

EXPLAINING THE RELATIONSHIP BETWEEN THE HR SYSTEM AND  
FIRM PERFORMANCE: A TEST OF THE STRATEGIC HRM FRAMEWORK.

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## ABSTRACT

Recent meta-analytic treatments of the Strategic Human Resource Management literature suggest a relationship between the adoption of 'high-commitment' HR practices and organization level performance outcomes (Combs, Lui, Hall & Ketchen, 2006). However, there is considerable variability in the manner in which the HR system construct is conceptualized and measured (Arthur & Boyles, 2007; Delaney & Huselid, 1996). Further, relative little attention has been given to how these systems of HR practices operate to influence organizational outcomes (Ostroff & Bowen, 2000). Drawing on the extant SHRM literature, the present study attempts to lend clarity to these issues by specifying and assessing a number of unique measures of the HR system. Several attitudinal, motivation and behavioral employee outcomes are also identified and assessed as possible mediators between the HR system measures and organizational outcomes. An integrated model proposing relationships both among these measures and their effects on various organizational outcomes is offered and tested.

Data obtained from 202 hotel locations provided mixed support for the proposed model of relationships. However, results generally support the relationships between measures of the HR System and important organizational outcomes. Findings also reinforce the utility of expanding the measurement of the HR system beyond the formally established HR programs, the need to better understand intra-organizational variability in HR systems along functional lines and the challenges and opportunities inherent in multi-

respondent designs. Finally, the failure to demonstrate the mediating role of the specified human capital characteristics in HR's relationship with firm performance presents a continued challenge to future research to effectively model this relationship.

*Dedicated to*

James L. Herdman

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## CHAPTER 1: INTRODUCTION

Historically, research in the human resource management domain has focused on the relationship between single HR practices and individual level outcomes (Wright & Boswell, 2002). However, the last two decades are marked by growing attention to the study Strategic Human Resource Management (SHRM). This line of research investigates bundles, or sets, of high commitment work practices and their relationship to firm level outcomes. Positioned theoretically within the Resource Based View (RBV) of the firm, practices such as selection, training, teamwork, participation and performance appraisal are argued to be capable of creating strategically important human capital, behavior and attitudinal outcomes among employees (Barney, 1991, 1995, 2001). These employee centered outcomes, in turn, are argued to result in improved organizational functioning and performance (Barney, 1991, 2001; Cappelli & Singh, 1992; Wright & McMahan, 1992).

Empirically, there is growing evidence that a positive relationship exists between the deployment of these systems of HR practices and firm level outcomes. Recent meta-analytic treatments of the literature suggest a relationship between adoption of these systems of practices and organization level outcomes, including profitability, productivity, and turnover (Combs et al., 2006;  $\rho = .19$ ,  $SD\rho = .12$ ). However, our capacity to draw firm conclusions regarding the strength and nature of this relationship is limited in several important ways.

First, there is considerable variability in the manner in which the HR system construct is conceptualized and measured (Arthur & Boyles, 2007; Boselie, Dietz & Boon, 2005; Wall & Wood, 2005). This variability in the measurement of the HR system calls

into question the relative validity of various approaches and makes across study comparisons of results based on different measures difficult. The present study attempts to lend needed clarity to this issue by carefully specifying and assessing several different measures of the HR System. Within this paper, each of the measures is argued to provide important information about the HR system. An integrated model is offered hypothesizing and testing a set of relationships among these measures. The relationship between these HR system measures and organizational level employee, intermediary and distal outcomes are also hypothesized. Because no study to date has simultaneously captured these multiple measures, this effort may yield insight into the processes through which HR practices operate to influence organizational performance unavailable in research to date.

Further, each HR System measure is assessed using independent respondent groups within each organization positioned to provide accurate reports of the measure in question (Arthur & Boyles, 2007). This methodology addresses criticism that the literature has been dominated by survey methodology employing single respondents (Wall & Wood, 2005). Additionally, though the presence and application of HR programs may vary within organizations according to job function, past research has required respondents to draw global conclusions regarding HR programs across sometimes very large and potential diverse organizations. This may mask important intra-organizations differences in tactical approaches to the deployment of HR practices in support of different job functions (Gerhart, Wright, McMahan, 2001; Gerhart, Wright, McMahan & Snell, 2000; Huselid & Becker, 2000; Wright, Gardner, Moynihan, Park, Gerhart & Delery, 2001). To mitigate this in the present study, respondents were asked to provide separate assessments of the HR system for different functional areas within the organization. Because a growing

literature argues against the universal application of high-commitment HR practices in favor of a differentiated approach depending on the strategic characteristics of various job functions (Lepak & Snell, 1999; Lepak & Snell, 2002; Huselid, Beatty & Becker, 2005), this design provides the opportunity to test these assumptions.

Finally, relative little attention has been given to how the HR system operates to influence organizational outcomes (Ostroff & Bowen, 2000, Bowen & Ostroff, 2004). While it is argued that HR practices impact firm level outcomes through their impact on the human capital characteristics of the firm, theoretic and empirical work investigating these mediating mechanisms has lagged behind studies demonstrating the main effects between HR System measures and firm outcomes (Bowen & Ostroff, 2000; Ostroff & Bowen, 2004 ; Wright, Dunford & Snell, 2002). The lack of empirical attention to these mediating mechanisms fails to provide a rigorous test of the theoretical assumptions underpinning the SHRM literature. Therefore, a number of theoretically important employee outcomes– including both attitudinal/motivational and behavioral outcomes are measured and tested as potential mediating mechanisms through which HR systems affect organizational performance. Together, the present study attempts to shed additional insight into the process mechanisms through which HR systems impact firm outcomes by testing a more fully specified model of the relationship between the HR system and organizational outcomes.

## CHAPTER 2: LITERATURE REVIEW

### *The Resource Based View of the Firm*

The resource-based view of the firm (RBV) has served as the principle theoretical rationale for understanding HR's role as a strategic asset of the firm (Boselie et al., 2006; Wright & McMahan, 1992; Wright et al., 2001). The RBV stands in contrast to economic and industry based models that assume homogenous and perfectly mobile resources amongst competing firms and, therefore, ignore firm level characteristics in examining performance differences. Instead, the RBV is grounded in the assumption that competitive advantage is a product of idiosyncratic attributes internal to the firm. Therefore, the RBV focuses very specifically on variability in firm level characteristics. This is consistent with research suggesting that the variance in firm performance, as measured by rate of return, is best explained at the firm level rather than industry level (Rumelt, 1991). In this firm level focus, the RBV attempts to explore the 'black box' of the firm by identifying those resources and capabilities unique to the firm that account for variance in performance across firms (Amit & Shoemaker, 1993; Barney, 1991; Wernerfelt, 1984). This perspective places an emphasis on factors under the control and direction of the managers (Carmeli & Tishler, 2004). Firm managers capable of developing and evolving these processes and resources can develop competitive advantage. When these resources rise to the definition of being valuable, rare, and not easily imitated or substituted, this advantage can be sustained (Barney, 1991, 2001).

The role of the firm's human capital characteristics, broadly defined as the nature and extent of the employee's potential contribution to the firm (Wright & McMahan,

1992), has been long recognized as a potential value creating 'resource' capable of resulting in sustained competitive advantage (Barney, 1991). A resource may be thought of as valuable to the degree that it enables a firm to successfully exploit opportunities and neutralize threats (Amit & Shoemaker, 1993). The capabilities of the firm's workforce figure centrally in this ability. Moreover, these human capital characteristics are embedded in complex social systems and are not readily observed or replicated (Barney, 1991; Barney, 2002). Given the theorized role of human resource practices in shaping the human capital characteristics of the firm, it is not surprising that the RBV has become the dominant theoretic basis for the study of SHRM (Boselie et al., 2005; Wright et al., 2001).

### *Strategic Human Resource Management*

Historically, research on human resource practices has been conducted primarily at the individual practice level in which HR practices are studied in isolation and their impact limited to the individual outcomes such as employee attitudes and performance (Wright & Boswell, 2002). However, there has been increasing attention to the impact of groups or bundles of practices and their relationship to firm level performance. These bundles or sets of practices, often referred to as high-commitment or high-performance work practices (Huselid, 1995), are generally thought to influence firm performance through three core mechanisms: 1) enhanced employee commitment and motivation 2) enhanced human capital pools in terms of employee skills and abilities and 3) through behavioral outcomes such as information sharing and coordination (e.g. Ferris, Hochwarter, Buckley, Harrell-Cook & Frink, 1999; Ostroff & Bowen, 2000; Boxall & Purcell, 2004; Wright et al., 2001). While the idea of systems of HR practices producing, through selection and training, direct

benefits to the firm through the enhanced employee skills and abilities can be readily understood, the mechanisms through which behaviors and attitudes are influenced in support of competitive advantage merit further discussion.

A number of frameworks have been offered suggesting a relationship between the HR system and these outcomes. Walton (1985), for example, described high-commitment work practices as based on an underlying conception of employees as critical assets to be developed rather than as disposable factors of production. The 'high commitment systems' associated with these assumptions includes management practices such as job enrichment, flexibility, participation, team working and minimization of status differences among employees. These practices are positioned against the Tayloristic assumptions of narrow task assignment, control and limited discretion and are purported to result in higher levels of employee commitment and, therefore, greater intrinsic motivation (Walton, 1985; Pfeffer, 2005; Wood & Albanese, 1995).

Consistent with the non-Tayloristic approach, though less reliant on the employee commitment as the central process mechanism, are Lawler's (1986, 1992) 'high-involvement management' and Huselid's (1995) 'high performance work practices'. Like the high commitment systems, these practices operate through the intermediary mechanism of enhanced attitudinal and motivation outcomes as well as by providing the opportunity for greater employee contribution (Ostroff & Bowen, 2000; Boselie et al., 2005). Programs such as employee participation, teams, and information-sharing more fully leverage the human capital of the firm by providing opportunities for employees to invest discretionary behavior in a manner supportive of organization success. Finally, HR systems are believed to impact organizational performance through enhanced structural

efficiencies, coordinative behavior and enhanced communication (Ichniowski, Kochan, Levine, Olson & Strauss, 1996). These programs include employee participation or voice mechanism, teams and information-sharing (Ostroff & Bowen, 2000; Boxall & Purcell, 2003). Therefore, while the specific HR practices associated with high-commitment, high-involvement or higher performance work practices are slightly variable, they hold the common assumption that HR practices impact the organization's employees in a way that produces unique skill, attitudinal and behavioral responses among employees. While no consensus exists in SHRM research regarding the specific practices associated with these systems, following Pfeffer (2005), the term 'high commitment system' is used throughout the paper and is consistent with and inclusive of those practices associated with both high involvement and high performance work systems.

A second assumption inherent in SHRM research is the idea of management of mutuality, or the alignment of interest, as a key objective of the HR system (Boswell, 2006; Boxall & Purcell, 2003). Bowen & Ostroff (2004) invoke the notion of the 'strong situation' in offering a framework for the understanding of the role of the HR system in developing the requisite attitudinal, behavioral and human capital outcomes important to organizational performance. Situational characteristics, in a strong situation, dominate otherwise idiosyncratic perceptions of the environment and serve as the primary determinant of affective and behavioral responses (Mischel & Mischel, 1976; Ross & Nisbett, 1991). The HR System, according to Bowen & Ostroff (2004), has the capacity to create a strong situation when the practices are salient, consistently applied and mutually reinforcing. When this occurs, an HR System will create uniform aggregate perceptions and behavioral responses by organizational members. These responses can be important to

organizational functioning and, when aligned in support of the organizations' strategic objectives, important to their ability to both develop and sustain competitive advantage. For this reason, the presence of HR programs, their application and their salience to employees all become critical dimensions of the HR System.

Finally, it is important to note that the relationships between these practices and employee outcomes are not mutually exclusive and can be synergistic and reinforcing. For example, selection may focus on both the immediate acquisition of important skills and abilities resulting in the enhancement of the organization's human capital. These practices may also be targeted at selecting individuals who share organizationally important values necessary to building long-term employee commitment to the organization (Schneider, 1987; Kristof-Brown, Zimmerman & Johnson, 2005). Likewise, organizational training and development initiatives would directly influence immediate human capital outcomes as well as enhance employee commitment and motivation.

Therefore, implicit in the study of SHRM is the suggestion that HR practices should be considered as a system—i.e. a bundle of practices whose impact exceeds specific practices in isolation (Becker & Huselid, 1998; Huselid, Jackson & Schuler, 1997). As Guzzo & Noonan (1994) argue, it is the collective interaction of HR Practices that affect employee and, ultimately, organizational performance. This suggests that it is theoretically appropriate to focus on single comprehensive measures of the HR System. Evidence seems to support this idea as sets of HR Practices, when reduced to a single index, outperform individual practices (Combs et al., 2006; Ichniowski et al., 1996). Further, several researchers have argued that different combinations of various practices may have equivalent performance consequences (Delery & Doty, 1996). These system level

representations of sets of HR practices allows for this underlying variability. Finally, a single index is consistent with the theoretical logic of the HR System as a strategic asset of the organization (Becker & Huselid, 1998).

### *Strategic Human Resource Management and the Resource Based View of the Firm*

As argued by Wright & McMahan (1992) and Cappelli & Singh (1992), the SHRM system becomes a resource, or strategic asset of the firm, capable of producing competitive advantage in so far as it produces unique and strategically important capabilities among the firm's workforce (Wright & McMahan, 1992; Wright et al., 2001; Ostroff & Bowen, 2000; Ichniowski et al., 1996). These include enhanced skill, motivation and behavioral characteristics of the employees. Additionally, because these practices are treated as systems, they bring with them interdependencies, unique historical paths and synergistic effects that are causally ambiguous (Barney, 2001; Lado & Wilson, 1994; Wright & McMahan, 1992; Wright et al., 2001). Moreover, the HR system, like the resultant human capital capabilities, is embedded in a complex social system that precludes replication (Barney, 1991; Barney, 2002).

Nevertheless, one of the challenges confronting empirical tests of the RBV as a theoretic basis for SHRM research is the need to assess the characteristics of the organization's workforce. It is not enough to demonstrate the relationship between superior firm performance and the presence of systems of high commitment HR Practices. A more rigorous test of the RBV requires both establishment of the relationship between HR Practices and the desired employee outcomes and a relationship between these outcomes and the organization's performance. Moreover, the main effect of HR Practices

must be shown to operate through these employee outcomes, through tests of mediation. Stated together, in addition to direct effects through improved processes, it must be shown that these relationships pass from practices through people to organizational level performance. Testing these relationships in this manner speaks directly to understanding the HR System as a source of value creation in the development of strategically important human capital characteristics. Few studies have endeavored to test these relationships simultaneously. Indeed, unlocking this ‘black box’ which explains HR’s contribution to the firm’s sustained competitive advantage has been described as “the most pressing theoretic challenge facing SHRM” (Becker & Huselid, 2006, pg. 899). For this reason, many have argued that though SHRM is commonly positioned within the RBV, it has not experienced a rigorous test of its arguments (Ferris et al., 2001; Ferris, Hall, Royle, & Martocchio, 2004; Wright et al., 2001; Becker & Huselid, 2006).

The intermediary mechanisms between HR practices and firm performance—employee skills, attitudes/motivations and behaviors—despite their conceptual importance, have received relative little empirical attention within SHRM research. Most research has focused exclusively on the relationship between reports of the presence of practices and a variety of organizational outcomes. Indeed, in a recent qualitative review of the extant literature on SHRM, only 20 of the 105 studies reviewed investigated the influence of the practices on proximal employee outcomes (Boselie et al., 2005). Likewise, meta-analytic review of the literature demonstrated that only 23 of the 165 effect sizes reported address these proximal employee outcomes (Herdman, 2007). When studied, they are often studied in isolation as dependent variables or individual mediators rather than within a more fully specified system of mediating mechanisms. This short-coming has been noted

in several reviews (e.g. Becker & Huselid, 2006; Wright et al., 2001; Guest, 1997) and has been the subject of recent theoretical developments (Bowen & Ostroff, 2004). Thus, the need to both more fully understand how the HR System impacts these human capital characteristics and the nature of their mediating role is of central importance in the larger literature and a focus of the present study.

### *Measures of the Human Resource Management System*

One of the long recognized limitations in the SHRM is the lack of a clear definition of the HR System construct. Qualitative and meta-analytic review of the literature reveals considerable variability in how the HR System construct is defined and measured (e.g. Arthur & Boyles, 2007; Boselie et al., 2006; Herdman, 2007). Arthur and Boyles (2007) provide a useful discussion of this issue and propose a framework for more clearly defining HR System constructs. Specifically, they draw on existing literature and identify four unique construct definitions—HR Principles, HR Programs, HR Practices and HR Perceptions that have been used to measure the HR system. HR Principles are high level value and attitudinal orientations of the organization’s leadership regarding the management of employees; HR Programs are objective reports by key organizational informants of the formal HR Programs in place; HR Practices are also reports of the programs, but differ in so far as they are targeted at measuring their actual use by line level managers and supervisors; finally, HR Perceptions refer to employee experiences with and perceptions of the HR Practices. While all these measures have been used to assess the HR System within SHRM research, interpretations of empirical findings are often made without regard to the underlying conceptualization (e.g. Combs et al., 2006).

In addition to their meanings, Arthur and Boyles (2007) present arguments that the validity of these conceptualizations is reliant on targeting appropriate respondents. Because SHRM research has been dominated by single respondent methodology, most often the senior HR person within the organization (Wall & Wood, 2005), the ability to both more clearly define HR System measures and target appropriate respondent groups to provide assessments represents an important advance. This will enable sounder research designs, validity assessments and ultimately practitioner application. Improved conceptualization and measurement of the HR System construct will also allow for the more careful establishment of the links between these measures and the theorized intermediary human capital characteristics—a necessary step in the establishment of the broader mediating relationships. In the following section, each of these measures is described along with relevant empirical findings.

### *HR Principles*

HR Principles are conceptualized as organization leaders' general view of the strategic importance of their human assets. Early work by McGregor (1960) delineates two basic attitudinal orientations of managers regarding their employees and two corresponding managerial approaches. The first, Theory X suggests a managerial attitude that employees are generally unmotivated and largely incapable of self-directed behavior. These attitudinal assumptions imply that employees are largely disposable and interchangeable and manifest operationally in management approaches characterized by rigid hierarchies, narrowly defined jobs and a command and control management. This is consistent with the Tayloristic approach referenced earlier. Conversely, the Theory Y management approach reflects an underlying managerial attitude that employees are

capable of self-motivation, learning and direction as well as creativity and discretionary initiative in circumstances where they are committed to the organization. Theory Y is consistent with the preceding discussion of high commitment management practices in its suggestion that enhanced commitment is the primary mechanism through which effort and performance are enhanced (McGregor, 1960; McGregor, 1967).

This high level distinction between the basic assumptions of managers related to the nature of the employee-organization relationship has been further developed by Tsui and colleagues (1995, 1997). They propose a framework of possible organization-employee employment relationships or “modes”. Of specific interest here is the distinction between what she refers to as “mutual investment” and “quasi-spot contract” modes of employment. In the mutual investment mode employers invest in the employee in the form of extended consideration of the employee’s well-being, career development and providing employment security. In exchange, the employee develops a similar commitment, a willingness to engage in behavior supportive of firm functioning but not specifically required in their jobs. Conversely, a quasi-spot contract is so named to connote “a circumscribed relationship” (Tsui et al, 1997, pg. 1092) in which the relationship is characterized by a short-term orientation, narrowly defined work and task specific economic rewards. Though not tested at the organizational level of analysis, support was found for the relationship between supervisory reports of a mutual investment mode and employee attitudes and performance (Tsui et al., 1997).

Considered in relationship to organizational level outcomes, a great deal has been written in the practitioner literature suggesting that a distinguishing feature of organizations that achieve sustained competitive advantage is the more effective

deployment of their human assets (e.g. O'Reilly & Pfeffer, 2000). Though most often anecdotally derived, this process is suggested to begin with a fundamental valuing of and investment in employees by organizational leaders. While this line of reasoning has a rich theoretic history (e.g. Argyris, 1964; Likert, 1961, 1967; McGregor, 1960), qualitative examination of the specific items used in SHRM research reveal few studies that seek to isolate and measure this basic beliefs of organizational leaders. When done, measurement of leader values is most often accomplished by attempting to capture the degree to which employees are valued and/or considered strategically important by direct query of the senior HR executive (for example see Bae & Lawler, 2000 and Bennet, Ketchen & Schultz, 1998). Others have used published statements of management philosophies as proxies for the existence of these attitudinal orientations (Welbourne & Andrews, 1996). Empirically, though limited in number, a positive relationship was found between the measures of HR Principle and organizational outcomes (Herdman, 2007).

### *HR Programs*

Objective reports of HR programs by a key organizational informant, is the most common conceptualization of the HR system construct (Herdman, 2007). Three general classes of items have been used to measure HR Programs: 1) simple dichotomous “yes or no” responses regarding the existence of the program (e.g. Huselid, 1995); 2) Likert scale items asking the degree to which the respondent agrees that a certain practice is in place (e.g. Bae & Lawler, 2000); and 3) more objective reports of raw percentages of total employees covered by the program or, in the case of training, the number of hours an employee spends in training over some period of time (e.g. Huselid, 1995). Studies employing objective measures of the formal HR Programs in place by a single key

organizational informant have consistently demonstrated a positive relationship between HR Programs and organizational outcomes (Herdman, 2007). Moreover, the fact that these are most often treated as additive indexes and that these indexes outperform individual practices in their association with organization outcomes supports the assumption that practices operate synergistically (Ichniowski et al., 1996; Combs et al., 2006).

Despite their prevalence in research, the HR Program measure offers the least evidence regarding the theoretic assumptions underlying this line of research. This approach has been criticized for several reasons. First, because the formal establishment of programs is both easily replicated, it fails the inimitability requirement necessary to sustain competitive advantage. Any advantage obtained through the deployment of these formal programs might be readily reproduced by competitors. Second, it does not address variability in implementation, but instead simply described the intended practices of the organization. This importance of implementation is a long-recognized challenge of practitioners and has received increased attention in SHRM research (Becker & Huselid, 2006). Finally, the assessment of the main effects of HR Programs and organizational outcomes in isolation both relies on assumed affects on strategically important human capital characteristics and fails to address alternative explanations—including reverse causality (Wright et al., 2001; Wright et al., 2005). Nevertheless, the relationship between the formal presence of high commitment HR systems, as measured by the HR program construct, and firm level outcomes is well-supported in the literature (Combs et al., 2006).

While the number and types of programs included in these studies varies, there seems to be an emerging consensus regarding the programs associated with high-commitment or high performance work practices (Boselie et al., 2006; Combs et al., 2006).

These include selective hiring, internal labor markets, training and development, involvement programs, employment security, performance appraisal, information sharing, contingent compensation, teams, reduced status distinctions and decentralized decision-making/autonomy. These practices are largely consistent with reviews offered by Pfeffer (2005) and others suggesting the existence of a group of practices consistently associated with high performing organizations.

### *HR Practices*

HR Programs and HR Practices are similar in that they seek to measure the existence and use of various HR programs. However, they differ in that they seek this information from different sources. These source characteristics have important implications on the properties of the construct (Arthur & Boyles, 2007). HR programs are relatively objective reports of actual programs in place by some key organizational informant with the requisite knowledge and understanding to accurately assess their existence. HR Practices, on the other hand, are reports of the existence and use of programs from line managers and supervisors. The difference between these two conceptualizations of the HR System might be thought of as the difference between the stated HR Programs and their actual use by managers. While the review of past research reveals a small number of studies using this conceptualization of the HR System, they were positively related to organizational outcomes (Herdman, 2007).

### *HR Perceptions*

Here, as with the distinction between HR Programs and HR Practices, we have another conceptually distinct measure focused specifically on employee interpretations of

HR Practices. As Schneider and colleagues note (2006, pg 126), "...it is one thing to know what the VP of HR says happens in training practices, and it may be another to hear how employees experience training practices". As described earlier, HR Practices can be salient features of the organizational environment and, as such, important in shaping employee perceptions of their environment. HR Perceptions resulting from the application of high commitment HR Practices should be consistent with the meaning and intent of these HR Practices. This includes inferences regarding their role in the organization, the nature of the relationship with the organization and behaviors important to organizational functioning (Rousseau, 1989; Rousseau, 1996; Bowen & Ostroff, 2004). These high commitment HR Perceptions are likely an important and central construct within the broader HR System and a necessary condition in the development of the attitudinal and motivational responses purported to result from these practices.

While no previous study has sought, as in the present research, to include HR Perceptions as a component piece of a larger system of constructs, there exists some empirical precedent for the measurement of HR Perceptions. For example, a series of studies found positive relationships between employee perceptions of high-involvement work practices--defined as training, contingent compensation, participation decision--making and information-sharing, in relationship to a number of organizational level outcomes (Vandenberg, Richardson & Eastman, 1999; Riordan, Vandenberg & Richardson, 2005). Similarly, others have found employee reactions to and evaluative judgments of more inclusive sets of high commitment HR practices to be positively related to organizational outcomes (Zacharatos, Barling & Iverson, 2005). Collectively, past

studies using employee perceptions of the HR Practices have consistently produced positive relationships with organizational level outcomes (Herdman, 2007).

*The Influence of Job Function Characteristics on High-commitment System Effects*

There is a growing literature that suggest that organizations are not best served by the universal application of high-commitment HR practices (Lepak & Snell, 1999; Lepak & Snell, 2002; Huselid, Beatty & Becker, 2005). For example, Lepak and Snell (1999, 2002) have argued that the optimal approach to HR management is driven by characteristics of the job functions in question. Specifically, they assert that the strategic importance and uniqueness of the human capital requirements of various job functions ought to be the primary determinant of the organization's approach to the management of that function. Strategic value is determined by the degree to which job functions possess value creation potential through the enactment of strategies that improve efficiency, effectiveness and exploit market opportunities. Human capital uniqueness refers to the degree to which employee skills are easily acquired from the market and replaced. In circumstances where employee skills are not readily obtained in the market and are characterized by interdependencies and firm specificity, a job function may be considered to have unique human capital characteristics. These arguments are largely consistent with Huselid and colleagues' (2005) assertion that organizations are best served by both classifying job functions and developing unique HR practices contingent upon function's strategic importance.

The strategic characteristics of the function, according to this framework, determine the appropriate organizational approach to the HR management system deployed in

support of that function. For example, a common distinction is made in the literature between an internal and external emphasis to the management of people (Lepak & Snell, 1999; Rousseau, 1995; Miles & Snow, 1984). An internal emphasis is characterized by the development of a long-term relationship emphasizing employee selection based on long-term compatibility and training efforts focused on the development of employees. The purported benefits of this emphasis are greater stability, commitment and development of long-term human capital pools in support of organizational strategy (Lepak & Snell, 1999; Pfeffer & Baron, 1988). All of this is consistent with the theoretic assumptions implicit in SHRM in terms of the influence of HR systems on employee skills, attitudes and behaviors. Within the Lepak & Snell (2002) contingent framework, this approach is most appropriately deployed in support of job functions that are both high in strategic importance and uniqueness of human capital.

Conversely, externally focused modes of employment emphasize the acquisition of necessary skills and abilities from the market. Operationally, this takes the form of employee selection emphasizing existing skills and abilities or via contractual relationships with external agents. This external orientation results in an employment relationship characterized not by commitment, but rather an 'exchange' relationship based on clear definition of mutual obligations and clear task definition. This is consistent with the 'quasi-spot orientation' described earlier (Tsui et al., 1997). According to the framework proposed by Lepak & Snell (1999), when job functions are low in both strategic importance and uniqueness of human capital, organizations are best served by adopting this external mode of employment.

This broad distinction, considered simply, is often referred to as “buy” vs. “make” decision of the organization in the acquisition of the human capital necessary to the accomplishment of organizational objectives (Miles & Snow, 1984). The prevailing emphasis within the SHRM literature has been in the direction of the “make” decision associated with the high-commitment work practices discussed earlier (Walton, 1985; Pfeffer, 2005; Lawler, 1992). The assumption is that the universal application of these practices, across employee populations, is preferred. This has been the dominate paradigm guiding research design as most research has sought to measure the universal effects of commitment based. However, a number of empirical studies provide evidence that these different modes are used by organizations and sometimes vary within the same organization (e.g. Davis-Blake & Uzzi, 1993; Lepak & Snell, 2002). That is, organizations tend to deploy high commitment HR systems in support of job functions that are strategically important and have unique human capital requirements, while opting for market-based transactional approaches for functions low in these dimensions.

However, the firm level performance consequences of an appropriately differentiated approach to the management of the firm’s human assets based on these functional characteristics has received little empiric attention (Lepak & Snell, 1999; Huselid et al., 2005). This line of inquiry has the capacity to inform practice and enable the most efficient deployment of scarce organizational resources. Further, this has important implications on research design. First, understanding that organizations do endeavor to develop unique HR practice sets for employees according to job function suggests that requiring global reports of HR practices, irrespective of these functions, would mask potentially important intra-organizational differences (Gerhart et al., 2000;

Wright et al., 2001). In order to mitigate this, it is necessary to collect data on HR programs and practices at the job function level. Further, the greatest impact on organizational level outcomes would be expected when commitment based practices are used in support of job functions which are both strategically important and have unique human capital requirements. Conversely, HR practices deployed in support of functions low on these dimensions would be expected to yield lower, and perhaps even negative, return on investments. The validity of these arguments for intra-organizationally differentiating HR practices is an important and, as yet, largely untested area of research.

## CHAPTER 3: HYPOTHESIS DEVELOPMENT

One advantage to the more careful conceptualization and measurement of the HR System construct is the capacity to more clearly define the links between the HR system, the theorized firm human capital characteristics and performance outcomes. A primary goal of the present study is to leverage the expanded measurement of the HR system to more fully specify the process mechanism through which the HR System may operate to influence firm performance outcomes. In the present chapter, arguments are developed regarding the expected relationship among these measures of the HR system, theoretically important employee outcomes and firm performance. A model of these relationships, along with a set of testable hypothesis statements, is presented.

### *Uniqueness of the HR System Measures*

In order to better understand past research and make future research more tractable, we need to know more about how assessments of different types of information regarding the HR System relate to one another as well as their relative utility in the prediction of organizational level outcomes. All of these constructs—HR Principle, HR Programs, HR Practices and HR Perceptions, provide different information regarding the HR System. As such, these measures should demonstrate some independence in both their relationship with one another and their association with various organizational outcomes. For this reason, there are two broad expectations related to these measures. First, they will be reasonably independent of one another. Second, their utility in the prediction of various organizational outcomes should differ.

*H<sub>1</sub>: HR Principle, HR Programs, HR Practices and HR Perceptions are independent measures that assess different information regarding the HR System.*

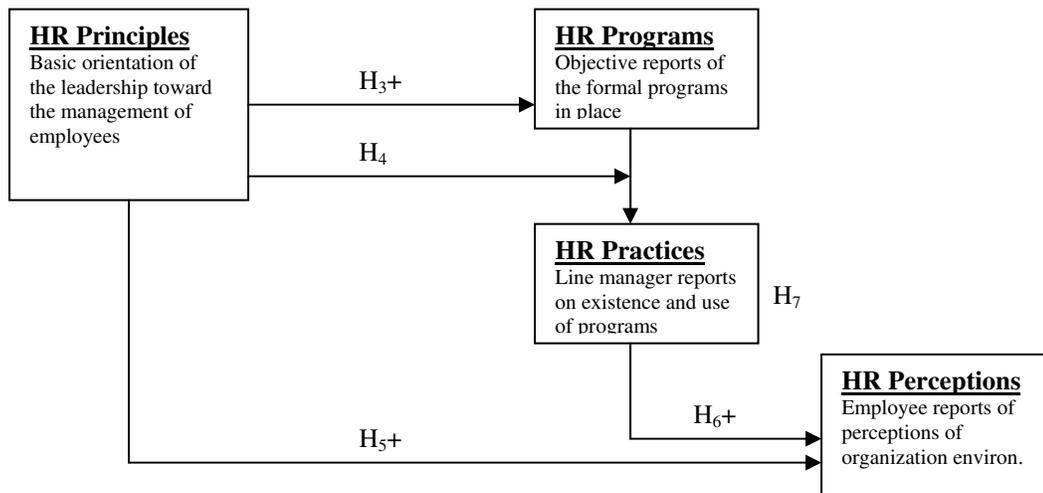
*H<sub>2</sub>: Each measure of the HR System will differ from the other HR system measures in its level of prediction of one or more of the assessed employee, intermediary and distal organizational outcomes.*

### *Modeling the Relationships among HR System Measures*

However, while these measures represent unique and independent information regarding the HR System, it is likely that these components of the HR System are related to one another in systematic ways. In the following section, expectations regarding the relationships among these measures are offered. These proposed relationships are shown graphically in Figure 1.

Figure 1

*Proposed relationship among HR System variables*



As shown, senior managers' HR Principles are unlikely to influence organizational performance directly. Therefore, high commitment HR Principles is positioned theoretically in this paper as an antecedent to the adoption of high commitment HR

Programs. This relationship is consistent with arguments that managerial beliefs regarding the strategic importance of the firm's human assets serve as the foundational assumptions on which the development of HR systems are based (Arthur & Boyles, 2007; Becker & Gerhart, 1996; Becker & Huselid, 2006; Colbert, 2004; O'Reilley & Pfeffer, 2000) Specifically, when an organization's leadership expresses a belief in the strategic importance of people, they are more likely to establish high commitment HR Programs within the organization. Conversely, managers possessing less positive assumptions regarding the strategic importance of people will be less likely to invest organizational resources in high-commitment work practices. Therefore, high-commitment HR Principles should be predictive of the establishment of high-commitment HR Programs compatible with these beliefs.

*H<sub>3</sub>: HR Principles reflective of attitudes valuing employees as strategically important will be positively related to the adoption of high-commitment work HR Programs.*

However, high commitment HR Programs may exist in the absence of compatible HR Principles. An organization's HR Programs may be a product of imitation, competitive forces or historical reasons unrelated to the beliefs of the current senior management (Abrahamson & Fairchild, 1999). In these circumstances, compatibility between HR Principles and HR Programs could be an important moderating condition between the existence of HR Programs and their implementation by the managers and supervisors charged with their use. Logically, organizational leadership whose HR Principles are consistent with the high commitment HR Programs would be more likely to support these programs and enforce their application. If this is true, this HR Principle-HR Program compatibility would then be a moderating condition for levels of HR Practices—

again, defined as managerial and supervisory reports of program implementation. Because it has been shown that there is often a significant disparity between stated HR programs and actual reports of their use, this serves as a possible explanation for this variability (Gerhart et al., 2000; Khilji & Wang, 2006).

