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**Are they worth it? Warmth and competence perceptions influence the investment of slack resources in and the efficacy of HPWS**

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CEO and Employee Perceptions, HPWS and Organizational Slack

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Are they worth it? Warmth and competence perceptions influence the investment of slack  
resources in and the efficacy of HPWS

## Abstract

Utilizing research on organizational slack and the stereotype content model, the antecedents and consequences of high performance work system (HPWS) utilization are assessed in a sample of 108 small and medium-sized enterprises (SMEs) in South Korea. The paper advances theory to demonstrate that organizational slack drives HPWS adoption, but only when the CEO views employees as worth the investment. A social psychology lens is used to illustrate the significance of CEO perceptions of employee warmth and competence as moderators of the relationship between slack resources and HPWS adoption in small firms. CEOs with available financial resources who also hold a high view of employee trustworthiness (i.e., warmth) and ability (i.e., competence) are likely to utilize higher levels of HPWS. Further, employee perceptions of CEO warmth and competence moderate the relationship between HPWS utilization and firm performance, such that high levels of perceived CEO warmth and competence enhance the efficacy of HPWS. The results serve to highlight the significance of perceptual factors in both the antecedents and outcomes of HPWS adoption, particularly in smaller firms.

*Keywords:* high performance work systems, organizational slack, employee competence, employee warmth, stereotype content model, firm performance

Are they worth it? Warmth and competence perceptions influence on the investment of slack resources in and the efficacy of HPWS

Recent literature in the strategic human resource management domain notes the gap between research findings espousing the efficacy of investing in sophisticated human resource (HR) systems, or high performance work systems (HPWS<sup>1</sup>), and the number of firms actually making use of such systems in practice (i.e., Arthur, Herdman, & Yang, 2016; Kaufman, 2015). Going beyond a focus on individual HR practices, HPWS are defined as a “... system of HR practices that includes comprehensive employee recruitment and selection procedures, compensation and performance management, extensive communication and employee involvement, and training and development...” (Armstrong et al., 2010, p. 978). Such systems are designed to enhance the human and social capital of the firm (Jiang & Liu, 2015; Takeuchi et al., 2007), with the goal of bettering unit and organizational performance (Becker & Huselid, 1998; Zacharatos, Barling & Iverson, 2005). According to the literature, HPWS are thought to lead to a number of benefits, including enhanced employee motivation and human capital, increased firm performance, and reduced voluntary turnover (i.e., Combs et al., 2006; Huselid, 1995; Jiang et al., 2012). Despite these findings there are still many organizations that have not yet adopted such practices (Shin & Konrad, 2017) and the adoption rate among small to medium-sized enterprises (SMEs) remains modest (i.e., Harney & Dundon, 2006). One study reports that the adoption rate is as low as 5-15% in a sample of SMEs in the UK and France (Gilman & Raby, 2013) and most work in this space reports that SMEs utilize fewer than 50% of available

<sup>1</sup> We use the label HPWS, but note that this literature uses differing labels including high involvement work systems, high commitment work systems, etc. to identify similar constructs.

## CEO and Employee Perceptions, HPWS and Organizational Slack

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high performance work practices (Chadwick, Way, Kerr & Thacker, 2013; Sels et al., 2006; Teo, Le Clerc & Galang, 2011; Way, 2002).

This research-practice gap creates a need to more fully explore the factors present in the decision to adopt models of HPWS. Further, the efficacy of HPWS in SMEs has been questioned in the literature (i.e., Chadwick et al., 2013; Patel & Conklin, 2009), creating a need to better understand both the antecedents and consequences of HPWS utilization in the SME context. We enter into this discussion by examining the role that organizational slack and CEO perceptions of their employees play in the adoption of HPWS, while also considering the salience of employee perceptions about the CEO in realizing productivity gains from HPWS utilization. Drawing on the slack literature (i.e., Bourgeois, 1981) and important insights from social psychology about judgment and evaluation, we ask: does slack encourage CEOs of SMEs to invest in human resource management systems and do these investment decisions depend upon perceptual factors? Second, do employee perceptions of the CEO alter the effectiveness of HPWS in SMEs?

While many organizations may have an interest in pursuing HPWS to incur these benefits, not all firms will be able to bear the significant expense involved (Gill, 2009). Slack resource availability is especially important for SMEs given their limited financial resource base. While we expect firms with slack to be more able to invest in HPWS than those without slack, we also note that the presence of slack resources will not automatically be translated into the implementation of HPWS. CEOs will likely consider various factors and many other options before making a final investment decision, and the literature demonstrates that managers have different approaches to investing slack resources (Daniel et al., 2004; George, 2005; Lungeanu, Stern & Zajac, 2016; Marlin & Geiger, 2015; Wiersma, 2017). We delve into this choice to explore CEO perceptions of employees as an important contingency factor in this decision.

Specifically, we enfold the stereotype content model (SCM), which is beginning to coalesce around the theory that judgment of others is fundamentally predicated on perceptions of the other’s warmth and competence (Cuddy, Fiske & Glick, 2008; Fiske, Cuddy, Glick & Xu, 2002; Eckes, 2002; Judd, James-Hawkins, Yzerbyt, & Kashima 2005; Kervyn, Fiske & Yzerbyt, 2013). The SCM suggests that value judgments are primarily based upon these basic assessments of others (Cuddy et al., 2008). Stereotypes of a group’s warmth and competence are associated with actively helpful behavioral responses as opposed to more passive or harmful responses associated with other configurations.

The study contributes to existing knowledge on HPWS in SMEs in several key ways. First, we assess the role that organizational slack plays in the utilization of HPWS in SMEs. Given the infrequent use of such practices, it is important to ask what factors need to be in play for SMEs to make use of high-involvement models of management. It is likely that slack plays an important role in this process, as firms are only able to invest if they have unabsorbed resources. We explore this question directly, thereby answering the call in the literature for a better understanding of the relationship between prior performance outcomes and HPWS adoption (Shin & Konrad, 2017). Second, we examine a question that has yielded little theoretical attention – is there a relational rationale for HPWS utilization in small firms based on CEO perceptions of employees? Given the high costs associated with an integrated system of HR practices and the limited resource base available to SMEs, it warrants an investigation of the financial and relational factors at play in this executive decision.

Third, we assess how employee perceptions of the CEO in SMEs helps to explain the effectiveness of HPWS implementation in influencing labor productivity. The extent to which HPWS are effective in driving productivity is likely linked to employee perceptions of *why* those

practices are being implemented (Nishii, Lepak & Schneider, 2008; Takeuchi, Chen & Lepak, 2009). For example, employee attitudes likely rest on whether they view the CEO as attempting to control their behavior and exploit their time, or view HPWS as a signal of commitment (Allen, Shore, & Griffeth, 2003; Takeuchi et al., 2007).

Finally, we highlight the theoretical contributions that the SCM (Cuddy et al., 2008) may play in explaining important phenomena related to managerial judgements. These judgments can then be tied to managerial choices and decisions that organizational leaders make in determining where to invest their resources and to what extent they ought to focus on building their human capital. Much of the research in social psychology has focused on the negative, or bias-inducing, effects of low warmth and competence perceptions (Cuddy et al., 2008; Cuddy, Fiske & Glick, 2007), with little attention given to the effect positive perceptions may have on managerial decision-making about employees as a group. Thus, there is a significant need to understand how the SCM may explain phenomena in the organizational world (Cuddy et al., 2011).

### **Theory and Hypotheses**

Research on strategically aligned HR systems has generated a wealth of knowledge regarding connections between various models of HPWS and firm performance outcomes (i.e., Combs et al., 2006; Jiang et al., 2012). Much of this research is built around the resource-based view (RBV) and social exchange theory (Barney, 1991; Huselid, 1995; Nyberg et al., 2014; Takeuchi et al., 2009; Wright & McMahan, 1992). The body of work argues that human resources are a valuable source of competitive advantage and that unlocking the potential of employees is done through demonstrating commitment to employees through ability-, motivation-, and opportunity-enhancing practices (Appelbaum et al., 2000; Jiang et al., 2012).



This commitment is then reciprocated with greater effort on the part of employees, who in turn help the organization to achieve higher levels of effectiveness (Evans & Davis, 2005).

Despite this growing focus, relatively little is known about the factors that lead decision makers toward using such systems. Only a handful of studies have addressed the antecedents to HPWS utilization. For instance, in a study of establishments across the U.S., Osterman (1994) found that firms are more likely to adopt innovative HR practices when management values employee welfare, the firm faces international competition and the organization has a significant need for highly-skilled labor. This externality driven model is further supported by Johns (1993) who finds that the use of high commitment systems is the result of perceptions of uncertainty and turbulence in the organization’s environment. Focusing on high-involvement work systems, Pil and MacDuffie (1996) argue that a host of factors will lead to the utilization of sophisticated HR systems ranging from the presence of complementary HR practices and technology to the success of prior workplace innovations. Others have found firms to be more likely to adopt commitment-oriented systems when they perceive these systems to be consistent with their business strategy (Arthur, 1992; Snell, 1992). Ichniowski, Shaw and Crandall (1995) build an economic model of decision-making to conclude that the implementation of workplace innovations is a key investment decision that managers make. More recently, Arthur et al. (2016) studied the use of HPWS in a large sample of hotel franchisees. Using the upper-echelon perspective (Hambrick & Mason, 1984), these authors report that top management beliefs about the effectiveness of HR programs in producing improved financial performance, combined with a managerial belief in the well-being of employees, predicted the perceived use of high performance work practices. This work supports the view that managers seek to make a rational choice about the value-creating potential of HR systems before implementation.

