------------|------------------------------------|--------------------------------------|---------------------------|---------------------------|--|--|
| Interest | Practices of Non-HPWS ^a | Practices of HPWS ^b | t for Slope Difference | p for Slope Difference | | |
| Social | Job tasks narrowly defined | Job tasks broadly defined | 0.756 | 0.450 | | |
| | Straightforward and stable job | Dynamic and challenging job | 1.306 | 0.191 | | |
| | Promotion based on seniority | Promotion based on performance | 0.166 | 0.868 | | |
| | Administrative use | Developmental use | -0.655 | 0.512 | | |
| | Appraisals are not used for raises | Appraisals are used for raises | -0.475 | 0.635 | | |
| | Relatively low wages and benefits | Relatively high wages and benefits | 1.545 | 0.122 | | |
| | Pay variation is low among people | Pay variation is high among people | -0.553 | 0.580 | | |
| | High base-pay portion | Low base-pay portion | -0.447 | 0.655 | | |
| | Limited training efforts | Extensive training | 1.519 | 0.129 | | |
| | Only managers make a decision | High level of employee participation | 0.935 | 0.350 | | |
| | Little communication needed | Much communication needed | -1.971 | 0.049 | | |
| | Low collaboration needed | High collaboration needed | 1.261 | 0.207 | | |
| Enterprising | Job tasks narrowly defined | Job tasks broadly defined | 0.905 | 0.365 | | |
| - | Straightforward and stable job | Dynamic and challenging job | 2.684 | 0.007 | | |
| | Promotion based on seniority | Promotion based on performance | 1.436 | 0.151 | | |
| | Administrative use | Developmental use | 0.160 | 0.873 | | |
| | Appraisals are not used for raises | Appraisals are used for raises | -0.947 | 0.344 | | |
| | Relatively low wages and benefits | Relatively high wages and benefits | 0.160 | 0.873 | | |
| | Pay variation is low among people | Pay variation is high among people | -0.272 | 0.785 | | |
| | High base-pay portion | Low base-pay portion | -0.925 | 0.355 | | |
| | Limited training efforts | Extensive training | 0.756 | 0.450 | | |
| | Only managers make a decision | High level of employee participation | 0.865 | 0.387 | | |
| | Little communication needed | Much communication needed | 0.022 | 0.982 | | |
| | Low collaboration needed | High collaboration needed | 0.352 | 0.724 | | |
| Conventional | Job tasks narrowly defined | Job tasks broadly defined | 1.427 | 0.153 | | |
| | Straightforward and stable job | Dynamic and challenging job | 2.146 | 0.032 | | |
| | Promotion based on seniority | Promotion based on performance | 0.663 | 0.507 | | |
| | Administrative use | Developmental use | 1.604 | 0.109 | | |
| | Appraisals are not used for raises | Appraisals are used for raises | 0.987 | 0.324 | | |
| | Relatively low wages and benefits | Relatively high wages and benefits | 1.366 | 0.172 | | |
| | Pay variation is low among people | Pay variation is high among people | 0.567 | 0.571 | | |
| | High base-pay portion | Low base-pay portion | -0.215 | 0.830 | | |
| | Limited training efforts | Extensive training | 1.619 | 0.105 | | |
| | Only managers make a decision | High level of employee participation | 1.362 | 0.173 | | |
| | Little communication needed | Much communication needed | 1.544 | 0.123 | | |
| | Low collaboration needed | High collaboration needed | 0.104 | 0.917 | | |

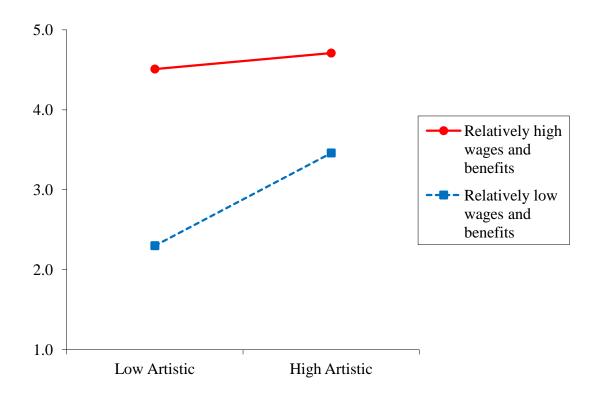
 $^{{}^{}a}_{b} n = 99$ ${}^{b}_{n} n = 97$

Two-Way Interaction between Artistic and Practice (Relatively low wages and benefits vs.

Relatively high wages and benefits) Type with Organizational Attractiveness as Dependent

Variable

FIGURE 3-1.



Two-Way Interaction between Artistic and Practice (Pay variation is low among people vs. Pay variation is high among people) Type with Organizational Attractiveness as Dependent Variable

FIGURE 3-2.