*H<sub>4</sub>: Levels of high commitment HR Principles will moderate the relationship between the reported existence of high commitment HR Programs and their use, as measured by HR Practices.*

As shown in Figure 1, HR Principles may also be directly related to employee perceptions of their work environment. Consistent with the theory of reasoned action, beliefs and attitudes would be expected to manifest in different behavioral patterns towards employees (Ajzen & Fishbein, 1980; McGregor, 1967). These behaviors will be experienced by employees and, consequently, shape their perceptions of the organizational environment (Tsui et al., 1997). Therefore, a positive association is expected between HR Principles and employee HR Perceptions.

*H<sub>5</sub>: High commitment HR Principles will be positively associated with high commitment HR Perceptions.*

As discussed earlier, Bowen and Ostroff (2004) argue that the HR system can operate as a strong situation in shaping employee perceptions. Each of the practices associated with these systems can communicate information to employees regarding their role and importance in the larger organization. These practices can also operate as cues to reinforce behaviors important to organizational functioning. Developing similar arguments, Rousseau (1995) suggested that HR practices can serve as key determinants of implicit 'psychological contracts' between an organization and its membership. This psychological contract is defined as an individual's belief in the mutual obligations between

the person and the organization. These contracts are formed by the inferences drawn, over time, by exposure to the HR System (Rousseau, 1995). The presence and application of high-commitment HR Practices may be thought of as ‘signals’ regarding the nature of the contract. As such, the HR system can serve as a key determinant of employee responses—both attitudinally and behaviorally. For example, performance appraisal, contingent compensation, etc. may be interpreted by the employee as an organizational priority in managing performance. Natural employee responses to these signals would be a felt obligation to respond to by increased effort or attention to performance.

Organizations deploying high commitment HR Practices could be expected to influence employee perceptions of the organizational environment in a number of ways. A system of high commitment HR Practices including rigorous selection activities, for example, would likely result in aggregate perceptions that the organization places a significant emphasis on selection and placement, is concerned with long-term compatibility and effectively places individuals in positions where they are likely to succeed. This may be complemented by the use of training and development practices resulting in perceptions that the organization is committed to their skill development and career growth. Employment security, use of internal labor markets, employee participation and autonomous job design, likewise, would shape employee perceptions regarding their environment and their value and importance within the organization. Team based organizing practices and information-sharing, in similar ways, would shape employee perceptions regarding the importance of these behaviors within the organization.

These practices can, and should, operate in synergistic and mutually reinforcing ways. The cues provided by systems of practices are multiple and do not operate, nor

should they be considered, in isolation (Bowen & Ostroff, 2004; Rousseau, 1995). Further, the supervisor is an especially important agent in this relationship because they, in many respects, represent the organization to the employee (Bowen & Ostroff, 2004; Rousseau, 1995). For this reason, the measure of supervisory application of HR Practices would be the most proximate and likely determinant of these HR Perceptions. Therefore, it is expected that higher aggregate level reports of the use of high commitment HR Practices will be associated with high commitment HR Perceptions.

*H<sub>6</sub>: Higher level of reported use of high-commitment HR Practices will be positively related to high commitment HR Perceptions.*

The importance of the difference between stated HR Programs and the actual implementation of HR Practices by managers and supervisors has been the subject of some discussion in the literature (Wright & Boswell, 2002; Vandenberg et al., 1999). Implicit in the previous hypothesis is the suggestion that an HR Program is effective only to the degree that it is implemented by managers and supervisors. Unimplemented programs have no capacity to shape employee experiences with the organization and therefore impact employee attitudinal or behavioral responses. Measures of HR Practices are then arguably more important than HR Programs because they should represent a more accurate report of their actual use (Becker & Huselid, 2006). As such, the HR Practices are directly antecedent to employee experience within the organization and, in turn, any improvements in the attitudinal or behavioral outcomes important to organizational functioning. Therefore, it is reasonable to expect that the relationship between high commitment HR Programs and both HR Perceptions and employee attitudinal and behavioral outcomes will be mediated by their actual use, as measured by HR Practices.

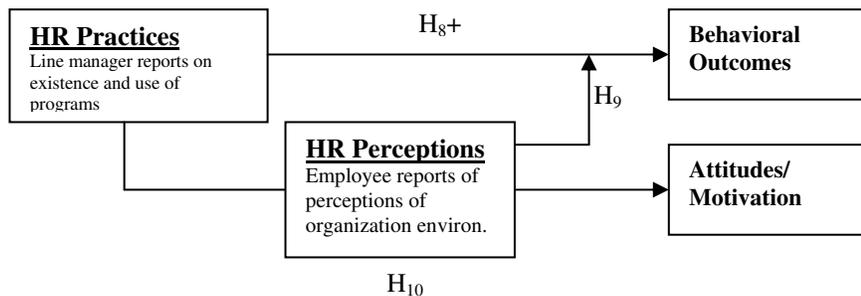
*H<sub>7</sub>: HR Practices will mediate the relationship between HR Programs and (a) HR Perceptions; (b) the employee attitudinal/motivational outcomes (c) and the behavioral outcomes.*

*Relationships between HR System Measures and Proximal, Intermediary and Distal Organizational Outcomes*

As argued earlier, the clearer definition of the HR System measures provides the ability to more precisely articulate the relationship between the HR System and strategically important firm level human capital characteristics. This is an important step in establishing the larger mediating role of the human capital characteristics in the relationship between the HR System and firm performance (Wright et al., 2001; Becker & Huselid, 2006). The focus in the present study is the linking the HR System to both theoretically important attitudinal and behavioral outcomes among employees. These relationships are developed in the discussion that follows and are shown graphically in Figure 2.

Figure 2

*Proposed relationships between HR System Variables and Proximal Outcomes*



As shown, HR Practices can operate directly to influence behavioral outcomes and employee skills. For example, selective hiring and training can impact employee skill levels and abilities directly through the acquisition and development of a more skilled and

capable workforce. Likewise, organizations can affect behavioral outcomes through job design and team-based initiatives and thereby more fully leverage employee discretionary behavior and enhance cooperative and coordinative behavior among employees. In this way, all the programs associated with high-commitment practices may have direct impacts on employee skills and behaviors not related to employee interpretations and reactions to the programs.

However, in terms of tapping the attitudinal, motivational and affective outcomes, employees' HR Perceptions occupy a central and important role. The capacity for HR Practices to result in higher aggregate levels of these outcomes is likely reliant, in part, on employee experiences with and interpretation of these practices. In short, it is this messaging that activates the affective, attitudinal and motivation outcomes believed to result from high-commitment work practices.

Because this research intends to represent both the attitudinal and behavioral paths through which HR practices may affect organizational outcomes, several proximal employee outcomes representing both paths are specified. Three intermediary attitudinal and motivation mechanisms and two behavioral outcomes were selected for their theoretical relationship with both HR practices and organizational level outcomes. The specified attitudinal outcomes target collective employee commitment, satisfaction and motivation thought to result from the deployment of high commitment work practices. Similarly, the behavioral outcomes were selected to tap levels of both coordinative behaviors among employees and employee discretionary behavior—both theorized consequences of high commitment HR practices (Ichniowski et al., 1996; Boxall & Purcell, 2003; Ostroff & Bowen, 2000).

In the following discussion, conceptual and theoretical arguments are built between the HR System measures and these outcomes. The intent here is not to suggest exclusive relationships between specific practices and these proximal outcomes. Instead, consistent with the systems perspective, the purpose is to develop a rationale and theoretic basis for a system of relationships between the previously defined HR System measures and the identified proximal employee outcomes. Also, consistent with SHRM theory, each of these employee outcomes are positioned as organizational level characteristics (Kozlowski & Klein, 2000; Ostroff & Bowen, 2000; Bowen & Ostroff, 2004). These high-commitment HR practices are argued to foster employees' shared perceptions of the organizational environment that result in enhanced collective attitudes/motivation as well as discretionary and coordinative behaviors.

#### *Motivational & Attitudinal Outcomes*

##### *Organizational Commitment.*

As the name implies, organizational commitment is an important proximal outcome of high-commitment work systems and has been the subject of multiple empiric studies as a dependent outcome (e.g. Riordan et al., 2005; Wright, Sherman, McCormick & Sherman, 2005). The presence of many of the practices speaks to a global organizational commitment to the individual—a commitment the employee is likely to reciprocate (Schneider, 1987; Rousseau, 1995). When this reciprocal relationship is consistently experienced across the organization, this gives rise to the development of a collectively committed workforce. However, these practices could only be expected to have this effect when organizational commitments to the employee are felt and experienced by the employees. Therefore, enhanced commitment to the organization is a proposed

consequence of high commitment HR Perceptions—suggesting that the development of higher aggregate levels of this attitudinal outcome will be reliant on employee perceptions of an organizational environment consistent with the meaning and intent of the high-commitment work practices.

*Job Satisfaction.*

Job satisfaction has also been studied in relationship to the presence of high-commitment HR Practices (Vandenberg et al., 1999) and aggregate employee perceptions of human resource systems with positive reported relationships (Riordan et al., 2005). This finding is expected to be replicated and extended by demonstrating that employee reports of HR Perceptions will mediate the relationship between higher levels of HR Practices and aggregate employee job satisfaction. While an extensive literature exists examining the relationship between various HR Practices and job satisfaction, the degree to which these practices are driven by employee perceptions of the meaning and intent of these programs is new.

However, there is theoretic precedent. For example, the job characteristics model suggests that job feedback, autonomy and variety result in employee perceptions of experienced meaningfulness and responsibility and it is these ‘psychological states’ that drive satisfaction, commitment and performance (Hackman & Oldham, 1980; Fried & Ferris, 1987). These job characteristics are consistent with the intent of the practices associated with high-commitment work practices. Therefore, it is reasonable groups of employees reporting HR Perceptions consistent with the intent of the high commitment HR Practices are more likely to report higher levels of the affective outcomes. Likewise, participation programs, which have been positively related meta-analytically to employee

satisfaction (Wagner, 1994), can only have this consequence to the degree that employees perceive they have a voice and that this voice is valued. For this reason, while a positive relationship is expected between high commitment HR Practices and organization level job satisfaction, this relationship is expected to be mediated by high commitment HR perceptions.

*Self-efficacy.*

Self-efficacy, defined as one's own belief in their ability to successfully perform a task, is an established determinant of both increased effort and performance (Bandura, 1982, 1986; Stajkovic & Luthans, 1998). Though not previously studied in SHRM research, higher aggregate levels of employee self-efficacy is an important and theoretically plausible outcome of a variety of HR Practices. This outcome, however, would not be a direct consequence of the HR Practices. Instead, it is more likely to operate through individuals' perceptions of themselves in the organizational environment. For example, employee perceptions of the degree to which they are well-placed within the organization, a function of the selection system, will likely be an important determinant of how capable they feel in their positions. Likewise, individual perceptions of training and development activities have been shown to be antecedent to higher levels of self-efficacy (Colquitt, Lepine & Noe, 2000). Additionally, performance feedback is an important condition for the development of self-efficacy (Bandura, 1986) and perceptions of employment security would be expected to influence employees' abilities to act confidently in work situations.

Taken together, higher aggregate levels of employee self-efficacy is a likely consequence of collective employee HR Perceptions that they are well-placed, trained, feel

secure in their positions and receive on-going performance related feedback. The relationship between the use of the high commitment HR Practices and higher aggregate levels of self-efficacy is reliant on these high commitment HR Perceptions. Therefore, the relationship between high commitment HR Practices and employee self-efficacy will be mediated by high commitment HR Perceptions.

### *Behavioral Outcomes*

#### *Teamwork behavior.*

Higher levels of organizational emphasis on team-working and team-based organizing structures would have direct effects on the behavioral and process efficiencies associated with teamwork. However, several other practices such as information-sharing, participation and autonomous job design would be expected to reinforce and grow coordinative behavior. Therefore, higher levels of high-commitment work practices are proposed to be positively associated with reports of team work behavior. While these impacts may occur directly, employee perceptions of the importance of these practices in their environment would likely make these effects more pronounced. As Leana and Van Buren (1999) assert, high-commitment systems result in higher quality relationships within the organization and improved coordinative behavior by communicating the organizational importance and emphasis on relationships. Further, considered at an organizational level, these collective perceptions are likely to result in the development of patterns and norms of providing assistance and help to co-workers (Leana & Van Buren, 1999; Takeuchi, Lepak, Wang & Takeuchi, 2007). Therefore, as shown in Figure 2, while a direct relationship between HR Practices and teamwork outcomes is expected, it will be moderated by HR Perceptions.

*Organizational Citizenship Behavior.*

Organizational citizenship behavior has been defined as behavior beneficial to organizational functioning and discretionary on the part of the employee (Organ, 1988). This construct is argued to represent employee behavior that falls outside of traditional task performance and is not part of the organization's reward and appraisal system, but is nevertheless important to and supportive of organizational functioning (Organ & Konovsky, 1989). Organizational citizenship behavior has been shown to be related to employee satisfaction and commitment, two hypothesized outcomes in the present research (Organ & Ryan, 1995; Podsakoff, MacKenzie, Paine & Bachrach, 2000). Moreover, the organization's ability to tap and leverage discretionary behavior has long been argued to be an important consequence of high-commitment HR systems (MacDuffie, 1995; Walton, 1995).

Empirically, however, few studies have tested this assumption. The behaviors associated with citizenship behavior, for example making suggestions to improve organizational functioning or making extra effort beyond your job description, should be important consequences of a high commitment system. Like teamwork behavior, these effects may occur directly through the enhanced opportunity to contribute through autonomous job design or employee participation programs. However, the incidence of these behaviors would likely be increased in circumstances where employees perceived that the organization invests in and is committed to the employee. This is consistent with the social exchange perspective in which employees perceiving a commitment from the organization are likely to reciprocate by engaging in behavior that is beneficial to the organization (Blau, 1964). This reciprocal relationship is at the heart of the underlying

logic and theory guiding high-commitment work practices. Further, like teamwork, these discretionary behaviors occur in a social context and result in the development of organizational level norms supporting and reinforcing their continued use (Leana & Van Buren, 1999; Bowen & Ostroff, 2004; Podsakoff & McKenzie, 1997). For this reason, it is expected that these behaviors would manifest collectively and could be considered an organizational level attribute. Therefore, one would expect a direct relationship between HR Practices and this outcome, but that this relationship would be moderated by HR Perceptions.

In sum, HR Practices are expected to be positively associated with the employee attitudinal/motivation and behavioral outcomes. However, as argued above, employee interpretations of the meaning of these HR Practices, or high commitment HR Perceptions, are an important condition in the creation of higher aggregate levels of organizational commitment, job satisfaction and self-efficacy. In line with this reasoning, as indicated in Figure 3, HR Perceptions are conceived as a mediating construct between HR Practices and these outcomes. High commitment HR Perceptions are also expected to moderate the relationship between HR Practices and the behavioral outcomes—i.e. organizational citizenship behavior and team work behavior. Therefore, high commitment HR Perceptions are expected to mediate the relationship between high commitment HR Practices and attitudinal/motivational outcomes and moderate the relationship between the high commitment HR Practices and behavioral outcomes of teamwork behavior and organizational citizenship behavior.

*H<sub>8</sub>: High commitment HR Practices will be positively related to both the motivational/attitudinal outcomes of (a) job satisfaction, (b) organizational commitment and (c) self-efficacy and the behavioral outcomes of (d) teamwork and (e) organizational citizenship behavior.*

*H<sub>9</sub>: High commitment HR Perceptions will moderate the relationship between HR Practices and measures of behavioral outcomes of (a) teamwork and (b) organizational citizenship behavior.*

*H<sub>10</sub>: HR Perceptions will mediate the relationship between HR Practices and attitudinal and motivational outcomes of (a) job satisfaction, (b) organizational commitment and (c) self-efficacy.*

### *The Relationship between Proximal Employee Outcomes and Organizational Outcomes*

Within the present study, the HR System and proximal employee outcomes are studied in relationship to both intermediate operational outcomes such as turnover and customer service as well as more distal financial outcomes. Again, the HR system is purported to have its effect on these intermediate and distal organizational outcomes through improved motivation/attitude and behavioral efficiencies. For this reason these proximal employee outcomes are expected to be predictive of these organizational performance outcomes.

Researchers have found positive linkages between collective workplace attitudes and individual performance outcomes. A recent meta-analysis showed a substantial relation between individual job satisfaction and individual performance ( $\rho = .30$ ; Judge, Thoresen, Bono, & Patton, 2001). Extending this relationship to organizational level performance, empirical support has been demonstrated for the relationship between employee attitudinal and motivational and organizational performance outcomes (e.g. Ostroff, 1992; Fulmer, Gerhart & Scott, 2003; Schneider, Hanges, Smith & Salvaggio, 2003). Indeed, recent meta-analyses have demonstrated that higher aggregate levels of employee attitudes are positively related to organizational level outcomes such as service, quality and financial outcomes (Harter, Schmidt & Hayes, 2002).

Likewise, high-commitment human resource practices have been reported to be negatively related to turnover (Arthur, 1994; Batt, 2002; Shaw, Delery, Jenkins and Gupta, 1998; Huselid, 1995). Because job satisfaction and organizational commitment are consistently negatively related to employee turnover (Griffith, Hom & Gardner, 2000), these enhanced affective outcomes represent possible mechanisms underlying this relationship. More committed and satisfied employees are more likely to feel a positive sense of attachment to the organization and, therefore, are less likely leave the organization.

Finally, given the strength and consistency of findings between self-efficacy and individual performance, the consideration of aggregate level self-efficacy among groups of employees seems a logical extension and a potentially important motivational construct in predicting organizational level outcomes (Stajkovic & Luthans, 1998). Similarly, the behavioral outcomes of teamwork behavior and organizational citizenship behavior are theoretically important predictors of organizational outcomes. However, because these have not been studied in relation to the organizational outcomes described here, these relationships are largely exploratory.

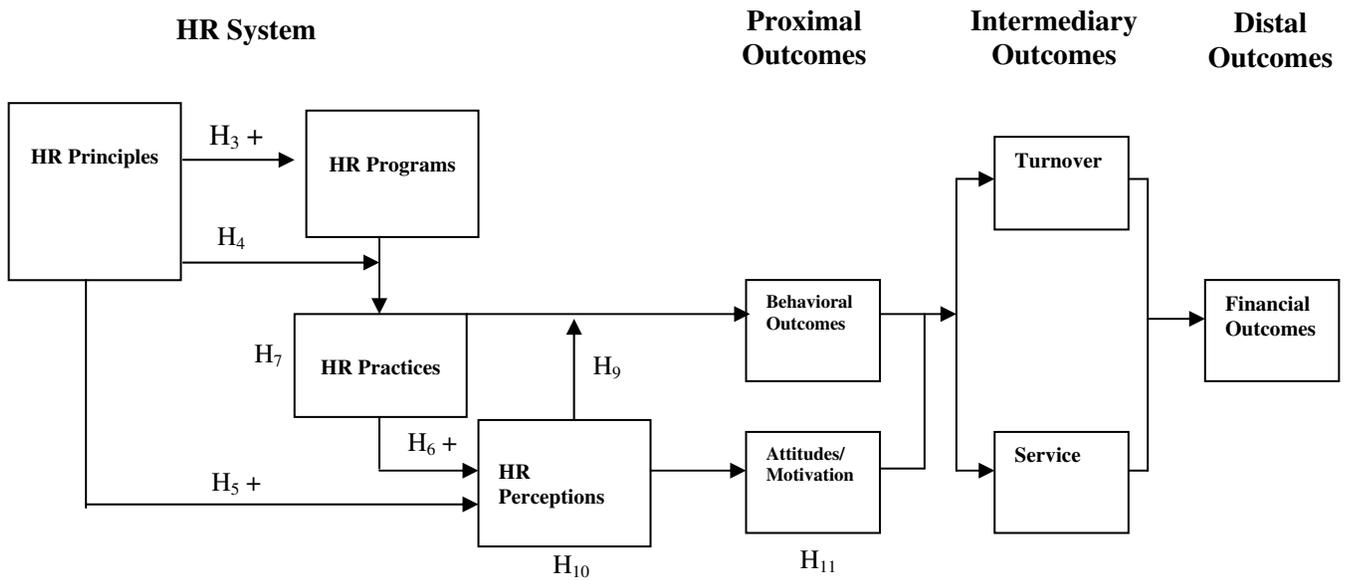
Together, these outcomes represent two paths through which the HR System may impact the human capital characteristics of the firm in important ways—collectively operating to enhance organizational functioning and performance. Consistent with the theoretical assumptions of SHRM, the proximal employee outcomes are proposed to serve a mediating role in the relationship between the HR system variables and intermediary and distal organizational outcomes. However, despite attempts to more fully specify these proximal outcomes, other unmeasured proximal outcomes are likely to exist. For this

reason, it is expected that the proximal employee outcomes will partially mediate this relationship. This relationship, as well as the complete model and associated hypothesis, is depicted in Figure Three.

*H<sub>11</sub>: The proximal outcomes of employee attitudes/motivation and behavioral outcomes will partially mediate the relationship between HR system variables and intermediary and distal organizational outcomes.*

Figure 3

*Comprehensive model of the relationships among measures of the HR system and proximal, intermediary and distal outcomes.*



*Test of differential effects according to job function*

A final consideration is the differential effects that may be expected by the application of high commitment HR practices to job functions of varying strategic importance and uniqueness of human capital requirements. As described earlier, a body of

literature exists suggesting that the uniform application of high-commitment practices without regards to variability along these dimensions is inappropriate. In the extreme, the cost associated with their use for employees occupying job functions low in both dimensions would result in lower or, perhaps, negative return on investment. This assumption can be tested by examining any differential prediction of organizational outcomes for HR System variables aligned with job functions that vary along these dimensions. The strongest effects for high commitment HR Programs will be expected for functions considered to be both strategically important and unique with respect to the human capital requirements.

*H<sub>12</sub>: The relationship between high commitment HR Programs and organizational outcomes will be strongest when used in combination with positions high in strategic importance and uniqueness of human capital.*

## CHAPTER 4: METHODS

The study was conducted with the cooperation of a large international hotel franchise company. This company manages, through franchise agreements, approximately 3,600 hotels comprised of five hotels brands and representing a variety of market orientations including the extended stay, low cost, business traveler and luxury markets. Each hotel operates autonomously and is free to adopt and implement management programs of their choosing. For this reason, variability in the HR system was anticipated among sampled hotels. There is also a relatively uniform managerial structure across all locations that enabled consistent sampling of management levels and employees along functional lines. This is further strengthened by the aggressive management of brand standards across the hotel portfolio. This includes the maintenance of uniform technological, advertising and physical plant standards. Together, this allowed for the more rigorous isolation of the effects of the HR system on hotel performance. Finally, the company provided objective measures of performance including multiple dimensions of customer ratings of customer service and objective and standardized financial performance.

There is a common perception that the service industry has been slow to adopt high-commitment HR practices because the relatively low skill and transient characteristics of the workforce do not warrant the required investments. For this reason, the service industry has been underrepresented in SHRM research (Batt, 1999, 2002; Schneider et al., 2006). Empirically, however, studies conducting comparative analyses between various industries report that practices associated with high commitment HR systems were more prevalent in the hotel industry than in manufacturing (Hogue, 1999). This is consistent

with recent empiric findings suggesting the effects of HR systems are moderated by the capital intensity of the industry in question (Datta, Guthrie & Wright, 2005). This finding supports past arguments that transactional and employee intensive nature of the service industry makes these investments more necessary and that organizations with a committed, motivated and capable workforce have a competitive advantage (Schneider et al., 2006). Within the hospitality industry employees and customers interact very directly in the production of the service. For these reasons, the sample and the focus on service industry are believed to be appropriate context for this research.

#### *Protocol*

The study was conducted in two phases. First, a pilot phase was used to test and refine the measures of the HR system constructs and employee outcome measures. The pilot phase was also used to develop the appropriate administrative processes involved in the distribution and collection of the surveys. For the pilot phase of the data collection, hotels were identified by the franchise advisory board of the company for participation based on diversity of brand and performance. These hotels were personally contacted by the researcher to describe the project and requirements. These locations provided employee count information and any language requirements. Survey packets were then prepared and sent to each location containing the survey materials, a sealed postage paid collection box and introductory letter with instructions on the distribution and collection process—these communications are both listed in Appendix A. The surveys themselves were color-coded according to the appropriate respondent group, as indicated in Table 1. A visual depiction of the typical organizational structure at each hotel and the survey instrument administered to each group is provided in Figure 4.

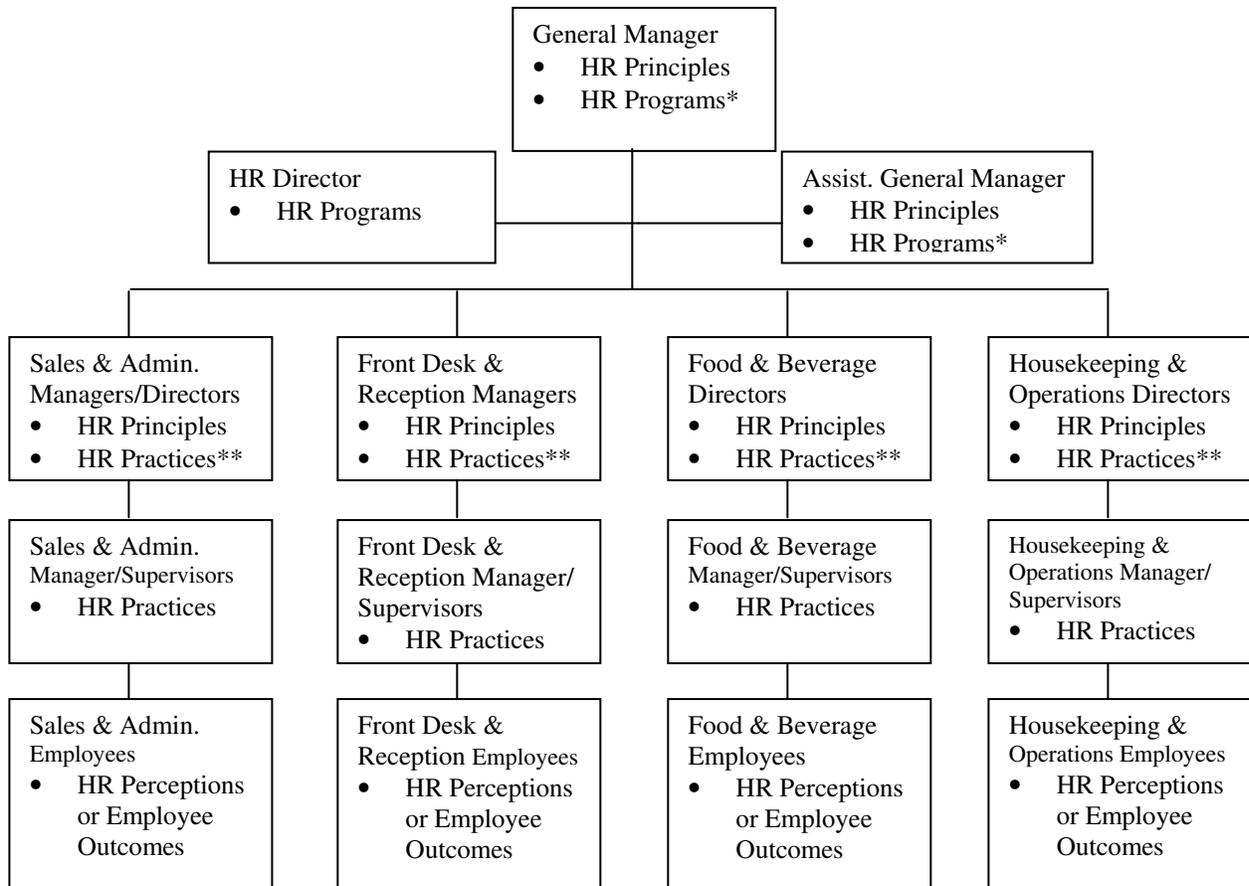
Table 1

*Respondent Groups by Conceptualization Assessed*

Conceptualization	Respondents
HR Principles	General Manager, Department managers
HR Programs	On-site HR representative or General Manager
HR Practices	Line managers/supervisors and employees
HR Perceptions	50% of hourly employees
Proximal Employee Outcomes	50% of hourly employees

Figure 4

*Typical Hotel Organizational Structure & Survey Respondent Groups*



\* Completed HR Programs survey in instances where no dedicated HR Personnel were located at hotels.

\*\* Complete HR Practice Survey in instances where there was no managers/supervisor reporting to this position

As shown, four survey instruments were developed containing the different measures of the HR System. The first survey instrument contained measures of HR Principles and was distributed to the senior management team of the hotel, defined as the General Manager and Department Heads. The second survey instrument contained measures of HR Programs and was distributed to either the property HR Manager or, when no such position existed, the General Manager. The third survey instruments contained measures of HR Practices and were distributed to department level managers and supervisors responsible for the direct oversight and management of employees. The fourth survey instrument contained the HR Perceptions measures and was distributed to line level employees. A fifth survey was developed to assess the various employee attitude and behavior outcomes and was also distributed to line level employees.

The two employee surveys—HR Perceptions and employee outcomes, were each distributed to random halves of the line level employees. This was important to mitigate the influence of common method bias possible from gathering the data from the same source (Wright, Sherman, Moynihan & Allen, 2005; Guthrie, 2001). This was accomplished by alternating the surveys in the packets so that upon distribution, every other employee receiving a survey would receive a different employee survey. Managers were also alerted, both during verbal communications and in the instructions, to the fact that there were two surveys and they should strive for random distribution of each survey.

For the pilot sample, it was necessary to have all items professionally translated into Spanish, Portuguese and Chinese to accommodate non-English speaking employees. In all cases, the items were both proofread by independent translators and reverse translated to assure the meaning and intent of the items was retained. All survey

instruments were also reviewed by both senior company and property level HR Personnel to ensure interpretability of the items prior to distribution.

Following the delivery of the survey materials, each location was again contacted by the researcher to further discuss and clarify the distribution and collection process. In an effort to enhance confidentiality, each survey was accompanied by an envelope for the employees to seal their completed surveys prior to placing the survey in the collection box. These collection boxes were also used to ship the completed survey packet back to the researcher for coding. A third follow-up contact was made with each location approximately one week after their intended survey distribution date to answer questions and check progress. In total, all locations were contacted personally by the researcher a minimum of three times to ensure understanding and smooth administration of the distribution and collection process. The pilot phase, from hotel identification to data analysis lasted approximately two months.

Following the pilot phase, managers were again contacted to provide qualitative feedback on the protocol and the measures. Three specific issues were identified during the pilot phase. First, the length of several of the surveys was expressed as a key concern. This resulted in a general reduction in the length of all the surveys by approximately 30%. Second, there was concern with the reading level and complexity of several of the items used in the employee surveys. Therefore, language in both employee surveys was simplified. Finally, concern was expressed with the wording used in instructions for the HR Programs and HR Practices survey and required modification. Each of these changes is described in detail in the measures section, below. These revised surveys were again

reviewed by company HR personnel as well as several of the participating pilot locations to ensure the interpretability of the items and the instructions.

For the primary data collection, the hotels were recruited by franchise area service managers who were instructed to provide a cross section of locations representing a diversity of brand and performance. These area managers participated in a web conferencing session conducted by the researcher and the senior operation officer for the organization to provide instruction on the selection process and criteria. These individuals were also provided written project summaries and “frequently asked questions” sheets to equip them in this effort. In total, 325 hotels were identified by the area service managers and contacted by the researcher to further describe the study and requirements. Of this original set, 254 hotels elected to participate in the study and provided the employee count and language requirement information necessary to prepare survey packets. For the primary data collection, it was necessary to have the revised versions of the employee surveys translated into Spanish, Chinese, Russian and French using professional translators and using the same reverse translation protocol described earlier. Otherwise, the same protocol used in the pilot phase was used in the primary data collection. All locations were personally contacted by the researcher a minimum of three times. However, in this phase, considerable additional follow-up was necessary to secure responses from a number of locations. Multiple e-mail reminders and phone calls were necessary in many cases. From first contact to receipt of the final hotel response packet, the primary data collected lasted approximately four months.

In both phases, all data were coded as they were received. Each location had a unique identification code provided by the company for matching performance data with

survey responses. Coders were instructed to enter all surveys containing responses to any items, but to identify surveys missing significant portions of data or containing anomalies, such as responding to all items with the same response or patterns of response. Surveys identified as potentially problematic were then visually inspected by the researcher and a decision was made to either include or eliminate the response. While approximately 2% of the surveys were eliminated, these cases were extreme and, as a rule, all responses were retained unless a compelling reason existed to eliminate the response.

Following receipt and coding, missing managerial responses were also noted by the coder and provided to the researcher for follow-up. These locations were then e-mailed electronic versions of the missing surveys with a note explaining the importance of participation and encouraging their response via mail or fax. In the primary data collection, this process was only marginally successful as the majority of locations that did not provide managerial surveys in the initial response packet, also failed to do so following multiple reminders. Approximately 50 additional management surveys were obtained in this manner. In a second attempt to secure as full a response as possible among managerial respondents, all three managerial surveys—HR Principles, HR Programs and HR Practices were made available via an on-line survey program. This process yielded an additional 29 surveys.

To ensure accuracy of data entry, approximately 5% of the surveys were randomly selected and compared to the data base for accuracy. All scale ranges were also analyzed to ensure that data fell within the correct parameters.

Prior to the creation of the attitudinal and perceptual variables, reliability assessments were conducted on all variables. Additionally, while all data related to the HR

Systems and proximal employee outcomes were collected at the individual level, the variables and proposed relationships under study are all represented at the organizational level of analysis. For this reason, individual responses were aggregated to represent these variables at the organizational level.