These studies have made valuable contributions, but missing from this calculus is the notion that CEOs will not completely base their decisions on general values and philosophies, but rather will consider the resources they have available and the specific perceptions of their own employee base. In other words, CEOs may generally sense that HR systems can influence profitability through norms of reciprocity and enhanced commitment (Cropanzano & Mitchel, 2005), but if they lack confidence in their current employees, they are unlikely to make the investment of their financial resources. These assertions are supported by Chadwick, Super and Kwon (2015) who leverage resource orchestration theory to demonstrate that the CEO's focus on strategic human resource management is related to the use of HPWS. Below, we build on these insights to highlight the significance of slack resources and perceptions of the competence and warmth of employees as additional key elements in this decision.

### **Slack and HPWS Utilization**

One important antecedent to resource deployment is to have free resources available for use. This is often referred to as "slack" in the strategy literature (Bourgeois, 1981). Firms with available slack have the ability to make investment choices that go beyond doing enough to maintain the organization and sustain existing processes (Cyert & March, 1963; Nohria & Gulati, 1996; Vanacker, Collewaert & Zahra, 2017). Slack can be defined as the "...cushion of actual or potential resources which allows an organization to adapt successfully to internal pressures for adjustment or to external pressures for change in policy, as well as to initiate changes in strategy with respect to the external environment" (Bourgeois, 1981; p. 30). Slack helps to protect the technical core of the business (Thompson, 1967) in general, while unabsorbed slack provides executives with discretionary resources to fund new pursuits and experiment with innovations (Hambrick & Snow, 1977; Simsek, Veiga & Lubatkin, 2007; Tan & Peng, 2003). Within the

SME context, Lu and Beamish (2001) note that the availability of slack resources is a factor in directing the internationalization strategies of smaller organizations. Franquesa and Brandyberry (2009) report that SMEs with potential financial slack were more likely to adopt innovation, though available slack was not associated with innovation adoption.

Based on the above literature on organizational slack and the strategic HRM literature, we propose that slack resource availability is positively associated with HPWS. Within the strategic HRM literature, scholars suggest that prior firm performance produces slack and is an important prerequisite to HPWS adoption (Shin & Konrad, 2017; Gerhart, Wright, McMahan & Snell, 2000; Wright, Gardner, Moynihan & Allen, 2005). Recent work has categorized HPWS as being composed of a suite of ability-, motivation-, and opportunity-enhancing practices (Appelbaum et al., 2000; Jiang et al., 2012; Paauwe & Boselie, 2005), which require significant investment on the part of the organization. Slack allows firms to invest in these management practices, while those with fewer resources focus on simply keeping vital systems running. Thus, slack resources serve as an important antecedent to HPWS adoption, particularly in smaller organizations with restricted financial resources. Given their size, we expect that slack will largely be derived from prior period performance in SMEs. Firms that have performed well relative to firms with fewer resources will have the slack available to invest in HPWS.

*Hypothesis 1:* Prior SME performance will be associated with higher utilization of HPWS in subsequent time periods, such that firms with higher levels of performance will be more likely to leverage HPWS.

Available resources alone are not enough to spur investments in human capital management practices; rather the CEO must also sense that investment of slack resources will be reciprocated by trustworthy and competent effort on the part of employees, such that the benefits of HPWS are fully realized. We explore this theoretical extension through the frame of the SCM, which theorizes that both groups and individuals are perceived on the two fundamental dimensions of

“warmth (e.g., friendliness, trustworthiness, empathy, and kindness) and competence (e.g., intelligence, power, efficacy, and skill)” (Cuddy et al., 2011, p. 75).

According to Wojciszke, Bazinska and Jaworski (1998), approximately 82% of the variance in everyday value perceptions of others can be explained by the generic dimensions of warmth and competence (Wojciszke, 2005). The SCM literature stresses the importance of these perceptions in regard to decision-making toward others. Individuals perceived to be warm and competent are generally trusted, accepted and well-liked, fostering active facilitating behaviors, while those lacking both competence and warmth are perceived negatively, fostering passivity or even actively harmful behaviors. It is important to note that the SCM makes no predictions about the accuracy of the perceptions. In fact, many of the perceptions are based on generalized stereotypes with little to no grounding in fact (Christenson & Rosenthal, 1982; Falkenberg, 1990; Judd & Park, 2005). In the current study, we are not interested in the accuracy of CEO perceptions, but instead in subsequent investment choices based on the perceptions themselves. Notably, much of the research in this domain has focused on stereotyping and bias (Cuddy et al., 2007), but the literature also highlights the significance of these perceptions in organizational decision-making (i.e., Cuddy et al., 2011). For instance, in an experimental sample, competence ratings based on gender and parental status influenced decisions related to hiring, promotions and training at the individual level (Cuddy, Fiske & Glick, 2004). This theoretical framing has also been applied at higher levels of abstraction, including perceptions of organizations and even nations (Pacher, 2018).

Importantly, perceptions of warmth and competence are thought to be universal and grounded in evolutionary adaptation forces that help to determine “friend” from “foe” (Cuddy et al., 2008). As such, CEOs will likely also view their employees through this lens. While CEOs

will have differing interpretations of the skill level and trustworthiness of individual employees, the uniqueness of the organizational membership, distinct organizational cultures, and common goals tend to reinforce leaders' views of employees as a coherent, unified group (i.e., entitativity) (Spencer-Rodgers, Hamilton, & Sherman, 2007). When making a significant investment decision, firm leaders are likely to make that decision based on their view of the collective, rather than their view of individual employees.

Specifically, CEOs' perceptions of their employees' warmth and competence are likely to affect decisions related to the degree that slack resources are invested in the HR system. The SCM theorizes different behavioral reactions in response to disparate configurations of perceptions of warmth and competence: active facilitation in the case of high warmth and competence, passivity in the case of mixed perceptions, and active harm in the case of low warmth and competence. The warmth dimension in social psychology is essentially concerned with perceptions of trustworthiness (Cuddy et al., 2008). Humans have learned to make quick calculations regarding the intentions of others (Fiske et al., 2002) and these decisions primarily reflect perceptions of warmth. Can the other be trusted? Firm leaders are unlikely to make investments in resources for which they have lower confidence in reciprocity. Given the time and expense involved in implementing HPWS, firm leaders are also not likely to make a commitment to the resource base if they do not sense a high likelihood that employees are competent enough to respond to the investment. If employees are not able to competently execute high-level roles and functions, then firm leaders will be less likely to make high-performance practices a centerpiece of the management structure. This is not to say that many CEOs will view their employees as truly incompetent, but rather that some CEOs will view their employees as highly competent, while others will view their employee base as moderately competent. We expect the

greatest response from CEOs that have a high view of their employees' competence relative to those who hold moderate views of employee competence.

As mentioned above, active facilitation is frequently the behavioral reaction to a view of others as being high in both warmth and competence. In the context of HPWS implementation in SMEs, this will mean that CEOs invest slack resources into HPWS when their perceptions of employee warmth and competence are high. According to the SCM, individuals are likely to view the warm and competent group with respect and admiration (Cuddy et al., 2008). This may further promote the active investment of slack resources. In the case of human resources, this will likely mean active investment in the policies and practices that enhance the ability, motivation and opportunity of the employee base. Therefore, we hypothesize that the CEO's perceptions of employee warmth and competence will moderate the relationship between slack resources and the implementation of HPWS.

*Hypothesis 2:* CEO perceptions of employee warmth and competence will moderate the relationship between prior firm performance and the degree of HPWS utilization in SMEs. The highest rate of HPWS utilization will be found among firms with higher performance, whose CEO also views employees as high in both warmth and competence.

### **Employee Perceptions of the CEO & HPWS Effectiveness**

Existing research in the field demonstrates that HPWS utilization tends to yield higher levels of performance (Huselid, 1995), however, the magnitude of the relationship between HPWS and performance is heterogeneous (Jiang et al. 2012), indicating that there may be significant moderators of the relationship. Further, employee attributions about why executives are implementing practices have been shown to affect the efficacy of the practices themselves and the attitudes and behaviors they elicit (Bowen & Ostroff, 2004; Kehoe & Wright, 2013; Nishii et al., 2008). To that end, employee perceptions of the CEO's value system and personal characteristics may serve an important role in determining how effectively the strategic

initiatives of the firm will be implemented (Wood & Vilkinas, 2007). Given this literature, we propose that employee perceptions of CEO warmth and competence will moderate the relationship between HPWS utilization and labor productivity.