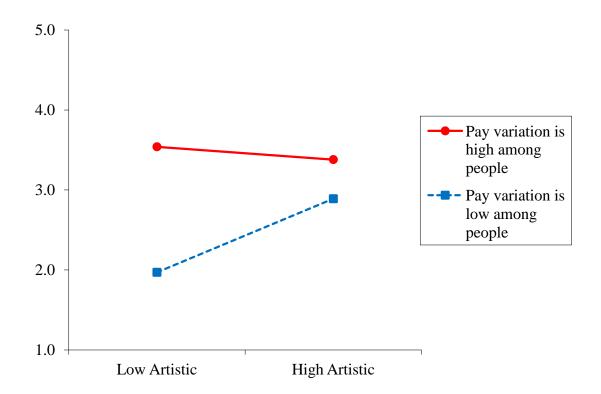


FIGURE 3-3.

Two-Way Interaction between Social and Practice (Little communication and socialization needed vs. Much communication and socialization needed) Type with Organizational Attractiveness as Dependent Variable

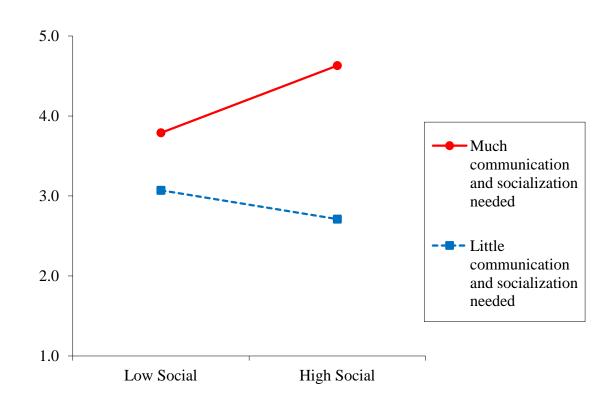


TABLE 6. Mean Differences for the HR Systems and Practices

Pair of HR System and Practices

| Non-HPWS and its Practices ^a | Mean | HPWS and its Practices ^b | Mean | t for Mean Difference | p for Mean Difference |
|-----------------------------------------|------|--------------------------------------|------|--------------------------|--------------------------|
| Non-HPWS as a whole | 3.01 | HPWS as a whole | 3.97 | -6.984 | 0.000 |
| Job tasks narrowly defined | 2.95 | Job tasks broadly defined | 3.66 | -4.664 | 0.000 |
| Straightforward and stable job | 3.71 | Dynamic and challenging job | 4.11 | -3.650 | 0.000 |
| Promotion based on seniority | 2.96 | Promotion based on performance | 4.17 | -8.677 | 0.000 |
| Administrative use of appraisals | 2.86 | Developmental use of appraisals | 3.40 | -4.312 | 0.000 |
| Appraisals are not used for raises | 2.55 | Appraisals are used for raises | 4.01 | -11.029 | 0.000 |
| Relatively low wages and benefits | 2.95 | Relatively high wages and benefits | 4.57 | -13.605 | 0.000 |
| Pay variation is low among people | 2.58 | Pay variation is high among people | 3.45 | -6.013 | 0.000 |
| High base-pay portion | 3.16 | Low base-pay portion | 3.25 | -0.623 | 0.534 |
| Limited training efforts | 2.91 | Extensive training | 4.20 | -9.787 | 0.000 |
| Only managers make a decision | 2.53 | High level of employee participation | 4.11 | -11.652 | 0.000 |
| Little communication needed | 2.63 | Much communication needed | 4.03 | -9.397 | 0.000 |
| Low collaboration needed | 3.42 | High collaboration needed | 3.57 | -1.126 | 0.262 |

 $^{^{}a}$ n = 99 b n = 97

Post Hoc Analyses

Holland's vocational interest model consists of six types (realistic, investigative, artistic, social, enterprising, and conventional). However, I used only two types (artistic and social) in my research. Some people may question why I did not include the other interest types. To address that, I did a post hoc analysis including all vocational types. The results are reported in Table 7. Table 7 is almost identical to my main analysis. There were no significant results in the two-way and three-way interaction terms except the HR system and social type.

TABLE 7. Hierarchical Moderated Regression Models^a (Post-hoc analyses)