### *Primary Sample Characteristics*

Of the original 254 locations who were delivered survey packets, 202 provided usable sets of surveys for some or all of the constructs under study. Among the 52 hotels who did not respond, 15 experienced either a change of management or ownership and therefore withdrew from the study. The remaining 37 hotels failed to respond to repeated inquiries regarding the status of the surveys and were therefore dropped from the sample. These hotels provided a representative cross-section of hotels within their franchise portfolio, including extended stay, business class and upscale markets. However, because size and financial performance data was provided for these hotels, t-test were performed to identify possible response bias among responding and non-responding hotels for these variables. No significant differences were found. Further, mean levels of each of these variables were compared to available industry trade association survey data (American Hotel & Lodging Association, 2007). This comparison suggested that the mean RPR in this sample, \$65.49/room, was only slightly higher than the national average of \$61.93/room. However, the average number of rooms for hotels in this sample, 155, was significantly larger than the 97 room national hotel average. Nevertheless, it was concluded that this sample was indeed representative of the larger franchise group and industry.

The distribution, average size and response rates are provided by brand and assessment type in Table 2. Brand One has an upscale business class market orientation and had 14 responding hotels. Brand Two has a limited service business class market orientation and was represented by 67 hotels. Brands Three and Four both represent long-term stay market orientations and were represented by 13 and 9 hotels, respectively. Brand Five has a mid-scale family and business class market orientation and was represented by 99 hotels.

Table 2

*Sample Characteristics & Response Rates*

Brand	Hotel Count	Average Size	<i>Response Count &amp; Rate* by Assessment</i>							
			HR Principles		HR Programs		HR Practices		Employee Surveys	
			Total Returned	Response Rate	Total Returned	Response Rate	Total Returned	Response Rate	Total Returned	Response Rate
Brand One	14	277	92	64%	13	93%	169	54%	700	39%
Brand Two	67	94	211	67%	63	94%	158	48%	1015	65%
Brand Three	13	98	45	66%	13	100%	28	44%	213	65%
Brand Four	9	91	20	46%	9	88%	20	48%	60	56%
Brand Five	99	200	562	72%	96	95%	649	57%	3571	49%
Total Sample	202	158	936	68%	193	94%	1024	52%	5549	54%

\* Determined by total employee count provided for each group at survey inception

In total, approximately 13,912 surveys were distributed to the various employee groups at the responding locations, with 7,702 complete and usable responses returned for an overall response rate of 55.3%. The demographic characteristics of these respondents for both the managerial and employee surveys are provided in Table 3. For the managerial surveys, the respondents averaged 5.75 years of service; 14.1 years of experience in the industry and 49.8% were female and 5.7% unspecified. For the two employee surveys, the respondents averaged 3.3 yrs of service; 6.2 years in industry and 61.95% were female and 4.29% unspecified. Of the 5,549 total responses to the two employee surveys, 1,015

(18.2%) were Spanish translation version, 40 (< 1 %) were Chinese, a 11 (< 1 %) were Russian and 16 (< 1%) were French

Table 3

*Respondent Demographic Characteristic*

<b>Managerial/Leadership Respondents</b>		<b>Line Employee Respondents</b>	
<b>Length of Service</b>	5.75	<b>Length of Service</b>	3.3
<b>Year in industry</b>	14.1	<b>Year in industry</b>	6.2
<b>Gender</b>		<b>Gender</b>	
Male	44.41%	Male	33.76%
Female	49.84%	Female	61.95%
Not Specified	5.70%	Not Specified	4.29%
<b>Level of Education</b>		<b>Level of Education</b>	
Some HS	2.66%	Some HS	18.63%
High school	24.81%	High school	30.87%
Some College	31.42%	Some College	28.29%
College	32.80%	College	11.23%
Graduate	2.66%	Graduate	1.47%
Not specified	5.60%	Not specified	9.51%
<b>Race/Ethnicity</b>		<b>Race/Ethnicity</b>	
Hispanic	9.05%	Hispanic	24.28%
American Indian/Alaskan	1.70%	American Indian/Alaskan	1.68%
Caucasian	70.61%	Black/African American	17.60%
Asian/Pacific Islander	3.19%	Asian/Pacific Islander	4.40%
Black/African American	5.86%	Caucasian	39.70%
Other	0.40%	Other	1.93%
Not Specified	9.26%	Not Specified	10.41%
<b>Department</b>		<b>Department</b>	
General Manager	21.30%	Front Desk/Reception	22.53%
Assistant GM/Rms Division	8.73%	Sales/Administration	2.83%
Front Desk	9.69%	Engineering	7.01%
Engineering	10.44%	Housekeeping	35.52%
Executive Housekeeper	12.67%	Food & Beverage	25.61%
F & B	13.95%	Other	2.40%
Sales	12.14%	Not Specified	4.11%
Admin/Other	9.27%		
Not Specified	1.81%		

## *Measures*

Each of the measures for the independent and dependent variables are described below. Included in each description are sample items, relevant pilot study findings and a brief description of any adjustment made to the instruments following the pilot study. All items used in both the pilot phases and primary data collections are presented in the Appendices. When the items were drawn from past research, the source is indicated.

### *The HR System Variables*

In order to develop the specific items of each facet of the HR system, all reported items used to measure the HR system in past research were consolidated into a data base. In total, over 680 items were collected and coded for both the practice assessed and conceptualization targeted. Items were then sorted according to conceptualization to provide a full and comprehensive data base of the measures employed in previous research. These items were then assessed and specific items were chosen based on the researcher's judgment as to their appropriateness to the present study. In several instances, new items were created because no suitable items were identified. Survey instruments were then developed for each of the HR system variables.

### *HR Principles.*

HR Principles captures variance in managerial attitudes related to the strategic importance of the management of employees and the surveys containing these measures were distributed to the senior management team at each location. As discussed earlier, several studies have attempted to assess managerial attitudes and values related to the management of employees. Therefore, it was possible to draw items from past research in the development of the HR Principles scale—for example, “Our employees’ capabilities

are our main source of competitive advantage” (Park, Mitsuhashi, Fey & Bjorkman, 2003). A number of new items were also developed including “Employee commitment and motivation is more important than location and hotel brand to the success of any hotel” and the reverse scored item “Employee skills and ability are largely interchangeable in this industry.” In total, eleven items were selected or created for use in the pilot phase. For all items, a Likert response scale was used ranging from “1” indicating strong disagreement with the statement, to “5” indicating strong agreement with the statement. The complete set of items used in the assessment of HR Principles in the pilot study is presented in Appendix B-1.

In the pilot study, the reliability of the scale ( $\alpha = .52$ ) was relatively low. The pilot scale contained items intending to target the overall value and importance senior management places on the management of their human resources and contained multiple reversed coded items. Following Tsui et al.(1997), this conceptualization was changed prior to the primary data collection to reflect a more specific ‘relational’ orientation on the part of senior management characterized by a general valuing of security and long-term career development. This slight change both narrows the conceptualization of the construct and is more conceptually consistent with the idea of a high commitment HR system. Therefore, the specific items were adapted somewhat to assess the degree to which managers believe that building and maintaining long-term relationships with employees is key to organizational success. Additionally, the reverse coded items were largely eliminated from the set as inter-item correlations between these assessments revealed low inter-correlation which was depressing the reliability of the measure. The result was a nine-item scale, provided in Appendix B-2. With these changes the reliability

of the measure improved significantly in the primary data collection ( $\alpha = .73$ ). The final survey that was distributed to employees is provided in Appendix B-3.

#### *HR Programs.*

HR Programs are reports by a key organizational informant of the formally established management programs at each location. Respondents were asked to report practices for the four separate functional areas common to most locations, as indicated in Figure 4. These departments were housekeeping/operations, food and beverage, sales/administration and front desk/reception. This will allow also for the testing of the differential effects of high commitment work practices when aligned with job functions of varying strategic importance. Respondents were asked to indicate the degree to which that practice is formally established and practiced on a five point Likert scale from “1”—indicating the practice is never used for employees in that department, to “5”—indicating that the practice applies to all individuals in that area. In total, eleven practices, commonly used in the SHRM literature were identified—selective hiring, internal labor markets, training and development, participation/involvement programs, employment security, performance appraisal, information sharing, contingent compensation, teams, reduced status distinctions and autonomy. For each work practice assessed, between four and six items were selected or created. While the majority of items were drawn from past research, several new items were created. All items selected are listed in Appendix C-1.

Because multiple items were used to assess the eleven practices and these assessments were made separately for each department, length was a particular concern with this instrument. Therefore, in an effort to shorten the instrument, individual items associated with each practiced were assessed. However, unlike measures in which

multiple items attempt to provide equivalent measures of the same construct, these measures identified unique, and potentially independent indicators of the construct. These formative measures, therefore, are not expected to necessarily covary and therefore traditional measures of reliability are inappropriate (Edwards & Bagozzi, 2000). Instead, inter-item correlations were examined for items which seem to be independent, rather than consistent, indicators of the practice. Based on this assessment, it was possible to reduce the survey to three items per management practice. This resulted in general reduction of the survey length by approximately 30 %.

A final change concerned the anchors for the response scales for HR Program items. Within the pilot study, the scale from these items had the following scale anchors: 1-Doesn't apply; 2- Applies to a few employees; 3- Applies to half; 4- Applies to most; and 5- Applies to all. Concern was expressed regarding possible inflations of these estimates based on a social desirability bias and the perception, by responding managers, that because the practices appeared on the instrument, they should be in place and apply to a large number of employees. For this reason, the instructions were adjusted to include the verbiage: "Below are a sample of practices that may or may not be used in your hotel. For those practices that do not apply to employees in a department of employees, simply circle N/A- doesn't apply." The scale anchors were then adjusted to: N/A- Doesn't Apply; 1- Applies to a few; 2- Applies to half; 3- Applies to most; 4- Applies to all. The new instructions and the revised scale are included in Appendix C-2. Once coded, these scales were converted to the 1 to 5 scale by coding N/A as 1 and increasing all other ratings by 1. Following on past research, the HR Program system variable was created with an additive index of the mean of reported practices used for each of the job functions (e.g. Arthur,

1994; Delery & Doty, 1996; Huselid, 1995). The final survey distributed to employees is provided in Appendix C-3.

*HR Practices.*

HR Practices captures the degree to which formal programs are implemented and used by managers and supervisors. The survey containing these measures was distributed to the manager and supervisors responsible for the oversight and management of the line level employees. The same items used in HR Programs assessment were also used here. However, in order to assure the respondent was referencing the degree to which they, and their fellow supervisory/managers personally implemented the programs, it was necessary to adjust the individual items to shift the referent to their own practice. For example, the HR program item used to assess selection practice changed from “Applicants undergo structured interviews (job related questions, same questions asked of all applicants, rating scales) before being hired” (Wright et al., 2005) to “Applicants in my department undergo structured interviews (job related questions, same questions asked of all applicants, rating scales) before being hired”. All items included in the pilot survey are listed in Appendix D-1. While the length of this survey was not cited as an issue, it was reduced as well. All items eliminated from the HR Program measure were also eliminated from the HR Practice survey. In order to mitigate the possible inflation of the reports of HR Practices and to maintain the continuity of measurement between the two assessments, the HR Practice survey instructions and scale anchors were adjusted to match those of HR Programs in the final survey. The items used in the primary data collection are provided in Appendix D-2 and the actual survey provided in Appendix D-3. Consistent with the treatment of the HR

Programs variable, an additive index was created representing the HR Practice system, as reported by the managers and supervisors.

*HR Perceptions.*

HR Perception measures were designed to capture employee perceptions of their work environment related to management practices and the survey containing these measures were distributed to line level employees. For each HR Practice, these items were framed in a manner to assess the degree to which employee perceptions of the organizational environment is consistent with the intent and the meaning of the HR Practice. It is important to note that special consideration was given to the level analysis. Because the proposed hypothesis will be tested at the organizational level, the items were reviewed and adapted, where appropriate, to focus the attention of the assessment to the total hotel environment. This is consistent with the referent shift consensus model described by Chan (1998) in which individual assessments are made at the level of the intended analysis. While items were drawn from a number of studies using measures of employee perceptions of HR Practices, it was also necessary to develop new items. For example, for the HR Practice Employee Participation, the items included “For the most part, employees are encouraged to participate in and make decisions that affect their day-to-day activities” (Vandenberg et al., 1999) as well as the new items “If employees have a concern or complaint, they can express it” and “Management cares about employee opinions and ideas”. A Likert type scale was used for all items ranging from “1” indicating strong disagreement with the statement to “5” indicating strong agreement with the statement. All items used in the pilot portion of the study are included in the Appendix E-1.

Two specific concerns were identified with this survey during the pilot phase. The survey, which included 48 items and was 1.5 pages long, was reported to be too long and onerous to respondents. Additionally, the reading level and complexity of several of the items were a concern. As a result, while the target for these items in the pilot survey was an eighth grade reading level, it was deemed necessary to be simplified to a fifth/sixth grade reading level in the primary data collection version. In an effort to reduce the length of the survey, an exploratory factor analysis was conducted on these items. This analysis found nearly all items loading strongly on a single factor. The few items which did not load on this single factor were typically reversed coded items and, when the data was factor analyzed for English speaking respondents only, loaded on this single factor. While no theoretic assumptions were made a priori regarding the expected factor structure of these perceptions, respondents in the pilot sample did not seem to distinguish the perceptions associated with individual practices as separate and discreet components of their work environment. For this reason, these measures were adapted significantly.

Following the same approach used in the revision of the HR Principles survey, these items were adapted and refined to reflect a ‘relational’ dimension. This change was important for several reasons. First, by developing parallel conceptualizations to the Principles survey, it is possible to better understand the degree to which leader values attitudes consistent with this perspective manifest not only in HR Programs/Practices consistent with these practices, but also in employee HR Perceptions. In some cases, it was possible to retain the simplified items from the pilot version. For example, the original item of “This hotel values employee training and development” was simplified to “The hotel values employee training and growth” and retained. The items comprising this

revised scale are presented in Appendix E-2 and the actual final survey distributed to employees is included in Appendix E-3.

### *Proximal Employee Outcomes*

In the development of the proximal employee outcome measures, consideration was again given to levels of analysis in the development of these items. Unlike the HR Perceptions items, however, several of these constructs are best made at the individual level. Unlike the HR Perception measure which assessed the employee's perceptions of the organizational environment, these assessed individual attitudinal states. Therefore, most assessments are made by asking the employee to assess their own self-efficacy, satisfaction and commitment, for example, rather than blanket determinations of overall levels of these outcomes at the hotel. Teamwork was assessed with items that were either neutral on the referent focus or at departmental level. Therefore, the conceptualization of the selected constructs determined the most appropriate referent focus.

All measures described below were assessed with Likert response scales ranging from "1" indicating strong disagreement to "5" indicating strong agreement with the statement. All items used in the assessment of the employee outcomes in the pilot study are provided in Appendix F-1, the items used for each measure in the primary data collection are provided in Appendix F-2 and the final survey instrument is provided in Appendix F-3. Where items are drawn from past research, the source is indicated.

#### *Teamwork.*

The teamwork measures captured the level of cooperative and coordinative behavior among employees at each location. Items were taken from Glaser, Zamanou, and Hacker's (1987). Sample items include "The people I work with are cooperative" and

“People I work with function as a team”. In total, seven items were used in the course of the pilot. These items produced good reliability in the pilot sample ( $\alpha = .91$ ). Given the strong reliability and the need to shorten the survey, a single item was eliminated.

Additionally, modest changes to the wording were made in order to simplify the items.

The reliability of this scale in the primary data collection was  $\alpha = .92$ .

#### *Organizational Citizenship Behavior.*

Organizational citizenship behavior (OCB) captures the degree to which employees engage in behaviors that are not formally required, but are nevertheless important to organizational functioning. It was originally conceptualized by Smith, Organ and Near (1983) as two dimensions: altruism (behavior targeted specifically at helping individuals) and generalized compliance (behavior reflecting compliance with general rules, norms, and expectations). Later Organ (1988) identified five dimensions belonging to OCBs: Altruism, Courtesy, Civic Virtue, Conscientiousness and Sportsmanship. The service intensive context makes the civic virtue, intended to capture behavior aimed at the improvement of the organization, the most appropriate conceptualizations for this study. Four items, used in past research, were selected for use in the pilot survey. These items had modest reliability ( $\alpha = .61$ ) in the pilot sample. Item analysis suggested that the elimination of one item “I participate in planning and organizing social events at work (ex: staff parties).” improved the reliability to  $\alpha = .81$ . For this reason, the item was dropped for the primary data collection and replaced with “I am willing to work harder than I have to in order for this hotel to do well”. The reliability of the scale for the primary data collection was  $\alpha = .81$ .

### *Organizational Commitment.*

Affective organizational commitment was designed to capture the employee commitment and loyalty to the hotel. This was measured using three items taken from Wright et al. (2005). A sample item is “I feel a strong sense of belonging to the organization”. These items had good reliability ( $\alpha = .80$ ) in the pilot sample. However, given the central nature of the construct, an additional item “I feel a high level of loyalty to this hotel” targeting the degree to which employees believed they felt a long-term commitment to the hotel was added during the primary data collection. Within the primary data collection, the reliability of this final scale was  $\alpha = .94$ .

### *Job Satisfaction.*

Job satisfaction assessed the employees overall satisfaction with their employment. This was accomplished using four items drawn from Cable and Edwards (2004). A sample item was “I am generally satisfied with my job”. This scale had good reliability in the pilot sample ( $\alpha = .89$ ) and all items were retained for use in the primary data collection ( $\alpha = .94$ )

### *Self-efficacy.*

Self-efficacy assessed employee’s own belief in their ability to be successful in their jobs. Four items intended to tap generalized self- efficacy items were drawn from Chen, Gully & Eden (2001). A sample item is “I am confident that I can perform well on many different tasks on the job”. These items had good reliability in the pilot sample ( $\alpha = .87$ ) and final sample ( $\alpha = .86$ ).

## *Intermediate Organizational Outcomes*

### *Customer Service Ratings.*

Quality of service received was assessed using organizationally provided data of actual customer ratings of service and quality. The customer service measure is known as the Guest Service Tracking Score (GSTS) and is the consolidated score on a battery of items used to assess the customer service and hotel quality perceptions of past guests of the hotel. These include overall satisfaction with their stay at the hotel, overall service received, willingness to recommend the hotel and return intentions. These data were provided on a monthly basis with an average of 50 customers per hotel surveyed. Correlations among these outcomes, however, was very high ( $r = .91$ ). Therefore, to simplify the presentation of results, a single service outcome—overall service received—was selected. This outcome is also the most directly impacted by interactions with employees. The variable used in the analysis was constructed by averaging the scores for each dimension for all months in the year of the data collection.

### *Voluntary Turnover.*

Voluntary turnover was assessed using data provided by the hotel General Manager or, in some cases, the Human Resource Director for the location. This was included in the HR Programs survey and calculated by the researcher based on the number of total voluntary quits reported during the most recent calendar year divided by the average total employment at the hotel during that same period (Shaw et al., 1998).

### *Distal Financial Outcomes*

#### *Revenue per Room.*

Revenue per available room (RPR) is a well-established and accepted financial performance metric within the hotel industry. It is calculated by dividing the total revenue for the property by the number of rooms available for occupancy during the same period. It is effective in so far as it accounts for variability in the size of the hotel and provides a comparable measure across properties. Data used for this measure was constructed by averaging the RPR for all months in the year of the data collection.

#### *Control Variables*

As stated one of the strengths of within industry sampling is the capacity to control for extraneous sources of performance (Pfeffer, 1998). This control was further enhanced in this sample by the uniform technology, advertising and physical plan standards within the participating franchise company. Additional control data, including the size, age and brand of the sampled hotels were provided by the company. This is important to protect against extraneous, unmeasured sources of performance variance within the sample that may also vary with both the independent and dependent variables under study. This omitted variable bias, in this circumstance, would have the possible consequence of wrongly attributing performance variance in performance to the HR System. The control variables are then included to capture these other affects and increase confidence in findings. The risk, naturally, is that these variables are related to performance in a manner consistent with the HR System's effects on performance, creating the alternative possibility that their inclusion in facts controls for HR's influence (Becker & Huselid, 2006).

*Size.*

Firm size was included as a control because it may be associated with the use of more sophisticated human resource practices as well as higher productivity born of economies of scale (Guthrie, Spell & Nyamori, 2002; Jackson & Shuler, 1995). Two measures of hotel size were explored, number of rooms and total employee count. While the correlation between these two measures of size was  $r = .89$ , room count was elected to represent size as it had a slightly stronger relationship with several of the outcomes and, therefore, a fuller control on these relationship. Therefore, organizational size was represented by the number of rooms at each location.

*Age.*

Hotel age has been noted to be associated with the evolution or adoption of high-performance human resource practices and learning curve advantages in productivity (Guthrie, 2001). Hotel age was provided by the company and represented as number of years since the hotel was branded with their company. While, in certain cases, the sampled hotels may have changed brands and therefore actually be older than the number represented, these instances were believed to be few in number.

*Brand.*

While technology, advertising and physical plant standards are uniform within each brand, they differ across brand types. Additionally, each brand represents slightly different strategic orientations and target customers. For this reason, brand serves as an important control for a number of potential sources of performance variances unrelated to variability in the independent variables. Therefore, brand was included in all analysis as a control. Each brand was represented by dummy coded variables. This was accomplished by

creating five new variables in which each hotel was coded as a 1, if the brand applied to that hotel or 0 if it did not apply.

### *Aggregation Analysis*

Because all hypothesized relationships are at the organizational level of analysis, individual responses were aggregated to represent these variables at the organizational level. Within the SHRM literature, the prevalence of single respondent survey methodology has resulted in concern regarding the reliability of these measures (Gerhart et al., 2000; Huselid & Becker, 2000). As a potentially meaningful source of measurement error, this issue has spawned considerable debate in the literature regarding the extent to which a lack of reliability may operate to depress observed relationships and, therefore, influences the interpretation of past research (e.g. Gerhart et al., 2000; Huselid & Becker, 2000). There exists, however, a consensus among researchers that securing multi-respondents from sampled organizations is necessary to both better understand the issue and protect against error introduced by single-response assessments (Becker & Huselid, 2006; Wright et al., 2001; Gerhart et al., 2000; Huselid & Becker, 2000; Wall & Wood, 2005). Therefore, the design employed here is responsive to these concerns and, though not a direct focus of this study, informs this debate. The three most common approaches to assessing variability in organizational level research are the inter-class correlations coefficients, ICC (1) and ICC(2), and  $R_{wg(1)}$  (e.g. Bliese, 2000).

ICC (1) and ICC (2) are ANOVA based measures derived from the components of a one-way random effects ANOVA in which the construct of interest is the dependent variable and the group membership is the independent variable. Therefore, ICC (1) provides an estimate of the amount of variance in responses explained by group

membership. ICC (1) is interpreted as the degree to which any one member might reliably represent the group (Bliese, 1998; Bliese, 2000). Past reviews using multiple assessments of various aspects of the work environment report average ICC (1) values of .12 (James, 1982). More recent research examining multiple assessments of management practices report ICC(1) values consistent with this estimate (e.g. Schneider, Salvaggio & Subirats, 2002; Takeuchi, Lepak, Wang & Takeuchi, 2007, Wright et al., 2005). Thus, the reliability of single raters is typically quite weak (Gerhart et al., 2000; Wright et al., 2001).

ICC (2) is an indicator of the reliability of the measure across respondents and, as such, provides an estimate of the degree to which the mean accurately represents the group (Bliese, 2000). ICC (2) values of .60 have been offered as a threshold criteria in establishing acceptable reliability among multiple raters (Glick, 1995). Recent studies, however, have reported ICC(2) values of .50 in samples drawn from groups of managers (e.g. Schneider et al., 2002; Takeuchi et al., 2007). Finally,  $Rwg_{(1)}$  is an estimate of within group agreement and compares observed within group variance against a theoretic distribution of random responses (James, 1982). Though commonly reported in organizational level research, it is important to distinguish that  $Rwg_{(1)}$  is a measure of within group agreement, not reliability (James, Demaree & Wolf, 1993; Schmidt & Hunter, 1989). Because  $Rwg_{(1)}$  focuses entirely on assessing variability in ratings for a single target, rather than accounting for variance both within and between targets (organizations), it fails the requirements of classical test theory (Schmidt & Hunter, 1989). Nevertheless, ICC (2) and  $Rwg_{(1)}$  are similar in that they both provide indicators of the consensus in ratings within the group. However, unlike  $Rwg_{(1)}$ , the null distribution assumption in the calculation of the ICC(2) estimate is a function of the actual variance in

the sample, rather than a theoretic estimate. The recommended standard for establishing agreement among respondents for  $Rwg_{(1)}$  is .60 (James, 1982), though the more commonly accepted standard in the literature is .7.

Because characteristics of the sample can exert systematic influences on these values, the use and reliance on multiple indicators is encouraged when interpreting variability (Bliese, 1998). For example, ICC(2) has been demonstrated to be systematically depressed in circumstances where group size is small (Bliese, 1998). In this sample, the mean number of individuals providing reports of HR Principles (group size  $\mu = 4.7$ ) and HR Practices (group size  $\mu = 5.7$ ) is relatively small. Second, as stated, ICC(2) is reflective of the ratio of group variance relative to the sample variance. When there is a small amount of variance between groups in the sample, even in cases of small within group variance, smaller ICC (2) values result.

Table 4 presents a summary of the average group size and agreement statistics for all aggregated study variables. First, considering the managerial reports of the HR System construct, HR Principles and HR Practices produced ICC(1) values of .17 and .15, respectively. Both values are statically significant ( $p < .01$ ) and consistent with values reported in other studies in which multiple assessments of HR Practices are provided (e.g. Wright et al., 2005). Likewise, the ICC (2) values for the management assessments are consistent with those reported in past research (Schneider et al., 2002; Takeuchi et al., 2007). However, the ICC (2) values of .49 for HR Principles and .50 for HR Practices suggest modest reliability in these assessments. Therefore, this data then affirms concerns with single-respondent designs and suggest that any one respondent would in fact provide an unreliable estimate of the organizations' HR Principles or HR Practices. However, it is

possible that the group size may be depressing these values somewhat. Further, the  $Rwg_{(1)}$  values of .87 for HR Principles and .73 for HR Practices suggests that agreement among respondents in absolute terms is relatively high. Therefore, ICC (2) may be further depressed by limited between organization variance in this sample.

Table 4

*Summary of Agreement Statistics for Aggregated Variables*

Variable	Respondent Set	Mean Group Size	Reliability/Agreement Indices		
			ICC (1)	ICC(2)	Mean $Rwg_{(1)}$
HR Principles	Senior Management	4.7	0.17 **	0.49	0.87
HR Practices	Managers/Supervisors	5.3	0.15 **	0.49	0.77
HR Perceptions	Employees	13.77	0.07 **	0.50	0.72
Employee Outcomes	Employees	13.68			
Job Satisfaction			0.05 **	0.42	0.71
Organizational Comm.			0.05 **	0.41	0.72
Self-Efficacy			0.02 **	0.21	0.80
Teamwork Behavior			0.04 **	0.41	0.59
Org. Citizenship Beh.			0.03**	0.30	0.73

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

In the assessment of agreement of the employee provided data, a similar story is evident. The employee assessment of HR Perceptions produced a value of .07, both statistically significant ( $p < .01$ ) and consistent with reported values in past studies (e.g. Schneider et al., 2003). Likewise, while mean levels of  $Rwg_{(1)}$  are above recommended thresholds, the ICC(2) estimate of .50 suggests modest reliability in this measure. Finally, as reported in Table 4, this same pattern holds for all employee outcome variables. ICC(1) statistics for all employee outcome variables are statistically significant ( $p < .01$ ), though a few are relatively small. Likewise, all mean  $Rwg_{(1)}$  values are above threshold standards

with the exception of teamwork behavior, which falls only slightly below. Once again, ICC(2) results are lower than suggested standards across all variables—especially in the cases of self-efficacy and organizational citizenship behavior. However,  $Rwg_{(1)}$  for self-efficacy and organizational citizenship behavior are comparatively high. This suggests that ICC (2) values may be systematically depressed by the relative small amount of sample variance for these variables (self-efficacy: S.D. = .29; organizational citizenship behavior: S.D. = .33).

Considered collectively, therefore, this data suggests that reliability concerns with single reports are indeed justified. Further, it demonstrates the limited information provided by any one indicator of within group variability (Bliese, 2000). In the present case, while largely consistent with past research, suggest that a single rater for any of these organizational level constructs would produce an unreliable estimate of the organizational mean.

To the degree that the variability in these data represents a lack of reliability in these measures, the most direct risk is that this error in measurement would depress the observed relationships (Nunnally, 1978; Gerhart et al., 2000; Huselid & Becker, 2000). Alternatively, it is also possible that this variability may represent true differences in practices, perceptions and employee experiences within the organization. If so, variability may represent an important property of these organizational characteristics (Arthur & Boyles, 2007). Therefore, as discussed later, understanding the sources and influence of variability in these measures represents an important opportunity for future research.

## CHAPTER 5: RESULTS

### *Descriptive Data*

Means, standard deviations, correlations and coefficient alpha reliabilities are provided for the organizational level study variables in Table 5.

### *Test of Hypothesis*

#### *Uniqueness of the HR System Measures*

Hypothesis 1 stated that the four measures of HR System—HR Principles, HR Programs, HR Practices and HR Perceptions, measure different types of information regarding the HR System and, therefore, should not be highly correlated. In order to test this hypothesis, the zero-order relationships among these measures were examined, as present in Table 5. The measures ranged in their relationship with one another from  $r = .13$  to  $r = .25$ . While the magnitudes of these relationships are all statistically significant in this sample, they are not at a level that would suggest that they are equivalent measures. This evidence suggests that these measures, while related, are in fact tapping different types of information related to the HR System. Therefore, Hypothesis 1 is supported.

Hypothesis 2 stated the measures of the HR System will provide significant differences in the prediction of organizational outcomes. The relative magnitude of the effect sizes between the various HR System measures and the proximal, intermediary and distal outcomes were examined. While all these relationships are contained in Table 5, for ease of exposition, they are also presented graphically in Figure 5. T-tests were performed

Table 5

*Means, Standard Deviations, Reliabilities and Zero-order Correlations*

	<b>M</b>	<b>S.D.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>1 Size</b>	159.65	91.08										
<b>2 Age</b>	13.24	12.56	0.37**									
<b>3 Brand One</b>	0.07	0.25	0.36**	0.03								
<b>4 Brand Two</b>	0.33	0.47	-0.51**	-0.38**	-0.19**							
<b>5 Brand Three</b>	0.06	0.25	-0.17*	-0.21**	-0.07	-0.19**						
<b>6 Brand Four</b>	0.04	0.21	-0.16*	-0.19**	-0.06	-0.15*	-0.06					
<b>7 Brand Five</b>	0.48	0.50	0.44**	0.53**	-0.26**	-0.69**	-0.25**	-0.21**				
<b>8 HR Principles</b>	4.01	0.37	-0.11	-0.10	-0.11	0.22**	0.05	0.03	-0.17*	0.74		
<b>9 HR Programs</b>	3.46	0.49	-0.05	-0.10	-0.06	0.06	0.02	0.07	-0.07	0.21**		
<b>10 HR Practices</b>	3.55	0.42	-0.03	-0.21**	-0.02	-0.01	0.07	0.16*	-0.06	0.21**	0.23**	
<b>11 HR Perceptions</b>	3.36	0.45	-0.20**	-0.24**	-0.12	0.12	0.12	0.17*	-0.19**	0.13*	0.25**	0.20**
<b>12 Job Satisfaction</b>	4.16	0.37	-0.18**	-0.17**	-0.18**	0.18**	0.01	0.10	-0.13*	0.26**	0.13*	0.18**
<b>13 Org. Citizenship Beh.</b>	4.10	0.33	-0.17*	-0.14**	-0.13*	0.13*	0.06	0.20**	-0.17*	0.16**	0.15*	0.04
<b>14 Org. Communication</b>	4.19	0.39	-0.12	-0.20**	-0.15*	0.14*	0.12*	0.12	-0.17*	0.20**	0.15*	0.13*
<b>15 Self-efficacy</b>	4.39	0.29	-0.05	-0.09	-0.07	0.12	-0.21**	0.16*	-0.03	0.06	0.18**	0.04
<b>16 Teamwork</b>	3.70	0.43	-0.21**	-0.20**	-0.08	0.15*	0.00	0.18**	-0.18*	0.17**	0.17*	0.07
<b>17 Turnover</b>	53.40	42.43	-0.16*	-0.03	-0.07	0.10	0.05	-0.07	-0.06	0.07	-0.16*	-0.11
<b>18 HR Princ. X HR Prog.</b>	13.91	2.64	-0.08	-0.12	-0.09	0.15*	0.05	0.04	-0.14*	0.67**	0.87**	0.29**
<b>19 HR Prog. X HR Perc.</b>	11.69	2.59	-0.15*	-0.21**	-0.10	0.13*	0.08	0.18**	-0.18**	0.24**	0.79**	0.27**
<b>20 HR Pract. X HR Perc.</b>	11.92	2.34	-0.14*	-0.28**	-0.09	0.06	0.11*	0.24**	-0.16*	0.21**	0.28**	0.75**
<b>21 Overall Service Received</b>	80.67	6.27	-0.52**	-0.41**	-0.13*	0.40**	0.24**	0.30**	-0.56**	0.27**	0.07	0.05
<b>22 Revenue Per Room</b>	65.49	20.78	-0.00	-0.17*	0.17*	0.18**	-0.05	-0.17*	-0.17*	0.05	0.19**	0.13*

Note. N = 192-202; Coefficient alpha reliabilities provided on the diagonals.