Following the SCM (Cuddy et al., 2008), we focus on CEO warmth and competence, as these likely send strong signals about how employees view the CEO and how likely they are to follow his or her leadership. Importantly, we are not focusing on employees’ perceptions of the practices themselves, but rather in understanding how employee perceptions of the CEO will influence the effectiveness of HR systems. We focus specifically on labor productivity, defined as operating profit divided by number of employees (Bhattacharya et al., 2005), as this is likely the most proximal financial indicator of how effective HR systems are in enhancing employee performance (Datta, Guthrie & Wright, 2005; Guthrie, 2001).

Perceptions of managerial intent have a significant influence on the way in which employees will perceive the employment practices implemented by the organization (Arthur, 1992; Jensen, Patel & Messersmith, 2013). Whether employees sense that the CEO is a trusted leader or an authoritarian will affect the efficacy of the system implemented. The extent to which employees feel that they are either being driven harder to perform at higher levels or invested in as valuable resources will largely depend upon their perceptions of the intent behind the practices. If leaders are not trusted (i.e., low-warmth), then any practices implemented will be viewed with suspicion. As such, ill-intentioned practices may not have the desired effect in producing higher levels of ability or motivation. At the same time, employees sensing that firm leadership is seeking to develop their skills will likely respond with greater commitment. Similarly, employees who perceive the CEO as highly competent will be more confident that their own efforts will be worthwhile as opposed to being wasted in the face of ineffective

leadership or strategy. These perspectives are consistent with the SCM prediction that the combination of warmth and competence will engender active behavioral facilitation.

Employee perceptions of the CEO are particularly important in SMEs. While large firms may experience a more fragmented culture, SMEs will be heavily influenced by perceptions of the CEO's leadership. When employees make positive attributions about their leaders, then practices proposed and implemented by the firm will be more likely to be viewed positively by employees. For instance, enhanced compensation plans like profit-sharing or incentive-based pay, will likely see differing reactions in SMEs depending upon how employees view the CEO and his/her intentions. In SMEs where employees sense that trustworthy managers are providing enhanced compensation mechanisms as a means of sharing the organization's success, employees will be positively predisposed toward the program.<sup>2</sup> However, in SMEs where employees sense that calculating managers are simply attempting to extract more effort, the compensation plans may not effectively induce high levels of productivity from employees. Similarly, offering training and development under a trusted leadership structure will be viewed as a tool to benefit both the organization and the employee as it fosters greater skill attainment. However, the same programs, under less supportive management, may be viewed as a further means of management attempting to control the behaviors of employees. In short, labor productivity will benefit when employees sense that the CEO is trustworthy and competent, thereby making the employees more likely to invest energy to boost productivity under the HPWS. CEOs viewed less positively will not spur employees to invest the extra effort to realize potential productivity gains.

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<sup>2</sup> While we did not directly measure employees' perceptions of HPWS, we did carry out an additional scenario-based experiment with a total of 359 employees in a South Korean company. Consistent with our arguments, we found that when CEOs were viewed as both competent and warm, participants tended to adopt a softer view of HR practices, which they believed were implemented to enhance employee well-being ( $b = .53, p < .05$ ). Full results are available upon request.



*Hypothesis 3:* The relationship between HPWS utilization and labor productivity will be moderated by employee perceptions of CEO warmth and competence, such that the relationship is stronger when CEOs are perceived as both warm and competent.

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**Organizational Slack, HPWS, and SME Labor Productivity**

Based on the theoretical rationale presented above, we expect an indirect effect of slack resources on SME performance via HPWS utilization. However, given that the overall conceptual model (Figure 1) suggests a series of mutually beneficial effects, the indirect effect is also expected to be contingent upon CEO perceptions of employees and employee perceptions of CEOs. Firms with available resources whose CEOs hold a favorable view of the human resource base in the firm (i.e., warmth and competence) are more likely to implement HPWS. In turn, while HPWS are likely to enhance firm performance (Combs et al., 2006; Huselid, 1995; Jiang et al., 2012), we expect that implementation conditions will play a role in the efficacy of the system adopted. Specifically, when employees sense that their CEO is trustworthy and competent, they will be likely to respond more favorably to the implementation of the HPWS. In sum, the use and effectiveness of HPWS depends upon perceptions of the other, where positive perceptions by both employees and the CEO will lead to greater HPWS implementation and better outcomes resulting from HPWS utilization. We test this via a first and second stage moderated mediation model (Edwards & Lambert, 2007), which we describe in the Methods section.

*Hypothesis 4:* The indirect effect of prior performance on subsequent labor productivity via HPWS will be conditional upon the level of employees’ competence and warmth at the first stage of the mediation (a path) and the level of CEO warmth and competence at the second stage of the mediation (b path). The relationship will be such that the highest labor productivity will be observed when perceptions of employee warmth and competence and perceptions of CEO warmth and competence are high.

**Methods**

## Sample

To test the proposed model, we conducted a field survey of SMEs in South Korea. We started by obtaining a list of SMEs in South Korea from a major industrial bank established by the South Korean government. Data was collected following approval of the study protocols by the Human Subjects Ethics Sub-Committee at the City University of Hong Kong (Ref. #: 2-4-201701\_03; Project Title: Are they worth it? CEO perceptions of employee competence and warmth as an antecedent to HPWS utilization). We contacted CEOs in the 277 SMEs, and explained the purpose and the importance of the present research. Out of 277 SMEs, 220 SMEs agreed to participate in the research. In the next step, we arranged a follow-up site visit with the 220 SMEs. Visiting each SME, we conducted three types of surveys. First, we administered a survey to each CEO. The CEO survey included employee warmth and employee competence scales. Second, we asked the manager in charge of HR issues in each SME about their HR practices. Third, we gave employees in each SME the employee surveys, which included the CEO warmth and competence scales. To reliably measure a given CEO's warmth and competence, we administered the employee survey to three randomly selected employees in each SME<sup>3</sup>. To maximize the participation rate we described direct and indirect benefits of the survey participation together with the purpose and the importance of the study to employees. All

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<sup>3</sup> The randomly selected employees were not significantly different from the overall population in SMEs in terms of age ( $t(43) = 1.67, ns$ ), gender ( $t(43) = .70, ns$ ), or organizational tenure ( $t(43) = 1.84, ns$ ). To further test the appropriateness of using just 3 raters we used a secondary archival dataset, which includes warmth and competence items to test the validity of randomly selecting three employees' ratings when compared with using all ratings from a given firm. A total of 10,064 employees from 500 firms answered an employee survey. The survey participants were from a variety of hierarchical levels (e.g., rank-and-file employees, assistant managers, and general managers) and from a variety of functional areas (e.g., sales, R&D, and finance). Participants assessed employees' overall competence in their firms (competence). They also answered the extent to which trustworthy relationships among employees are developed (warmth). We aggregated all employees' ratings on these items. We then randomly-selected three employees in each firm and aggregated the three employees' ratings on the competence and warmth items. We ran the correlation analysis. The results showed that the randomly selected ratings were highly correlated with all participants' ratings ( $r = .75, p < .01$ ). The same was true for warmth ( $r = .73, p < .01$ ). These correlations suggest that using three randomly selected participants provides a valid estimate of the full population mean for a given firm.

participants were allowed to answer the survey during their work hours. Confidentiality was assured. In total, we administered 220 CEO surveys, 220 manager surveys, and 660 employee surveys (three employees per firm). In total, we received 108 (49.1%) surveys from CEOs, 153 (69.5%) surveys from managers, and 459 (69.5%) surveys from employees.

About a year after the initial survey administration, we collected objective financial performance data for the sample of firms from Korea Enterprise Data, which possesses the largest database on SMEs’ financial information in Korea.<sup>4</sup> After removing survey data with missing values and without survey responses from at least three employees, complete data was available from 108 CEOs, 108 managers, and 324 employees. On average, in our sample the SMEs have 21.8 employees. According to South Korean Ministry of SMEs and Startups (2016), such firms with less than 50 employees account for 97% of firms in South Korea. Of the 108 firms, 68% were in manufacturing, 18% in wholesale and retail trade, 5% in information and communication, 4% in professional, scientific, and technical activities, 2% in water supply, 2% in construction, and 1% in transportation and storage industries. Consistently, firms in manufacturing and wholesale and retail trade industries make up about half of the firms in South Korea (excluding agriculture, forestry, fishing, mining, and small restaurants and lodging) (South Korean Ministry of SMEs and Startups, 2016).

In the CEO sample, 94% were male, 24% completed high school, 61% had a bachelor’s degree, and 15% held a graduate degree. In terms of age, 38% of CEOs were in their 40s and 62% were over 50. Of the manager sample, 69% were male, 28% completed high school, 69% had a bachelor’s degree, and 3% held a graduate degree. Among the managers, 8% were in their 20s, 51% were in their 30s, 31% were in their 40s, and 10% were over 50. Of the employee

<sup>4</sup> More information can be found in the following website: <http://www.kedkorea.com/en/ENINT01R1.do>

sample, 63% were male, 30% completed high school, 67% had a bachelor's degree and 3% had a graduate degree. In terms of age, 18% were in their 20s, 44% were in their 30s, 28% were in their 40s, and 10% were over 50.