| | Models estimated | | | | | |
|---------------------------------------------------|-------------------|-------------|-------------|-------------|----------------|--|
| Variables | Model 1: Model 2: | | | | | |
| | Baseline | Main effect | Model 3 | Model 4 | Model 5 | |
| (Intercept) | 3.93** | 2.37** | 3.87** | 3.87** | 3.87** | |
| Control variables | | | | | | |
| Age | -0.09** | -0.08* | -0.08* | -0.08* | -0.08* | |
| Gender ^d | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | |
| Major ^e | -0.05 | -0.07* | -0.07* | -0.07* | -0.07* | |
| Main effect | | | | | | |
| HR system ^b | | 0.44^{**} | 0.44^{**} | 0.44^{**} | 0.44^{**} | |
| Organizational Culture ^c | | 0.04 | 0.04 | 0.04 | 0.04 | |
| Realistic | | 0.04 | 0.04 | 0.04 | 0.04 | |
| Investigative | | 0.02 | 0.02 | 0.02 | 0.02 | |
| Artistic | | 0.06† | 0.06† | 0.06† | $0.06 \dagger$ | |
| Social | | -0.04 | -0.04 | -0.04 | -0.04 | |
| Enterprising | | 0.04 | 0.04 | 0.04 | 0.04 | |
| Conventional | | 0.12^{**} | 0.12^{**} | 0.12** | 0.12^{**} | |
| Interaction (two-way) | | | | | | |
| HR system × Realistic | | | 0.03 | 0.03 | 0.03 | |
| HR system × Investigative | | | -0.06 | -0.06 | -0.06 | |
| HR system × Artistic | | | -0.03 | -0.03 | -0.03 | |
| HR system × Social | | | 0.09^{*} | 0.09^{*} | 0.09^{*} | |
| HR system × Enterprising | | | 0.02 | 0.02 | 0.02 | |
| HR system × Conventional | | | -0.03 | -0.03 | -0.03 | |
| HR system × Organizational Culture | | | -0.00 | -0.00 | -0.00 | |
| Interaction (two-way) | | | | | | |
| Culture × Realistic | | | | -0.05 | -0.05 | |
| Culture × Investigative | | | | 0.01 | 0.01 | |
| Culture × Artistic | | | | 0.01 | 0.01 | |
| Culture × Social | | | | -0.03 | -0.03 | |
| Culture × Enterprising | | | | 0.03 | 0.03 | |
| Culture × Conventional | | | | 0.00 | 0.00 | |
| Interaction (three-way) | | | | | | |
| HR system \times Culture \times Realistic | | | | | 0.05 | |
| HR system \times Culture \times Investigative | | | | | -0.02 | |
| HR system × Culture × Artistic | | | | | 0.02 | |
| HR system \times Culture \times Social | | | | | -0.02 | |
| HR system × Culture × Enterprising | | | | | 0.02 | |
| HR system \times Culture \times Conventional | | | | | 0.03 | |
| F | 2.812* | 22.65** | 14.36** | 10.87** | 8.845** | |
| R^2 | 0.010 | 0.235 | 0.243 | 0.246 | 0.251 | |
| Adjusted R ² | 0.007 | 0.224 | 0.226 | 0.223 | 0.222 | |
| ΔR^2 | | 0.225** | 0.008 | 0.003 | 0.005 | |

Main effect and interaction terms are centered in model 3, 4 and 5.

b 1 = "HPWS," 0 = "Non-HPWS."; c 1 = "innovative," 0 = "bureaucratic."

d 1 = "female," 0 = "male."; e 1 = "business," 0 = "others." p < 0.10, p < 0.05, p < 0.01, p

Chapter 5

DISCUSSION

The results of this research suggest that high-performance work systems outperform non-high-performance work systems in recruiting performance. Nonetheless, individual differences also play a role in predicting job applicants' choice of organizations, which are characterized by HR systems and organizational culture. I explicitly consider the individual level, whereas much strategic human resources management research has investigated an organizational level relationship between HPWS and firm performance (e.g., Batt, 2002; Guthrie, 2001; Huselid, 1995). My basic argument is that although HPWS can outperform non-HPWS in terms of recruiting on average, an applicant is less likely to prefer HPWS when his or her vocational interest doesn't fit with the HR system. Moreover, I suggest this relationship holds for the combined situation (i.e., vertical fit between HPWS and innovative culture).

The main finding of my study is that organizational attractiveness is higher for HPWS than for non-HPWS as applicants' socialness increases, supporting hypothesis 1b. Regardless of socialness level, HPWS are preferable to non-HPWS, and this gap becomes wider as an applicant's socialness increases. In other words, HPWS becomes stronger for a higher social person than for a lower social person in attracting applicants.

I also test for how vocational interest moderates the relationship between culture type and organizational attractiveness. Unfortunately, I couldn't find the two-way interactions between vocational interest and culture type with organizational attractiveness as the dependent variable. Despite the insignificant results, it would be interesting to investigate further why applicants don't care about the culture type for their future workplaces.

Regarding the three-way interaction, I found that there was no interaction among HR bundle type, culture type, and vocational interest on organizational attractiveness. This can guide future research to test vertical fit with other contextual factors, such as business strategies in testing recruiting effects of HR bundle type.