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

Table 5 (continued)

*Means, Standard Deviations, Reliabilities and Zero-order Correlations*

	10	11	12	13	14	15	16	17	18	19	20	21
1 Size												
2 Age												
3 Brand One												
4 Brand Two												
5 Brand Three												
6 Brand Four												
7 Brand Five												
8 HR Principles												
9 HR Programs												
10 HR Practices												
11 HR Perceptions	0.20**	0.89										
12 Job Satisfaction	0.18**	0.33**	0.88									
13 Org. Citizenship Beh.	0.04	0.36**	0.64**	0.81								
14 Org. Communication	0.13*	0.33**	0.80**	0.76**	0.94							
15 Self-efficacy	0.04	0.29**	0.53**	0.56**	0.56**	0.86						
16 Teamwork	0.07	0.46**	0.61**	0.50**	0.56**	0.49**	0.92					
17 Turnover	-0.11	-0.03	0.03	-0.08	-0.07	-0.08	0.00					
18 HR Princ. X HR Prog.	0.29**	0.28**	0.22**	0.19*	0.19**	0.16*	0.20**	-0.08				
19 HR Prog. X HR Perc.	0.27**	0.78**	0.30**	0.34**	0.30**	0.28**	0.40**	-0.12	0.74**			
20 HR Pract. X HR Perc.	0.75**	0.80**	0.31**	0.25**	0.27**	0.19**	0.30**	-0.07	0.33**	0.69**		
21 Overall Service Received	0.05	0.23**	0.29**	0.29**	0.30**	0.10	0.21**	0.03	0.19**	0.19**	0.15**	
22 Revenue Per Room	0.13*	0.11	0.15*	0.12	0.17**	0.08	0.10	-0.13*	0.18*	0.19**	0.13*	0.01

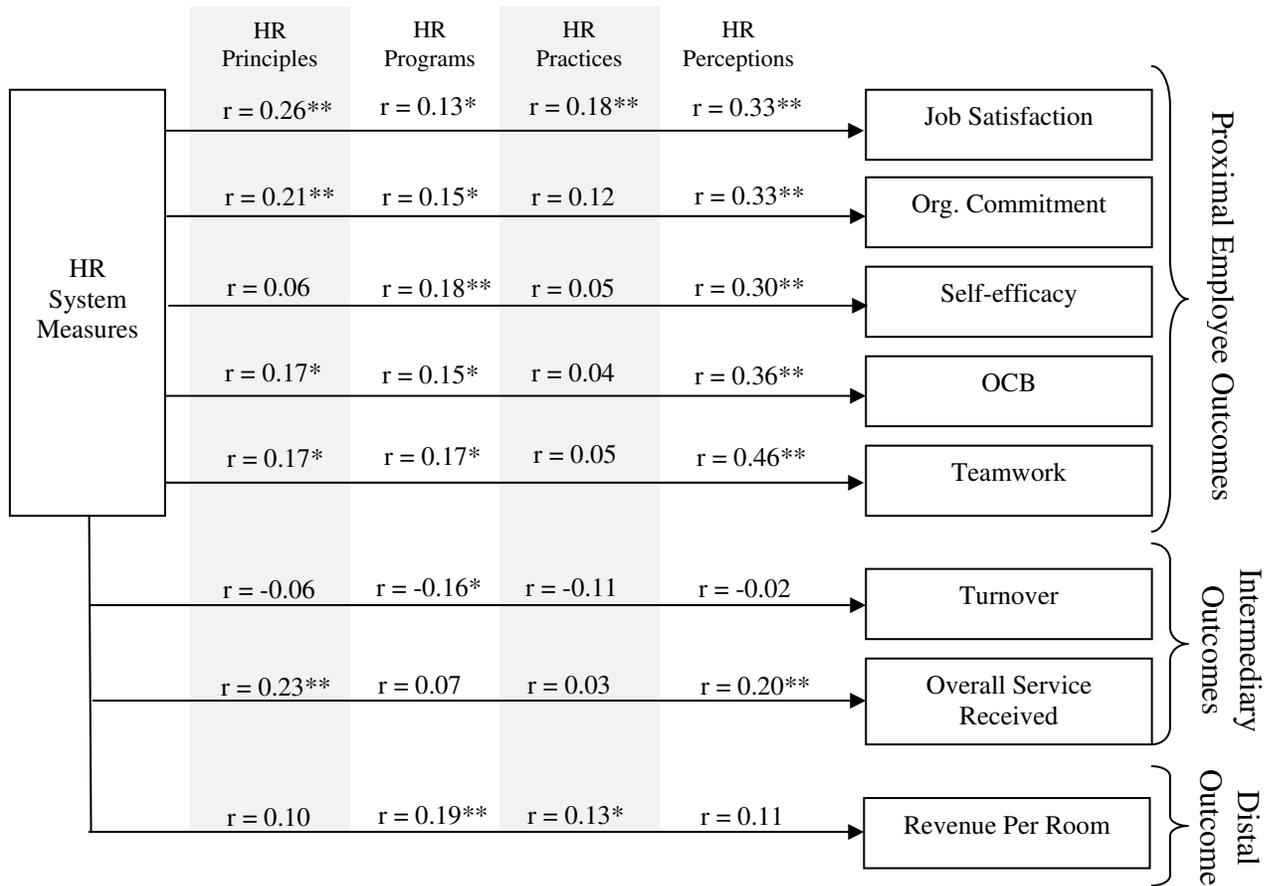
Note. N = 192-202; Coefficient alpha reliabilities provided on the diagonals.

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

Figure 5

*Visual Representation of the Relationships between HR System measures and Organizational Level Outcomes*



on the pairs of relationships between the HR System measures and the outcomes to establish whether any differences in these effects size are statistically significant. A difference of approximately .13 ( $p < .05$ ) between these effect sizes was necessary to reach this threshold with this sample size. Because many of the relationships with the outcomes themselves are on the order of  $r = .13$ , this was a difficult standard and only 18 of the 48 pairs met this standard. Moreover, the great majority of these 18 significant differences were the product of the comparisons of the HR Perceptions relationships, whose

magnitudes were consistently much larger than those for other HR system measures. Nevertheless, even the relative prediction of HR Programs and HR Practices, the two most conceptually similar measures assessed, show meaningful (though not statistically significant) differences across outcomes. Therefore, these comparisons provide mixed evidence of the differential prediction of the measures and, therefore, only limited support for Hypothesis 2.

#### *The relationship between HR System variables*

Hypothesis 3 stated that HR Principles reflecting managerial beliefs in the strategic importance of employees will be positively related to the adoption of high-commitment HR Programs. As indicated in Table 5, the zero-order correlations between levels of HR Principles and HR Programs is  $r = .21$  ( $p < .01$ ). However, in order to test this relationship in the presence of the controls, hierarchical linear regression was performed. These results are presented in Table 6. As shown, in Model One, HR Programs are regressed on all of the control variables, including the five brand dummy variables, hotel age and hotel size. This combination of controls accounted for 2% of the variance in HR Programs ( $p > .05$ ). In Model Two, these same control variables are entered into the model, followed by a second step entering HR Principles. In this model, the inclusion of HR Principles, explains an additional 5% of the variance in HR Programs for a cumulative  $R^2$  of .09 ( $p < .01$ ). Thus, the inclusion HR Principles in this regression model provides a statistically significant increment in prediction of the presence of HR Programs and Hypothesis 3 is supported.

Hypothesis 4 stated that high commitment HR Principles will moderate the relationship between high commitment HR Programs and their use, as measured by HR

Practices. In order to test for moderation, hierarchical linear regression was used in three steps. Table 7 presents the results of this analysis. In Model One, HR Practices was regressed on the controls only. This accounted for a significant amount of variance in the levels of HR Practice, with 7% of the variance explained by the presence of the controls alone ( $p < .01$ ). As shown in Model Two, the second step included both HR Principles and HR Programs. These two variables provided a statistically significant increase of 7% of

Table 6

*Hierarchical Regression Results for HR Principles regressed on HR Programs*

Variable	HR Programs					
	Model 1			Model 2		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	3.44	0.13		2.41	0.40	
Age	-0.003	0.003	-0.076	-0.003	0.003	-0.082
Size	0.000	0.001	0.040	0.000	0.001	0.022
Brand 1	-0.11	0.15	-0.06	-0.09	0.15	-0.05
Brand 2	0.06	0.11	0.06	-0.00	0.11	-0.00
Brand 3	-0.00	0.17	0.00	-0.04	0.17	-0.02
Brand 4	0.17	0.20	0.07	0.15	0.19	0.06
HR Principles				0.28	0.10	0.20**
R	0.13			0.24**		
R <sup>2</sup>	0.02			0.07**		
Adj. R <sup>2</sup>	-0.01			0.02**		
F	0.56					
	(6,185)					
$\Delta R^2$				0.05**		
$\Delta F$				7.42**		
				(1, 184)		

Note. N = 191

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

Table 7

*Hierarchical Regression Examining Moderating Effects of HR Principles on Relationship between HR Programs and HR Practices*

Variable	HR Practices								
	Model 1			Model 2			Model 3		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	3.58	0.11		2.242	0.37		4.82	2.67	
Age	-0.006	0.003	-0.178*	-0.006	0.002	-0.171*	-0.005	0.003	-0.166
Size	0.0002	0.000	0.065	0.0001	0.0004	0.040	0.0002	0.0004	0.042
Brand 1	0.04	0.13	0.02	0.07	0.12	0.04	0.07	0.12	0.05
Brand 2	-0.01	0.09	-0.01	-0.07	0.09	-0.07	-0.06	0.09	-0.07
Brand 3	0.08	0.16	0.04	0.04	0.15	0.02	0.04	0.15	0.02
Brand 4	0.34	0.16	0.17*	0.30	0.16	0.15*	0.30	0.160	0.15*
HR Principle				0.22	0.08	0.20**	-0.42	0.66	-0.38
HR Programs				0.14	0.06	0.16*	-0.59	0.74	-0.66
HR Principles X HR Programs							0.19	0.18	1.09
R	0.32**			0.38**			0.39**		
R <sup>2</sup>	0.07**			0.14**			0.15**		
Adj. R <sup>2</sup>	0.04**			0.10**			0.11**		
F	2.17**								
	(6, 173)								
$\Delta R^2$				0.07**			0.01		
$\Delta F$				7.39**			0.94		
				(2,171)			(1, 171)		

Note. N = 186

\* Significant at  $p < .05$

\*\*Significant at  $p < .01$

the variance in HR Practices explained, for a cumulative  $R^2$  of .14 ( $p < .01$ ). Consistent with the test for moderation, the interaction term of HR Principles X HR Programs was entered as a third step, as reflected in Model Three. The resulting beta coefficient and incremental change in  $R^2$  offered by the interaction term failed to produce a statistically significant increment in prediction to the model. This fact suggests that moderation is not present and, therefore, Hypothesis 4 is not supported (Aiken & West, 1992). Though visual examination of the slopes of the regression lines in the high and low conditions of the moderating variable is customary in moderation analysis, this was not warranted in this circumstance. However, as indicated in Table 5, it is worth noting that both HR Principles and HR Programs are significantly related to HR Practices,  $r = .21$  ( $p < .01$ ) and  $r = .23$  ( $r < .01$ ), respectively. Moreover, the examination of the beta coefficients for HR Principles ( $\beta = .20$ ,  $p < .05$ ) and HR Programs ( $\beta = .16$ ,  $p < .05$ ) reveals that they both contribute significantly to the prediction of HR Practices.

Hypothesis 5 stated that HR Principles will be positively associated with presence of high commitment HR Perceptions. While the zero-order correlation between these two variables was significant,  $r = .13$  ( $p < .05$ ), this relationship is relatively modest. As shown in Table 8, hierarchical regression analysis was conducted to test this relationship in the presence of the control variables. The first step of the analysis, present in Model One, explained 10% of the variance in HR Perceptions ( $p < .01$ ). The inclusion of HR Principles in the second step, presented in Model Two, failed to provide significant improvement in this prediction. Therefore, HR Principles failed to provide significant prediction of the presence of HR Perceptions and Hypothesis Five is not supported.

Table 8

*Hierarchical Regression Results for HR Principles regressed on HR Perceptions*

Variable	HR Perceptions					
	Model 1			Model 2		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	3.42	0.12		3.00	0.35	
Age	-0.005	0.003	-0.145	-0.005	0.003	-0.148
Size	-0.0001	0.0004	-0.039	0.0001	0.0004	-0.024
Brand 1	-0.13	0.13	-0.07	-0.12	0.13	-0.07
Brand 2	0.07	0.09	0.07	0.08	0.09	0.08
Brand 3	0.18	0.15	0.10	0.14	0.15	0.07
Brand 4	0.34	0.17	0.15*	0.33	0.17	0.16*
HR Principles				0.10	0.09	0.08
R	0.31**			0.32**		
R <sup>2</sup>	0.10**			0.11**		
Adj. R <sup>2</sup>	0.07**			0.07**		
F	3.42**					
	(6, 190)					
$\Delta R^2$				0.01		
$\Delta F$				1.52		
				(1, 189)		

Note. N = 196

\* Significant at  $p < .05$

\*\*Significant at  $p < .01$

Hypothesis 6 stated that HR Practices will be positively associated with HR Perceptions. Table 9 presents the hierarchical regression analysis results testing this hypothesis. Model One includes controls only with HR Practices entered as the second step in Model Two. The inclusion of the controls in the model predicts a significant portion of the variance in HR Perceptions— $R^2 = .10$ . Moreover, the inclusion of HR Practices, although very modest, provides statistically significant incremental improvement in the prediction of HR Perceptions with an additional 2% ( $p < .05$ ) of variance explained. Therefore, Hypothesis 6 is supported.

Table 9

*Hierarchical Regression Results for HR Practices and HR Programs regressed on HR Perceptions*

Variable	HR Perceptions								
	Model 1			Model 2			Model 3		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	3.42	0.12		2.84	0.30		2.73	0.25	
Age	-0.005	0.003	-0.144	-0.004	0.003	-0.112	-0.005	0.003	-0.13
Size	0.0002	0.0005	-0.039	-0.0002	0.0004	-0.049	-0.0002	0.0004	-0.050
Brand 1	-0.13	0.14	-0.07	-0.12	0.13	-0.07	-0.106	0.13	-0.06
Brand 2	0.07	0.10	0.07	0.08	0.09	0.08	0.06	0.09	0.08
Brand 3	0.18	0.15	0.10	0.17	0.15	0.09	0.17	0.15	0.10
Brand 4	0.34	0.17	0.15*	0.30	0.17	0.15*	0.30	0.17	0.17*
HR Practices				0.16	0.08	0.15*			
HR Programs							0.16	0.08	0.22**
R	0.31**			0.34**			0.37**		
R <sup>2</sup>	0.10**			0.12**			0.14**		
Adj. R <sup>2</sup>	0.07**			0.09*			0.09*		
F	3.31**								
	(6, 184)								
$\Delta R^2$				0.02*			0.05**		
$\Delta F$				4.64*			9.64**		
				(1,183)			(1, 182)		

Note. N = 190

\* Significant at  $p < .05$

\*\*Significant at  $p < .01$

Though not hypothesized, the relationship between HR Programs and HR Perceptions was also tested. Because reports of HR Programs by a key organizational informant are more established and have greater precedent in SHRM research, the direct relationship between the HR System measured in this manner and employee perceptions is important to understand. Model Three in Table 9, presents these results. As indicated, HR Programs, provides a stronger increase in the overall prediction of these HR Perceptions,  $\Delta R^2 = .05$ ,  $p < .01$ .

*Relationships between HR System variables and Proximal, Intermediary and Distal Organizational Outcomes*

Hypotheses 7a -7c stated that HR Practices will mediate the relationship between HR Programs and (a) HR Perceptions, (b) the employee attitudinal outcomes and (c) behavioral outcomes. Following Baron and Kenny (1986), a significant relationship between both the independent variable—HR Programs and the criterion variable must first be established. Second, the independent variable must also be related to the proposed mediator, HR Practices. Third, the mediator must be predictive of the criterion variables when the independent variable is included in the prediction model. This is necessary as the mediator and the outcomes may be correlated because they are both caused by the independent variable, HR Programs. Thus, HR Programs must be controlled in establishing the effect of the mediator on the outcome. Finally, to establish mediation, the effect of HR Programs on the outcomes, as determined by the beta coefficient in the final regression model, must fall to zero when HR Practices is included in the model.

Table 10 presents the results the hierarchical regression used in the examination of mediation of HR Practices between HR Programs and HR Perceptions. Model One includes the controls of brand, hotel size and hotel age. Model Two includes HR Programs

Table 10

*Hierarchical Regression Results for test of mediation of HR Practices between HR Programs and HR Perceptions*

Variable	HR Perceptions								
	Model 1			Model 2			Model 3		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	3.42	0.117		2.81	0.25		2.33	0.36	
Age	-0.005	0.003	-0.145	-0.004	0.003	-0.121	-0.003	0.003	-0.092
Size	0.0002	0.004	-0.038	-0.0002	0.0004	-0.027	-0.0002	0.0005	-0.023
Brand 1	-0.13	0.14	-0.02	-0.11	0.14	-0.06	-0.10	0.13	-0.07
Brand 2	0.07	0.09	0.07	0.05	0.10	0.08	0.05	0.09	0.07
Brand 3	0.18	0.15	0.10	0.17	0.15	0.09	0.14	0.15	0.10
Brand 4	0.35	0.17	0.15*	0.32	0.17	0.17*	0.28	0.17	0.17*
HR Programs				0.18	0.07	0.20**	0.17	0.07	0.15*
HR Practices							0.15	0.08	0.13
R	0.31**			0.38**			0.39**		
R <sup>2</sup>	0.10**			0.14**			0.15**		
Adj. R <sup>2</sup>	0.07**			0.11**			0.11**		
F	3.20**								
	(6,144)								
$\Delta R^2$				0.05**			0.01		
$\Delta F$				9.33**			3.54		
				(1, 185)			(1, 182)		

Note. N = 190

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

as the second step in the model, which increments positively to the prediction of HR Perceptions,  $\Delta R^2 = .05$ ,  $p < .01$ . Model Three, includes a third step in which HR Practices is entered into the regression model. As indicated, the inclusion of HR Practices fails to increment significantly to the prediction of HR Perceptions. This fails the requirements necessary for the establishment of a mediating relationship (Baron & Kenny, 1982). Not surprisingly, the path coefficient of HR Programs falls only slightly, suggesting the presence of very slight mediation, but remained significant ( $p < .05$ ). Therefore, this Hypothesis 7a is not supported.

Turning to the possible mediating role of HR Practices between HR Programs and the employee outcomes, only two tests were possible. While, as reported in Table 5, the zero order correlations between both HR Programs and employee outcome variables are significant ( $r = .13$  to  $.18$ ,  $p < .05$ ), HR Practices was significantly related only to the two attitudinal variables—job satisfaction,  $r = .18$  ( $p < .01$ ) and Organizational Commitment,  $r = .13$  ( $p < .05$ ). Therefore, the requirements necessary for the test of mediation are met only for these variables. For this reason, the analysis was conducted for these variables only. Table 11 and Table 12 present the results of this analysis for job satisfaction and organizational commitment, respectively. As indicated, HR Programs failed to provide significant prediction of both outcomes in the presence of the controls. Likewise, HR Practices, when entered into the model, failed to provide a significant contribution to the prediction of these variables. Therefore, Hypothesis 7b and 7c, proposing a mediating role of HR Practices between HR Programs and the employee outcomes, were not supported.

Hypothesis 8a-8e proposed a direct relationship between HR Practices and the employee attitudinal outcomes of (a) job satisfaction, (b) organizational commitment and

Table 11

*Hierarchical Regression Results for test of mediation of HR Practices between HR Programs and Employee Outcomes*

Variable	<i>Job Satisfaction</i>								
	Model 1			Model 2			Model 3		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	4.18	0.10		3.91	0.22		3.54	0.29	
Age	-0.003	0.003	-0.090	-0.0002	0.0003	-0.082	-0.002	0.003	-0.053
Size	-0.00001	0.0004	-0.029	-0.00001	0.0003	-0.024	-0.0001	0.0003	-0.032
Brand 1	-0.21	0.12	-0.14	-0.20	0.12	-0.13	-0.19	0.11	-0.13
Brand 2	0.10	0.08	0.13	0.10	0.08	0.12	0.10	0.08	0.13
Brand 3	0.01	0.13	0.01	0.01	0.13	0.01	0.00	0.13	0.00
Brand 4	0.17	0.15	0.10	0.16	0.15	0.09	0.13	0.15	0.07
HR Programs				0.08	0.06	0.10	0.06	0.06	0.07
HR Practices							0.12	0.07	0.10
2									
R	0.27**			0.29**			0.32**		
R <sup>2</sup>	0.08**			0.09**			0.10**		
Adj. R <sup>2</sup>	0.05**			0.05**			0.06**		
F	2.45**								
	(6,184)								
$\Delta R^2$				0.01			0.01		
$\Delta F$				1.94			1.67		
				(1,183)			(1,182)		

Note. N = 185

\* Significant at  $p < .05$

\*\*Significant at  $p < .01$

Table 12

*Hierarchical Regression Results for test of mediation of HR Practices between HR Programs and Employee Outcomes*

Variable	Organizational Commitment								
	Model 1			Model 2			Model 3		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	4.10	0.10		3.80	0.22		3.64	0.31	
Age	-0.0003	0.003	-0.112	-0.0003	0.003	-0.104	-0.002	0.003	-0.092
Size	0.0004	0.0004	0.105	0.0004	0.0004	0.099	0.0004	0.0004	0.096
Brand 1	-0.21	0.12	-0.13	-0.20	0.12	-0.13	-0.19	0.12	-0.13
Brand 2	0.14	0.08	0.17	0.14	0.08	0.17	0.14	0.08	0.17
Brand 3	0.23	0.13	0.14	0.22	0.13	0.14	0.22	0.13	0.14
Brand 4	0.27	0.15	0.14	0.26	0.15	0.13	0.24	0.15	0.13
HR Programs				0.09	0.06	0.11	0.08	0.06	0.10
HR Practices							0.05	0.07	0.06
R	0.29**			0.32**			0.32**		
R <sup>2</sup>	0.09**			0.10**			0.10**		
Adj. R <sup>2</sup>	0.06**			0.06**			0.06**		
F	2.86**								
	(6,184)								
$\Delta R^2$				0.01			0.00		
$\Delta F$				2.34			0.57		
				(1,183)			(1,182)		

Note. N = 185

\* Significant at  $p < .05$

\*\*Significant at  $p < .01$

(c) organizational citizenship behavior; and the employee behavioral outcomes of (d) teamwork and (d) organizational citizenship behavior. Again, because the relationship between HR Practices and employee outcomes is significant only for the job satisfaction and organizational commitment, the analysis was limited to these variables. As presented in Table 13, HR Practices provided a significant increase in the prediction of the job satisfaction— $\Delta R^2 = .02$  ( $p < .05$ ). However, HR Practices failed to add significantly to the prediction of organizational commitment. Therefore, support is limited to Hypothesis 8a, job satisfaction.

Hypothesis 9a and 9b proposed that HR Perceptions would moderate the relationship between Practices and measures of behavioral outcomes of (a) teamwork and (b) organizational citizenship behavior. Although the zero-order correlation between HR Practices and these behavioral outcomes was not significant, moderation is still possible (Aiken & West, 1992). Therefore, following the same procedure outlined above, tests for moderation were performed. Tables 14 presents the results of an analysis of the possible moderating affect of HR Perceptions on the relationship between HR Practices and Organizational Citizenship Behavior. In Model One, the control set is entered resulting in an  $R^2$  of .09 ( $p < .05$ ). In Model Two, both HR Practices and HR Perceptions are entered into the model and provide a significant increase in explanation of the variance in this outcome of  $\Delta R^2 = .07$  ( $p < .01$ ). Of note, however, is the comparison of the beta coefficient of both HR Practices and HR Perceptions in this model. While HR Perceptions coefficient of .21 was significant ( $p < .01$ ), the HR Practice coefficient was not, suggesting that HR Perceptions alone is contributing to this increment in prediction. In Model Three, the interaction term HR Practices X HR Perceptions is entered into the model resulting in

Table 13

*Hierarchical Regression Results for Employee Outcomes regressed on HR Practices*

Variable	<i>Job Satisfaction</i>						<i>Organizational Commitment</i>					
	Model 1			Model 2			Model 1			Model 2		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	4.18	0.10		3.68	0.25		4.10	0.10		3.84	0.26	
Age	-0.003	0.003	-0.090	0.002	0.003	-0.059	-0.003	0.003	-0.112	0.003	0.003	-0.094
Size	-0.00001	0.0003	-0.0186	-0.0001	0.0003	-0.0290	0.0004	0.0004	0.1054	0.0004	0.0004	0.0993
Brand 1	-0.21	0.11	-0.14	-0.20	0.11	-0.13	-0.21	0.12	-0.13	-0.20	0.12	-0.13
Brand 2	0.10	0.08	0.13	0.11	0.08	0.13	0.14	0.08	0.17	0.15	0.08	0.18*
Brand 3	0.01	0.12	0.01	0.01	0.12	0.00	0.23	0.13	0.14	0.22	0.13	0.14
Brand 4	0.17	0.14	0.10	0.14	0.14	0.08	0.27	0.15	0.14	0.25	0.15	0.13
HR Practices				0.14	0.06	0.16*				0.07	0.07	0.08
R	0.27**			0.32**			0.30**			0.31**		
R <sup>2</sup>	0.08**			0.10**			0.09**			0.09**		
Adj. R <sup>2</sup>	0.05**			0.07**			0.06**			0.06**		
F	2.02**						2.98**					
	(6, 184)						(1, 183)					
$\Delta R^2$				0.02*						0.01		
$\Delta F$				4.62*						1.16		
				(1, 183)						(1, 183)		

Note. N = 190

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

Table 14

*Hierarchical Regression Examining Moderating Effects of HR Perceptions on the Relationship between HR Practices and Organizational Citizenship Behavior*

Variable	Org. Citizenship Behavior								
	Model 1			Model 2			Model 3		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	4.04	0.08		3.48	0.26		3.37	1.42	
Age	-0.0001	0.0021	-0.0063	0.0006	0.0022	0.0216	0.0006	0.0022	0.0225
Size	0.0001	0.0003	0.0128	0.0001	0.0003	0.0223	0.0001	0.0003	0.0239
Brand 1	-0.11	0.10	-0.08	-0.08	0.09	-0.06	-0.08	0.09	-0.06
Brand 2	0.10	0.07	0.14	0.09	0.07	0.12	0.09	0.07	0.12
Brand 3	0.17	0.12	0.11	0.13	0.11	0.09	0.13	0.11	0.09
Brand 4	0.37	0.12	0.24**	0.31	0.12	0.20*	0.31	0.12	0.20
HR Practices				-0.05	0.06	-0.06	-0.01	0.39	-0.02
HR Perceptions				0.21	0.05	0.28**	0.24	0.42	0.33**
HR Practices X HR Perceptions							-0.01	0.11	-0.06
R	0.29*			0.39**			0.39**		
R <sup>2</sup>	0.08*			0.16**			0.16**		
Adj. R <sup>2</sup>	0.05*			0.12**			0.12**		
F	2.84*								
	(6, 184)								
$\Delta R^2$				0.07**			0.00		
$\Delta F$				7.68**			0.01		
				(2, 182)			(1, 181)		

Note. N = 190

\* Significant at  $p < .05$

\*\*Significant at  $p < .01$

no significant increase in prediction. This same analysis was conducted for teamwork behavior and is presented in Table 15. Again, the inclusion of the HR Practice X HR Perceptions interaction term failed to produce a statistically significant increment in the prediction of teamwork behavior. Therefore, the findings provide no evidence of moderation in this relationship and therefore Hypothesis 9a -9c are not supported. Although, not hypothesized, these same analyses were conducted on an exploratory basis for possible moderating affects of HR Perception between HR Programs and these behavioral outcomes with similar results.

Hypothesis 10a-10c proposed that HR Perceptions will mediate the relationship between HR Practices and attitudinal and motivational outcomes of (a) job satisfaction, (b) organizational commitment and (c) self-efficacy. While HR Perceptions, the proposed mediating mechanism, is highly related to these outcomes, HR Practices was related significantly only to job satisfaction and organizational commitment. Table 16 presents the results of this analysis for job satisfaction. As shown in Model Two, when HR Practices is entered into the model, there is a significant increase in prediction,  $\Delta R^2 = .02$  ( $p < .05$ ). In model three, HR Perceptions was entered, again providing significant increment in the prediction of job satisfaction  $\Delta R^2 = .05$ . Moreover, the beta coefficient for HR Practices falls from  $\beta = .15$  ( $p < .05$ ) to  $\beta = .12$  ( $p > .05$ ), suggesting slight mediation. Hypothesis 10a is therefore supported, but only modestly. Table 17 presents the results of this same analysis for organizational commitment. However, because HR Practices failed to provide incremental prediction in this outcome, the requirements of mediation are not met. Therefore, hypothesis 10b is not supported.

Table 15

*Hierarchical Regression Examining Moderating Effects of HR Perceptions on the Relationship between HR Practices and Teamwork Behavior*

Variable	Teamwork Behavior								
	Model 1			Model 2			Model 3		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	3.78	0.11		2.92	0.33		3.60	1.43	
Age	-0.0036	0.0027	-0.1115	-0.0025	0.0027	-0.0779	0.0005	0.0022	0.0191
Size	-0.0004	0.0004	-0.0973	-0.0004	0.0004	-0.0839	0.0001	0.0003	0.0243
Brand 1	-0.03	0.12	-0.02	0.01	0.11	0.01	-0.08	0.09	-0.07
Brand 2	0.05	0.09	0.06	0.03	0.08	0.03	0.09	0.07	0.12
Brand 3	-0.04	0.15	-0.02	-0.09	0.14	-0.05	0.13	0.11	0.09
Brand 4	0.34	0.15	0.17	0.24	0.15	0.12	0.31	0.12	0.20
HR Practices				-0.07	0.07	-0.07	-0.08	0.40	-0.10
HR Perceptions				0.33	0.07	0.35**	0.18	0.42	0.24
HR Practices X HR Perceptions							0.01	0.12	0.06
R	0.29**			0.44**			0.44**		
R <sup>2</sup>	0.09**			0.19**			0.19**		
Adj. R <sup>2</sup>	0.06**			0.15**			0.15**		
F	2.89**								
	(6, 184)								
$\Delta R^2$				0.10**			0.00		
$\Delta F$				11.72**			0.30		
				(2, 182)			(1, 181)		

Note. N = 190

\* Significant at  $p < .05$

\*\*Significant at  $p < .01$

Table 16

*Hierarchical Regression Examining Mediating Affects of HR Perceptions on the Relationship between HR Practices and Job Satisfaction*

Variable	Job Satisfaction								
	Model 1			Model 2			Model 3		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	4.16	0.10		3.68	0.25		3.11	0.30	
Age	-0.0026	0.0025	-0.0888	-0.0016	0.0025	-0.0556	-0.0009	0.0025	-0.0295
Size	0.00002	0.0004	0.0052	-0.00002	0.0038	-0.0005	0.00002	0.0004	0.0036
Brand 1	-0.21	0.11	-0.15*	-0.20	0.11	-0.14	-0.18	0.11	-0.12
Brand 2	0.10	0.08	0.12	0.10	0.08	0.13	0.09	0.08	0.11
Brand 3	-0.03	0.13	-0.02	-0.03	0.13	-0.02	-0.07	0.13	-0.04
Brand 4	0.19	0.14	0.11	0.16	0.14	0.09	0.09	0.14	0.05
HR Practices				0.13	0.06	0.15*	0.10	0.06	0.12
HR Perceptions							0.20	0.06	0.23**
R	0.27**			0.32**			0.38**		
R <sup>2</sup>	0.08**			0.10**			0.14**		
Adj. R <sup>2</sup>	0.05**			0.07**			0.10**		
F	2.02**								
	(6,184)								
$\Delta R^2$				0.02*			0.05**		
$\Delta F$				4.62*			10.16**		
				(1,183)			(1, 182)		

Note. N = 191

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

Table 17

*Hierarchical Regression Examining Mediating Affects of HR Perceptions on the Relationship between HR Practices and Organizational Commitment*

Variable	Organizational Commitment								
	Model 1			Model 2			Model 3		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	4.08	0.10		3.85	0.26		3.29	0.31	
Age	-0.0032	0.0026	-0.1060	-0.0028	0.0027	-0.0909	-0.0020	0.0026	-0.0659
Size	0.0005	0.0004	0.1260	0.0005	0.0004	0.1215	0.0005	0.0004	0.1296
Brand 1	-0.21	0.11	-0.14	-0.20	0.11	-0.14	-0.18	0.11	-0.12
Brand 2	0.16	0.08	0.19	0.16	0.08	0.20	0.15	0.08	0.18
Brand 3	0.23	0.14	0.13	0.22	0.14	0.13	0.19	0.14	0.11
Brand 4	0.29	0.14	0.16*	0.27	0.14	0.15*	0.21	0.14	0.12
HR Practices				0.06	0.07	0.07	0.03	0.07	0.04
HR Perceptions							0.20	0.06	0.22**
R	0.30**			0.31**			0.38**		
R <sup>2</sup>	0.09**			0.10**			0.14**		
Adj. R <sup>2</sup>	0.06**			0.06**			0.10**		
F	3.01**								
	(6,184)								
$\Delta R^2$				0.00			0.04**		
$\Delta F$				0.89			9.33**		
				(1,183)			(1,182)		

Note. N = 191

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

Again, on an exploratory basis, a supplemental analysis was conducted examining the possible mediating role of HR Perceptions between the HR Programs and these same employee outcomes. Unlike HR Practices, as indicated in Table 5, a positive and significant relationship was found between HR Programs and all employee outcomes. Nevertheless, HR Programs failed to provide a significant increase in the prediction of job satisfaction and organizational commitment, thereby failing the requirements necessary to demonstrate mediation. However, it did provide a significant increment in the prediction of self-efficacy. This analysis is shown in Table 18. Model Two, in which HR Programs is entered, provides a significant increase in prediction,  $\Delta R^2 = .03$  ( $p < .05$ ). In Model Three, HR Perception was entered into the regression model and provides a significant increase in the prediction or  $\Delta R^2 = .06$  ( $p < .01$ ). As shown, the beta coefficient for HR Program fell from  $\beta = .18$  ( $p < .05$ ) to  $\beta = .12$  ( $p > .05$ ), again suggesting partial, but not full mediation. Therefore, considered collectively, very little evidence for the proposed mediating role of HR Perceptions is evident in these data.