## Measures

We conducted surveys with the three groups in Korean. We followed Brislin (1980)'s procedure for translation and back-translation. First, one of the authors who is fluent in Korean and English translated English scales into Korean. The scales in Korean were then translated back into English by a bilingual research assistant majoring in human resources management. The back translated version was closely compared with the original scales. When any discrepancy was detected between the two versions, it was discussed and the translated version was revised such that the scale represented the original and intended meaning in the context of South Korea. Finally, a faculty member at a university in Korea and a practitioner who manages a HRM-consulting firm each read the final translation to test for readability.

**Labor productivity (archival data source, Time 3).** Labor productivity is one of the most widely used outcome variables in empirical studies in human resources management. It is considered as the key indicator of workforce performance, because it is closely linked with a firm's human capital (Datta, Guthrie, & Wright, 2005). We measured labor productivity as operating profits divided by the number of employees (Bhattacharya, Gibson, & Doty, 2005). We obtained information on operating profits and the number of employees for each firm from Korea Enterprise Data about a year after the survey was administered. Korea Enterprise Data is a major credit bureau for SMEs in Korea. Based on its extensive database of SMEs in Korea, it provides business credit reports including SMEs' credit ratings and financial performance. Average operating profits of our sample of firms was 426 million Korean Won. This is similar to

the average operating profits of the population of South Korean SMEs of a similar size (380 million Korean Won) per the South Korean Ministry of SMEs and Startups (2016).

**High performance work systems (HR manager survey, Time 2).** To measure HPWS, we used the 9-item HPWS scale developed by Wright, Gardner, Moynihan, and Allen (2005). The measure includes items for selection, training, pay for performance, performance evaluation, and employee participation. The scale has demonstrated high reliability in prior research (e.g., Wright et al., 2005). Consistent with past research, the HPWS index encompasses ability-enhancing (e.g., training), motivation-enhancing (e.g., profit-sharing), and opportunity-enhancing practices (e.g., job autonomy) (Jiang et al., 2012). To the 9-item measure we also added two pay-for-performance items that Wright et al. (2005) intended to include in their measure, but could not due to the restriction imposed by the sample company. The added items were “Our company has a gain-sharing program where employees share financially in the gain as their performance improves” and “Our company has a profit-sharing program where employees share financially in the company profit as the company profit increases.” We also added two more items about employee participation (job autonomy and communication systems) from Shaw, Park, and Kim (2013) in order to more broadly assess the level of HPWS implementation across the sample. The added items were “Employees have job autonomy in managing their work” and “Our company has communication systems through which it can share organizational information with employees.” In total, the HR manager in each firm was asked to assess a total of 13 HPWS items. We standardized the 13 items and created three indices of ability-enhancing, motivation-enhancing, and opportunity-enhancing practices. We then averaged them to create the HPWS index ( $\alpha = .69$ ).

**Organizational slack (archival data source, Time 1).** There are many ways to measure organizational slack. Among others, cash reserves is widely used because it is an “easily deployed resource and provides managers the greatest degree of freedom in allocating it to alternate uses” (George, 2005, p. 666). While cash reserves was not available in our dataset, another measure of organizational slack is net income based on the same logic as above (Subramanian & Nilakanta, 1996). Net income is profit after excluding all business-related expenses including cost of goods sold, operating expenses, and taxes. It represents the amount of left-over resources that managers can use. Thus, following past research (Subramanian & Nilakanta, 1996), we used net income measured at Time 1 as organizational slack. We collected organizational slack data from Korea Enterprise Data. The time lag between T1 and T2 (survey data) is about six months. We adjusted for size by controlling for the total number of employees.

**Perceived CEO warmth and competence (employee survey, Time 2).** To measure CEO warmth and competence, we followed past research (Kim, Eisenberger, & Baik, 2016) and adapted the six-item warmth perception and the six-item competence perception scales from Fiske et al. (2002) to the organizational context. Employees were asked to evaluate the extent to which each adjective of warmth ( $\alpha = .93$ : trustworthy, well-intentioned, good-natured, warm, friendly, and sincere) and competence ( $\alpha = .90$ : competent, confident, capable, efficient, intelligent, and skillful) applied to the CEO in their firm with a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). We aggregated the employees’ ratings to the organizational level. We calculated the aggregation statistics.  $F$  statistic was 4.05,  $p < .01$ ,  $ICC[1]$  was .50,  $ICC[2]$  was .75, and  $r_{wg}$  was .95 for CEO warmth.  $F$  statistic was 4.23,  $p < .01$ ,  $ICC[1]$  was .52,  $ICC[2]$  was .76, and  $r_{wg}$  was .95 for CEO competence. These aggregation statistics indicate significant

between-firm variance and within-firm agreement in regard to CEO warmth and competence, thereby justifying aggregation (LeBreton & Senter, 2008).

In our theory, we compare *high* warmth/competence CEOs with *low* warmth/competence CEOs in relation to employees' reactions to HPWS. By using categorical variables we are more easily able to compare the differences among the groups (DeCoster, Gallucci, & Iselin, 2011). Although the conversion of continuous variables into categorical variables results in the loss of important information on the focal variables, this approach provides a more conservative test that also allows us to avoid artificial statistical biases. While warmth and competence are two distinct dimensions (Fiske et al., 2002), they can be highly correlated for individuals or groups, particularly given the prevalence of halo effects (e.g., Yzerbyt, Kervyn, & Judd, 2008; Wojciszke, Abele, & Baryla, 2009). Highly correlated variables in statistical analysis are likely to bias the analysis model, and this is particularly true for interaction models (Cortina, 1993). Additionally, the use of categorical variables is consistent with the social cognition literature, which often clusters groups based on warmth and competence dimensions (Cuddy et al., 2007). Indeed, past research suggests that the four combination groups based on warmth and competence lead to unique emotional and behavioral responses (e.g., Cuddy et al., 2011).

In following past research (Schleicher, Watt, & Greguras, 2004; Slaughter, Christian, Podsakoff, Sinar, & Lievens, 2014; Tsui, Pearce, Porter, & Tripoli, 1997), we used the medians of the warmth and competence dimensions to create the following four combinations: (1) high warmth & high competence, (2) high warmth & low competence, (3) low warmth & high competence, and (4) low warmth & low competence. For example, if CEO warmth and CEO competence in a firm were higher than the medians of CEO warmth and CEO competence

respectively in our sample, then the CEO was categorized into the high warmth & high competence group. We used the low warmth and low competence group as the reference group.

**Perceived employees' warmth and competence (CEO survey, Time 2).** We measured employee warmth and competence in a similar manner. We adapted the six-item scales from Fiske et al. (2002) to the organizational context. As we are interested in CEO perceptions of employees, we changed the referent of the six items to employees. The CEO in each firm was asked to assess the degree to which each adjective of warmth (trustworthy, well-intentioned, good-natured, warm, friendly, and sincere) applied to employees as a collective in his/her firm. A 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*) was used. Cronbach's alpha was .90. Similar to the measure of employee warmth, the CEO in each firm rated the extent to which each adjective of competence (competent, confident, capable, efficient, intelligent, and skillful) applied to employees as a collective in his/her firm. For this scale, a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*) was used. Cronbach's alpha was .90. The median for the employee competence measure is 5.33. As expected, this shows that most CEOs view their employees as at least moderately competent, so our test is between those that view their employees as highly competent versus moderately competent. Similar to employee perceptions of CEO warmth and competence, we created four combinations based on the medians of the dimensions of CEO perceptions of employees' warmth and competence. The low employee warmth and low employee competence category was used as the reference group. Appendix presents all the items of the employees' warmth and competence scales.<sup>5</sup>

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<sup>5</sup> We performed confirmatory factor analyses with the following four latent constructs: CEO warmth, CEO competence, employees' warmth, and employees' competence. The hypothesized four-factor model fit the data well (CFI = .94; TLI = .93; RMSEA = .07) and significantly better than three alternative models: a) a three-factor model (employees' warmth and competence were combined):  $\Delta\chi^2 = 243.34$ ,  $p < .01$ ; CFI = .86; TLI = .84; RMSEA = .12; b) a two-factor model (employees' warmth and competence were combined, and CEO warmth and competence were combined):  $\Delta\chi^2 = 118.08$ ,  $p < .01$ ; CFI = .82; TLI = .80; RMSEA = .14; and c) a one-factor model:  $\Delta\chi^2 = 410.69$ ,  $p < .01$ ; CFI = .68; TLI = .65; RMSEA = .18).



Central to our theoretical argument concerning employees’ warmth is that this dimension is essentially concerned with perceptions of an individual’s trustworthiness (Cuddy et al., 2008). In order to test this assumption, we assessed the degree to which the warmth dimension is associated with employees’ benevolence, integrity, and affect-based trust, all of which are important components of trustworthiness (e.g., Mayer & Davis, 1999). We administered a paper survey to 150 managers (including assistant managers) from various organizations, which included the employee warmth scale ( $\alpha = .77$ ), the 5-item employees’ benevolence scale ( $\alpha = .64$ ; Mayer & Davis, 1999), the 6-item integrity scale ( $\alpha = .71$ ; Mayer & Davis, 1999), and the 5-item affect-based trust scale ( $\alpha = .66$ ; McAllister, 1995). While we received 84 manager surveys, one survey was dropped due to missing values. As expected, employees’ warmth was strongly and positively correlated with their benevolence ( $r = .76, p < .01$ ), integrity ( $r = .68, p < .01$ ), and affect-based trust ( $r = .67, p < .01$ ), providing evidence for construct validity.