Finally, I tested whether the HR system level result still holds at the practice level (i.e., each component of the HR system). I found three significant slope differences: (1) the slope of the linear relationship between "relatively low wages and benefits" and "artistic" is significantly different from the slope between "relatively high wages and benefits" and "artistic"; (2) the slope of the linear relationship between "pay variation is low among people" and "artistic" is significantly different from the slope between "pay variation is high among people" and "artistic"; and (3) the slope of the linear relationship between "little communication and socialization skills needed" and "social" is significantly different from the slope between "much communication and socialization skills needed" and "social." This result suggests that people differentiate the HR system level and its component level in choosing organizations. Little research has investigated this decoupling in the area of strategic HRM. This paper opens up the viable research area as suggested by the supported hypothesis.

Contribution to Theory

This paper contributes to the current research of strategic HRM in many aspects. First, research on the effects of high-performance work systems (HPWS) on firm performance has occupied considerable standing in the strategic HRM literature. Numerous studies have shown favorable results for the HPWS, such as heightened occupational safety (Zacharatos, Barling, & Iverson, 2005), enhanced customer service (Chuang & Liao, 2010), and increased

productivity (Takeuchi, Lepak, Wang, & Takeuchi, 2007). However, little attention has been paid to the role of personal differences in responding to HPWS. A recent study (Jensen, Patel, & Messersmith, 2013) has highlighted the "dark side" of HPWS by showing that the perception of HPWS can strengthen anxiety and role overload when employees' job control decreases. This implies that the effect of HPWS can be different in different persons. However, questions remain: Why and how do organizations' HR systems attract more of some type of people and fewer of other types?

This paper contributes to the theory of strategic HRM by showing that vocational interest moderates the relationship between HR bundle type and organizational attractiveness, that is, a higher social person would be even more likely to choose HPWS than non-HPWS than a lower social person does. My finding thus advances the HR system research by opening up the possibility that HPWS are not universally equally valued.

Second, I tested HPWS in terms of recruiting performance. My basic argument is that an applicant's vocational interest differentiates recruiting performance of HPWS. Recently scholars have paid attention to targeted recruiting and selection practice. Newman and Lyon (2009) provided initial guidance on how features of organizational image can attract applicants with particular job-related personalities and abilities. However, no studies examine how high-performance work systems can be used for targeting a particular applicant's nature. My study showed that HPWS is more effective way of recruiting a higher social person. As far as I know, this is the first study to test the effect of HPWS in terms of recruiting.

Third, besides the horizontal fit among the practices within the HR system, scholars in strategic HRM research have emphasized the vertical alignment between the system and environmental factors such as business strategy (Delery, 1998; Lepak & Shaw, 2008). For example, Schuler and Jackson (1987) suggested that different strategy types (e.g., cost

reduction, quality improvement, and innovation) require different types of employee role behaviors, and HR practices should be used to ensure those behaviors take place. However, little research has investigated the fit between HR bundles and organizational culture.

I explicitly tested the vertical fit between HR systems and culture type in recruiting performance. My argument is that HPWS have a synergistic effect with innovative culture on organizational attractiveness. Specifically, this synergy is strengthened when an applicant's vocational interest is higher in artistic or social. Although I failed to support my hypotheses on the vertical fit, few studies have attempted to test the vertical fit in strategic HRM. I hope this study contributes to the research area of SHRM by guiding more future research to investigate the synergistic effect of HR systems with other factors in various aspects.

Fourth, this paper showed how a lower level of an HR system (i.e., HR practices of an HR system) is different from a higher level (i.e., HR system level) in predicting organizational attractiveness. I found three two-way interactions between vocational interest type and HR system type: 1) a higher artistic person likes the higher wages and benefits; 2) a higher artistic person likes the higher pay variation among people; and 3) a higher social person likes the higher communication/socialization skills than the lower one. This implies that the level of artisticness and socialness doesn't differentiate organizational attractiveness for the other practices. Thus, this paper contributes to the theory of SHRM by showing that each HR practice's different level of contribution to the system level.

Finally, I found a strong main effect of HPWS, that is, it attracts almost everybody in recruiting. Most previous studies have deemed high-performance work systems as factor in motivating employees and resulting enhanced organizational performance. For instance, Jiang, Lepak, Hu, and Baer (2012) showed the effects of HR systems on proximal organizational outcomes (human capital and motivation) and distal outcomes (voluntary

turnover, operational outcomes, and financial outcomes). Conversely, my dissertation shows that HPWS may be a mediator linking recruiting advantages and better organizational outcomes. Because HPWS is attractive to most people, it can increase the number of applications. This may give organizations a better chance to select qualified applicants than any other HR systems. Thus, organization's high performance may be at least partially due to improved recruiting.

Future Research

Future research may improve on the approach of the present study. First, although an HR system was tested in terms of recruiting performance in this research, future research should explore perceptions of employees on HR systems in predicting employee attitudes or behaviors. Most bundling studies have investigated the determinants and outcomes of HPWS within organizational settings. For instance, organizational commitment plays a mediating role between HPWS and department performance (Messersmith, Patel, & Lepak, 2011). Although I tested the effect of HPWS in terms of recruiting performance with student samples, future research should examine how the interaction between vocational interest and HPWS influences individual level outcomes.