#### *Mediating role of proximal employee outcomes*

Hypothesis 11 stated that the employee attitudinal and behavioral outcomes will partially mediate the relationship between the intermediary and distal organizational outcomes. Although all HR System variables were directionally negative in their relationship with voluntary employee turnover, only HR Programs was significantly related to this voluntary turnover,  $r = -.16$  ( $p < .05$ ). Therefore, the analysis was limited to this relationship. However, none of the employee outcomes were related individually to this outcome. To understand whether these variables, collectively, predicted voluntary turnover, a preliminary analysis was conducted in which voluntary turnover was regressed

Table 18

*Hierarchical Regression Examining Mediating Effects of HR Perceptions on the Relationship between HR Programs and Employee Self-efficacy*

Variable	Self-Efficacy								
	Model 1			Model 2			Model 3		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	4.18	0.10		3.91	0.22		3.54	0.29	
Age	-0.0036	0.0027	-0.0895	-0.0024	0.0026	-0.0821	-0.0016	0.0026	-0.0530
Size	-0.0001	0.0004	-0.0186	-0.0001	0.0004	-0.0238	-0.0001	0.0003	-0.0317
Brand 1	-0.21	0.12	-0.14	-0.20	0.12	-0.13	-0.19	0.11	-0.13
Brand 2	0.10	0.08	0.13	0.10	0.08	0.12	0.10	0.08	0.13
Brand 3	0.01	0.13	0.01	0.01	0.13	0.01	0.00	0.13	0.00
Brand 4	0.17	0.15	0.10	0.16	0.15	0.09	0.13	0.15	0.07
HR Programs				0.08	0.06	0.10	0.06	0.06	0.07
HR Perceptions							0.12	0.07	0.14*
R	0.27**			0.32**			0.40**		
R <sup>2</sup>	0.07**			0.10**			0.17**		
Adj. R <sup>2</sup>	0.04**			0.07**			0.13**		
F	2.85*								
	(6,183)								
$\Delta R^2$				0.03*			0.06**		
$\Delta F(1,182)$				6.36**			13.70**		
				(1,182)			(1, 181)		

Note. N = 190

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

on the full set of employee outcomes. The results failed to produce a statistically significant increase in the prediction of voluntary turnover. For this reason, the full test for mediation was not conducted. Therefore, Hypothesis 11 was not supported for employee voluntary turnover.

Examining the relationship between the HR system variables and customer ratings of overall service received, only HR Principles and HR Perceptions demonstrate statistically significant relationships with zero-order correlations of  $r = .27$  and  $.23$  ( $p < .01$ ). Therefore, the analysis of the possible mediating role of employee outcomes will be limited to these variables. Table 19 presents the results of the hierarchical regression analysis examining the mediating role of the employee outcomes in the relationship between HR Principles and overall service received. Model One included the controls only, explaining 47% of the variance in Overall Service Ratings, ( $p < .01$ ). It is worth noting that this is a very meaningful portion of the variance explained in this outcome. Model Two enters HR Principles into the model with an increase of  $\Delta R^2 = .03$  ( $p < .01$ ). In Model Three, the full set of employee attitudinal and behavioral outcomes are entered into the model. This again provides an increase of  $\Delta R^2 = .03$  ( $p < .05$ ). Additionally, the inclusion of these variables modestly reduces the beta coefficient for HR Principles in the model from  $\beta = .17$  ( $p < .05$ ) to  $\beta = .14$  ( $p < .05$ ), suggesting only very slight mediation. Therefore, only weak support was found for the mediating role of the specified employee outcomes in the relationship between HR Principles and Overall Service Received.

Table 20 presents the hierarchical regression analysis examining the mediating role of employee outcomes in the relationship between HR Perceptions and Overall Service Received. Model One includes controls only and, as reported earlier, explains a large

Table 19

*Hierarchical Regression Results for test of mediation of Employee Outcomes between HR Principles and Overall Service Received*

Variable	Overall Service Received								
	Model 1			Model 2			Model 3		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	80.34	1.23		69.13	3.68		63.09	6.28	
Age	-0.029	0.032	-0.058	-0.029	0.031	-0.059	-0.026	0.031	-0.052
Size	-0.013	0.005	-0.195**	-0.014	0.005	-0.210**	-0.02	0.00	-0.234**
Brand 1	1.45	1.39	0.06	1.76	1.36	0.07	2.41	1.36	0.10
Brand 2	5.47	0.99	0.41**	4.84	0.98	0.36**	4.44	0.98	0.33**
Brand 3	8.58	1.63	0.32**	8.22	1.60	0.30**	7.12	1.69	0.26**
Brand 4	10.30	1.78	0.34**	9.86	1.74	0.33**	9.45	1.76	0.32**
HR Principles				2.89	0.90	0.17*	2.38	0.91	0.14*
Job Satisfaction							1.20	1.54	0.07
Org. Citizenship Beh.							0.33	1.54	0.02
Org. Commit.							2.67	1.73	0.16*
Self-efficacy							-0.89	1.57	-0.04
Teamwork							-1.38	0.98	-0.10
R	0.69**			0.71**			0.73**		
R <sup>2</sup>	0.48**			0.50**			0.53**		
Adj. R <sup>2</sup>	0.46**			0.48**			0.50**		
F	28.5**								
	(6,189)								
$\Delta R^2$				0.03*			0.03*		
$\Delta F$				10.38*			2.22*		
				(1,188)			(1,183)		

Note. N = 190

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

Table 20

*Hierarchical Regression Results for test of mediation of Employee Outcomes between HR Perceptions and Overall Service Received*

Variable	Overall Service Received								
	Model 1			Model 2			Model 3		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	80.34	1.23		78.09	2.86		72.18	5.61	
Age	-0.029	0.032	-0.058	-0.023	0.032	-0.046	-0.022	0.032	-0.044
Size	-0.013	0.005	-0.195**	-0.014	0.005	-0.202**	-0.015	0.005	-0.225**
Brand 1	1.45	1.39	0.06	1.61	1.39	0.07	2.32	1.39	0.09
Brand 2	5.47	0.99	0.41**	5.23	0.98	0.39**	4.71	0.98	0.36**
Brand 3	8.58	1.63	0.32**	8.50	1.59	0.32**	7.39	1.69	0.28**
Brand 4	10.30	1.78	0.34**	10.03	1.79	0.33**	9.66	1.79	0.32**
HR Perceptions				0.69	0.76	0.05	0.43	0.83	0.03
Job Satisfaction							2.13	1.55	0.13*
Org. Citizenship Beh.							0.70	1.57	0.04
Org. Commitment							2.00	1.74	0.12*
Self-efficacy							-1.86	1.58	-0.09
Teamwork							-1.28	1.03	-0.09
R	0.69**			0.69**			0.71**		
R <sup>2</sup>	0.47**			0.48**			0.51**		
Adj. R <sup>2</sup>	0.46**			0.46**			0.47**		
F	28.5**								
	(6,193)								
$\Delta R^2$				0.00			0.03*		
$\Delta F(1,192)$				0.82			2.48*		
				(6,192)			(5,187)		

Note. N = 200

\* Significant at  $p < .05$

\*\*Significant at  $p < .01$

portion of the variance in this outcome. Model Two, which enters HR Perceptions into the model, fails to provide significant improvement in this prediction over the controls,  $\Delta R^2 = .00$  ( $p > .05$ ). While the failure of HR Perception to increment this prediction makes the test for mediation irrelevant, Model Three enters the employee outcomes as a third step. The inclusion of these variables provides significant improvement in the model,  $\Delta R^2 = .03$  ( $p < .05$ ). Therefore, the employee outcomes are related, above the controls, to organizational service outcomes. Nevertheless, there is no support for the role of the employee outcomes partially mediating the relationship between HR Perceptions and Overall Service Received.

In examining the distal financial outcome, both HR Programs ( $r = .19$ ,  $p < .01$ ) and HR Practices ( $r = .13$ ,  $p < .05$ ) provide meaningful prediction of RPR when considered on a bivariate basis. Further, as indicated in Table 5, Job Satisfaction ( $r = .15$ ,  $p < .05$ ), organizational citizenship behavior ( $r = .12$ ,  $p < .05$ ) and organizational commitment ( $r = .17$ ,  $p < .01$ ) provide significant prediction of this outcome. The result of the mediation analysis for employee outcomes between HR Programs and RPR is provided in Table 21. As shown, Model Two includes the addition of HR Programs, resulting in a statistically significant increase in prediction,  $\Delta R^2$  of .04 ( $p < .01$ ). The inclusion of the employee attitudinal outcomes of job satisfaction and organizational commitment again increases this prediction,  $\Delta R^2$  of .04 ( $p < .05$ ). However, the path coefficient for HR Programs falls only slightly, and remains significant. Likewise, when organizational citizenship behavior, the only behavioral outcome related to RPR, is included in Model 4, it fails to increment significantly to the prediction of the outcome and has no effect on the magnitude of the

Table 21

*Hierarchical Regression Results for test of mediation of Employee Outcomes between HR Programs and Revenue per Room*

Variable	Revenue per Room											
	Model 1			Model 2			Model 3			Model 4		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	67.38	5.35		39.47	11.36		2.19	19.35		1.42	21.24	
Age	-0.304	0.139	-0.183*	-0.281	0.136	-0.172*	-0.251	0.135	-0.151*	-0.252	0.136	-0.153*
Size	0.003	0.021	0.014	0.001	0.021	0.004	-0.002	0.021	-0.009	0.002	0.021	-0.008
Brand 1	14.90	6.16	0.18*	15.80	6.06	0.19*	17.72	6.05	0.22	17.70	6.07	0.22**
Brand 2	5.08	4.29	0.12	4.53	4.22	0.10	3.27	4.20	0.07	3.26	4.21	0.07
Brand 3	-5.15	6.77	-0.06	-5.59	6.66	-0.07	-7.35	6.72	-0.09	-7.34	6.73	-0.09
Brand 4	-17.96	7.86	-0.18*	-19.38	7.73	-0.19*	-21.7	7.71	-0.22*	-21.79	7.82	-0.22**
HR Programs				8.15	2.94	0.19*	7.30	2.93	0.17*	7.28	2.94	0.17*
Job Satisfaction							1.96	6.47	0.04	1.93	6.50	0.03
Org. Commitment							7.80	6.22	0.15*	7.45	7.36	0.14*
Org. Citizenship Beh.										0.59	6.64	0.01
R	0.32**			0.38**			0.42**			0.37**		
R <sup>2</sup>	0.10**			0.14**			0.17**			0.17**		
Adj. R <sup>2</sup>	0.08**			0.11**			0.13**			0.13**		
F	3.58**											
	(6, 183)											
$\Delta R^2$				0.04**			0.03*			0.00		
$\Delta F$				7.98**			3.5*			0.01		
				(1, 182)			(2,180)			(1, 179)		

Note. N = 187-194

\* Significant at  $p < .05$

\*\*Significant at  $p < .01$

beta coefficient for HR programs. Therefore, only very weak partial mediation was found for the employee variables in the relationship between HR Programs and RPR.

Table 22 presents the results of this same analysis for the mediation of employee outcomes between HR Practices and RPR. While the same pattern of results is evident, the impact of the inclusion of the employee outcomes in the model has no discernable influence on the HR Practices path coefficient. Therefore, no evidence of mediation is evident in this relationship.

Given the central importance of the prediction of organizational financial performance, coupled with the fact that several of these measures of the HR System are new, several exploratory regression models were conducted. Table 23 presents the regression results for the HR System variables in the prediction of the RPR. Model One presents the controls only, while Models Two-Five present the addition of each of the HR System variables to the model individually. Model Six presents the combined effects of all the HR System variables entered into the regression model simultaneously. These variables, considered individually, provide varying degrees of prediction in RPR in the presence of the controls: HR Principles-  $\Delta R^2 = .00$  ( $p > .05$ ); HR Programs-  $\Delta R^2 = .04$  ( $p < .01$ ); HR Practices-  $\Delta R^2 = .02$  ( $p < .05$ ); and HR Perceptions-  $\Delta R^2 = .02$ , ( $p > .05$ ). Likewise, the combined influence of all these constructs,  $R^2 = .05$  ( $p < .05$ ), increments provides only a small increase in the prediction of this outcome over HR Programs alone.

Table 24 presents the regression analysis for the influence of the employee outcomes in the prediction of RPR. The inclusions of the employee attitudinal variables in Model Two provide in variance explained of  $\Delta R^2 = .04$  ( $p < .01$ ). Likewise, the inclusion employee behavioral outcomes separately in Model Three provides an increase of  $\Delta R^2 =$

Table 22

*Hierarchical Regression Results for test of mediation of Employee Outcomes Between HR Practices and Revenue per Room*

Variable	Revenue per Room											
	Model 3			Model 3			Model 3			Model 4		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	67.38	5.35		39.47	11.36		4.14	20.64		1.66	23.30	
Age	-0.304	0.138	-0.184*	-0.281	0.136	-0.173*	-0.203	0.137	-0.124	-0.206	0.137	-0.126
Size	0.003	0.021	0.014	0.004	0.021	0.016	0.002	0.021	-0.008	-0.002	0.021	-0.007
Brand 1	14.90	6.16	0.18*	15.34	5.97	0.19*	17.31	5.96	0.22**	17.26	5.98	0.22
Brand 2	5.08	4.29	0.12	5.96	4.23	0.13*	4.32	4.23	0.10	4.32	4.24	0.10
Brand 3	-5.15	6.77	-0.06	-3.68	7.27	-0.04	-6.14	7.36	-0.07	-6.19	7.39	-0.07
Brand 4	-17.96	7.86	-0.18*	-18.88	7.65	-0.19*	-21.64	7.64	-0.22*	-21.97	7.79	-0.22
HR Practices				7.00	3.53	0.14*	6.49	3.54	0.13*	6.58	3.57	0.13
Job Satisfaction							-1.29	6.68	-0.02	-1.41	6.72	-0.03
Org. Commitment							10.85	6.47	0.20	9.90	7.66	0.18*
Org. Citizenship Beh.										1.60	6.92	0.03
R	0.34**			0.37**			0.41**			0.41**		
R <sup>2</sup>	0.12**			0.13**			0.17**			0.17**		
Adj. R <sup>2</sup>	0.09**			0.10**			0.12**			0.12**		
F	4.04**											
	(6, 184)											
$\Delta R^2$				0.02*			0.03*			0.01		
$\Delta F$				3.98**			3.5*			0.05		
				(1, 183)			(2, 181)			(1, 180)		

Note. N = 191

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

Table 23

*Hierarchical Regression Results for All HR System Variables regressed on Revenue Per Room*

Variable	Revenue per Room								
	Model 1			Model 2			Model 3		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	67.38	5.35		57.25	16.17		67.28	5.35	
Age	-0.304	0.138	-0.184*	-0.294	0.136	-0.184*	-0.327	0.141	-0.191*
Size	0.003	0.021	0.014	0.006	0.021	0.025	0.004	0.022	0.019
Brand 1	14.90	6.16	0.18*	15.02	6.02	0.19*	12.62	6.30	0.15*
Brand 2	5.08	4.29	0.12	5.76	4.32	0.13	4.98	4.28	0.11
Brand 3	-5.15	6.77	-0.06	-1.09	7.04	-0.01	-3.14	6.88	-0.04
Brand 4	-17.96	7.86	-0.18*	-17.71	7.68	-0.18*	-16.70	8.06	-0.16*
HR Principles				2.38	3.96	0.04			
HR Programs							4.31	3.03	0.20*
HR Practices									
HR Perceptions									
R	0.34**			0.35**			.38**		
R <sup>2</sup>	0.12**			0.12**			.14**		
Adj. R <sup>2</sup>	0.09**			0.09**			.10**		
F	4.30**								
	(6,193)								
$\Delta R^2$				0.00			0.04**		
$\Delta F$				0.36			7.98**		
				(1, 189)			(1, 183)		

Note. N = 189-194

\* Significant at  $p < .05$

\*\*Significant at  $p < .01$

Table 23 (continued)

*Hierarchical Regression Results for All HR System Variables regressed on Revenue Per Room*

Variable	Revenue per Room								
	Model 4			Model 5			Model 6		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	41.15	13.74		46.87	12.20		25.22	22.71	
Age	-0.232	0.138	-0.142	-0.272	0.135	-0.165*	-0.271	0.146	-0.163*
Size	0.004	0.021	0.016	0.004	0.021	0.020	0.003	0.022	0.015
Brand 1	15.34	5.97	0.19*	15.60	5.96	0.19	12.96	6.36	0.16*
Brand 2	5.96	4.23	0.13	4.65	4.14	0.11	4.74	4.51	0.10
Brand 3	-3.68	7.27	-0.04	-6.20	6.56	-0.07	-4.05	7.77	-0.04
Brand 4	-18.88	7.65	-0.19*	-19.9	7.66	-0.19**	-20.56	8.33	-0.20*
HR Principles							0.30	4.43	0.01
HR Programs							2.19	3.28	0.05
HR Practices	7.00	3.53	0.14*				6.13	4.30	0.08
HR Perceptions				6.00	3.25	0.13	3.60	3.75	0.11
R	0.37**			0.36**			0.41**		
R <sup>2</sup>	0.14**			0.14**			0.17**		
Adj. R <sup>2</sup>	0.10**			0.10**			0.17**		
F									
$\Delta R^2$	0.02*			0.02			0.05		
$\Delta F$	3.93			3.23			2.63*		
	(1, 183)			(1,193)			(1,189)		

Note. N = 189-194

\* Significant at p < .05

\*\*Significant at p < .01

Table 24

*Hierarchical Regression Results for Revenue Per Room Regressed on Employee Attitudinal/Behavioral Outcomes*

Variable	Revenue Per Room											
	Model 1			Model 2			Model 3			Model 4		
	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$	b	Std. Error	$\beta$
Constant	66.55	5.16		29.23	23.26		24.42	19.05		27.33	23.96	
Age	-0.288	0.135	-0.173*	-0.257	0.134	-0.155	-0.276	0.134	-0.171*	-0.261	0.135	-0.158
Size	0.006	0.021	0.025	0.001	0.021	0.006	0.007	0.021	0.031	0.002	0.021	0.009
Brand 1	14.82	5.96	0.18*	17.14	5.95	0.21*	15.76	5.93	0.19*	17.05	6.00	0.20*
Brand 2	5.77	4.15	0.13	3.99	4.15	0.09	4.66	4.15	0.11	3.94	4.18	0.09
Brand 3	-2.66	6.76	-0.03	-5.70	7.16	-0.07	-3.67	6.75	-0.04	-5.88	7.22	-0.07
Brand 4	-17.38	7.59	-0.17*	-19.96	7.58	-0.20*	-21.06	7.69	-0.21*	-20.39	7.72	-0.20*
Job Satisfaction				2.81	6.41	0.05				2.63	6.70	0.05
Org. Commitment				9.40	6.60	0.18*				8.15	7.46	0.15*
Self-efficacy				-2.91	6.44	-0.04				-3.58	6.78	-0.05
Org. Citizenship Beh.							8.15	4.92	0.13*	2.42	6.75	0.04
Teamwork							2.39	3.79	0.05	0.24	4.29	0.01
R	0.34**			0.39**			0.37**			0.39**		
R <sup>2</sup>	0.12**			0.16**			0.14**			0.16**		
Adj. R <sup>2</sup>	0.09**			0.12**			0.10**			0.11**		
F(6,187)	4.30**											
	(6, 194)											
$\Delta R^2$				0.04*			0.02*			0.04*		
$\Delta F$				2.8*			2.40			1.60		
				(3, 191)			(2, 192)			(5, 189)		

Note. N = 202

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

.02 ( $p < .05$ ). When entered collectively in Model Four, the combination fails to provide a significant increase over the attitudinal variables alone. Nevertheless, these employee variables do provide significant increments in the prediction of ratings of RPR.

*Test of differential effects according to job function*

Hypothesis 12 stated that the relationship between high commitment HR Practices and organizational outcomes will be strongest when used in combination with positions high in strategic importance and uniqueness of human capital. In order to facilitate the test of the hypothesis at the organizational level, all HR Systems variables were aggregated to the organizational level. However, because they were collected at the departmental level, it is possible to examine the relative influence of HR Programs and Practices when used in combination with job functions of varying strategic importance. Table 25 presents the zero-order correlations of the HR Programs, Practices and Perceptions when used in combination with Front Desk Reception (FDR) Employee and Housekeeping/Operation (HKO) employees. These departments were selected for comparison for two reasons. First, they are common to all hotels in the sample, whereas only full service locations with restaurant and banquet operations have food & beverage employees. Further, the sales departments at many hotels are very small, sometimes limited to a single employee. Second, there are clear differences in both the skill expectations and strategic importance of these two departments. Front desk employees interact very directly with customers, are more directly involved in negotiating room rates, handling customer complaints, etc. and have higher skill requirements, while housekeeping employees rarely have direct contact with the customer. Therefore, these departments offer sufficient contrast to support this analysis.

Several relationships in Table 25 are worth noting. First, the HR Program reports for the FDR are significantly related to both the customer ratings of service and RPR. This stands in contrast to not only the correlations of the HR Programs for HKO, which yield no relationship with either type of outcome, but the overall HR Program report which failed to relate significantly to customer ratings of service. Further, t-tests reveal a significant difference in prediction between FDR and HK HR Programs for this outcome. Similarly, HR Practices reports for FDR were significantly related to RPR, while HKO were not. Again, these differences were found to be statistically significant. Finally, HR Perceptions for FDR were positively related to both service outcomes, while HKO was not—once again, a statistically significant difference in magnitudes. This suggests that the HR Programs, Programs and Practices for more strategically important and higher skill job functions are more meaningfully and consistently related to organizational outcomes. Therefore, Hypothesis 12 is supported.

Table 25

*Comparison of Zero-order Correlations for Various Job Functions with Organizational Outcomes*

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>8</b>
<b>1</b> HR Programs- HK							
<b>2</b> HR Programs- FDR	0.85*						
<b>3</b> HR Practices- HK	0.09	0.05					
<b>4</b> HR Practices- FDR	0.13	0.14	0.27**				
<b>5</b> HR Perceptions- HK	0.25*	0.20**	0.16	0.13			
<b>6</b> HR Perceptions- FDR	0.15*	0.23**	0.02	0.04	0.07		
<b>8</b> Overall Service Received	0.12	0.15*	0.00	0.13*	0.11	0.25**	
<b>9</b> Revenue Per Room	0.06	0.18*	-0.02	0.23*	0.12	0.09	0.01

Note. N= 122-202

\* Significant at p < .05

\*\* Significant at p < .01

### *Summary of findings*

Table 26 provides a summary of each formal hypothesis statements and the results. While related significantly, in support of Hypothesis One, each of the measures was found to be reasonably independent—suggesting they are distinct measures that provide different information about the HR System. Mixed support was found for Hypothesis Two. While the differences in the predictive utility of the HR system measures were relatively small, difference were found. Hypothesis Three was supported as HR Principles were predictive of the existence of HR Programs. Hypothesis Four was not supported as HR Principles failed to provide a meaningful source of moderation between their existence—HR Programs, and their use—HR Practices. Likewise, Hypothesis Five was not supported as HR Principles, in the presence of the controls, was not a significant determinant of HR Perceptions at the location. However, in support of Hypothesis Six, both HR Programs and HR Practices provided significant prediction of HR Perceptions.

Hypothesis Seven proposed that HR Practices would be positively associated with both the employee attitudinal and behavioral outcomes. This was supported for job satisfaction only. Further, HR Practices failed to serve the proposed mediating role between HR Programs and either HR Perceptions or the employee attitudinal or behavioral outcomes. Therefore, Hypothesis Seven was not supported.

Hypothesis Eight proposed a moderating role for HR Perceptions in the relationship between HR Practices and the employee behavioral outcomes. While strongly related individually to the specified employee outcomes, HR Perceptions failed to provide a meaningful source of moderation between HR Practices and employee behavioral outcomes. Hypothesis Nine proposed that HR Perceptions would mediate the relationship

between HR Practices and the employee attitudinal outcomes. HR Perceptions demonstrated only a slight mediating role between HR Practices and a single employee outcome, job satisfaction. Therefore, little support was found for this hypothesis.

Hypothesis 11 proposed that the specified employee outcomes would partially mediate the relationship between the HR System variables and the intermediate and distal organizational level outcomes of voluntary turnover, customer service rating and financial outcomes. Only the relationship between HR Principles and customer ratings of overall service received showed evidence of this mediation.

Finally, Hypothesis 12 stated that the relationship between high commitment HR Practices and organizational outcomes will be strongest when used in combination with positions high in strategic importance and uniqueness of human capital. This hypothesis was generally supported as the HR system measures were more strongly related to organizational level outcomes when deployed in support of more strategically important job functions.

Considered collectively, the results of the test of hypotheses provide support for the overall model proposed in Figure 3. In the following section, the implication of these findings and several post hoc analyses are performed in an effort to better understand this pattern of relationships.

Table 26

*Summary of Hypothesis and Findings*

<b>H<sub>1</sub></b>	HR Principle, HR Programs, HR Practices and HR Perceptions are independent measures that assess different types of information regarding the HR System.	Supported
<b>H<sub>2</sub></b>	Each measure of the HR System will provide significant difference in prediction of the assessed organizational outcomes.	Mixed support
<b>H<sub>3</sub></b>	HR Principles reflective of attitudes valuing employees as strategically important will be positively related to the adoption of high-commitment work HR Programs.	Supported
<b>H<sub>4</sub></b>	Levels of high commitment HR Principles will moderate the relationship between the reported existence of high commitment HR Programs and their use, as measured by HR Practices.	Not supported
<b>H<sub>5</sub></b>	High commitment HR Principles will be positively associated with high commitment HR Perceptions.	Not supported
<b>H<sub>6</sub></b>	Higher level of reported use of high-commitment HR Practices will be positively related to high commitment HR Perceptions.	Supported
<b>H<sub>7</sub></b>	HR Practices will mediate the relationship between HR Programs and (a) HR Perceptions; (b) the employee attitudinal/motivational outcomes (c) and the behavioral outcomes.	Not supported
<b>H<sub>8</sub></b>	High commitment HR Practices will be positively related to both the motivational/attitudinal outcomes of (a) job satisfaction, (b) organizational commitment and (c) self-efficacy and the behavioral outcomes of (d) teamwork and (e) organizational citizenship behavior.	Support for job satisfaction only
<b>H<sub>9</sub></b>	High commitment HR Perceptions will moderate the relationship between HR Practices and measures of behavioral outcomes of (a) teamwork and (b) organizational citizenship behavior.	Not supported
<b>H<sub>10</sub></b>	HR Perceptions will mediate the relationship between HR Practices and attitudinal and motivational outcomes of (a) job satisfaction, (b) organizational commitment and (c) self-efficacy.	Partial mediation found for Job Satisfaction only.

Table 26(continued)

*Summary of Hypothesis and Findings*

<p><b>H<sub>11</sub></b></p>	<p>The proximal outcomes of employee attitudes/motivation and behavioral outcomes will partially mediate the relationship between HR system variables and intermediary and distal organizational outcomes.</p>	<p>Weak support for mediation of employee outcomes between HR Principles and overall service received. Not supported for all other outcomes</p>
<p><b>H<sub>12</sub></b></p>	<p>The relationship between high commitment HR Practices and organizational outcomes will be strongest when used in combination with positions high in strategic importance and uniqueness of human capital.</p>	<p>Supported</p>

## CHAPTER 6: DISCUSSION

This study represents a first attempt to simultaneously capture, from different sources, multiple measures of the HR System and employee attitudinal, motivational and behavioral outcomes. The uniformity of the sample and quality of the dependent measures provided a rigorous test of the proposed relationships. Taken together, this is one of the most ambitious efforts to date aimed at modeling and understanding the influence of systems of HR practices on organizational performance outcomes.

This effort makes several specific contributions to the understanding of the relationship between systems of HR Practices and organizational performance. As stated in the introductory chapter, the literature has been characterized by significant variability in the assessment of the HR System variable (Combs et al., 2006; Boselie et al. 2005; Delery & Shaw, 2001). This variability in the measurement of the HR System makes across study comparisons difficult and, therefore, makes the literature less cumulative. Further, variability in measurement raises questions regarding both the validity and utility of various approaches. To address this variability and make the literature more tractable, four conceptually different components of the HR System were specified and assessed—HR Principles, HR Programs, HR Practices and HR Perceptions, targeting leader values, formal programs, practice implementation and employee perceptions respectively (Arthur & Boyles, 2007). Each of these assessments answers calls in the research to assess the HR System in a manner beyond the identification of the formal instantiations of high commitment work practices (e.g. Gerhart, 2005; Becker & Huselid, 2006; Colbert, 2004).

By providing simultaneous assessments of different components of the larger HR System, it was possible to hypothesize and test relationships among these measures of the HR System. Further, building on past theoretical developments, a clearer articulation of the relationship between these HR system measures and organizational outcomes was proposed and tested (Bowen & Ostroff, 2004). While the results of these analyses provide mixed support for the hypothesized relationships, they offer several new insights to the SHRM literature and important guidance to future research. Specifically, results underscore the utility of examining different approaches to the measurement of the HR System and the limitations inherent in examining only formally documented programs and policies.

The measurement of the HR System variables and employee outcomes was also strengthened by targeting multiple responses from independent groups within the organization best positioned to provide valid assessments of the construct in question (Arthur & Boyles, 2007). Further, separate reports were provided for specific HR practices for job functions common to all participating organizations. Because the literature has been dominated by single-respondent methodology requiring generalized reports of HR Practices across sometimes large organizations, this approach represented a key advance (Wall & Wood, 2005; Herdman, 2007; Boselie et al., 2005). Results suggested that the strategic characteristics of the job function may influence the magnitude of the relationship between HR system measures for that function with critical organizational outcomes (Lepak & Snell, 1999, 2000; Huselid, 2005). This is an important finding and suggests that within-organization differentiation in HR practice deployment may have potentially important performance consequences (Huselid, 2005; Lepak & Snell, 1999, 2002; Becker

& Huselid, 2006). Further, by answering calls in the literature for the use of multiple respondents to address issues inherent in single respondent measures, these data affirm key challenges and opportunities inherent multiple respondent research designs (Gerhart et al, 2000; Wright et al., 2001; Huselid & Becker, 2000; Becker & Huselid, 2007; Wall & Wood, 2005).

A final contribution of this research is an expanded understanding of the human capital mechanisms through which the HR System is theorized to influence organizational outcomes. While prior research has accumulated evidence of a relationship between the presence of high-commitment HR practices and organizational outcomes, relatively little attention has been given to the intermediary mechanisms responsible for this effect (Wright, 2001; Bowen & Ostroff, 2004; Ferris et al., 1999; Combs et al, 2006). Because the HR System's impact on organizational performance is theorized to operate, in part, through improved employee attitudes, motivation and behavior, variables thought to be potentially important in this regard were specified and measured. These organizational level human capital characteristics, in the present study, were in fact associated with enhanced organizational service and financial outcomes. However, only weak support was found for their role as mediating mechanisms between the HR System variables and these same outcomes.

In the following chapter, the results of this study are reviewed with specific attention to how results inform each of these key areas of contribution. Several post hoc analyses are offered and the implications of these findings on future research and managerial practice are discussed. The chapter concludes with a discussion of study limitations.

### *Measures of the HR System*

Our ability to better understand the relationship between systems of HR practices and organizational level outcomes requires more clearly articulating the relationship between this system, strategically important human capital characteristics and performance outcomes (Wright et al., 2001; Becker & Huselid, 2006). This process includes efforts to improve the measurement of the HR system in order to enable fuller specification of its relationship with important firm level human capital characteristics. Toward this end, four conceptually distinct measures of the HR system, all drawing on different respondent sets, were identified and assessed. Three of these measures—HR Principles, HR Practices and HR Perceptions, have little empirical precedent and were, in many respects, exploratory in nature.

In examining the larger pattern of relationships between HR System measures and organizational level outcomes, the data related to their relative predictive utility was mixed. The effect sizes of each of these measures with the proximal employee outcomes, intermediary outcomes and distal financial outcomes are summarized in Table 27. Shown are both the zero-order relationships and the incremental prediction offered by each HR system component when controls for organization size, brand and age were included in the prediction models. Considered collectively, HR Perceptions offers the strongest and most consistent prediction of the employee and service outcomes, followed by HR Principles. HR Programs, the most established of the measures, offered the most consistent prediction across all outcomes. Finally, HR Practices, when considered at the organizational level, failed to produce significant relationships with most outcomes.

Table 27

*Comparison of Relative Effect Sizes for Various HR System Variables with Proximal, Intermediary and Distal Outcomes**Proximal Employee Outcomes*

	Job Satisfaction			Org. Commit.			Self-efficacy			OCB			Teamwork		
	r	R <sup>2</sup>	ΔR <sup>2</sup>	r	R <sup>2</sup>	ΔR <sup>2</sup>	r	R <sup>2</sup>	ΔR <sup>2</sup>	r	R <sup>2</sup>	ΔR <sup>2</sup>	r	R <sup>2</sup>	ΔR <sup>2</sup>
HR Principles	0.26**	0.07**	0.05**	0.21**	0.04**	0.02*	0.06	0.00	0.00	0.17*	0.03*	0.02	0.17	0.03*	0.02
HR Programs	0.13*	0.02*	0.01	0.15*	0.02*	0.01	0.18**	0.03**	0.03*	0.15*	0.02*	0.02	0.17*	0.03*	0.02*
HR Practices	0.18**	0.03**	0.02*	0.12	0.01	0.00	0.05	0.00	0.00	0.04	0.00	0.00	0.05	0.00	0.00
HR Perceptions	0.33**	0.11**	0.07**	0.33**	0.11**	.07**	0.30**	0.10**	0.08	0.36**	0.13**	.09**	0.46**	0.21*	0.16**

*Note.* N = 191–202; r and R<sup>2</sup> reflect the zero-order relationships; ΔR<sup>2</sup> reflects incremental prediction in the outcome provided by the HR System variable when hotel size, age and brand are controlled

\* Significant at p < .05

\*\* Significant at p < .01

Table 27 (continued)

*Comparison of Relative Effect Sizes for Various HR System Variables with Proximal, Intermediary and Distal Outcomes*

	<i>Intermediary Outcomes</i>						<i>Distal Outcomes</i>		
	Overall Service			Turnover			RPR		
	r	R <sup>2</sup>	ΔR <sup>2</sup>	r	R <sup>2</sup>	ΔR <sup>2</sup>	r	R <sup>2</sup>	ΔR <sup>2</sup>
HR Principles	0.23**	0.05**	0.03**	0.06	0.00	0.00	0.10	0.01	0.00
HR Programs	0.07	0.01	0.00	-0.16*	0.03*	0.02*	0.19**	0.04**	0.04**
HR Practices	0.03	0.00	0.00	-0.11	0.01	0.01	0.13*	0.02*	0.02*
HR Perceptions	0.20**	0.04**	0.00	-0.02	0.00	0.00	0.11	0.01	0.02*

*Note.* N = 191–202; r and R<sup>2</sup> reflect the zero-order relationships; ΔR<sup>2</sup> reflects incremental prediction in the outcome provided by the HR System variable when hotel size, age and brand are controlled

\* Significant at p < .05

\*\* Significant at p < .01

One general observation is that the two measures that tap individual beliefs and perceptions—HR Principles and HR Perceptions, produced the strongest relationships with the employee attitudinal/behavioral and customer service outcomes. Because each of these variables were drawn from separate groups of people, thereby excluding demand effects or common method variance as an alternative explanation, this pattern is compelling. This supports the assertion that a relational employment orientation, measured in this study both in terms of leader beliefs and employee perceptions, may positively impact employee affective and behavioral outcomes and help shape the customers' experience with the organization (Tsui et al., 1997). However, that neither of these measures were related to revenue per room may mean that this relationship is less direct than previous thought.