**Control variables.** We controlled for several factors that may affect the observed results. First, we measure CEO intentions to support their employees, as this may significantly influence the implementation of HPWS in the firm. To measure CEO intent, we adapted a perceived organizational support scale. The five highest loading items from the Shanock and Eisenberger (2006) scale were rephrased to be answered from the CEO’s perspective. For example, “the organization strongly considers my goals and values” was rephrased as: “I strongly consider employees’ goals and values.” For another example, “the organization really cares about my well-being” was rephrased to read “I really care about employees’ well-being.” The CEO in each firm was asked to rate five intentions to support items using a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). Cronbach’s alpha was .78.

Employee demographic information such as gender, age, educational level, and tenure are likely to influence a CEO's perceptions of employees' warmth and competence. Such workforce characteristics can also affect firm performance (e.g., Frink et al., 2003). Thus, to avoid omitted variable bias, we controlled for the proportion of female employees (0 = male, 1 = female), age (1 = 20-29, 2 = 30-39, 3 = 40-49, 4 = 50 or over), educational level (1 = high school diploma, 2 = bachelor's degree, 3 = graduate degree), and tenure (1 = 1 year, 2 = 1-5 years, 3 = 5-10 years, 4 = more than 10 years). We also controlled for the CEO's gender, age, and educational level. Older organizations are likely to have more established HR practices, which consequently affects firm performance (Guthrie, 2001). Thus, we controlled for organizational age (i.e., years of business), measured as the number of years since founding. Larger firms may also have more resources to implement high quality HR practices, so we controlled for organizational size, which we measured as number of employees (McKay, Avery, & Morris, 2009).

## Results

Descriptive statistics and correlations among study variables are presented in Table 1. Consistent with our expectations, the high employee-warmth and high employee-competence group was significantly and positively correlated with HPWS ( $r = .45, p < .01$ ). While HPWS was not significantly correlated with firm performance ( $r = .13, ns$ ), the direction was positive. Interestingly, CEO perceptions of employee warmth and competence and employee perceptions of the CEO's warmth and competence were not significantly correlated with firm performance.

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Insert Tables 1 - 3 about here  
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## Test of Hypotheses

Our data is multi-level in nature in that each firm is nested in each industry (Hough, 2006). Hierarchical linear modeling (HLM) can efficiently accommodate different levels of error

terms in one equation (Kreft & de Leeuw, 1998). Thus, following past research (e.g., David, Avery, Witt, & McKay, 2015; McKay, Avery, & Morris, 2008), we utilized HLM to test our hypotheses. All the continuous predictors were mean-centered to facilitate the interpretation of regression coefficients. The analysis results are presented in Tables 2 and 3.

Hypothesis 1 proposes that slack (operationalized as prior firm performance) will be positively associated with HPWS utilization. To test the hypothesis, we included control variables in Model 1 and added organizational slack along with the other predictors (e.g., employees’ perceptions of CEOs and CEOs’ perceptions of employees) in Model 2. The HLM results showed that organizational slack was not significant in predicting HPWS utilization over and beyond the control variables (Model 2:  $b = .12, ns$ ), failing to support Hypothesis 1.

Hypothesis 2 states that CEO perceptions of employee warmth and competence will moderate the relationship between slack resources and the degree of HPWS utilization in SMEs such that the effect of organizational slack on HPWS utilization will be highest when CEOs perceive employees to be both warm and competent. To test the hypothesis, we included interactions of organizational slack with three groups in Model 3. As shown in Table 2, the interaction between organizational slack and the high employee warmth and competence group was significant and positive with respect to HPWS ( $b = .34, SE = .16, p < .05$ ). We plotted the interaction effect in Figure 2 using one standard deviation above and below the mean of the independent variable (Aiken & West, 1991). Figure 2 shows that the effect of organizational slack on HPWS is strongest when the perception of employees’ warmth is high and the perception of employees’ competence is low. However, despite a relatively large interaction effect, the standard error for the measure is large as well, suggesting that the overall estimate for the particular group (i.e., high warmth and low competence) may not be reliable and stable.

Consistently, the simple slopes tests show that the effect of organizational slack on HPWS utilization is not significant at  $p < .05$  ( $b = 2.91$ ,  $SE = 1.58$ ). The simple slope was positive and statistically significant only for the high warmth and high competence group ( $b = .25$ ,  $SE = .11$ ,  $p < .05$ ).<sup>6</sup> The results suggest the importance of a CEO's perceptions of both employee warmth and competence in the decision to adopt HPWS, in support of Hypothesis 2.

Hypothesis 3 predicts that the relationship between HPWS and firm performance will be moderated by employee perceptions of CEO warmth and competence. We test this hypothesis in the same manner as we tested Hypothesis 2. As Table 3 shows, the high CEO warmth and CEO competence group significantly and positively moderates the relationship between HPWS and firm performance (Model 6:  $b = 30.87$ ,  $p < .01$ ). The interactions for the other groups were not significant. Following the same procedure as for Hypothesis 2, we plotted the interaction effect in Figure 3. Simple slopes tests showed that the effect of HPWS on firm performance was only positive and significant for high levels of CEO warmth and competence ( $b = 17.66$ ,  $SE = 7.48$ ,  $p < .05$ ).<sup>7</sup> Hypothesis 3 is supported.

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 Insert Figures 2 - 3 about here  
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Hypothesis 4 proposes that the indirect effect of organizational slack on firm performance via HPWS will be conditional upon the level of employees' warmth and competence at the first stage of the mediation ( $a$  path) and the level of CEO warmth and competence at the second stage of the mediation ( $b$  path). The significant moderation effects of employees' warmth, employees' competence, CEO warmth, and CEO competence at their respective stages allow us to directly

<sup>6</sup> Simple slopes test for low employee warmth and high employee competence:  $b = .25$ ,  $SE = .33$ ,  $ns$ ; simple slopes test for low employee warmth and low employee competence:  $b = -.09$ ,  $SE = .12$ ,  $ns$ .

<sup>7</sup> Simple slopes test for high CEO warmth and low CEO competence:  $b = -2.04$ ,  $SE = 18.98$ ,  $ns$ ; simple slopes test for low CEO warmth and high CEO competence:  $b = -18.89$ ,  $SE = 22.08$ ,  $ns$ ; simple slopes test for low CEO warmth and low CEO competence:  $b = -13.21$ ,  $SE = 7.85$ ,  $p < .10$ .

test the conditional indirect effect of organizational slack. We used the Monte Carlo method of bootstrapping with 20,000 repetitions to test the conditional indirect effect. The bootstrapping approach is preferable to other statistical techniques such as a Sobel test in testing for mediation, because it is free from any assumption on the sampling distribution of the product of the two path coefficients (Edwards & Lambert, 2007; Preacher & Hayes, 2008). The bootstrapping results show that the conditional indirect effect of organizational slack on firm performance via HPWS was significant and positive only when the levels of employees' warmth, employees' competence, CEO warmth, and CEO competence are high ( $b = 4.37$ , 95% CI: .09-10.92,  $p < .05$ ). Therefore, Hypothesis 4 is supported.

**Robustness Checks**

While we used categorical variables to test our conceptual model, we re-ran the analysis using warmth and competence as continuous variables. Consistent with the main findings, simple slopes tests of the three-way interaction indicate that the relationship between organizational slack and the utilization of HPWS is positive and significant only for the high competence and warmth group ( $b = .22$ ,  $SE = .11$ ,  $p < .05$ ), and the relationship between HPWS and firm performance is positive and significant only for the high CEO competence and warmth group ( $b = 20.50$ ,  $SE = 7.77$ ,  $p < .05$ ). The interaction patterns for the three-way interaction effects are similar to Figures 2 and 3.