Associated with the first point, because human resource (HR) bundles are composed of an array of HR practices, which are expected to be synergistic and complementary (Dyer & Reeves, 1995), theoretically there are numerous ways of bundling. For instance, Perry-Smith and Blum (2000) identified a work–family HR bundle because this bundle is composed of HR practices such as "help with day care costs," "paid parental leave," and "flexible scheduling." Although I tested the HPWS as a focal independent variable, future research may test other forms of HR systems relating to individual differences.

Second, my testing about the vertical fit was based on the fit between HR systems and organizational culture. Because their combinations of vertical fit can be numerous, future research might extend the present findings by using alternative factors such as business strategy and HR strategy in conjunction with HPWS. Toh, Morgeson, and Campion (2008) suggested that HR choices are related to the context within which organizations operate. Their study provided evidence that organizations maintain some level of fit between their HR systems and their espoused values and organizational structure, and thus extended our knowledge of the factors influencing the kinds of HR bundles organizations use. Perhaps the perception of fit might be different from person to person.

Lastly, I used vocational interest as a moderator. However, future research could use other moderating variables, such as personality. During the past decade, a sizable body of research (e.g., Larson, Rottinghause, & Borgen, 2002) has demonstrated significant associations between vocational interests—typically conceptualized and measured as Holland's (1997) realistic, investigative, artistic, social, enterprising, and conventional (RIASEC) interest domains—and the personality traits of the big five model (Digman, 1990; Goldberg, 1993). Although the vocational interests and the big five are closely related, they are in different domains. Thus, future research can extend this study by employing personality measures as a moderator in the relationship between HR systems and organizational attractiveness.

Managerial Implications

This paper is of value to managers. Although many studies show that HPWS can be useful to organizations, they are costly to facilitate especially compared to cost-reducing bundles. This paper implies that the recruiting value of HPWS is not as high if they need

lower social persons. According to Holland's theory, a person whose primary type is social is more congruent with a sociable environment and progressively less congruent with environments that are artistic and enterprising, investigative and conventional, and realistic, as indicated by the distances of these five types from the realistic position on the hexagon (Edwards, 2008). Accordingly, the lower social person might be the higher realistic type. If companies believe that low in social individuals fit better with them than any other type, they may consider adopting non-HPWS because these systems not only save money, but also are not as objectionable to low in social people. In sum, this paper allows managers to customize their HR systems based on their targeted applicants.

However, I found a strong main effect of high-performance work systems---it attracts most people. Although HPWS is expensive to facilitate, it is powerful in attracting applicants. Thus, organizations should consider using HPWS in recruiting if they don't have any particular preference for the applicant's nature or they want to increase application numbers.

These findings suggest a priority list among those HR practices that are most influential in determining an organization's attractiveness with different vocational types. For instance, I have already shown that the practice of "higher communication/socialization skills required" is more attractive to a higher social person than to a lower one. However, other HR practices do not differentiate the preference of HR systems for the social person. This implies that a company can implement the communication practice as a start rather than implementing an entire HR system (i.e., HPWS) to save money. It also suggests that this should be highlighted in recruiting material.

Finally, although I failed to support the vertical fit between HR systems and organizational culture, this paper allows managers to think about the potential synergy between HR systems and any other contextual factors to be more synergistic.

Limitations

Despite the positive findings, the current research also has several limitations. First is the use of manipulated scenario versions. The different types of HR systems and organizational culture are described by using my own developed statements. Although they are based on extensive existing academic writings, they should be validated as an appropriate description.

The second limitation is that my sample comprises only undergraduate students. Even though most of the participants in this study were seniors and juniors, prime candidates for recruiting, it is true that their understanding of HR systems and culture is limited. Ideally, sampling should be done with MBA students or employees who are working. In addition, it is possible that those seeking higher education will be more attracted to HPWS than other employee types. Future research need to sample from various sources including less educated workers.

The third limitation is that majority of sample in this study are business students. Of the 206 respondents in survey A, 65% were business majors. For sample B (n = 99), 54% were business majors. In terms of sample C (n = 97), 60% were business majors. Students who are majoring same subject might be similar in looking for future work places. Future research should consider diversified samples in terms of major and even college types to include something like community college.

Finally, scenarios used in this study were paper rather than more engaging materials such as videos and recruiting web pages. Perhaps I couldn't find a main effect of culture type because of this. People may not differentiate the comparison of culture types by just reading simple descriptions of innovative and bureaucratic cultures. Organizational culture might be

more vivid by more visual cues. Future research should consider different techniques in manipulating organizational features.