Conversely, the more objective measures of HR Programs and HR Practices provided the stronger prediction of the economic performance of the hotel, as measured by revenue per room. A possible interpretation of these relationships is that reports of established HR practices—measured both in terms of formal establishment or actual implementation, is most strongly predictive of economic measures. More importantly, it may be that positively impacting firm financial outcomes is less reliant on the leader HR Principles or employee HR Perceptions, but can be affected directly through the direct impacts on productivity and performance born of program establishment and implementation (Ichniowski et al., 1996; Ostroff & Bowen, 2000; Boxall & Purcell, 2003).

In the discussion that follows, these findings are explored and discussed more deeply. Each measure is discussed in turn—highlighting key findings and suggesting possible new research directions important to expanding our understanding of the measurement of the HR system.

## *HR Principles*

This is the first study to date to directly assess these HR Principles from multiple representatives of the senior management team and examine these HR Principles in relationship to employee and organizational outcomes. Here, relational HR Principles were targeted—assessing the senior management team’s belief in the importance of development of long-term relationships with employees characterized by mutual investment (Tsui et al., 1997). Because organizational leader beliefs regarding the strategic importance of various approaches to the management of the organization’s human assets has been offered as the foundational assumptions on which the development of systems of HR practices are based, this is an important area of inquiry (Arthur & Boyles, 2007; Becker & Gerhart, 1996; Colbert, 2004; O’Reilly & Pfeffer, 2000).

Consistent with this prediction, support was found for the relationship between high-commitment HR Principles and the adoption of high-commitment work practices. This finding represents the first of its type and is potentially important to understanding variation in organizational adoption of management practices. Nevertheless, the size of the effects ( $\Delta R^2 = .02$ ,  $p < .01$ ) was rather modest, leaving a considerable amount of variance in the deployment of high-commitment HR systems unexplained. Because these measures of HR Principles, following the pilot were narrowed conceptually to a “relational” perspective, it may be that these relational HR Principles may be more predictive of narrower sets of practices than the relatively comprehensive set of HR practices represented here by the HR Programs index. For example, these relational HR Principles would logically be more predictive of the use of HR practices such as providing job security, development opportunities and a heavier reliance on internal labor markets, than

contingent compensation and performance appraisals. Therefore, assessing and measuring other HR Principle dimensions may be necessary to better explain this relationship. A number of HR Principle orientations are possible, including the degree to which organization leadership believes in the importance of providing expanded opportunities for employees, the importance of providing employee contingent performance rewards, etc. (Tsui et al, 1997; Rousseau, 1995; Colbert, 2004; Becker & Gerhart, 2006).

High-commitment HR Principles were also proposed as a moderating influence between the formal establishment of HR Programs and HR Practices or their implementation by managers and supervisors. This hypothesis rests in the logic that senior management teams holding values compatible with formally established HR Programs would be more likely to promote and reinforce their use. In these data, no support was found for this relationship. Given the lack of evidence supporting HR Principles role in this relationship, this remains an important area for research with important practical and theoretical implications. HR practitioners struggle daily with consistent implementation of HR Practices by managers and supervisors. Moreover, understanding the implemented practices (rather than the formally stated, though potentially often unimplemented practices) is vital to furthering SHRM research and more directly connecting HR practices to both the human capital characteristics and organizational outcomes (Becker & Huselid, 2006). By extension, understanding the antecedents of consistently implemented HR Practices is an important area of future research.

As stated earlier, HR Principles was a consistent predictor of organizational employee attitudinal, behavior and service outcomes. HR Principles provided significant incremental prediction in all employee outcomes, but self-efficacy, above the controls—

$\Delta R^2 = .05$  ( $p < .01$ ) for job satisfaction and  $\Delta R^2 = .02$  for organizational commitment, organizational citizenship behavior and teamwork. This finding is consistent with findings at the individual job level suggesting a relationship between a “mutual investment” approach to management and employee attitudes and performance (Tsui et al., 1997). More importantly, this study suggests the generalizability of these relationships to organizational level of analysis by demonstrating this relationship between aggregate leader HR Principles and aggregate employee behavioral and affective outcomes.

However, the relationships between HR Principles and the employee attitudinal and behavioral outcomes are at odds with the lack of association between HR Principles and HR Perceptions. A possible interpretation of this finding is that relational HR Principles have direct consequences on employee attitudes and behaviors, unrelated to their interpretation of the management practices. It may be that these HR Principles manifest in an overall “tone” at a location, unrelated in the employee minds to managerial practices, but nevertheless important to the development of these affective/motivational and behavioral outcomes. Because HR Principles reflect a higher level “valuing” of the strategic importance of developing long-term relationships with employees, understanding how these beliefs manifest behaviorally and programmatically to shape these outcomes is an important area for future research (Colbert, 2004; Becker & Huselid, 2006). Further, the role of organizational size may be a key determinant of the intensity and frequency of the senior leadership team’s contact with employees. In larger organizations, where contact is less frequent, this relationship may be less pronounced. Because organizational size was related to both variables, the capacity to understand its possible moderating role in this relationship is likely an important research direction.

Also notable is the relationship of HR Principles with customer ratings of overall service received. Even with full controls in place, HR Principles was predictive of this outcome ( $\Delta R^2 = .03$ ,  $p < .01$ ). To date, there are only two instances of the use of objective ratings of customer service as a dependent variable in past SHRM research. Gelade and Ivery (2003) found relationships between measures of staffing levels, overtime rates and professional certification rates (used a proxies for the HR System variable) to be related to customer satisfaction in a sample of bank branches. Conversely, in a sample of auto dealerships, Rogg, Schmidt, Skull and Schmitt (2001), reported a very weak relationship ( $r = .06$ ) between a measure of HR Programs and customer satisfaction. Therefore, the evidence of the relationship between measures of the HR System and organizational service outcomes in previous research is both limited and mixed. So, this finding fills an important need to better understand if and how HR systems impact service outcomes (Schneider et al., 2006). That leader's beliefs regarding the importance of investing in and establishing long-term relationships with employees is predictive of customer ratings of service received is intriguing. It is possible that this relational orientation also manifests in the organization's relationship with customers. Given the rather distal nature of the relationship between HR Principles and service outcomes in the present study, understanding the dynamics underlying this relationship presents an opportunity for future research.

However, these findings should be viewed provisionally for several reasons. First, the social desirability inherent in 'valuing employees' may have restricted the capacity to tap variance in managerial beliefs. The mean levels of this variable ( $\mu = 4.10$ ) were the highest amongst the HR system measures and the standard deviation ( $SD = .37$ ) was the

lowest. Achieving greater ability to effectively tap additional variance in managerial values may yield additional insight not available in the current data. Further, as stated, additional HR Principle dimensions may be explored in future research. Indeed, fully understanding the relationship between the HR system and firm outcomes has been recently argued to be most productively pursued by beginning with HR Principles (Colbert, 2004; Becker & Huselid, 2006). This argument suggests that programmatic decisions, though potentially highly variable in their specific design, naturally flow from the basic assumptions of organizational leadership regarding the strategic importance of various approaches to managing people. By identifying an organization's HR Principles, important information is obtained regarding the basic approach to employee management without the complexity and challenges inherent in capturing and representing the programmatic manifestations of these HR Principles.

### *HR Programs*

HR Programs represents the most common conceptualization of the HR System in SHRM research—representing 89% of the total effect sizes reported (Herdman, 2007). HR Programs proved the most consistent predictor, across outcomes, on a zero-order correlation basis. However, when controls were included in the various prediction models, HR Programs' capacity to provide incremental prediction to the employee, HR Perceptions and voluntary turnover outcomes was comparatively modest. Nevertheless, a positive relationship was found. However, in terms of the prediction of superior financial outcomes suggesting competitive advantage, it proved important ( $\Delta R^2 = .04$ ) in the prediction of revenue per room. This is a magnitude consistent with past meta-analytic findings

examining the relationship of HR system measures with firm financial performance (Combs et al., 2006;  $\rho = .16$ ). This is especially important given the quality of this financial metric and its central importance within the hospitality industry. Finally, as suggested earlier, HR Programs may have its most direct effects on organizational financial outcomes through structural and process efficiencies (Ichniowski et al., 1996; Ostroff & Bowen, 2000).

Additionally, because the HR Program reports were collected at the departmental level, it was possible to test for variable effects of high-commitment work practices when used in support of job functions of differing strategic importance. In this sample, this analysis involved a contrast in the magnitude of the relationship between high-commitment HR Programs and organizational outcomes when deployed in support of two different job functions. These two functions were selected for their apparent differences in both strategic importance and human capital requirements—the front desk/reception (high) and the housekeeping (low) functions. As shown in Table 25, consistent with Hypothesis 12, the magnitude of the relationship between high-commitment HR Programs and both organizational service and financial outcomes are significantly larger when supporting the front desk/reception function than for those supporting the housekeeping. This general pattern of relative magnitudes extends to the other HR system measures as well. This finding supports the assertion that the impact of high commitment HR practices on organizational competitive advantage may be reliant on the functional characteristics of the position (Huselid, 2005; Lepak & Snell, 1999, 2002). While this analysis may only be considered indirect evidence of the utility of a differentiated approach to the deployment of high commitment HR practices, this suggests that organizations may be better served by

the selective alignment of high commitment practices behind more strategic functions. Moreover, this affirms concerns that research designs requiring the generalized reporting of HR Programs across job functions may indeed mask important intra-organizational variability in programs and thereby obscure the relationship between the HR System and performance outcomes (Wall & Wood, 2005; Gerhart et al., 2000; Wright et al., 2001). Therefore, these findings have important implications on both future research and practice.

### *HR Practices*

HR Practices was developed as a parallel measure to HR Programs, but administered to line level managers and supervisors in order to measure the actual implementation of management practices. The HR Practice measure provides important information regarding the actual use of the various practices. Because implementation levels, even among core HR Practices, is likely to vary widely both within and across organizations, this information is critical to understanding the HR System's effects on organizational outcomes (Becker & Huselid, 2006).

An important finding was the weak relationship between reported HR Programs and reported HR Practices. As this is consistent with past findings, this relationship was not completely unexpected (Wright et al., 2001; Khilji & Wang, 2006). This lack of association between reports is evident for individual HR practice levels as well. Table 28 presents the correlations between HR Programs and HR Practices for each HR practice assessed. These correlations, represented in bold in Table 28, ranged from  $r = -.02$  for job design to  $r = .32$  for selective hiring. These modest associations suggest a considerable disconnect between the reported HR Programs and HR Practices, even for specific

Table 28

*Zero-order Correlations for Individual HR Program, HR Practice and Organizational Outcome Variables.*

	<b>M</b>	<b>SD</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>1</b> Selective Hiring- Program	3.09	0.67						
<b>2</b> Training/Develop- Program	3.57	0.98	0.38**					
<b>3</b> Employee Part- Program	3.39	1.07	0.39**	0.41**				
<b>4</b> Pay Practice- Program	3.71	0.98	0.17*	0.29**	0.32**			
<b>5</b> Job Design- Program	2.52	0.71	0.02	0.00	0.12	0.10		
<b>6</b> Perform. Appraisal- Program	3.63	0.99	0.34**	2.39**	0.33**	0.25**	-0.05	
<b>7</b> Information Sharing- Program	3.84	0.88	0.31**	0.18*	0.29**	0.34**	0.20*	0.30**
<b>8</b> Team Building- Program	3.37	1.10	0.28**	0.44**	0.46**	0.16*	0.09	0.21**
<b>9</b> Internal Labor Market- Program	4.13	0.91	0.26**	0.20**	0.28**	0.20	0.02	0.34**
<b>10</b> Employee Security- Program	3.31	1.05	0.21**	0.22**	0.30**	0.26**	0.05	0.30**
<b>11</b> Reduced Status- Program	3.56	0.50	-0.03	-0.11	-0.17*	-0.09	-0.07	-0.08
<b>12</b> Selective Hiring- Practice	3.16	0.56	<b>0.32**</b>	-0.05	0.03	-0.04	0.08	0.15*
<b>13</b> Training/Develop- Practice	3.62	0.75	0.12	<b>0.03</b>	0.07	-0.12	0.07	0.11
<b>14</b> Employee Part- Practice	3.67	0.68	0.10	-0.04	<b>0.05</b>	-0.09	0.15*	0.04
<b>15</b> Pay Practice- Practice	3.31	0.81	0.11	-0.01	0.05	<b>0.31**</b>	0.03	0.12
<b>16</b> Job Design- Practice	2.73	0.47	0.06	-0.07	-0.09	0.11	<b>-0.02</b>	0.05
<b>17</b> Perform. Appraisal- Practice	3.49	0.71	0.21**	0.07	0.01	0.13	-0.13	<b>0.29**</b>
<b>18</b> Information Sharing- Practice	3.70	0.64	0.19**	-0.06	0.09	0.18*	0.14*	0.13
<b>19</b> Team Building- Practice	3.72	0.66	0.20**	0.06	0.13	0.02	0.13	0.11
<b>20</b> Internal Labor Market- Practice	3.80	0.56	0.17*	0.14*	0.04	0.10	-0.02	0.13
<b>21</b> Employee Security- Practice	3.48	0.66	0.17*	0.20*	0.19**	0.21**	0.00	0.19*
<b>22</b> Reduced Status- Practice	3.66	0.59	0.00	-0.03	-0.03	0.04	0.01	0.00
<b>23</b> Job Satisfaction	4.16	0.37	0.02	0.23**	0.10	0.08	-0.03	0.06
<b>24</b> Org. Citizenship Behavior	4.10	0.33	0.05	0.21**	0.15*	0.19**	-0.05	0.15*
<b>25</b> Org. Commitment	4.19	0.39	0.05	0.20**	0.11	0.14	-0.01	0.10
<b>26</b> Self-efficacy	4.39	0.29	0.10	0.16*	0.15*	0.13	0.12	0.07
<b>27</b> Teamwork	3.70	0.43	0.11	0.23**	0.10	0.13	0.04	0.10
<b>28</b> Turnover	53.40	42.43	-0.17*	-0.06	-0.15*	-0.16*	-0.09	-0.02
<b>29</b> Overall Service Received	80.67	6.27	-0.01	0.27**	-0.03	0.13*	-0.09	0.09
<b>30</b> Revenue per Room- 2007	60.10	17.25	0.11	0.06	0.08	0.09	0.15*	0.07

Note. N = 190-202

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

Table 28 (continued)

*Means, Standard Deviations, Reliabilities and Zero-order Correlations for Individual HR Program, HR Practice and Organizational Outcome Variables.*

	7	8	9	10	11	12	13	14
1 Selective Hiring- Program								
2 Training/Develop- Program								
3 Employee Part- Program								
4 Pay Practice- Program								
5 Job Design- Program								
6 Perform. Appraisal- Program								
7 Information Sharing- Program								
8 Team Building- Program	0.23**							
9 Internal Labor Market- Program	0.26**	0.20**						
10 Employee Security- Program	0.31**	0.28*	0.36**					
11 Reduced Status- Program	0.11	-0.07	0.03	0.05				
12 Selective Hiring- Practice	0.06	0.10	-0.04	-0.02	0.00			
13 Training/Develop- Practice	0.06	0.11	0.12	0.10	0.06	0.45**		
14 Employee Part- Practice	-0.06	0.06	-0.07	0.04	0.04	0.45**	0.54**	
15 Pay Practice- Practice	0.11	-0.04	0.03	0.01	-0.08	0.37**	0.22**	0.40**
16 Job Design- Practice	-0.02	0.01	-0.02	0.08	0.08	0.25**	0.02	0.16*
17 Perform. Appraisal- Practice	0.12	0.01	0.07	0.07	-0.04	0.45**	0.47**	0.41**
18 Information Sharing- Practice	<b>0.24**</b>	0.12	-0.04	0.06	0.05	0.45**	0.37**	0.49**
19 Team Building- Practice	0.13	<b>0.18*</b>	0.01	0.02	0.08	0.37**	0.43**	0.39**
20 Internal Labor Market- Practice	0.15*	0.07	<b>0.07</b>	0.09	0.04	0.28**	0.36**	0.39**
21 Employee Security- Practice	0.14*	0.12	0.02	<b>0.11</b>	0.03	0.16*	0.24**	0.29**
22 Reduced Status- Practice	-0.05	-0.09	-0.10	0.15*	<b>0.27*</b>	-0.03	0.03	0.00
23 Job Satisfaction	-0.02	0.09	0.00	0.04	0.04	0.04	0.16*	0.16*
24 Org. Citizenship Behavior	0.05	0.06	0.05	0.06	0.01	-0.04	0.02	0.05
25 Org. Commitment	0.07	0.07	0.02	0.04	0.07	0.06	0.06	0.09
26 Self-efficacy	0.08	0.01	0.10	0.07	0.08	-0.03	0.04	0.11
27 Teamwork	0.04	0.08	0.04	0.00	-0.01	-0.01	0.05	-0.02
28 Turnover	-0.14*	-0.15	-0.02	-0.01	0.08	-0.15*	-0.09	-0.06
29 Overall Service Received- 2007	-0.04	0.13	-0.11	0.08	0.00	-0.10	-0.01	0.03
30 Revenue per Room- 2007	0.20**	0.09	0.00	0.16*	0.16*	0.07	0.12	0.05

Note. N = 190-202

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

TABLE 28 (continued)

Means, Standard Deviations, Reliabilities and Zero-order Correlations for Individual HR Program, HR Practice and Organizational Outcome Variables.

	15	16	17	18	19	20	21	22
1 Selective Hiring- Program								
2 Training/Develop- Program								
3 Employee Part- Program								
4 Pay Practice- Program								
5 Job Design- Program								
6 Perform. Appraisal- Program								
7 Information Sharing- Program								
8 Team Building- Program								
9 Internal Labor Market- Program								
10 Employee Security- Program								
11 Reduced Status- Program								
12 Selective Hiring- Practice								
13 Training/Develop- Practice								
14 Employee Part- Practice								
15 Pay Practice- Practice								
16 Job Design- Practice	0.16*							
17 Perform. Appraisal- Practice	0.47**	0.25**						
18 Information Sharing- Practice	0.37**	0.30**	0.45**					
19 Team Building- Practice	0.34**	0.14*	0.48**	0.44**				
20 Internal Labor Market- Practice	0.40**	0.19**	0.44**	0.36**	0.41**			
21 Employee Security- Practice	0.24**	0.11	0.35**	0.21**	0.40**	0.46*		
22 Reduced Status- Practice	0.05	0.15*	-0.02	-0.04	0.04	0.00	-0.04	
23 Job Satisfaction	0.01	-0.09	0.08	0.08	0.18*	0.11	0.14*	0.08
24 Org. Citizenship Behavior	0.03	-0.18*	0.04	-0.03	0.07	0.01	0.11	0.10
25 Org. Commitment	0.00	-0.01	0.07	0.07	0.17*	0.11	0.18*	0.06
26 Self-efficacy	-0.01	-0.10	-0.03	0.01	0.08	-0.01	0.05	0.09
27 Teamwork	-0.01	-0.04	0.00	0.05	0.18*	0.00	0.11	-0.01
28 Turnover	-0.09	-0.08	-0.07	-0.04	0.04	-0.07	-0.14	-0.02
29 Overall Service Received- 2007	0.04	0.07	0.07	-0.08	0.04	0.08	0.25**	0.11
30 Revenue per Room- 2007	-0.04	-0.02	0.07	0.09	0.06	0.08	0.07	0.11

Note. N = 190-202

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

TABLE 28 (continued)

Means, Standard Deviations, Reliabilities and Zero-order Correlations for Individual HR Program, HR Practice and Organizational Outcome Variables.

	23	24	25	26	27	28	29
1 Selective Hiring- Program							
2 Training/Develop- Program							
3 Employee Part- Program							
4 Pay Practice- Program							
5 Job Design- Program							
6 Perform. Appraisal- Program							
7 Information Sharing- Program							
8 Team Building- Program							
9 Internal Labor Market- Program							
10 Employee Security- Program							
11 Reduced Status- Program							
12 Selective Hiring- Practice							
13 Training/Develop- Practice							
14 Employee Part- Practice							
15 Pay Practice- Practice							
16 Job Design- Practice							
17 Perform. Appraisal- Practice							
18 Information Sharing- Practice							
19 Team Building- Practice							
20 Internal Labor Market- Practice							
21 Employee Security- Practice							
22 Reduced Status- Practice							
23 Job Satisfaction							
24 Org. Citizenship Behavior	0.64**						
25 Org. Commitment	0.80**	0.76**					
26 Self-efficacy	0.53**	0.56**	0.56**				
27 Teamwork	0.61**	0.50**	0.56**	0.49**			
28 Turnover	0.03	-0.08	-0.07	-0.08	0.00		
29 Overall Service Received- 2007	0.29**	0.29**	0.30**	0.10	0.21**	0.03	
30 Revenue per Room- 2007	0.12	0.12	0.13*	0.05	0.07	-0.12	0.01

Note. N = 190-202

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

practices. There is some evidence, however, that the use of the additive index may mitigate this issue somewhat as the average individual HR Program-HR Practice relationship was  $r = .17$ , compared with the additive index correlation of  $r = .23$ .

It is difficult to ascertain the relative accuracy of the HR Programs versus HR Practice reports. Judging from their relative association with the proximal, intermediary and distal organizational outcomes, however, it would seem that HR Programs is the more predictive of the two measures for the organizational level outcomes. While related significantly to HR Perceptions, HR Practices failed to provide significant prediction of employee, intermediate or distal outcomes when represented as the aggregate mean of all supervisory reports. However, this disparity in predictions may be attributable, in part, to challenges associated with the aggregation of the HR Practice reports to the organizational level.

For example, when examined within specific functions, the relationship between HR Practices and the employee attitudinal, motivational and behavioral outcomes improves. Table 29 presents the zero-order correlations between the HR System measures for Front Desk/Receptions only. Of particular note is the fact that the relationship of HR Practices reports, by Front Desk managers and supervisors, is significantly related to all employee outcomes but self-efficacy. These significant relationships stand in contrast to the failure of aggregate organization level HR Practices to predict these same employee attitudinal and behavioral outcomes. It is important to note that this analysis is restricted to cases where there were more than two front desk employees providing responses to both the HR Perception and employee outcomes, coupled with a front desk manager report of HR Practices. Due to overall response rates (54% for employees and 52% for supervisors)

and the department's smaller size, this requirement yielded only 80 intact sets of survey responses. Nevertheless, the prediction of the HR Practice measure increases substantially for the employee outcomes when examined within this department only.

Table 29

*Means, Standard Deviations, Reliabilities and Zero-order Correlations for Front Desk Reception Only*

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>1</b> HR Program- FDR								
<b>2</b> HR Practice- FDR	0.18							
<b>3</b> HR Perception- FDR	0.19	0.20*						
<b>4</b> Job Sat- FDR	0.09	0.27**	0.36**					
<b>5</b> OCB- FDR	0.13	0.23*	0.27**	0.68**				
<b>6</b> Org. Comm.- FDR	0.26*	0.30*	0.46**	0.81**	0.68			
<b>7</b> Self-efficacy- FDR	0.12	0.18	0.21	0.50**	0.49**	0.46**		
<b>8</b> Teamwork- FDR	0.15	0.36**	0.23*	0.62**	0.37**	0.56**	0.39**	

*Note.* N = 80

\* Significant at  $p < .05$

\*\* Significant at  $p < .01$

The HR Practice measure, unlike the HR Programs measure, is designed to provide reports of actual implementation rather than reporting on the relatively objective evaluation of formally established programs and policies. Variability in responses may therefore represent either low reliability in multiple ratings of a single objective target (in this case, the organization's implemented practices) or true difference in supervisory practice within functional areas (Gerhart et al., 2001; Gerhart, et al., 2000; Huselid & Becker, 2000; Wright et al., 2001). Whether this variability represents low reliability or true differences in implemented practices this would depress the true magnitude of the relationship. To the degree that the variability evident in this data represents true difference in actual practices

implemented, aggregation to the organizational level may be inappropriate and obscure the relationship between this measure and organizational outcomes. This latter argument seems to be supported by the earlier analysis demonstrating increased prediction of HR Practices when examined at a more localized level.

Therefore, there are clear challenges in the use of this measure. First, this data underscores the need to secure multiple respondents in the assessment of HR practices. It would seem that single respondent methodology, for this HR system measure especially, would be unlikely to provide a clear picture of the actual implementation. Second, it makes the aggregation of the HR Practice reports a delicate exercise. However, this challenge may be reconciled with the earlier arguments supporting the examination of intra-organizational differences in HR practices according to the strategic importance of the job function. By targeting HR Practice assessments to more strategically important job functions, the utility of these measures might be maximized while avoiding aggregation issues inherent in collapsing these measures across function subgroups.

### *HR Perceptions*

The final measure, HR Perceptions, was designed to assess employee perceptions of their work environment. Specifically, it captures the degree to which employees perceive that the organization has a long-term commitment to and invests in the development of their employees. This study provides a first attempt to tap employee perceptions of management practices and establish a link to both the HR System and employee outcomes. This approach is consistent with theoretic assertions that these employee perceptions are antecedent to the development of the attitudinal and behavioral outcomes important to organizational functions (Bowen & Ostroff, 2004) and answers

recent calls in the literature to examine employee climate perceptions related to management practices (Bowen & Ostroff, 2004; Gerhart, 2005).

In my conceptual model, I proposed that HR Perceptions would mediate the relationship between HR Programs/Practices and organization level job satisfaction, commitment and self-efficacy. The HR Perceptions measure was also proposed to have a moderating role between HR Practices and the employee behavioral outcomes of teamwork and organizational citizenship. There was no support for these relationships in this data.

These findings highlight the need for continued research on the role of these employee HR Perceptions. However, the strong association between organizational level HR Perceptions and organizational attitudinal and behavioral outcomes is an important finding. These relationships, coupled with the relatively strong prediction of organizational service outcomes, suggest that the future of this construct is promising. One advantage to the direct assessment of employee perceptions is the recognition that these perceptions are likely born of multiple cues in the work environment (Rousseau, 1995; Bowen & Ostroff, 2004; Gerhart, 2004) and may result from multiple combinations or configurations of HR Practices (Delery & Doty, 1996). The pilot study examination of the factor structure of these HR Perceptions, even when using measures targeted to perceptions of single HR practices, suggested a single dominant factor—offering further evidence of this systems perspective and the complexity of the signaling or cues offered by systems of HR practices. It would seem that employees do not delineate between practices but instead develop a summative conclusion regarding their work environment. Based on this logic, several researchers have argued that these HR Perceptions are a fruitful line of inquiry and

a central point of managerial leverage—especially given their predictive utility in both this study and others (Gerhart, 2005; Fulmer, Gerhart & Scott, 2003). By focusing on employee perceptions, future research might investigate both the environment antecedents to the development of HR Perceptions and further explore its consequences on managerially important outcomes.

Again, because this is a new measure, these findings should be viewed conditionally. Like HR Principles, this measure was adapted following the pilot phase to target “relational” perceptions. Therefore, the examination of other dimensions of employee perceptions, like opportunity for contribution, may offer additional insight and is an important research direction (Rousseau, 1995).

#### *Mediating mechanisms*

Another goal of this study was to more fully specify and measure theoretically important firm level human capital characteristics through which the HR System may operate to influence organizational level outcomes. In this study, this included attitudinal/motivation measures of organizational job satisfaction, commitment, and self-efficacy as well as the behavioral outcomes of teamwork and organizational citizenship behavior. These organizational characteristics were in fact related to both objective customer service ratings and revenue per room. Given the quality and objective nature of these measures, this represents an important finding for this industry. This finding suggests that organizations may be able to positively influence organizational competitiveness through interventions targeted at improving these human capital characteristics. These results support past research demonstrating a relationship between organizational level affective

outcomes and organizational outcomes (Bowen & Schneider, 1988; Schneider & Bowen, 1993; Fulmer, Gerhart & Scott, 2003; Ostroff, 1992; Ryan, Schmit & Johnson, 1996). Further, this is consistent with meta-analytic research examining aggregate employee affective outcomes and establishment performance, and affirms its generalizability to the hospitality industry (Harter et al., 2002). It would seem that these organizational human characteristics create value for organizations.

However, in this sample, there was very limited evidence that these employee attitudinal and behavioral outcomes mediate the relationship between HR system variables and organizational outcomes. For example, while it was possible to demonstrate a relationship between HR Programs and both these employee and organizational outcomes, only very slight partial mediation is evident. Likewise, the HR Perceptions measures, as the most predictive measure of the employee and service outcomes, also provide only limited evidence regarding this mediation relationship. Mediation for these employee outcomes was only evident in the relationship between HR Principles and customer service outcomes.

This lack of evidence regarding the mediating role of both attitudinal and behavioral outcomes is directly counter to the theoretical expectations underlying SHRM research. Organizational commitment, for example, is believed to be an important consequence of high commitment HR practices and a central mechanism in driving improved organization results (Wright et al., 2005; Ostroff & Bowen, 2001). Further, both this data and past SHRM research have shown a relationship between HR system measures and both job satisfaction and organizational commitment (e.g. Chang, 2005; Vandenberg et al., 1999; Wright et al., 2005). Similarly, though not studied at the organizational level of

analysis, past research has demonstrated a relationship between individual HR practices and self-efficacy (e.g. Colquitt, Lepine & Noe, 2000). Finally, organizational citizenship behavior and teamwork behavior are arguably good representative measures of the coordinative and discretionary behaviors believed to result from high commitment work practices (MacDuffie, 1995). Unfortunately, given the relative dearth of research directed at understanding the intermediary human capital characteristics driving the HR systems relationship with organizational outcomes, there is little past research with which to contrast these findings.

A possible explanation for these findings is that these employee outcomes, while related to both service and financial outcomes, may not be the mechanisms through which the HR system impacts these outcomes. For example, the direct effects of the HR System's influence on the employee's skills and abilities as well as structural and process efficiencies were not measured (Wright et al., 2001; Cappelli & Singh, 1992; Ostroff & Bowen, 2000; Ichniowski et al., 1996). Therefore, the model presented and tested here may be underspecified and the paths most responsible for HR's effect not represented. Similarly, these measures may be too generalized and fail to represent the more specific strategic capabilities resulting from the HR System that are most responsible these improved outcomes. For example, Sun, Aryee, and Lawfound (2007) found evidence for partial mediation for service related OCBs between HR Program measure and reports of turnover and employee productivity (sales per employee) in a sample of hotels. While this study differed from the present study by using supervisory reports of service OCBs and subjective organizational performance measures, the proposed mediating mechanism was more narrowly defined in terms of a specific capability believed to be strategically

important (i.e. service behavior), rather than the more generalized measures employed here. Therefore, future research may endeavor to more specifically define these intermediate outcomes in terms of more narrowly defined strategic capabilities (Becker & Huselid, 2006).

Finally, the lack of support for the mediating relationship in this study may be a result of characteristics of the aggregated variables. All relationships in the present study were proposed and tested at the organizational level. While the utility of representing these variables at the organizational level is supported by the fact that these variables generally exhibited the expected pattern of relationships, there was still within organization variability for all aggregated variables. Each of the employee attitudinal and behavioral variables was developed to assess the individual—and the existence of the organizational level variable is reliant on agreement among these individual reports (Chan, 1998; Bliese, 2000). As reported earlier, the between rater reliability assessment (ICC2) suggested very modest inter-rater reliability for these measures ranging from .21 to .41 and therefore a potentially meaningful source of measurement error. Therefore, the observed relationships may be depressed, thereby limiting the capacity to demonstrate the expected mediation (Gerhart et al, 2001; Huselid & Becker, 2001).

Alternatively, as discussed earlier in relationship to HR Practices measure, this variability in individual reports may reflect accurate reports of idiosyncratic practices, perceptions and employee experiences. Extending the arguments made earlier regarding the possible importance of within firm differentiation of HR System along functional lines; this variability may be born of variability in subgroup experiences with different practices. As is possible with the HR Practice measure, in circumstances of less than perfect

agreement, aggregating employee perception and attitudinal outcomes across these functional subgroups may obscure the relationship between HR practices, the resultant human capital characteristics and organizational outcomes. Therefore, the relationship between HR System variables, the mediating human capital characteristic and organization performance outcomes may be most appropriately modeled and tested for more in strategically important functional subgroups.

Within the SHRM literature, the consistency of employee perceptions or organization climate has been theorized as an important and necessary byproduct of systems of HR practices (Schneider et al., 2002; Ostroff & Bowen, Bowen & Ostroff, 2004). This climate, or ‘sharedness’, is generally desired and there is limited evidence that higher levels of agreement in employee perceptions of climate enhanced the relationship between climate and service outcomes (Schneider et al., 2002). Schneider’s (2002) study, however, consisted of responses from a functionally homogeneous sample of bank tellers. By comparison, the present sample drew from a relatively diverse group of functional areas—including food and beverage, front desk, sales and housekeeping employees. Therefore, it may be necessary to further qualify the degree to which ‘sharedness’ or agreement is desired or performance enhancing. For example, organizations may target practices to more strategically important subgroups and therefore positively impacting employee attitudes, motivation and behaviors of this functional subset of employees. However, this selective deployment may grow the overall variance in these measures at the establishment level by neglecting other functions. This variability may be appropriate and in fact performance enhancing by focusing scarce resources in an area for which there is the greatest return from a competitive advantage perspective (Lepak & Snell, 1999;

Huselid et al., 2005). Conversely, organization level agreement may be evidence of a lack of insufficient differentiation of HR practices between groups of variable strategic importance.