Consistent with past research, in our study we used a HPWS index. Specifically, Takeuchi et al. (2007, p. 1070) stated: “any empirical investigation of HR activities and their organizational outcomes should operate at the system level.” However, since we conceptualized HPWS as a three-dimensional construct, we tested if the results held with the three dimensions separated out. In alignment with our main findings, the effects of ability-enhancing ( $b = 33.68$ ,

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3  $SE = 16.11, p < .05$ ), motivation-enhancing ( $b = 31.95, SE = 15.59, p < .05$ ), and opportunity-  
4 enhancing practices ( $b = 37.70, SE = 16.86, p < .05$ ) on firm performance were positively and  
5 significantly moderated by the high CEO competence and warmth group. Also, the interactive  
6 effect of organizational slack with the high employee competence and warmth group was  
7 positive and significant for ability-enhancing ( $b = .27, SE = .11, p < .05$ ) and motivation-  
8 enhancing practices ( $b = .24, SE = .11, p < .05$ ). It was, however, not significant in predicting  
9 opportunity-enhancing practices ( $b = .03, SE = .12, ns$ ). We conjecture that there are a more  
10 limited number of ways to provide opportunities for employees in SMEs.  
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21 We also empirically tested for potential endogeneity issues in our model (Antonakis,  
22 Bendahan, Jacquart, & Lalive, 2010). We used the control function approach running a  
23 regression with organizational slack as the dependent variable, and the moderator and control  
24 variables as predictors. We then included the standardized residuals as an additional control. The  
25 interaction between organizational slack and high warmth and high competence group was  
26 positive and significant ( $b = .37, SE = .17, p < .05$ ). Also, consistent with our main findings, the  
27 interaction between HPWS and high CEO warmth and high CEO competence group was  
28 significant as well ( $b = 30.28, SE = 10.71, p < .01$ ). As an additional check, we calculated the  
29 linear prediction with organizational slack as the dependent variable, using the moderator and  
30 control variables as predictors. We again ran the regression with the unstandardized residuals as  
31 a control. Consistently, the organizational slack-high warmth and competence group interaction  
32 was positive and significant with respect to HPWS ( $b = .34, SE = .16, p < .05$ ). Moreover, the  
33 HPWS-high CEO warmth and competence group interaction was significant in predicting firm  
34 performance ( $b = 30.87, SE = 10.73, p < .01$ ), suggesting that study findings are not subject to  
35 endogeneity.  
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Based on the recommendations on the usage of control variables (e.g., Becker, 2005; Bernerth & Aguinis, 2016), we also re-ran the analysis without control variables. The results were consistent with our main findings. There was a significant and positive interaction effect between organizational slack and the high employee warmth and competence group on HPWS implementation ( $b = .44, SE = .16, p < .01$ ). The interaction effect between HPWS and high CEO warmth and competence group on firm performance was also significant and positive ( $b = 28.91, SE = 11.48, p < .05$ ). The table of these results is available upon request.

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Insert Tables 4 - 5 about here  
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**Influence of CEO Dispositions**

While the results above indicate support for the SCM, there is also the possibility that the moral and ethical dispositions of the CEO are driving HPWS investment decisions, rather than the presence of slack and perceptions of employees’ warmth and competence<sup>8</sup>. Unfortunately, the original dataset did not include measures of such dispositions. Thus, to help test this competing explanation a second study was conducted to address this question directly. The supplemental project was approved by the Institutional Review Board at the University of Nebraska (IRB #: 20191119807EX; Project Title: SME Management Practices Survey).

A sample of 1,057 CEOs of firms with 10 – 50 employees from across the U.S. was identified and surveyed. The survey included the same measures of employee warmth and competence and the same measure for HPWS. In addition, several dimensions of CEO moral and ethical dispositions were collected. Specifically, we measured moral attentiveness using a 5-item scale derived from Reynolds (2008). Example items include, “I regularly think about the ethical implications of my decisions” and “I often reflect on the moral aspects of my decisions”. We

<sup>8</sup> We would like to thank an anonymous reviewer for this helpful observation.

also measured ethical predispositions toward both utilitarianism and formalism as defined by Reynolds (2006). To measure these items, participants were asked to evaluate how important it was to them to be identified by certain traits indicating utilitarianism (innovative, resourceful, effective, influential, etc.) and formalism (i.e., principled, dependable, trustworthy, etc.). Finally, we included a measure of narcissism from Ames, Rose and Anderson (2006). Sample items include “I have a natural talent for influencing people” and “I like to be the center of attention”. The basic logic behind using these scales was to test whether it was the CEO’s perception of his or her employees that correlated with HPWS investment or if it was the CEO’s predisposition to be ethical or moral in his or her behaviors that seems to be driving investment in this area. Completed surveys were received from 81 CEOs, providing a response rate of 7.95%. Of the respondents, 95% were male. 1.2% were in their 20s, 4.9% were in their 30s, 23.2% in their 40s, 35.4% in their 50s and 35.4% were above 60.

To test the competing hypothesis, each of the dispositions was tested separately along with the controls and measures of employee warmth and competence using ordinary least squares regression. Results are available in Tables 4 & 5. Table 4 shows the correlations between the variables. The correlation between the HPWS measure and CEO perceptions of employee warmth ( $r = .23, p < .01$ ) and competence ( $r = .28, p < .01$ ) were both significant. The HPWS measure was not significantly correlated with moral attentiveness ( $r = .13, ns$ ), utilitarianism ( $r = .21, ns$ ), formalism ( $r = .10, ns$ ) nor narcissism ( $r = .07, ns$ ).

Table 5 shows the results of the regression and demonstrates a similar pattern of results. The results largely support the SCM in showing that CEO perceptions of his or her employees’ warmth and competence remained significant in predicting HPWS investment over and above the effects of the dispositions in seven of the eight regressions. Employee-warmth remained a



CEO and Employee Perceptions, HPWS and Organizational Slack 31

significant predictor when controlling for moral attentiveness ( $b = 1.08, p < .05$ ), narcissism ( $b = 1.08, p < .05$ ), formalism ( $b = 1.06, p < .05$ ), and was marginally significant when controlling for utilitarianism ( $b = .96, p = .052$ ). Similarly, employee competence remained a significant predictor in each of the models while controlling for moral attentiveness ( $b = 1.19, p < .05$ ), narcissism ( $b = 1.19, p < .05$ ), formalism ( $b = 1.21, p < .05$ ) and utilitarianism ( $b = 1.14, p < .05$ ). The results of this secondary study further underscore CEO perceptions of employees.

Discussion

Theories of social capital and social exchange have long held that relationships within the firm serve as important catalysts for action (Adler & Kwon, 2002; Coleman, 1988; Blau, 1964; Eisenberger, Huntington, Hutchison, & Sowa, 1986; Nahapiet & Ghoshal, 1998). We link into this literature base to highlight the significance of CEO perceptions in determining the extent to which small and medium sized firms invest financial resources in their human capital through systems of high performance work practices. Using organizational slack and the stereotype content model as a lens (Cuddy et al., 2008; Fiske et al., 2002) we argue and find support for the theory that the likelihood of a firm, with available financial resources, investing in HPWS is contingent upon the CEO’s perceptions of the warmth and competence of the employee base. The presence of slack alone was not sufficient; however, when the interaction of slack and CEO perceptions of the warmth and competence of the employee-base were in place, firms were more likely to invest in HPWS. Further, integrating the SCM and the strategic HRM literature, we argue that the degree to which HPWS result in strong firm performance depends on employees’ perceptions of the CEO. Specifically, we find that HPWS contribute to firm performance when employees view CEOs as trustworthy and competent.

Implications for Theory

These findings advance theory in a number of ways. First, the results highlight the significance of the perceptions of others in the decision to adopt HR systems. The findings of this study indicate that organizational slack is not enough to drive significant adoption of HPWS; rather there are more complex nuances at play in determining whether or not SME CEOs will choose to implement HPWS. It likely illustrates the strategic options CEOs have available to them when they have slack resources to utilize, and that these resources will only be invested in human capital if particular conditions are met. Specifically, the results of the study support the likelihood that executives will weigh the payoff of investing in human resources by judging the potential of employees to provide a return on investment. When SME CEOs hold positive perceptions of both the level of ability and trustworthiness of their employees, they are more likely to engage in active facilitation by making more significant investments of available resources in the human capital of the firm through HPWS. This result seems to hold even when controlling for the ethical and moral predispositions of the CEO.

This is an important theoretical contribution to a literature stream (i.e., strategic HR) that has focused most of its efforts on determining the consequences of HPWS utilization, but is now also beginning to give greater attention to antecedents (Arthur et al., 2016; Chadwick et al., 2015). Importantly, this result does not necessarily indicate that CEOs make HR investment decisions for emotional or philosophical reasons, but rather supports a rational model of choice in which CEOs weigh the returns of investment through perceptions of the ability and trustworthiness of employees (Arthur et al., 2016). In this context, CEOs elected to invest slack resources into HPWS only when they sensed that their employees would be both committed and competent to make such practices effective. In other words, CEO intentions only led to action when they felt that employees would make the investment in HPWS pay off.

Interestingly, in further analysis of the four potential combinations of employee warmth and competence, our findings suggest that there is a likelihood that CEOs are willing to make significant investments of their slack resources into HPWS when employees are viewed as warm but less competent (see group 2 in Figure 2). The effect size of the interaction between organizational slack and the high warmth and low competence group was relatively large ( $b = 2.94$ ). This is consistent with the strategic HRM literature, which shows that one reason firms adopt HPWS is in order to improve the quality of the firm’s human capital (e.g., Jiang et al., 2012). In organizations where CEOs sense that employees will respond with high commitment (i.e., warmth) to HPWS, they may view this as a means of remedying the lack of competence. However, while the coefficient was large, the standard error was also large ( $SE = 1.55$ ). Practically speaking, this suggests that in such cases, some CEOs will be willing to invest available resources into HPWS, while others will not see additional resource allocation as useful. This is congruent with the SCM, which demonstrates that groups are viewed with ambivalence when they are thought to be warm but incompetent. Further, none of the other conditions (high warmth, low competence; low warmth and low competence) were significantly related to HPWS investment. These findings suggest that both warmth and competence are likely needed to promote prosocial action by the chief executive in SMEs. That said, additional nuance needs to be explored in the literature as the current study did not draw distinctions between the various high-low combinations of warmth and competence.