Conclusion

Previous bundling literature on the effectiveness of high-performance work systems has largely neglected the role of individual differences. Although some scholars have raised the issue of the potential dark side of HPWS (e.g., Cappelli & Neumark, 2001; Jensen et al., 2013), their focus is quite different from the one adopted in the current research. Although few hypotheses were supported, this study shows that HPWS are at least in some cases more effective when they are aligned with person-level vocation type in the context of recruiting. Given the prevalence of system-level studies in SHRM, my paper is also of value by suggesting new perspectives to test the practice level of the system. I hope this paper contributes to the research area of HR bundling by providing fresh perspectives in discovering desirable uses of HR systems for scholars and practitioners.

APPENDIX 1.

HR Bundles and Their Practices by Sub-Function

| HR Bundle | HR Sub- Function | HR Practice |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Cost Reduction (Arthur, 1992) | Staffing | Low skill requirementsJob tasks narrowly defined |
| | Performance Management Compensation and Benefits Training and Development Employee Relations | Limited Benefits Relatively low wages Incentive-based Limited training efforts Very little employee influence over "management" decision No formal employee complaint/grievance mechanisms Little communication/socialization efforts Intense supervision/control |
| 2. Commitment Maximizing (Arthur, 1992) | Staffing | Broadly defined jobs High percent of skilled workers |
| | Performance Management Compensation and Benefits Training and Development Employee Relations | More extensive benefits Relatively high wages All salaried/stock ownership More extensive, general skills training High level of employee participation/involvement Formal dispute resolution procedures (nonunion firms) Regularly share business/economic information with employees Self-managing teams |
| 3-1. High-Performance Work System (Huselid, 1995) | Staffing Performance Management Compensation | Comprehensive employee recruitment and selection procedures Performance management systems Incentive compensation |
| | and Benefits Training and | Extensive employee involvement |

| HR Bundle | HR Sub- Function | HR Practice |
|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3-2. High-Involvement or High-Performance Work System (Bae, Chen, Wan, Lawler, & Walumbwa, 2003) | Development Employee Relations Staffing | and training |
| | Performance Management Compensation and Benefits | Reliance on pay-for-performance (significant contingent or 'at risk' |
| | Training and Development Employee Relations | pay) Extensive training and development of these employees Significant delegation of authority to lower-level employees (empowerment) Broadly defined job responsibilities and employee participation in non-work aspects of organizational decision making |
| 3-3. High-Performance Work Practices (Kochan & Osterman, 1994) | Staffing | Job rotation |
| | Performance Management Compensation and Benefits Training and Development Employee Relations | Self-directed work teams Problem-solving groups/quality circles TQM |
| 3-4. High-Performance Work Practices (MacDuffie, 1995) | Staffing | Job rotation Hiring criteria, Current job vs. learning Status barriers |
| | Performance Management Compensation and Benefits Training and Development | Contingent pay |
| | Employee | Suggestions received or |

| HR Bundle | HR Sub- Function | HR Practice |
|------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------------------|
| | Relations | implemented |
| | | Self-directed work teams |
| | | Problem-solving groups/quality |
| | | circles |
| 4 W 1 E '1 HD D 11 | a. cc. | ■ TQM |
| 4. Work-Family HR Bundles (Perry-Smith & Blum, 2000) | Staffing | |
| | Performance | |
| | Management | |
| | Compensation | On-site day care |
| | and Benefits | Help with day care costs |
| | | Elder care assistance |
| | | Information on community day care |
| | | Paid parental leave Unneid parental leave |
| | | Unpaid parental leaveMaternity or paternity leave with |
| | | reemployment |
| | | Flexible scheduling |
| | Training and | Initial weeks training for |
| | Development Development | production, supervisory, & |
| | Development | engineering employees |
| | | Hours per year after initial training |
| | Employee | 8 |
| | Relations | |
| 5. Best Practices (Arthur, 1992) | Staffing | |
| | Performance | |
| | Management | |
| | Compensation | Extensive benefits |
| | and Benefits | High wages |
| | | Stock ownership |
| | Training and | Extensive skills training |
| | Development | |
| | Employee | Employee Participation |
| | Relations | • Formal dispute resolution |
| | | Information sharing Solaried yearlers |
| | Other | Salaried workers Broadly defined jobs |
| | Other | Broadly defined jobsHighly skilled workers |
| | | riigiiry skined workers |
| | | Self-managed teams |
| Practices (Youndt et al., | Staffing | Self-managed teamsPhysical skills |
| | J | Physical skills |
| 6. Administrative HR Practices (Youndt et al., 1996) | Staffing Performance Management | <u> </u> |