As these data illustrate, multiple respondent samples bring with them significant challenges to future research. The intention in the present study was to represent and test relationships among organizational level characteristics with managerially important outcomes. Therefore, fully understanding the sources and consequences of this variability is beyond the scope of the current investigation. However, the degree to which variability in both HR practice reports and employee perceptions may represent an important property of these organizational level construct is an important future research pursuit.

#### *Managerial Implications*

This study exists within a broader context of increasing pressure on HR practitioners to demonstrate the capacity of the HR function to serve as a strategic asset important to the development of firm level competitive advantage. This fact, coupled with the tendency of SHRM research to use managerially important dependent variables, has resulted in considerable practitioner attention to this emerging research stream (Becker & Huselid, 2006). Given the scope and intensive nature of the data collection required in the present investigation, the organization's willingness to assist and provide the access required to conduct this study serves as further testimony to this interest in HR's relationship with firm performance.

This study provided a very targeted investigation of these relationships in hotels and employed two managerially relevant outcomes to this industry- customer service and

revenue per room. Both outcomes are of central importance to managers within this industry and, as such, understanding the points of managerial leverage in influencing these outcomes has the potential to inform their daily activities. While this research may be best considered a “point of departure” in the development of expanded measures of the HR System and understanding their relationship with organizational employee, service and financial outcomes, several tentative conclusions are possible.

First, results supported the positive association of a relational employment perspective, measured both in terms of leader values and employee perceptions, with achieving above average hotel service outcomes. Therefore, this suggests that the adoption of a relational perspective on the part of senior management teams and engendering employee perceptions that the organization is committed to them has positive consequences on service delivery. Further the strength of the relationship between relational HR Perceptions and the employee attitudinal and behavior outcomes suggest that these employee perceptions may figure centrally in the development of both a more satisfied and committed workforce. Likewise, these data suggest that HR Perceptions are antecedent to an overall willingness on the part of employees to invest discretionary effort for the benefit of the organization as well as improved coordinative between employees.

Second, higher aggregate levels reports of high-commitment HR Programs and HR Practice is associated with above average revenue per room within this sample. These relationships suggest that high-commitment HR practice interventions have positive economic consequences. However, the mechanism through which these systems operate is less clear and merits additional study in the industry.

Third, it is apparent in these data that the assessed employee attitudinal and behavioral outcomes were positively related to both superior service and financial performance. The magnitude of these relationships suggests that these relationships are both statistically and practically significant. These findings suggest that managerial interventions targeted towards the improvement of these firm level human capital characteristics can be a source of value creation.

Finally, the strength of the relationship between the relatively static hotel characteristics of size, brand and age with customer service ratings was unanticipated. For example, the inclusion of the controls in the prediction models accounted for 47% of the variance in customer ratings of overall service received. Though not the focus of this study, the strength of these relationships represents potentially important information to hotel management teams in developing a fuller understanding of the drivers of hotel performance outcomes. It also makes the ability of HR Principles and the employee outcomes to increment this prediction more compelling and underscores the need to understand and include this type of contextual variables in future research.

#### *Study Limitations*

There are several features of this research design that may limit the capacity to generalize the findings of this study to other contexts. One limitation of this study is the relative narrow industry specific focus of the investigation. While affording enhanced control of extraneous influences on establishment performance, this study was conducted within a single franchise company. For this reason, the sample focused on mid-sized hotels to the exclusion of both very large metro hotels and hotels focused strategically on

the luxury market. This narrow focus may restrict the capacity to generalize the results not only across other industries, but also within the hospitality industry.

Another limitation was the opportunity for some distortion of results through managerial influence—for example, including the selective distribution of surveys to certain employees or failing to provide privacy to respondents. This study used methodology in which the materials were sent to each location and the General Manager or HR Manager was made responsible for distributing and collecting the surveys. While precautions were taken, including individual envelopes and a sealed collection box, this placed the custody of the surveys outside of the researcher's observation during completion. However, these managers had little to gain by distorting results since the primary benefit of their participation was the receipt of a hotel 'profile' report comparing their hotel to the larger sample. The utility of this report to these managers would be greatly diminished if the results were distorted. Moreover, there was no evidence of tampering. The ideal case, certainly, would have been to have direct researcher observation of the survey distribution and collection process. However, given the scope study and the geographic disparity of the locations, this was not a practical possibility and protocol seemed a sound solution.

An additional limitation of the study is that the methodology called for splitting the line level employee sample between the HR Perception and employee outcome surveys. While the average hotel had approximately 29 total employee responses, these responses were split equally between the two surveys. The consequence is that the group sizes for each set of these assessments were smaller. Ideally, a full response from all employees on

either survey would provide increased confidence in both the mean level variables representing each hotel and a better sense of the strength of agreement.

Though difficult to assess, a related issue may be response biases inherent for hotels that were both identified for participation and expressed interest in participation. While, in identifying the locations, the franchise area managers were instructed to select hotels for their variability in both performance and management practices, approximately 75 of the 325 originally identified locations elected not to participate. Of the remaining 252, an additional 52 locations failed to return their packets after receiving their survey materials. While no significant differences were found between these responding and non-responding hotels in terms of the size or performance variables, suggesting a representative sample, it was not possible to ascertain whether respondents and non-respondents differed on the HR System or employee outcome measures. Thus, participating hotels may represent more progressive locations that are confident in both their management practices and employee outcomes. Therefore, it is possible that some range restriction is suppressing relationships in this sample due to response bias.

Finally, a persistent methodological challenge within the literature is the inability to demonstrate the direction of causality between high-commitment work practices and firm performance. Several researchers have suggested an alternative explanation for the consistent relationship between the presence of high commitment work practices and organizational performance may be that superior firm performance produces slack resources and it is these slack resources which lead to the adoption of high-commitment practices (Wright et al., 2005; Wall & Wood, 2006). If this is true, then the relationship

may actually be reversed—i.e. firm performance leads to the adoptions of the practices rather than the commonly hypothesized relationship.

However, fully addressing the issue of causality necessitates the collection of longitudinal data (Wall & Wood, 2005). This allows for the examination and comparison of the relationship between the various HR system variables with both past and concurrent performance measures (Wright et al., 2005). While the long-term intention of this line of research is to collect both HR system data and performance data over a number of years, that is not within the scope of the current investigation.

### *Conclusion*

This research offers an important contribution to the larger SHRM research literature. Specifically, this research contributes to a better understanding of the measurement of the HR System. This includes an improved understanding of the relationship of these various measures to proximal organizational level employee, intermediary and distal financial outcomes. This research also moves beyond the demonstration of the main effects of the HR System-organizational performance relationship and targets the process mechanism responsible for this effect.

This study employed an industry specific design and a rigorous test of the proposed relationships. Results generally support the relationships between measures of the HR System and important organizational outcomes. Findings also reinforce the utility of expanding the measurement of the HR system beyond the formally reported HR Programs, the need to better understand intra-organizational variability in HR systems along functional lines and the challenges and opportunities inherent in multi-respondent designs.

Finally, the failure to demonstrate the mediating role of the specified human capital characteristics in HR's relationship with firm performance presents a continued challenge to future research to effectively model this relationship. It is important that future research build on this study both in the measurement of the HR System and attention to these intermediary mechanisms.

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## Appendix A

### Introductory Letter and Instructions

Date XX, 2007

Dear \_\_\_\_\_,

It was good to speak with you today. On behalf of IHG, IAHI and Virginia Tech let me say thank you for your willingness to assist with this research project. I understand that you are very busy and this represents additional time and effort. It is our goal to ensure that this research project delivers findings important to you as a manager and leader.

Please know that all data collected from individuals and participating properties will be held in complete confidence by the research team at Virginia Tech. No property or individual data will be shared and all results will be presented in summary form only. Therefore, your complete and candid response is appreciated and important. All participating hotels will receive a summary report of the findings.

Attached, you will find a brief set of instructions for the distribution and collection of the surveys. These surveys are color-coded according to respondent group and, to ensure confidentiality, an envelope has been provided with each survey. Please note that it is important that individuals complete the surveys privately and independently. Once completed, all surveys should be returned immediately in the enclosed postage-paid collection box.

I will contact you over the next couple of days discuss the survey materials and distribution and collection process. In the meantime, if you have any questions related to this study, please do not hesitate to contact me directly at (540) 239-1422 or [aherdman@vt.edu](mailto:aherdman@vt.edu).

Thank you for your cooperation in this project.

Sincere Regards,

Andrew O. Herdman

## *Instructions*

### **Survey Distribution**

Enclosed are four sets of surveys. These surveys are color-coded according to the intended group of respondents, as follows:

#### **Yellow- Senior Leadership Survey:**

This survey assesses a number of aspects of the senior leadership's approach to the management of employees. These surveys should be completed by the *general manager* and all *department heads*.

#### **White- General Manager or Human Resources**

This survey is designed to assess the mix of formally established management practices at the hotel as well as differences in practices between departments. This survey should be completed by the on-site *HR Manager/Director* or, if no such position exists at the property, the *General Manager*. This is a critical survey, so please ensure that it is completed and included in the packet when returned.

#### **Blue- Managers & Supervisors**

This is intended to assess the degree to which management practices are implemented, independent of their formal existence. This survey should be completed by *supervisors and managers* responsible for the day-to-day oversight of line level employees. Therefore, supervisors and managers should complete these based on the practices they actually incorporate into their daily management routine.

#### **Green- Employee Survey**

These surveys measure a variety of employee perceptions and attitudes. This should be completed by all hourly, line level employees at the hotel. *Please note that there are two different versions of the survey and both versions should be distributed equally across departments and work groups.* Translated versions of this survey are provided in the requested languages, when available, and should be distributed accordingly.

### **Survey Completion:**

For ease of administration, we suggest employees complete the surveys at the beginning or end of their shifts to minimize disruption. In the past, hotels have had good success with quick employee meeting to explain the purpose and importance of the survey- this tends to maximize response rates.

All individuals are to be instructed to complete the surveys fully and honestly. To ensure this occurs, please provide privacy and encourage employees to respond independently.

Once complete, employees should seal surveys in the envelopes provided and return them to the hotel management office where they can personally place the surveys in the

collection box provided. This box, which is pre-addressed and postage paid, can be used to return the surveys—simply seal the drop slot and place in regular mail.

We are hoping for full participation from all employees. While the “General Manager or Human Resource Manager” (white) survey may take between 20-30 minutes to complete, both the managerial and hourly employee surveys typically require only 10 minutes and 5 minutes, respectively.

**Support is available from Virginia Tech to answer questions or address any issues. Please feel free to call me directly at (540) 239-1422 should any arise.**

Thank you for your time and assistance.

## Appendix B-1

### HR Principles- Pilot Study Instruction and Items

#### Likert Scale Instructions and Items

Instructions: Please respond to following items by circling the number reflecting the degree to which you agree with the following statements. Circling a “1” reflects strong disagreement with the statement, while circling “5” indicates strong agreement with the statement.

In my opinion, our employees’ capabilities are our main source of competitive advantage. (Park et al., 2003)
My primary responsibility is creating an environment that maximizes employee productivity and contribution level. (new)
In my opinion, employee commitment and motivation is more important than location and hotel brand to the success of any hotel. (new)
I view employees as a key factor to our success. (Bennett et al., 1998)
I believe that employee skills and ability are largely interchangeable in this industry. (R) (new)
I view money spent on human resources primarily as a cost of doing business. (R) (Bennett et al., 1998)
If faced with a budget cutting requirement, labor cost and employee programs would be the first area I would cut. (R) (new).
Employees generally don’t care about what tasks they do as long as they are paid well for doing them. (McGregor, 1967)
Most employees want to be involved in setting major business goals.(McGregor, 1967)
Employees generally can’t handle work which requires a high degree of self-direction.(McGregor, 1967)
One of my basic responsibilities is to make each individual feel useful and important.(McGregor, 1967)
Maintaining close supervision over employees is the best way to assure that performance standards are met.(McGregor, 1967)
Allowing employees to control their own work will lead to direct improvements in performance. (McGregor, 1967)

*(R ) indicates reverse coded items*

Ranking Instructions and Items

Instructions: From your perspective, please rank from 1-5, the following strategic factors in terms of their importance in determining the success of your hotel. Indicating a “1” reflects the most important factor, while indicating a “5” reflects the least important factor:

Meeting customer needs
Hotel Brand
Technology (i.e. reservation, property management system, etc)
Management of human resources
Location

Instructions: Based on your experience, please rank from 1 to 5 the following areas in terms of the degree to which investments in the area impact hotel performance. Indicating a “1” reflects the area producing the highest return on investment, while indicating a “5” suggests the lowest:

Supplies
Customer service programs
Human resource programs/practices
Physical plant improvements
Technology

## Appendix B-2

### HR Principles- Primary Study Instruction and Items

#### Likert Scale Instructions and Items

Instructions: Please respond to following items by circling the number reflecting the degree to which you agree with the following statements. Circling a “1” reflects strong disagreement with the statement, while circling “5” indicates strong agreement with the statement.

#### Relational Principles

I believe that it is management’s obligation to provide all employees with long-term career opportunities.
My primary responsibility is creating an environment that maximizes employee productivity and contribution level. (new)
In my opinion, employee commitment and motivation is more important than location and hotel brand to the success of any hotel. (new)
As long as employees continue to do a good job, they can expect to stay here as long as they want.
Employees will work harder if I show that I care about them personally.
For a management position, I would rather hire a current employee with training needs than someone from outside with no training needs.
One of my core responsibilities as a leader is to prepare others for future promotion.
Providing job security to employees is a key management responsibility.
In my opinion, our employees’ capabilities are our main source of competitive advantage.



From your perspective, please rank the importance of the following five strategic factors from 1 to 5. The factor you consider the most important in determining the success of your hotel should receive a "1" ranking. The factor you consider the least important in determining hotel success should receive a "5". Please use all five ranks.

Ranking	Strategic Factor
_____	Meeting customer needs
_____	Hotel brand
_____	Technology (i.e. reservation, prop. mgt. system)
_____	Management of human resources
_____	Location

Based on your experience, please rank the return on investment of the following five spending areas from 1 to 5. The spending area that you consider to have the highest return on investment should receive a "1" ranking. The spending area that you consider to have the lowest return on investment should receive a "5" ranking. Please use all five ranks.

Ranking	Spending Area
_____	Supplies
_____	Customer service programs
_____	Human resource programs/practices
_____	Physical plant improvements
_____	Technology

**Remaining items should be completed by General Manager only**

Please provide the *approximate* percentage of total hotel budgeted expenses each area represents- total should equal 100%.

Percent	Spending Area
____%	Wages, salaries and benefits
____%	Supplies
____%	Marketing/advertising
____%	Employee management programs (e.g. training, selection, social function, newsletters)
____%	Utilities
____%	Capital expenditures
____%	Other (travel, taxes, franchise fees, etc.)

Please indicate the actual capital expenditures for your hotel in each of the following years:

2005	\$ _____
2006	\$ _____

Please *estimate* the annual marketing spending (excluding national brand advertising) for the hotel in each of the following areas:

Spending	Media
\$ _____	Print media
\$ _____	Radio advertising
\$ _____	TV advertising
\$ _____	Outdoor advertising
\$ _____	Electronic media
\$ _____	Other: _____

Please *estimate* the spending for the hotel in each of the following areas:

Spending	Media
\$ _____	Recruitment/selection
\$ _____	Training/Development
\$ _____	Employee Communication (e.g. employee meetings, newsletter, etc.)
\$ _____	Employee incentives

**Thank you for your time and participation. Please seal survey in envelope and place in collection box.**

## Appendix C-1

### HR Programs- Pilot Study Instructions & Items

Instructions: Please indicate the degree to which the following management practices are in place by circling the number corresponding to the degree to which that practice is formally established and covers all employees in that area. Circling a “5” suggests that the program/practice *is formally established and is applied to all employees in that area*. Circling a “1” means that programs/practice is *not formally established or ever applied*.

#### **Hiring Practices**

Applicants undergo structured interviews (job related questions, same questions asked of all applicants, rating scales) before being hired. (Wright et al., 2005)
Applicants for this job take formal test (paper and pencil or work sample) before being hired. (Wright et al., 2005)
Applicants for positions in this area undergo more than one interview before being hired. (Zacharatos et al., 2005)
Employees are provided a preview of what work in the organization will be like, including the more negative aspects, as part of the selection process in this area? (Guest, Mitchie, Conways & Sheehan., 2003)
Employee selection focuses on overall fit to the hotel rather than specific skills. (Collins & Smith, 2006)

#### ***Training & Development***

There are formal training programs to teach new hires the skills they need to perform the job. (Delery et al., 1996)
We offer orientation programs that train employees on the history and processes of the organization. (Collins & Smith, 2006)
We have a mentoring system to help develop these employees.(Collins & Smith, 2006)
Apart from OJT, the hotel provides these employees with formal job training, either on or off the premises. (Delaney & Huselid, 1996)
Formal training programs are offered to employees in order to increase their promotability in this organization. (Delery & Doty, 1996)

#### **Employee Participation**

Employees in these areas are involved in formal participation programs such as quality improvement programs, roundtable discussions and suggestion systems. (Wright, 2005)
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------

We have formalized programs to encourage employee participation in this area. (Delery & Doty, 1996)
Mechanisms exist to consult employees in this area on the hotel's business plan. (Delery & Doty, 1996)
Formal programs are in place in this area to keep open communications with employees.

### **Contingent Compensation**

Pay raises for employees in these jobs are based on performance. (Wright, 2005)
Employees in these jobs have the opportunity to earn individual bonuses for productivity, performance or other individual outcomes. (Wright, 2005)
Pay decisions are based primarily on a seniority-based system. (R) (Bae & Lawler, 2000)
Employee bonuses or incentive plans are based primarily on the performance of the organization (Collins & Smith, 2006)

### **Autonomous Job Design**

Most employees in these areas perform simple and repetitive tasks as part of their work (R). (Zacharatos et al., 2005)
Employees at this area are given lots of opportunity to decide how to do their work. (Zacharatos et al., 2005)
The actual job duties are shaped more by the employee than by a specific job description. (Delery & Doty, 1996)
Providing employees with jobs that are challenging and fulfilling is a priority in this area. (Zacharatos et al., 2005)

### **Performance Appraisal**

Performance appraisals are used to plan skill development and training for future advancement with the hotel. (Collins & Smith, 2006)
Performance appraisals are based on objective observable performance results. (Delery & Doty, 1996)
Multiple employees provide input to the performance appraisal evaluation of employees in this area. (Wright et al., 1999)
Employees in these jobs regularly (at least once per year) receive a formal evaluation of their performance. (Wright et al., 2005)

### **Information-Sharing**

Information about how the hotel is performing financially is shared with these employees. (Zacharatos et al., 2005)
Employees in this area are part of regular information sharing meetings. (Bjorkman & Xiucheng, 2002)
Strategy and goals are communicated primarily to managers in this area.(R) (Guest et al., 2003)
Information on the hotel's performance targets such as service and cost provided to these employees. (Guest et al., 2003)

## Teams

The development of teams is an important element of this area's strategy.(Zacharatos et al., 2005)
Employees in this area work in semi-autonomous groups (i.e. groups with a high level of responsibility). (Zacharatos et al., 2005)
Employees sometimes work in problem-solving teams in this area. (new)
Specific training is offered to these employees to increase their ability to work as a team. (new)

## Internal Labor Markets

Qualified employees in this area have the opportunity to be promoted to positions of greater responsibility within the company. (Wright McCormick, Sherman & McMahan,1999; Wright et al., 2005)
Management vacancies in this area are filled with people already employed here. (Delaney & Huselid, 1996)
Internal candidates are given consideration over external candidates for job openings in this department.

## Employment Security

Providing employment security to our employees is a priority in area of the hotel. (Zacharatos et al., 2005)
Employees in these jobs can expect to stay in the organization for as long as they wish (Delery & Doty, 1996)
Job security is almost guaranteed to these employees. (Chang, 2005)
If the organization faces economic problems, employees in this area would be the last to get cut. (Chang, 2005)

### Reduced Status Distinctions

The use of formal titles is enforced in this area. (R) (Zacharatos et al., 2005)
Some employees in this area have privileges that are unavailable to other employees (reserved parking, meals, etc).(R) (Zacharatos et al., 2005)
The same holiday and vacation entitlement is in place for all levels of employees in this area (Guest et al., 2003)
Attempts are made to minimize status distinctions among employees in this area. (new)

### Supplemental Information

Instructions: Please respond, to the best of your knowledge, to each of the following questions .

What percentage of employees in this area of the hotel work in semi-autonomous groups (i.e. groups with a high level of responsibility)? (Zacharatos et al., 2005)
Number of times/year performance is formally appraised for employees in this area of the hotel. (Shaw, Delery, Jenkins & Gupta, 1998)
On average, how many hours of formal training does a typical employee in this area receive per year? (Wright et al., 1999)
What percentage of non-entry level jobs in this area have been filled with internal candidates in recent years (i.e. over the past three years)? (Zacharatos et al., 2005; Guthrie, 2001)
What percentage of job applicants are eventually hired in this area? (Zacharatos et al., 2005)
Percent of employees in this areas involved in regularly scheduled meetings to discuss work-related issues .(Way, 2002)

## Appendix C-2

### HR Programs- Primary Study Instructions & Items

**Instructions:** Below are a sample of practices that may or may not be used in your hotel. For those practices that do not apply to employees in a department of employees, simply circle N/A- not applicable. For those that do apply, please circle the number that indicates the degree to which that practice *applies to employee in that department*. Circling a “1” means that programs/practice applies to a few employees in that department. Circling a “4” means that the practice applies to all employees in that department.

#### Hiring Practices

Applicants undergo structured interviews (job related questions, same questions asked of all applicants, rating scales) before being hired. (Wright et al., 2005)

Applicants for this job take formal test (paper and pencil or work sample) before being hired. (Wright et al., 2005)

Applicants for positions in this area undergo more than one interview before being hired. (Zacharatos et al., 2005)

#### Training & Development

There are formal training programs to teach new hires the skills they need to perform the job. (Delery et al., 1996)

We have a mentoring system to help develop these employees.(Collins & Smith, 2006)

Apart from OJT, the hotel provides these employees with formal job training, either on or off the premises. (Delaney & Huselid, 1996)

#### Employee Participation

Employees in these areas are involved in formal participation programs such as quality improvement programs, roundtable discussions and suggestion systems. (Wright, 2005)

We have formalized programs to encourage employee participation in this area.. (Khairi, 2000)

Mechanisms exist to consult employees in this area on the hotel’s business plan. (Delery & Doty, 1996)

#### Contingent Compensation

Pay raises for employees in these jobs are based on performance. (Wright, 2005)

Employees in these jobs have the opportunity to earn individual bonuses for productivity, performance or other individual outcomes. (Wright, 2005)

Employee bonuses or incentive plans are based primarily on the performance of the organization (Collins & Smith, 2006)

### **Autonomous Job Design**

Most employees in these areas perform simple and repetitive tasks as part of their work (R). (Zacharatos et al., 2005)

Employees at this area are given lots of opportunity to decide how to do their work. (Zacharatos et al., 2005)

The actual job duties are shaped more by the employee than by a specific job description. (Delery & Doty, 1996)

### **Performance Appraisal**

Performance appraisals are used to plan skill development and training for future advancement with the hotel. (Collins & Smith, 2006)

Multiple employees provide input to the performance appraisal evaluation of employees in this area. (Wright et al., 1999)

Employees in these jobs regularly (at least once per year) receive a formal evaluation of their performance. (Wright et al., 2005)

### **Information-Sharing**

Information about how the hotel is performing financially is shared with these employees. (Zacharatos et al., 2005)

Employees in this area are part of regular information sharing meetings. (Bjorkman & Xiucheng, 2002)

Strategy and goals are communicated primarily to managers in this area.(R) (Guest et al., 2003)

### **Teams**

The development of teams is an important element of this area's strategy.(Zacharatos et al., 2005)

Employees in this area work in semi-autonomous groups (i.e. groups with a high level of responsibility). (Zacharatos et al., 2005)

Specific training is offered to these employees to increase their ability to work as a team. (new)

## Internal Labor Markets

Qualified employees in this area have the opportunity to be promoted to positions of greater responsibility within the company. (Wright et al., 1999; Wright et al., 2005)

Management vacancies in this area are filled with people already employed here. (Delaney & Huselid, 1996)

Internal candidates are given consideration over external candidates for job openings in this department.

## Employment Security

Providing employment security to our employees is a priority in area of the hotel. (Zacharatos et al., 2005)

Job security is almost guaranteed these employees. (Chang, 2005)

If the organization faces economic problems, employees in this area would be the last to get cut. (Chang, 2005)

## Reduced Status Distinctions

The use of formal titles is enforced in this area. (R) (Zacharatos et al., 2005)

Some employees in this area have privileges that are unavailable to other employees (reserved parking, meals, etc.).(R) (Zacharatos et al., 2005)

The same holiday and vacation entitlement is in place for all levels of employees in this area (Guest et al., 2003)

## Supplemental Information

Instructions: Please respond, to the best of your knowledge, to each of the following questions .

Percent of total employees considered to be regular/full-time employees (employee working an average of 30+ hrs/week).

What percentage of employees in this area of the hotel work in semi-autonomous groups (i.e. groups with a high level of responsibility)? (Zacharatos et al., 2005)

On average, how many hours of formal training does a typical employee in this area receive per year? (Wright et al., 1999)

What percentage of job applicants are eventually hired in this area? (Zacharatos et al., 2005)

Percent of employees in department represented by labor union.

## Appendix C-3

### HR Programs- Final Survey

#### General Manager or Human Resource Manager



This survey is being conducted by researchers at Virginia Tech University as part of a comprehensive study of management practices within the hospitality industry. The information collected through this survey will be held in strict confidence by the researchers at Virginia Tech and the results will be presented in consolidated summary form only. Therefore, your cooperation and candid response is encouraged and appreciated.

All hotels participating in the survey will receive a summary report of the findings. Thank you for your time and cooperation in this effort.

**Completed by:**  General Manager  Human Resource Manager/Director  Other: \_\_\_\_\_

**Estimated number of employees who quit in 2006:** \_\_\_\_\_

**Average number of employees working at the hotel in 2006:** \_\_\_\_\_

**Instructions:** Below are a sample of practices that may or may not be used in your hotel. For those practices that do not apply to employees in a department of employees, simply circle N/A- not applicable. For those that do apply, please circle the number that indicates the degree to which that practice *applies to employee in that department*. Circling a “1” means that programs/practice applies to a few employees in that department. Circling a “4” means that the practice applies to all employees in that department.

**Rating scale:**

Doesn't Apply	Applies to a few	Applies to half	Applies to most	Applies to all
N/A	1	2	3	4

***Hiring Practices***

		Housekeeping & Engineering	Front Desk & Reception	Sales & Administration
Applicants undergo structured interviews (job related questions, same questions asked of all applicants, rating scales) before being hired.	N/A	1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Applicants for these jobs take formal tests (paper and pencil or work sample) before being hired.	N/A	1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Applicants for positions undergo more than one interview before being hired.	N/A	1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4

***Training & Development***

		Housekeeping & Engineering	Front Desk & Reception	Sales & Administration
There are formal training programs to teach new hires the skills they need to perform the job.	N/A	1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
We have a mentoring system to help develop these employees.	N/A	1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Apart from on-the-job training, the hotel provides these employees with formal job training, either on or off the premises.	N/A	1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4

***Employee Participation Programs***

		Housekeeping & Engineering	Front Desk & Reception	Sales & Administration
Employees are involved in formal participation programs such as quality improvement programs, roundtable discussions and suggestion systems.	N/A	1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
We have formalized programs to encourage employee participation.	N/A	1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Mechanisms exist to consult employees in this department on the hotel's business plan.	N/A	1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4

<b><i>Pay Practices</i></b>	Housekeeping & Engineering	Front Desk & Reception	Sales & Administration
Pay raises for employees in these jobs are based on performance.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Employees have the opportunity to earn individual bonuses for productivity, performance or other individual outcomes.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Employee bonuses or incentive plans are based primarily on the performance of the hotel for these employees.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4

<b><i>Job Design</i></b>	Housekeeping & Engineering	Front Desk & Reception	Sales & Administration
Employees perform simple and repetitive tasks as a major part of their work.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Employees are given lots of opportunity to decide how to do their work.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
The actual job duties are shaped more by the employee than by a specific job description.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4

<b><i>Diversity Programs</i></b>	Housekeeping & Engineering	Front Desk & Reception	Sales & Administration
We have a formal diversity policy and program in place for this department.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
We take deliberate steps to grow the diversity of our work force by targeting and recruiting minority candidates.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
We have processes in place to incorporate the perspectives of employees of all backgrounds and experiences in decisions in this department.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4

<b><i>Performance Appraisal</i></b>	Housekeeping & Engineering	Front Desk & Reception	Sales & Administration
Employees regularly (at least once per year) receive a formal evaluation of their performance.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Multiple employees provide input to the performance appraisal evaluation of employees.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Performance appraisals are used to plan skill development and training for future advancement with the hotel.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4

<b><i>Information Sharing</i></b>	Housekeeping & Engineering	Front Desk & Reception	Sales & Administration
Information about how the hotel is performing financially is shared with these employees.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Employees in this department take part in regular information sharing meetings.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Strategy and goals are communicated primarily to managers in this department.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4

**Rating scale:**

Doesn't Apply	Applies to a few	Applies to half	Applies to most	Applies to all
N/A	1	2	3	4

**Teams**

	Housekeeping & Engineering	Front Desk & Reception	Sales & Administration
The development of teams is an important element of this department's strategy.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Employees work in semi-autonomous groups (i.e. groups with a high level of responsibility).	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Specific training is offered to these employees to increase their ability to work as a team.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4

**Promotion Practices**

	Housekeeping & Engineering	Front Desk & Reception	Sales & Administration
Qualified employees have the opportunity to be promoted to positions of greater responsibility within the hotel.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Management vacancies in this department are filled with people already employed here.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Internal candidates are given consideration over external candidates for job openings in this department.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4

**Employment Security**

	Housekeeping & Engineering	Front Desk & Reception	Sales & Administration
Providing employment security to our employees is a priority in this department of the hotel.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Job security is almost guaranteed to these employees.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
If the organization faces economic problems, employees in this department would be the last to get cut.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4

**Status Difference**

	Housekeeping & Engineering	Front Desk & Reception	Sales & Administration
The use of formal titles is enforced in this department.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
Some employees in this department have privileges that are unavailable to other employees (reserved parking, meals, etc).	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4
The same holiday and vacation entitlement is in place for all levels of employees in this department.	N/A 1 2 3 4	N/A 1 2 3 4	N/A 1 2 3 4

**Supplemental Information**

	Housekeeping & Engineering	Front Desk & Reception	Sales & Administration
Percent of total employee considered regular/full-time employees (employees working an average of 30+ hrs/week)	_____ %	_____ %	_____ %
On average, how many hours of formal training does a typical employee in this department receive per year?	_____ #	_____ #	_____ #
Approximately what percentage of job applicants are eventually hired in this department?	_____ %	_____ %	_____ %
Percent of employees in this department involved in regularly scheduled meetings to discuss work-related issues.	_____ %	_____ %	_____ %
Percent of employee in department represented by labor union.	_____ %	_____ %	_____ %

## Appendix D-1

### HR Practices- Pilot Study Instructions & Items

**Instructions:** Please indicate the degree to which the following Human Resource Programs and Practices are practiced within your department by either yourself or your fellow supervisors and managers. Please be sure to accurately represent the degree to which it is actually practiced, rather than the intended or stated practice. Indicating a “5” suggest that the program/practice are consistently applied. Indicating a “1” means that programs/practice is never applied.