The study findings further support theorizing in the field noting that control and commitment are not opposing constructs (Su, Wright & Ulrich, 2018). In other words, firms may not adopt practices simply as a means to control behavior, nor will they simply utilize practices as a means to demonstrate commitment, but rather they will weigh the likely return on

investment by assessing the trustworthiness and competence of the human capital in the firm. Like any tangible or intangible resource, those perceived to be of higher quality in production potential will garner greater investment. In short, firm leaders will be more likely to make investments in the HR architecture if they sense that the resource will produce greater returns.

In addition, the study further builds upon a relational base to demonstrate that the effectiveness of HPWS utilization in SMEs is moderated by employee perceptions of firm leaders. As employees perceive that firm leaders are trustworthy and competent, they are more likely to view HPWS as an investment in their own capabilities, rather than as a means of controlling or demanding higher performance. The value of HPWS in SMEs appears to be contingent upon the level of trust that employees have in firm leadership. Interestingly, the relationship only holds when both warmth and competence are high. When perceptions of CEO competence are high, but warmth perceptions are low, employees did not appear to respond to the investments in HPWS. This fits the BIAS map explained by the SCM, which suggests that people will respond with passive harm to those that they deem to be competent, but cold (Cuddy et al., 2007). In the present case, employees may be unwilling to put in the effort despite the investment from the organization, leaving the organization with little benefit.

This study also makes an important contextual contribution by assessing these relationships in a sample of SMEs. While large firms may be able to allocate resources toward the acquisition and development of human capital more freely, SMEs face constraints that call for greater discretion. Overall, this study supports a conclusion that the mutual perceptions between employees and their leadership is an important link to assess when considering the utilization of HPWS and its consequences. Firms with strong positive relationships, evidenced

through the perceptions of both leaders and employees, appear to be able to make the most efficacious use of such practices. Further analysis is necessary to tease out causal components.

**Practical Implications**

The present study also provides important practical implications. In the strategic HR literature, HPWS have been shown to bring in numerous benefits to employees such as increased job satisfaction, psychological empowerment, perceived organizational support, and workplace safety (Barling, Kelloway, & Iverson, 2003; Liao et al., 2009). Considering our findings that HPWS utilization depends on CEO perceptions of employees’ competence and warmth, it may be that employee well-being in the organization is partly contingent on how they are viewed by firm leadership. Our findings that employee perceptions of the CEO’s warmth and competence is a key factor in HPWS effectiveness also suggests that socialization training for managers in organizations should include a discussion of supportive leadership. Given that low perceptions of the CEO’s warmth and competence reduces the effectiveness of HPWS (see Figure 3), it is worth emphasizing the importance of positive and supportive leadership.

Second, it is important for employees to understand that the image their CEO forms of them may affect the decisions that are made in regard to human capital investment. While most employees will strive to achieve a positive reputation with their leaders, this study underscores the tangible importance of these perceptions. More importantly, as CEOs are more likely to view their employee base as a whole when making investment decisions, it is also important that employees attempt to build a warm and trustworthy culture within their ranks. Individual contributions are important, but maintaining a strong set of employees across the full organization will likely affect the type of investment that employees receive in SMEs.

Finally, it is important to note that such perceptions may also have a “dark side”. Employees may be more interested in “image crafting” than truly building their competence or enhancing their collaboration skills. Firm managers need to be aware of this and seek to provide accurate information to CEOs weighing important investment choices. The employee base may not always be the proper strategic area in which to invest and managers need to ensure that CEOs are not blinded by positive perceptions into making sub-optimal investments in HPWS.

### **Limitations and Future Research Directions**

The study should be considered in light of its limitations. First, the study is set in a sample of South Korean SMEs. While firms in South Korea share many characteristics with those in the West (Bae & Lawler, 2000), it may be that the relationships are of greater relevance in a Korean context. Findings should be generalized to other settings with some caution. Second, it would have been ideal to survey all of the employees in each SME, but time and resource constraints led us to only administer the surveys to three employees in each SME. While we encourage scholars to replicate our findings with a larger employee sample, we believe that this is not a critical issue as the employee survey asked about a single referent (i.e., the CEO), rather than questions about the employees themselves, different departments or even the overall culture of the organization. We also randomly selected three employees to improve the sample representativeness and to reduce measurement error (McCready, 2005). According to the social cognition literature (e.g., Cuddy et al., 2008; Fiske et al., 2002), an individual’s warmth and competence are likely to be similarly evaluated among different raters. This is especially true in SMEs where CEOs frequently interact with their employees. Consistently, the employees’ ratings of the CEO’s warmth and competence had high inter-rater reliabilities as shown in the

aggregation statistics:  $ICC[2]$  was .76 and  $r_{wg}$  was .95 for CEO competence, and  $ICC[2]$  was .75 and  $r_{wg}$  was .95 for CEO warmth.

Third, the nature of the theoretical model leads us to make inferences that are not directly observed in the data. While we are able to measure the perceptions of warmth and competence held by CEOs, as well as the use of HR practices as reported by HR managers, which are subsequently matched with archival financial data, we make a theoretical inference of association. For example, we theorized that organizational slack interacts with CEOs' perceptions of warmth and competence to form an association with HPWS utilization. Central to the argument is the CEO's evaluation of return on investment in HPWS. However, we did not directly measure this perception. Additional work is needed to more clearly assess the extent to which CEO perceptions of employees affect their decision making on HPWS.

Fourth, while we used HLM to test our conceptual model with a bootstrapping approach, path analysis and structural equation modeling are also useful to test the (moderated) mediation model paths simultaneously. In our study, we could not employ either technique due to our relatively small sample size and the low sample size to parameters ratio, which results in unreliable estimations (Byrne, 2010). Future research may measure the two dimensions longitudinally with some time lag to reduce common method variance.

Finally, additional work is also needed to address the antecedents to CEO perceptions of employee warmth and competence, as well as a deeper understanding of the cases where CEOs have mixed perceptions of employees. What leads CEOs to these perceptions and do they vary based on CEO personality? How accurate are these perceptions and does the accuracy of the perception predict how successful or unsuccessful the firm will be once sophisticated HR systems are adopted? What are the likely behavioral responses for CEOs that view their

employees with ambivalence across the two dimensions? Addressing such questions will provide additional insight to the nomological network of the SCM and the investment choices of CEOs.

## Conclusion

Perceptions of warmth and competence within the firm appear to be linked not only to the outcomes of HPWS utilization, but also serve as an important antecedent. Only when CEO perceptions of employees' collective warmth and competence in SMEs is high, are organizational slack resources translated into the use of HPWS. These findings support recent work in social psychology in highlighting the significance of perceptions in decision-making, in this case in determining the extent to which CEOs are willing to invest slack resources in their human capital. Findings point to an important consideration set that CEOs are likely to make when choosing where to invest their resources and how best to develop their human capital. The utilization of HPWS, in turn, results in higher productivity only when employees' perceptions of CEO warmth and competence are high. Similar to CEOs, employees appear to respond to the HR system based on their evaluations of the CEO on these important dimensions.



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CEO and Employee Perceptions, HPWS and Organizational Slack  
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Table 1  
*Descriptive Statistics and Correlations*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. CEO gender	0.06	0.23	—							
2. CEO age	3.62	0.49	0.02	—						
3. CEO education	1.91	0.62	−0.03	−0.09	—					
4. Years of business	3.33	0.76	−0.11	0.29**	0.13	—				
5. Employee respondents' average gender	0.37	0.32	−0.03	−0.11	0.08	−0.13	—			
6. Employee respondents' average age	2.31	0.60	0.08	0.12	0.12	0.17	−0.36**	—		
7. Employee respondents' average education	1.73	0.35	−0.00	−0.08	0.20*	0.04	0.03	0.06	—	
8. Employee respondents' average tenure	2.39	0.62	−0.06	0.35**	−0.06	0.27**	−0.12	0.43**	−0.03	—
9. Organizational size	1.15	0.37	0.05	0.10	0.05	0.12	0.11	−0.06	0.07	−0.02
10. CEO intentions to support	6.07	0.80	−0.00	−0.09	0.01	0.04	−0.19*	−0.07	−0.00	−0.08
11. Organizational slack	0.00	1.00	0.01	0.13	−0.03	0.02	0.12	−0.05	0.01	0.20*
12. Low EW and high EC	0.16	0.37	0.01	−0.19	0.02	−0.06	0.03	0.09	0.17	−0.08
13. High EW and low EC	0.10	0.30	−0.08	0.20*	−0.05	−0.03	−0.07	−0.00	−0.18	0.07
14. High EW and high EC	0.41	0.49	−0.04	−0.09	0.09	−0.02	−0.04	−0.11	0.02	0.00
15. Low CEOW and high CEOC	0.08	0.28	0.07	0.10	0.21*	0.09	0.28**	−0.14	−0.12	−0.01
16. High CEOW and low CEOC	0.07	0.26	−0.07	0.08	0.10	−0.17	−0.03	0.11	0.05	−0.00
17. High CEOW and high CEOC	0.43	0.50	0.12	0.10	−0.05	0.02	−0.26**	−0.09	−0.01	−0.05
18. HPWS	0.00	1.00	0.01	−0.13	0.05	−0.04	−0.16	0.03	0.16	0.02
19. Labor Productivity	24.43	52.11	−0.06	−0.02	−0.06	−0.19	0.15	−0.02	−0.03	0.07