| HR Bundle | HR Sub- Function | HR Practice |
|----------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------|
| | and Benefits | Individual incentives |
| | | Internal equity |
| | Training and | Training for policies and procedures |
| | Development | |
| | Employee | |
| | Relations | |
| 7. Human-Capital- Enhancing HR Practices (Youndt et al., 1996) | Staffing | Selective staffing |
| | Performance | Developmental |
| | Management | Behavior-based |
| | Compensation | Salary |
| | and Benefits | Skill-based |
| | | Group incentives |
| | | External equity |
| | Training and | Comprehensive training |
| | Development | Technical skills |
| | | Problem-solving skill |
| | Employee | |
| | Relations | |
| 8. High-Commitment Practices(Wood & de Menezes, 1998) | Staffing | Internal recruitment |
| | Performance | Individual written assessment |
| | Management | produced periodically by |
| | | management or supervisors |
| | Compensation | Monthly pay |
| | and Benefits | Cashless pay |
| | | Merit pay |
| | | Financial involvement (e.g., profit- |
| | | sharing, employee share option) |
| | | Welfare facilities (food, sick, |
| | | pension, shorter working week) |
| | Training and | Multi-skilling |
| | Development | Human relations skills (e.g., social skills and team working skills) as a |
| | | selection criterion |
| | г | Training needs analysis |
| | Employee Relations | Direct communication (e.g., quality circles, team briefing, top management briefing) |
| | | No clocking in |
| | | Information disclosure (labor |
| | | productivity, Salary costs, Internal investment, Financial position of the establishment) |

| HR Bundle | HR Sub- Function | HR Practice |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9. Work/Family Programs (Osterman, 1995) | Staffing | |
| | Performance Management | |
| | Compensation and Benefits | Day care services On-site day care paid or subsidized by employer Off-site day care paid or subsidized by employer Day-care subsidies paid by employer to employees Day-care donations to local providers in return for slots |
| | | for employees 5) Day-care referral |
| | Training and Development Employee Relations | 5) Day-care referrar |
| 10. Calculative Practices (Gooderham, Nordhaug, & Ringdal, 1999) | Staffing | |
| | Performance Management Compensation and Benefits Training and Development Employee Relations | Performance appraisals Formal evaluation Individual rewards |
| 11. Collaborative Practices (Gooderham et al., 1999) | Staffing | |
| | Performance Management Compensation and Benefits Training and Development | |
| | Employee Relations | Strategy briefingsWritten mission statementCommunication policy |
| 12. Developmental HR Practices (Kuvaas, 2008) | Staffing | Career development |
| | Performance Management Compensation | Performance appraisal |

| HR Bundle | HR Sub- Function | HR Practice |
|------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | and Benefits Training and Development Employee Relations | Training opportunities |
| 13. Empowerment- Enhancing Bundles (Subramony, 2009) | Staffing | Job enrichment (skill flexibility, job variety, responsibility) |
| (constant), 2007) | Performance Management Compensation and Benefits Training and Development | |
| | Employee Relations | Employee involvement in influencing work process/outcomes Formal grievance procedure and complaint resolution systems Self-managed or autonomous work groups Employee participation in decision making Systems to encourage feedback from employees |
| 14. Motivation-Enhancing Bundles (Subramony, 2009) | Staffing | Opportunities for internal career mobility and promotions |
| | Performance Management | Formal performance appraisal process |
| | Compensation and Benefits | Incentive plans (bonuses, profit-sharing, gain-sharing plans) Linking pay to performance Health care and other employee benefits |
| | Training and Development Employee Relations | |
| 15. Skill-Enhancing Bundles (Subramony, 2009) | Staffing | Job descriptions/requirements generated through job analysis Recruiting to ensure availability of large applicant pools Structured and validated tools/procedures for personnel selection |

| HR Bundle | HR Sub- Function | HR Practice |
|-----------|---------------------|----------------------------------------------|
| | Performance | |
| | Management | |
| | Compensation | |
| | and Benefits | |
| | Training and | Job-based skill training |
| | Development | |
| | Employee | |
| | Relations | |

APPENDIX 2.

Classifying Similar Bundles Based On Their HR practices

| "Cost-Reducing" Type Bundles | "Performance-Enhancing" Type Bundles |
|-------------------------------------------------|--------------------------------------------------------------|
| Cost Reduction | Commitment Maximizing |
| Administrative HR Practices | High Performance Work Systems |
| Calculative Practices | Work-Family HR Bundles |
| | Best Practices |
| | Human-Capital-Enhancing HR Practices |
| | High-Commitment Practices |
| | Work-Family Programs |
| | Collaborative Practices |
| | Developmental HR Practices |
| | Empowerment-Enhancing Bundles |
| | Motivation-Enhancing Bundles |
| | Skill-Enhancing Bundles |

APPENDIX 3.