#### **Hiring Practices**

Applicants in my department undergo structured interviews (job related questions, same questions asked of all applicants, rating scales) before being hired. (Wright et al., 2005)
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Applicants for jobs in my department take formal test (paper and pencil or work sample) before being hired. (Wright et al., 2005)
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Applicants for positions in this department undergo more than one interview before being hired. (Zacharatos et al., 2005)
---------------------------------------------------------------------------------------------------------------------------

There a deliberate attempt to provide a preview of what work in the organization will be like, including the more negative aspects, as part of the recruitment and selection process. (Guest et al., 2003)
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Selection system for employees in my department focuses on the potential of the candidate to learn and grow with the organization. (Collins & Smith, 2006)
------------------------------------------------------------------------------------------------------------------------------------------------------------

Selection systems in my department focus on overall fit to the company rather than specific skills. (Collins & Smith, 2006)
-----------------------------------------------------------------------------------------------------------------------------

#### **Internal Labor Market**

Qualified employees in this area have the opportunity to be promoted to positions of greater responsibility within the company. (Wright 1999; Wright et al., 2005)
--------------------------------------------------------------------------------------------------------------------------------------------------------------------

Management vacancies in my area are filled with people already employed here. (Delaney & Huselid, 1996)
---------------------------------------------------------------------------------------------------------

We give internal candidates are given consideration over external candidates for job openings in this area. (Collins & Smith, 2006)
-------------------------------------------------------------------------------------------------------------------------------------

### **Training & Development**

We use formal training programs to teach new hires the skills they need to perform the job in this department. (Delery et al., 1996)
We offer orientation programs that trains employees on the history and processes of the organization. (Collins & Smith, 2006)
We have a mentoring system to help develop employees in my department (Collins & Smith, 2006)
We use job rotation is used to help expand the skills of employees in this department (Collins & Smith, 2006)
Apart from OJT, in the past 2 years we have provided employees in this department with formal job training, either on or off the premises. (Delaney & Huselid, 1996)
We implement formal training programs for employees in order to increase their promotability in this organization. (Delery & Doty, 1996)

### **Autonomous Job Design**

Most employees in this department perform simple and repetitive tasks as part of their work. (R) (Zacharatos et al., 2005)
Employees in my department are given lots of opportunity to decide how to do their work. (Zacharatos et al., 2005)
The actual job duties of the employees in my department are decided by employee the rather than by a specific job description. (Delery & Doty, 1996)
Providing employees with jobs that are challenging and fulfilling is a priority in this department.. (Zacharatos et al., 2005)

### **Performance Appraisal**

We use performance appraisals in this department to plan skill development and training for future advancement with the company. (Collins & Smith, 2006)
When we appraise performance in this department, it is based on objective observable performance results (Delery & Doty,1996)

We seek input from multiple employees when we doing performance appraisal evaluation of employees in my department. (Wright at al, 1999)

Employees in my department regularly (at least once per year) receive a formal evaluation of their performance. (Wright et al., 2005)

### **Contingent Compensation**

We base pay raises on performance in this department. (Wright, 2005)

Employees in my department have the opportunity to earn individual bonuses for productivity, performance or other individual outcomes. (Wright, 2005)

Pay decisions make for employees in this department are based primarily on a seniority-based system. (R) (Bae & Lawler, 2000)

Employee bonuses or incentive plans are based primarily on the performance of the organization for employees in this department. (Collins & Smith, 2006)

### **Employee Participation**

We involve employees in this department in formal participation programs such as quality improvement programs, roundtable discussions and suggestion systems. (Wright, 2005)

We have formalized programs in this department to encourage employee participation in this area. (Khairi, 2000)

Employees in this department are often asked by myself and other managers/supervisors to participate in decisions. (Delery & Doty, 1996)

We keep open communications with employees in this department. (Delery & Doty, 1996)

### **Information-Sharing**

We share information about how the hotel is performing financially with employees in this department. (Zacharatos et al., 2005)

We hold regular information sharing meetings with employees in this department. (Bjorkman & Xiucheng, 2002)

Strategy and goals are communicated primarily to manager in department..(R) (Guest et al., 2003)

Information on firm's performance targets such as service and cost provided to all employees in my department. (Guest et al., 2003)

### **Reduced Status Distinctions**

The use of formal titles is enforced in my department. (R) (Zacharatos et al., 2005)

Some levels of employees have privileges that are unavailable to other employees (reserved parking, meals, etc) in my department..(R) (Zacharatos et al., 2005)

The same holiday and vacation entitlement is in place for all levels of employees in my department. (Guest et al., 2003)

Attempts are made to minimize status distinctions among employees in my department.. (new)

We hold social events for individuals in this department in which employees at all levels are encouraged to attend. (Zacharatos et al., 2005)

### **Teams**

The development of teams is an important element of our strategy in this department. (Zacharatos et al., 2005)

Employees in my department work in semi-autonomous groups (i.e. groups with a high level of responsibility). (Zacharatos et al., 2005)

Employees sometimes work in problem-solving teams in my department. (new)

We offer specific training to employees in this department to increase their ability to work as a team. (new)

### **Employment Security**

Providing employment security to our employees is a priority in my department. (Zacharatos et al., 2005)

Employees in my department can expect to stay in the organization for as long as they wish. (Delery & Doty, 1996)

Job security is almost guaranteed to my department's employees. (Chang, 2005)

If the hotel faces economic problems, employees in my department would be the last to get cut (Chang, 2005)

## Appendix D-2

### HR Practices- Primary Study Instructions & Items

**Instructions:** Please indicate the degree to which the following management practices are used in your department by circling the number corresponding to the degree to which it is implemented. *Indicating a “5” suggest that the program/practice is consistently used in your department. Indicating a “1” means that programs/practice is never used in your department.*

#### **Hiring Practices**

Applicants in my department undergo structured interviews (job related questions, same questions asked of all applicants, rating scales) before being hired. (Wright et al., 2005)
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Applicants for jobs in my department take formal test (paper and pencil or work sample) before being hired. (Wright et al., 2005)
-----------------------------------------------------------------------------------------------------------------------------------

Applicants for positions in this department undergo more than one interview before being hired. (Zacharatos et al., 2005)
---------------------------------------------------------------------------------------------------------------------------

#### **Internal Labor Market**

Qualified employees in this area have the opportunity to be promoted to positions of greater responsibility within the company. (Wright 1999; Wright et al., 2005)
--------------------------------------------------------------------------------------------------------------------------------------------------------------------

Management vacancies in my area are filled with people already employed here. (Delaney & Huselid, 1996)
---------------------------------------------------------------------------------------------------------

We give internal candidates are given consideration over external candidates for job openings in this area. (Collins & Smith, 2006)
-------------------------------------------------------------------------------------------------------------------------------------

#### **Training & Development**

We use formal training programs to teach new hires the skills they need to perform the job in this department. (Delery et al., 1996)
--------------------------------------------------------------------------------------------------------------------------------------

We offer orientation programs that train employees on the history and processes of the organization. (Collins & Smith, 2006)
------------------------------------------------------------------------------------------------------------------------------

We have a mentoring system to help develop employees in my department (Collins & Smith, 2006)
-----------------------------------------------------------------------------------------------

#### **Autonomous Job Design**

Most employees in this department perform simple and repetitive tasks as part of their work. (R) (Zacharatos et al., 2005)
----------------------------------------------------------------------------------------------------------------------------

Employees in my department are given lots of opportunity to decide how to do their work.
------------------------------------------------------------------------------------------

(Zacharatos et al., 2005)

The actual job duties of the employees in my department are decided by employee the rather than by a specific job description. (Delery & Doty, 1996)

### **Performance Appraisal**

We use performance appraisals in this department to plan skill development and training for future advancement with the company. (Collins & Smith, 2006)

We seek input from multiple employees when we doing performance appraisal evaluation of employees in my department. (Wright at al, 1999)

Employees in my department regularly (at least once per year) receive a formal evaluation of their performance. (Wright et al., 2005)

### **Contingent Compensation**

We base pay raises on performance in this department. (Wright, 2005)

Employees in my department have the opportunity to earn individual bonuses for productivity, performance or other individual outcomes. (Wright, 2005)

Employee bonuses or incentive plans are based primarily on the performance of the organization for employees in this department. (Collins & Smith, 2006)

### **Employee Participation**

We involve employees in this department in formal participation programs such as quality improvement programs, roundtable discussions and suggestion systems. (Wright, 2005)

We have formalized programs in this department to encourage employee participation in this area. (Khairi, 2000)

Employees in this department are often asked by myself and other managers/supervisors to participate in decisions. (Delery & Doty, 1996)

### **Information-Sharing**

We share information about how the hotel is performing financially with employees in this department. (Zacharatos et al., 2005)

We hold regular information sharing meetings with employees in this department. (Bjorkman & Xiucheng, 2002)

Strategy and goals are communicated primarily to manager in department..(R) (Guest et al., 2003)

### **Reduced Status Distinctions**

The use of formal titles is enforced in my department. (R) (Zacharatos et al., 2005)

Some levels of employees have privileges that are unavailable to other employees (reserved parking, meals, etc) in my department..(R) (Zacharatos et al., 2005)

The same holiday and vacation entitlement is in place for all levels of employees in my department. (Guest et al., 2003)

### **Teams**

Employees in my department work in semi-autonomous groups (i.e. groups with a high level of responsibility). (Zacharatos et al., 2005)

Employees sometimes work in problem-solving teams in my department. (new)

We offer specific training to employees in this department to increase their ability to work as a team. (new)

### **Employment Security**

Providing employment security to our employees is a priority in my department. (Zacharatos et al., 2005)

Job security is almost guaranteed to my department's employees. (Change, 2005)

If the hotel faces economic problems, employees in my department would be the last to get cut (Chang, 2005)

### **Supplemental Information**

**Instructions:** Please respond, to the best of your knowledge, to each of the following questions for the employees in your department.

Percent of employees in your department involved in regularly scheduled meetings to discuss work-related issues .(Way, 2002)

On average, how many hours of formal training does typical employee in your department receive per year? (Wright et al., 1999)

What percentage of job applicants are eventually hired your department? (Zacharatos et al., 2005)

## Appendix D-3

### HR Practices- Primary Study Instructions & Items



#### Managers & Supervisors

This survey is being conducted by researchers at Virginia Tech University as part of a comprehensive study of management practices within the hospitality industry. The information collected through this survey will be held in strict confidence by the researchers at Virginia Tech and the results will be presented in consolidated summary form only. Therefore, your cooperation and candid response is encouraged and appreciated.

Thank you for your time and cooperation in this effort.

---

**Position title:**    Director       Manager       Supervisor

**Department:**    Front Desk    Sales/Administration    Engineering       Housekeeping       Restaurant/Lounge  
 Kitchen       Banquets               Other: \_\_\_\_\_

---

**Instructions:** Below are a sample of practices that may or may not be used in your department. For those practices that do not apply in your department, simply circle N/A- not applicable. For those that do apply, please circle the number that indicates the extent to which that practice is used. Circling a “1” means that programs/practice is rarely used in your department. Circling a “4” means that the practice is always used in your department.

**Rating scale:**

Never Used	Rarely Used	Sometimes Used	Often Used	Always Used
N/A	1	2	3	4

#### *Hiring Practices*

	Never	Sometimes	Always
Applicants in my department undergo structured interviews (job related questions, same questions asked of all applicants, rating scales) before being hired.	N/A	1 2 3 4	
Applicants for jobs in my department take formal tests (paper and pencil or work sample) before being hired.	N/A	1 2 3 4	
Applicants for positions in this department undergo more than one interview before being hired.	N/A	1 2 3 4	

#### *Training & Development*

	Never	Sometimes	Always
We use formal training programs to teach new hires the skills they need to perform the job in my department.	N/A	1 2 3 4	
We offer orientation programs that train employees on the history and processes of the organization.	N/A	1 2 3 4	
We have a mentoring system to help develop employees in my department.	N/A	1 2 3 4	

#### *Employee Participation Programs*

	Never	Sometimes	Always
We involve employees in this department in formal participation programs such as quality improvement programs, roundtable discussions and suggestion systems.	N/A	1 2 3 4	
We have formalized programs in this department to encourage employee participation.	N/A	1 2 3 4	
Employees in this department are often asked by myself and other managers/supervisors to participate in decisions.	N/A	1 2 3 4	

#### *Pay Practices*

	Never	Sometimes	Always
We base pay raises on performance in this department.	N/A	1 2 3 4	
Employees in my department have the opportunity to earn individual bonuses for productivity, performance or other individual outcomes.	N/A	1 2 3 4	
Employee bonuses or incentive plans are based primarily on the performance of the organization for employees in this department.	N/A	1 2 3 4	

<b>Rating scale:</b>	Never Used	Rarely Used	Sometimes Used	Often Used	Always Used
	N/A	1	2	3	4

***Job Design***

	Never	Sometimes			Always
Most employees in this department perform simple and repetitive tasks as part of their work.	N/A	1	2	3	4
Employees in my department are given lots of opportunity to decide how to do their work.	N/A	1	2	3	4
The actual job duties of the employees are decided by the employee rather than by a specific job description.	N/A	1	2	3	4

***Diversity Programs***

	Never	Sometimes			Always
We are involved in the implementation of the hotel’s diversity initiative in this department.	N/A	1	2	3	4
Targeting and growing employee diversity is an important consideration in our recruitment and selection efforts.	N/A	1	2	3	4

***Promotion Practices***

	Never	Sometimes			Always
Qualified employees in this area have the opportunity to be promoted to positions of greater responsibility within the company.	N/A	1	2	3	4
Management vacancies in my area are filled with people already employed here.	N/A	1	2	3	4
We give internal candidates consideration over external candidates for job openings in this area.	N/A	1	2	3	4

***Performance Appraisal***

	Never	Sometimes			Always
We use performance appraisals in this department to plan skill development and training for future advancement with the company.	N/A	1	2	3	4
We seek input from multiple employees when doing performance appraisal evaluations of employees in my department	N/A	1	2	3	4
Employees in my department regularly (at least once per year) receive a formal evaluation of their performance.	N/A	1	2	3	4

***Employment Security***

	Never	Sometimes			Always
Providing employment security to our employees is a priority in my department.	N/A	1	2	3	4
Job security is almost guaranteed to my department’s employees.	N/A	1	2	3	4
If the hotel faces economic problems, employees in my department would be the last to get cut.	N/A	1	2	3	4

***Teams***

	Never	Sometimes			Always
The development of teams is an important element of our strategy in this department.	N/A	1	2	3	4
Employees in my department work in semi-autonomous groups (i.e. groups with a high level of responsibility).	N/A	1	2	3	4
We offer specific training to employees in this department to increase their ability to work as a team.	N/A	1	2	3	4

***Information Sharing***

	Never	Sometimes			Always
We share information about how the hotel is performing financially with employees in this department.	N/A	1	2	3	4
We hold regular information sharing meetings with employees in this department.	N/A	1	2	3	4
Strategy and goals are communicated primarily to the managers in my department.	N/A	1	2	3	4

<b>Rating scale:</b>	Never Used	Rarely Used	Sometimes Used	Often Used	Always Used
	N/A	1	2	3	4

***Status Distinctions***

	Never	Sometimes			Always
	N/A	1	2	3	4
The use of formal titles is enforced in my department.	N/A	1	2	3	4
Some levels of employees have privileges that are unavailable to other employees (reserved parking, meals, etc) in my department.	N/A	1	2	3	4
The same holiday and vacation entitlement is in place for all levels of employees in my department.	N/A	1	2	3	4

***Supplemental Information***

On average, how many hours of formal training does a typical employee in your department receive per year?	_____ #
What percentage of job applicants are eventually hired in your department?	_____ %
Percent of employees in your department involved in regularly scheduled meetings to discuss work-related issues.	_____ %

**Thank you for completing the survey.**

**Please fold the survey, seal it in the envelope and return it to the collection box in the management office.**

## Appendix E-1

### HR Perceptions- Pilot Study Instructions & Items

**Instructions:** Please carefully consider each statement and circle the number that reflects the degree to which you agree with each statement. Circling a “5” means you strongly agree with the statement. Circling a “1” means you strongly disagree.

#### Hiring Practices

Getting a job here certainly wasn't easy. (Zacharatos et al., 2005)
Only the best people are hired in this hotel. (Zacharatos et al., 2005)
This hotel does not pay a great deal of attention to the hiring of new employees. (R) (Zacharatos et al., 2005)
This hotel is effective in placing people in positions that suit their skills and interest. (new)

#### Internal Labor Market

There is very little future growth for employees in this hotel. (new)
Employees are provided opportunities for growth in this hotel. (new)
Employees can fulfill their career plans within this company. (new)

#### Training & Development

The hotel provides enough training for employees to learn new ways to do their job. (Zacharatos et al., 2005)
Employees are continually trained in new ways to contribute to the hotels effectiveness (new)
This hotel values growth and development on the job. (new)
Employees' skills and abilities are growing through their job here at the hotel (new)

#### Performance Appraisal

Employees are given adequate formal feedback on their performance and how they can improve. (new)
This organization takes the time to regularly evaluate employee performance. (new)
There is a strong link between how well I perform my job and the likelihood of my receiving a high performance evaluation. (Vandenberg et al., 1999)
Employees have a voice in their performance appraisal. (Chang, 2005)

### **Autonomous Job Design**

Employees have lots of opportunity to decide how to do their work. (Zacharatos et al., 2005)
If a problem occurs at work, employees can take action to fix it without involving management. (Zacharatos et al., 2005)
There is little opportunity for employees to use their judgment when doing their work. (R) (Zacharatos et al., 2005)
Employees have enough freedom over how their work. (Riordan et al., 2005)

### **Contingent Compensation**

There is a strong link between how well employees perform their job and the likelihood of a raise in pay. (Vandenberg et al., 1999)
I am satisfied with the amount of recognition I receive when I do a good job (Vandenberg et al., 1999)
The incentive system at this hotel encourages employees to work toward hotel goals. (Ahmad & Schroeder, 2003)
Employees performance is not related to how much they make. (R) (new)

### **Employee Participation**

It is easy for employees to communicate their thoughts to management. (Zacharatos et al., 2005)
If employees have a concern or complaint, they can express it. (new)
Management cares about employee opinions and ideas. (new)
For the most part, employees are encouraged to participate in and make decision that affect their day-to-day activities. (Van der Berg et al., 1999)

### **Information-Sharing**

Hotel goals and objectives are clear to employees. (new)
Employees have enough information to do their job well. (Zacharatos et al., 2005)
Employees are not sure what the hotels goals are or how well we are doing. (R) (new)
Employees often have to rely on the grapevine to get job-related information. (R) (Riordan et al., 2005)
Employees know how we are planning to be competitive at this hotel. (Ahmad & Schroeder, 2003)

### **Reduced Status Distinctions**

The role of all employees is equally valued at this hotel. (new)
Employees are made to feel as important to hotel success as higher levels of management. (new)
It sometimes seems as if everyone my organization has a different title. (R) (Zacharatos et al., 2005)
Employees have the opportunity to interact with top management in my organization. (Zacharatos et al., 2005)

### **Teams**

Employees feel they are really part of their work group. (Zacharatos et al., 2005)
If there is a decision to be made, everyone is involved in it.. (Zacharatos et al., 2005)
Working together is a priority here. (new)

### **Employment Security**

Employees have work in this hotel for as long as they want it. (Zacharatos et al., 2005)
If someone were to lose their position, this hotel would try very hard to place them in another position elsewhere in the hotel. (Zacharatos et al., 2005)
Employees can be sure of being employed in this hotel as long as they do good work. (Zacharatos et al., 2005)
Employees are not really sure how long they will be employed by my organization. (R) (Zacharatos et al., 2005)

## Appendix E-2

### HR Perceptions- Primary Study Instructions & Items

#### **Relational HR Perceptions**

This hotel trains employee to help get them promoted (Tsui et al., 1997)
Employees have chances to be promoted at this hotel.
The hotel helps people with their careers. (Tsui et al., 1997)
This hotel recruits people from within the company. (Tsui et al., 1997)
The hotel values employee training and growth.
Lots of training is provided to employees.
This hotel provides job security.
Employees feel secure in their positions at the hotel.
This hotel hires people who will fit in over the long-term.

## Appendix E-3

### HR Perceptions- Final Survey

# Employee Survey



The following survey is being conducted by researchers at Virginia Tech University. Your response will be held in strict confidence and will not be shared with hotel management. When you are done, please seal the survey in the attached envelope and return to the hotel management office.

**How long have you worked at this hotel?** \_\_\_\_\_ **How long have you worked in the hotel industry?** \_\_\_\_\_

**Gender:**       Male    Female                      **Hours worked/week:**    10-20 hrs.    20-30 hrs.    30-40 hrs.

**Department:**    Front Desk       Porter/Bell Staff/Driver    Sales/Administration    Engineering       Housekeeping  
 Restaurant/Lounge    Kitchen                       Banquet                       Other: \_\_\_\_\_

**Highest level of education:**    Some high school                      **Race/Ethnicity:**    Hispanic  
 High school graduate                       American Indian/Alaskan Native  
 Some college                                       Black/African American  
 Graduated college                               Asian/Pacific Islander  
 Post graduate                                       Caucasian                       Other: \_\_\_\_\_

**Instructions:** Please think about each statement and circle the number that indicates the degree to which you agree with each statement. Circling a (1) means you strongly disagree. Circling a (5) means you strongly agree with the statement.

**Rating scale:**

Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
1	2	3	4	5

	Strongly Disagree	Neutral	Strongly Agree		Strongly Disagree	Neutral	Strongly Agree
Employees have lots of freedom to decide how to do their work.	1	2	3	4	5		
If a problem occurs, employees can fix it without involving management.	1	2	3	4	5		
It is easy for employees to share their ideas with management.	1	2	3	4	5		
Employees are encouraged to participate in decisions that affect their work.	1	2	3	4	5		
Employees are not afraid to speak up if there is a problem.	1	2	3	4	5		
If a decision is being made in my department, everyone is involved.	1	2	3	4	5		
Employees have enough information to do their jobs well.	1	2	3	4	5		
Employees are given information about hotel goals and performance.	1	2	3	4	5		
Employees in my department often feel stressed at work.	1	2	3	4	5		
Employees don't have enough time to do everything well.	1	2	3	4	5		
Employees spend a lot of time just trying to keep up with their work.	1	2	3	4	5		
I often think about work when I'm at home.	1	2	3	4	5		
The hotel values differences in its employees.	1	2	3	4	5		
I believe the hotel has a very diverse workforce.	1	2	3	4	5		
The hotel makes sure the opinions of employees from different backgrounds are heard.	1	2	3	4	5		
Employees know what they need to do to perform their job well.	1	2	3	4	5		
This hotel values performance more than how long you have worked here.	1	2	3	4	5		
Managers let people know when they are doing a good job.	1	2	3	4	5		
The pay system encourages employees to work hard.	1	2	3	4	5		
Employees at this hotel will earn more money if they do a good job.	1	2	3	4	5		
The hotel often takes the time to measure how well employees are doing their jobs.	1	2	3	4	5		
This hotel trains employee to help get them promoted.	1	2	3	4	5		
The hotel helps people with their careers.	1	2	3	4	5		
This hotel recruits people from within the hotel for management positions.	1	2	3	4	5		
The hotel values employee training and growth.	1	2	3	4	5		
Lots of training is provided to employees.	1	2	3	4	5		
This hotel provides job security.	1	2	3	4	5		
Employees feel secure in their positions at the hotel.	1	2	3	4	5		
This hotel hires people who will fit in over the long-term.	1	2	3	4	5		

**Please seal in envelope and place in collection box.  
Thank you!!!**

## Appendix F-1

### Employee Outcomes- Pilot Study Instructions & Items

**Instructions:** Please carefully consider each statement and circle the number that reflects the degree to which you agree with each statement. Circling a “5” means you strongly agree with the statement. Circling a “1” means you strongly disagree.

#### Job Satisfaction

I like working here
I would recommend this organization to others
I am generally satisfied with my job
I get personal satisfaction from my job.

Note: Items taken from Cable and Edward (2004)

#### Organizational Commitment

I am proud to work for this hotel.
I am proud to be working for the hotel
I feel a strong sense of belonging to the organization

Note: Items taken from Wright et al (2005)

#### Self-efficacy

When facing difficult tasks on the job, I am certain that I will accomplish them.
I will be able to successfully overcome any challenge on the job.
I am confident that I can perform effectively on many different tasks on the job.
Even when things are tough, I can perform quite well on the job.

Note: All items taken from Chen, Gully & Eden (2001)

#### Teamwork

People I work with are cooperative and coordinative.
People I work with are direct and honest with each other.
People I work with accept criticism without becoming defensive
People I work with are good listeners when I encounter any problem.
People I work with care for each other.
People I work with resolve disagreements cooperatively.
People I work with function as a team.

Note: All seven items were adapted from Glaser, Zamanou, and Hacker's (1987).

### **Organizational Citizenship Behavior**

I participate in planning and organizing social events at work (ex: staff parties).
I make suggestions to improve the hotel.
I am willing to do things that help the hotel outside of my normal duties.
I volunteer for tasks that are not required.

## Appendix F-2

### Employee Outcomes- Primary Study Instructions & Items

Instructions: Please carefully consider each statement and circle the number that reflects the degree to which you agree with each statement. Circling a “5” means you strongly agree with the statement. Circling a “1” means you strongly disagree.

#### Job Satisfaction

I like working here
I would recommend this organization to others
I am generally satisfied with my job
I get personal satisfaction from my job.

Note: Items taken from Edwards & Rothard (1999)

#### Organizational Commitment

I care about the future of the hotel.
I am proud to be working for the hotel
I feel a strong sense of belonging to the organization
I feel a strong sense of loyalty to the hotel.

Note: Items taken from Wright et al (2005)

#### Self-efficacy

When facing difficult tasks on the job, I am certain that I will accomplish them.
I will be able to successfully overcome any challenge on the job.
I am confident that I can perform effectively on many different tasks on the job.
Even when things are tough, I can perform quite well on the job.

Note: All items taken from Chen, Gully & Eden (2001)

#### Teamwork

People I work with are cooperative.
People I work with are direct and honest with each other.
People I work with help each other with problems at work.
People I work with care for each other.
People I work with resolve disagreements well.
People I work with function as a team.

Note: All seven items were adapted from Glaser, Zamanou, and Hacker's (1987).

### **Organizational Citizenship Behavior**

I am willing to work harder than I have to in order for this hotel to do well.
I make suggestions to improve the hotel.
I am willing to do things that help the hotel outside of my normal duties.
I volunteer for tasks that are not required.

## Appendix F-3

### HR Perceptions- Primary Study Instructions & Items

# Employee Survey



The following survey is being conducted by researchers at Virginia Tech University. Your response will be held in strict confidence and will not be shared with hotel management. When you are done, please seal the survey in the attached envelope and return to the hotel management office.

**How long have you worked at this hotel?** \_\_\_\_\_ **How long have you worked in the hotel industry?** \_\_\_\_\_

**Gender:**       Male    Female                      **Hours worked/week:**    10-20 hrs.    20-30 hrs.    30-40 hrs.

**Department:**    Front Desk       Porter/Bell Staff/Driver    Sales/Administration    Engineering       Housekeeping  
                           Restaurant/Lounge    Kitchen                       Banquet                       Other: \_\_\_\_\_

**Highest level of education:**    Some high school                      **Race/Ethnicity:**    Hispanic  
                                                   High school graduate                       American Indian/Alaskan Native  
                                                   Some college                                       Black/African American  
                                                   Graduated college                               Asian/Pacific Islander  
                                                   Post graduate                                       Caucasian                       Other: \_\_\_\_\_

**Instructions:** Please think about each statement and circle the number that indicates the degree to which you agree with each statement. Circling a (1) means you strongly disagree. Circling a (5) means you strongly agree with the statement.

**Rating scale:**

Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
1	2	3	4	5

	Strongly Disagree	Neutral	Strongly Agree		Strongly Disagree	Neutral	Strongly Agree				
All job decisions in this department are made in a fair way.	1	2	3	4	5	When facing difficult tasks on the job, I am certain that I will accomplish them.	1	2	3	4	5
When making decisions about my job, our department offers reasons that make sense.	1	2	3	4	5	I am able to overcome any problem on the job.	1	2	3	4	5
Information on decisions is provided when employees ask for it.	1	2	3	4	5	I am confident that I can perform well on many different tasks on the job.	1	2	3	4	5
When decisions are made about our jobs, this hotel considers employee needs.	1	2	3	4	5	Even when things are tough, I can perform quite well on the job.	1	2	3	4	5
When decisions are being made, this hotel attempts to make sure everyone is heard.	1	2	3	4	5	People I work with are cooperative.	1	2	3	4	5
I like working here.	1	2	3	4	5	People I work with care for each other.	1	2	3	4	5
I am generally satisfied with my job.	1	2	3	4	5	People I work with resolve disagreements well.	1	2	3	4	5
I recommend this hotel to others looking for a job.	1	2	3	4	5	People I work with function as a team.	1	2	3	4	5
I get personal satisfaction from my job.	1	2	3	4	5	People are direct and honest with one another.	1	2	3	4	5
I make suggestions to improve this hotel.	1	2	3	4	5	People in my department help each other with problems at work.	1	2	3	4	5
I volunteer for tasks that are not required.	1	2	3	4	5	Employees in my department sometimes make fun of people at work.	1	2	3	4	5
I am willing to do things that help this hotel outside of my normal duties.	1	2	3	4	5	Employees in my department sometimes say hurtful things to people at work.	1	2	3	4	5
I am willing to work harder than I have to in order for this hotel to do well.	1	2	3	4	5	Employees in my department sometimes act rudely to others at work.	1	2	3	4	5
I care about the future of this hotel.	1	2	3	4	5	Employees in my department sometimes play mean pranks on people at work.	1	2	3	4	5
I feel a strong sense of belonging to this hotel.	1	2	3	4	5	Employees in my department sometimes curse at people at work.	1	2	3	4	5
I am proud to be working for this hotel.	1	2	3	4	5						
I feel a high level of loyalty to this hotel.	1	2	3	4	5						

***Please seal in envelope and place in collection box.  
Thank you!!!***

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**RESEARCH:**

**Dissertation**

“Explaining the relationship between HR system and firm performance: A test of the strategic HRM framework”

- Committee Chair: Jeffrey B. Arthur, Ph.D.

**Research Honors**

2006 Litschert Award for Excellence in Student Research.

**Academic Conference Presentations:**

Herdman, A.O. & Carlson, K.D. (2007). Measuring FIT: Scale Development and Initial Validation of a New Measure. Paper presented at the Academy of Management Meeting, Philadelphia, PA.

Herdman, A.O. & Carlson, K.D. (2007). *A Multi-Sample Examination of a Hierarchical Framework of Person-Work Environment Fit Constructs*. Presented at the Society of Industrial and Organizational Psychology, New York, NY.

Carlson, K.D & Herdman, A.O.(2007). *The development of parallel measures of global perceptions of person-environment fit*. A paper submitted to the Society of Industrial and Organizational Psychology, New York, NY.

Carlson, K.D., Herdman, A.O. & Lau, S. (2006). *The Form of Fit Functions: An Analysis Using Application Decisions*. Presented at the Annual Meeting of the Academy of Management Conference, Atlanta, GA. (***Selected for Best Paper Proceedings within Human Resource Division***)

Carlson, K. D. & Herdman, A.O. (2006). *A Hierarchical Framing of Person Work-Environment Fit*. Presented at the Society for Industrial and Organizational Psychology, Dallas, TX.

Carlson, K. D. & Herdman, A.O. (2005). *Measures of Person-Work Environment Fit Constructs: Conceptual Ambiguity and Empirical Reality*. Presented at the Annual Meeting of the Academic of Management, Honolulu, HI.

Carlson, K.D. & Herdman, A.O. (2005). *Construct Validity of Fit Measures: Conceptual Ambiguity and Empirical Reality*. Paper presented at the Annual Meeting of the Society for Industrial and Organizational Psychology, Los Angeles, CA.

### **Working Papers:**

Herdman, A.O. *A meta-analytic examination of Strategic Human Resource Management Research*.

Carlson, K. D. & Herdman, A.O. What “Measurement Approach Moderates Results” Means for the Person-Work Environment Fit Literature.

Carlson, K.D., Herdman, A.O. & Lau, S. *The Form of Fit Functions: An Analysis Using Application Decisions*.

Carlson, K. D. & Herdman, A.O. *A Hierarchical Framing of Person Work-Environment Fit*.

### **TEACHING EXPERIENCE:**

#### **East Carolina University**

**Assistant Professor, Management; 2007-Present**

Course Taught: Managerial Negotiation

**Virginia Polytechnic Institute and State University**

**Instructor- Management Department; 2004 – 2007**

Courses Taught:

- Introduction to Human Resources Management (Student ratings: 4.8/5.0; 4.64/5.0; 4.64/5.0)
- Human Resource Staffing & Development (Student rating: 4.64/5.0)
- Management Theory and Leadership Practice (Student ratings: 4.81/5.0; 4.82/5.0)

Teaching Honors:

- 2006 Hoover Award for Excellence in Teaching and Student Advising
- 2007 Hoover Award for Excellence in Teaching and Student Advising

**Saint Francis University, Loretto, PA**

**Adjunct Faculty- Continuing Education Program; 2000–2002**

- Course Taught: Organizational Behavior; Human Resource Management.

**Geneva College, Beaver Falls, PA**

**Adjunct Faculty- Human Resource Management Program; 1996 – 2002**

- Received highest teach evaluation scores in history of program.
- Course Taught: Human Resource Management; Organizational Behavior; Organizational Theory and Development; Ethics in Decision-Making.

**TRAINING EXPERIENCE:**

**Development Dimensions International, Pittsburgh, PA**

Certified Instructor- TQM/Continuous Improvement; Current

**Tierney Group, Philadelphia, PA**

Certified Instructor- Media Relations Training; Current

**Dale Carnegie Associates, Effective Speaking & Human Relations**

Graduate Assistant- 1995-2002

- Recipient of the "Highest Award for Achievement"

**Steven R. Covey Leadership Center, Beyond Principle Centered Leadership**

**INDUSTRY EXPERIENCE:**

**Crown American Properties, L.P., Johnstown, PA**

**Vice President of Partnership Marketing, September 2000- November 2003**

- Selected to lead the entrepreneurial efforts of the organization through the development of new revenue streams and fully leveraging current assets.
- Led industry in the production of new revenue as a percent of total revenue-including a revenue increase of 200% over eighteen months in position.

- Responsible for the development of program conceptualization, development and implementation, including the leadership of 29 remote management teams: identification of training and development needs, incentive development and on-going support
- Development and execution of client presentations, contract negotiation and on-going relationship management

**Vice President of Human Resources, September 1997- September 2000**

**Director of Human Resources; April 1996- September 1997**

- Responsible for leading Human Resource function for this full-phase shopping mall, office building and hotel real estate development company comprised of 3,500 employees in nine states
- Directed cultural change effort and engineered continuous improvement and customer service initiatives throughout the organization.
- Developed and implemented comprehensive and successful leadership and sales development programs.
- Member of strategic planning team with the specific responsibility of aligning the organizations human resources with these objectives
- Development and maintenance of a comprehensive employee relations and communication effort.
- Selected to lead organization's *Customer Service Task Force* charged with the improvement of customer service- both internally and externally. This included selection, training, rewards and organizational communication.
- Involved in the research, development and implementation of the organization's customer relationship management/web site initiatives.

**SERVICE & COMMUNITY INVOLVEMENT**

- Society for Human Resources Management; 1992-Present
  - Treasurer, 1995-1996
- Regional Board of Directors, Junior Achievement; 1996-2003
  - Fund Drive Chairperson, 1996-1999
  - Junior Achievement Leadership Circle; Inducted- June 1998
- Crown American Contributions Committee Chairperson; 1993-2003
- Johnstown Chamber of Commerce Board of Directors; 1999-2003
- Johnstown Business District Board of Directors; 1997-1999
- Oakland United Methodist Church Council Member; 1997-2003
- Oakland United Methodist Church Youth Group Leader; 1995-2003
- Johnstown Charities Golf Tournament Planning Committee; 1993-2003
- Phi Sigma Kappa International Fraternity; Lifetime Member