Standardized HR Practices of Cost-Reducing HR Bundle (Non-HPWS) and

Performance-Enhancing HR Bundle (HPWS)

| HR Sub- Functions | Non-HPWS | HPWS Job tasks broadly defined Dynamic and challenging job Promotion based on performance | | |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Staffing | Job tasks narrowly defined Straightforward and stable job Promotion based on seniority | | | |
| Performance Management | Administrative useAppraisals are not used for raises | Developmental useAppraisals are used for raises | | |
| Compensation and Benefits | Relatively low wages and benefits Pay variation is low among people High base-pay portion | Relatively high wages and benefits Pay variation is high among people Low base-pay portion | | |
| Training and Development | Limited training efforts | Extensive training | | |
| Employee Relations | Only managers make a decision Little communication/socialization needed Low collaboration needed | High level of employee participation Much communication/socialization needed High collaboration needed | | |

APPENDIX 4.
Summary of Scenario Versions and Survey Questions

| | # of items | A | В | C |
|--------------------------------------------|---------------|----|-----|-----|
| Non-HPWS (Administrative or Cost-Reducing) | 4 | | X | |
| HPWS | 4 | | | X |
| Bureaucratic Culture | 4 | | X | |
| Innovative Culture | 4 | | | X |
| Vocational Interest (RIASEC model) | 48 | X | X | X |
| HR Practices in Non-HPWS | 48 | | X | |
| HR Practices in HPWS | 48 | | | X |
| Non-HPWS x BC | 4 | X | | |
| Non-HPWS x IC | 4 | X | | |
| HPWS x IC | 4 | X | | |
| HPWS x BC | 4 | X | | |
| Demographics | 9 | X | X | X |
| Total questions | | 73 | 113 | 113 |

APPENDIX 5.

Survey Scenarios

High-performance work systems (HPWS)

"Your job will be a set of broadly defined goals, which require a wide variety of skills. Your promotion will not be based on your seniority but on your performance; that is, we value your abilities, creativity, and hard work. You won't be bored because your job is dynamic and challenging. You will be promoted as long as you maintain a high level of performance.

"Our performance management is for developmental use. Performance appraisals are used for raises and many decisions. We pay you high wages and extensive benefits compared to other companies. We emphasize high pay variation among employees (i.e., many employees are paid different amounts). Most of your pay is performance-based, which means your salary is volatile because your pay is significantly contingent on your and the organization's performance. Because your job is complex and needs high skills, we offer you extensive training for general and specialized skills.

"Finally, we expect you to participate in 'management' decisions. We require that you have great communication/socialization skills with other employees. We not only care that your job is done successfully, but also encourage you to be involved in others' jobs.

"In sum, our company gives you high wages and extensive training and allows you to define the best way to do your job. We believe our HR system is the best way to increase employee creativity and performance. Many employees love our company because they are challenged and have autonomy in their job. This is a big edge for our company."

Non-HPWS

"Your job will be a set of narrow tasks, which require only basic skills. Your promotion will not be based on your performance, but on your seniority; that is, we value your loyalty. Your job is low stress because it is straightforward and stable. You will be promoted over time.

"Our performance management is generally not for developmental but for administrative use. Performance appraisals are not used for raises or many decisions. Although we pay you competitive wages and benefits compared to other companies, others may pay more. We emphasize low pay variation among employees (i.e., everyone is paid a similar amount). Most of your pay is base pay, which means your salary is stable because your pay is not contingent on your or the organization's performance. Because your job is straightforward and needs only basic skills, we offer you little training. However, we will train you on company policies and procedures.

"Finally, we don't expect employees to influence 'management' decisions. We do not require you to have great communication/socialization skills with other employees. We only care that your job is done appropriately and efficiently, with supervisors helping you do this.

"In sum, our company gives you competitive wages, requires minimal training, and provides you with clear directions on how to perform your jobs. We believe our HR system is the best way to achieve process improvement and efficiency. Many employees love our company because they have little stress related to job performance, and they have great job stability. This is a big edge for our company."

APPENDIX 5. (Continued)

Survey Scenarios

<u>Innovative culture</u>

"Our company promotes adaptability and flexibility. We believe our employees maximize their performance when they have more autonomy in doing their jobs, so formal procedures defined by rules and regulations are minimized. This reduces stagnation and apathy. Thus, our culture discourages attention to detail and rule-following, and instead encourages experimenting and risk-taking. We also encourage behaviors such as self-confidence and adaptability to accomplish growth. We evaluate your performance based on criteria such as innovation and flexibility. In summary, our culture ultimately cultivates innovation and creativity."

Bureaucratic culture

"Our company promotes stability and consistency. We believe our employees maximize their performance when they have clear job descriptions and procedures that are formally defined by rules and regulations. This reduces confusion and conflict among tasks. Thus, our culture discourages experimenting and risk-taking, and instead encourages attention to detail and rule-following. We also encourage conformity and predictability to accomplish efficiency. We evaluate your performance based on criteria such as precision and timeliness. In summary, our culture ultimately cultivates stability and reliability."

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