## CEO and Employee Perceptions, HPWS and Organizational Slack

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Table 1 (Continued)

*Descriptive Statistics and Correlations*

Variable	9	10	11	12	13	14	15	16	17	18
10. CEO intentions to support	0.11	(0.78)								
11. Organizational slack	0.35**	0.08	—							
12. Low EW and high EC	0.02	−0.00	0.02	—						
13. High EW and low EC	−0.23*	0.04	−0.10	−0.15	—					
14. High EW and high EC	0.11	0.40**	0.07	−0.36**	−0.28**	—				
15. Low CEOW and high CEOC	0.30**	−0.03	0.22*	−0.04	−0.10	0.23*	—			
16. High CEOW and low CEOC	−0.07	−0.18	−0.09	0.07	0.02	0.05	−0.09	—		
17. High CEOW and high CEOC	−0.15	0.40**	−0.15	−0.17	0.14	0.28**	−0.26**	−0.24*	—	
18. HPWS	0.14	0.30**	0.12	−0.10	−0.19	0.45**	0.03	0.01	0.38**	(0.69)
19. Labor Productivity	−0.09	0.08	0.20*	0.00	−0.14	0.15	0.08	−0.05	0.10	0.13

*Note.*  $N = 108$ .  $SD$  = standard deviation; EW = employee warmth; EC = employee competence; CEOW = CEO warmth; CEOC = CEO competence; HPWS = high performance work systems. Reliabilities are provided in parentheses on the diagonal.

a. \*  $p < .05$ , \*\*  $p < .01$ .

Table 2  
*Hierarchical Linear Modeling Results – Main and Interaction Effects of Organizational Slack and Employee Warmth and Competence on HPWS (T2)*

Predictor	Dependent Variable: HPWS (T2)		
	Model 1	Model 2	Model 3
	$\beta$ (s.e.)	$\beta$ (s.e.)	$\beta$ (s.e.)
Intercept	−0.66 (0.42)	−1.02 (0.40)	−1.10 (0.39)
Control Variables			
CEO gender	−0.00 (0.39)	−0.24 (0.34)	−0.20 (0.33)
CEO age	−0.26 (0.20)	−0.38 (0.19)*	−0.33 (0.19)
CEO education	−0.01 (0.15)	−0.10 (0.13)	−0.09 (0.13)
Years of business	−0.13 (0.13)	−0.09 (0.11)	−0.11 (0.11)
Employee respondents’ average gender	−0.44 (0.31)	−0.25 (0.27)	−0.23 (0.27)
Employee respondents’ average age	−0.01 (0.18)	0.16 (0.16)	0.15 (0.15)
Employee respondents’ average education	0.47 (0.26)	0.40 (0.23)	0.28 (0.23)
Employee respondents’ average tenure	0.21 (0.17)	0.14 (0.15)	0.12 (0.15)
Organizational size	0.39 (0.26)	0.35 (0.25)	0.29 (0.25)
CEO intentions to support	0.31 (0.11)**	0.02 (0.12)	−0.03 (0.12)
Independent Variables			
Low CEOW & High CEOC		0.43 (0.34)	0.41 (0.33)
High CEOW & Low CEOC		0.45 (0.33)	0.50 (0.33)
High CEOW & High CEOC		0.87 (0.20)**	0.92 (0.20)**
Low EW & High EC		0.04 (0.25)	0.09 (0.25)
High EW & Low EC		−0.39 (0.30)	0.42 (0.55)
High EW & High EC		0.44 (0.23)	0.48 (0.22)*
Organizational slack (Org. Slack)		0.12 (0.08)	−0.09 (0.12)
Low EW & High EC X Org. Slack			0.35 (0.35)
High EW & Low EC X Org. Slack			3.00 (1.58)
High EW & High EC X Org. Slack			0.34 (0.16)*
Industry dummies	Yes	Yes	Yes
Pseudo R-squared	0.19	0.41	0.45

Note. N = 108. HPWS = high performance work systems.  
a. \*  $p < .05$ , \*\*  $p < .01$ .

## CEO and Employee Perceptions, HPWS and Organizational Slack

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Table 3

*Hierarchical Linear Modeling Results – Main and Interaction Effects of HPWS and CEO Warmth and Competence on Labor Productivity (T3)*

Predictor	Dependent Variable: Labor Productivity (T3)		
	Model 4 $\beta$ (s.e.)	Model 5 $\beta$ (s.e.)	Model 6 $\beta$ (s.e.)
Intercept	1.40 (22.76)	3.57 (23.56)	3.82 (22.64)
Control Variables			
CEO gender	–22.41 (19.20)	–22.01 (19.22)	–23.00 (18.54)
CEO age	5.28 (11.03)	5.93 (11.17)	5.43 (10.82)
CEO education	–4.24 (7.49)	–4.06 (7.50)	–1.74 (7.32)
Years of business	–16.82 (6.31)**	–16.60 (6.34)*	–19.50 (6.36)**
Employee respondents' average gender	27.37 (15.39)	27.84 (15.44)	31.66 (15.00)*
Employee respondents' average age	7.88 (8.96)	7.58 (9.00)	8.58 (8.95)
Employee respondents' average education	5.75 (13.31)	5.19 (13.40)	–1.48 (13.07)
Employee respondents' average tenure	2.56 (8.63)	2.32 (8.65)	2.21 (8.41)
Organizational size	–42.99 (14.46)**	–43.56 (14.54)**	–36.51 (14.29)*
CEO intentions to support	6.24 (6.76)	6.29 (6.76)	6.66 (6.72)
Independent Variables			
Low CEOW & High CEOC	29.05 (19.34)	28.24 (19.47)	34.45 (18.82)
High CEOW & Low CEOC	–5.14 (18.95)	–6.12 (19.14)	0.06 (18.59)
High CEOW & High CEOC	17.92 (11.47)	16.11 (12.55)	16.76 (12.24)
Low EW & High EC	3.69 (14.37)	3.52 (14.37)	1.14 (13.84)
High EW & Low EC	–94.91 (31.89)**	–95.74 (31.96)**	–83.69 (31.31)**
High EW & High EC	1.79 (12.75)	0.84 (13.02)	–1.15 (12.54)
Organizational slack (Org. Slack)	0.20 (7.22)	0.38 (7.23)	–2.64 (7.06)
Low EW & High EC X Org. Slack	38.49 (20.39)	37.80 (20.47)	44.34 (19.79)*
High EW & Low EC X Org. Slack	–183.8 (91.61)*	–189.8 (93.06)*	–189.8 (89.49)*
High EW & High EC X Org. Slack	17.84 (9.53)	17.16 (9.72)	23.14 (10.18)*
High performance work systems (HPWS)		1.98 (5.56)	–13.21 (7.85)
Low CEOW & High CEOC X HPWS			–5.68 (22.52)
High CEOW & Low CEOC X HPWS			11.16 (20.34)
High CEOW & High CEOC X HPWS			30.87 (10.73)**
Industry dummies	Yes	Yes	Yes
Pseudo R-squared	0.33	0.33	0.38

Note.  $N = 108$ . HPWS = high performance work systems.

a. \*  $p < .05$ , \*\*  $p < .01$ .

Table 4  
*Descriptive Statistics and Correlations for Secondary Study*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. CEO gender	0.95	0.22	—									
2. CEO age	2.99	0.95	0.12	—								
3. CEO education	1.26	0.72	0.00	−0.12	—							
4. HPWS	9.56	2.47	0.12	0.05	0.02	—						
5. Employee warmth	4.25	0.59	−0.16	−0.15	0.07	0.23*	—					
6. Employee competence	4.09	0.61	−0.06	0.17	−0.11	0.28*	0.71*	—				
7. Moral attentiveness	3.94	0.71	−0.16	−0.15	0.13	0.13	0.09	0.02	—			
8. Utilitarianism	4.18	0.50	0.05	0.03	0.10	0.21	0.20	0.08	0.11	—		
9. Formalism	4.68	0.50	−0.07	0.04	0.14	0.10	0.29	−0.01	0.15	0.59*	—	
10. Narcissism	2.77	0.52	−0.15	−0.03	−0.10	0.07	0.26*	0.19	−0.02	0.27*	0.02	—

*Note.* *N* = 81.

a. \* *p* < .05

## CEO and Employee Perceptions, HPWS and Organizational Slack

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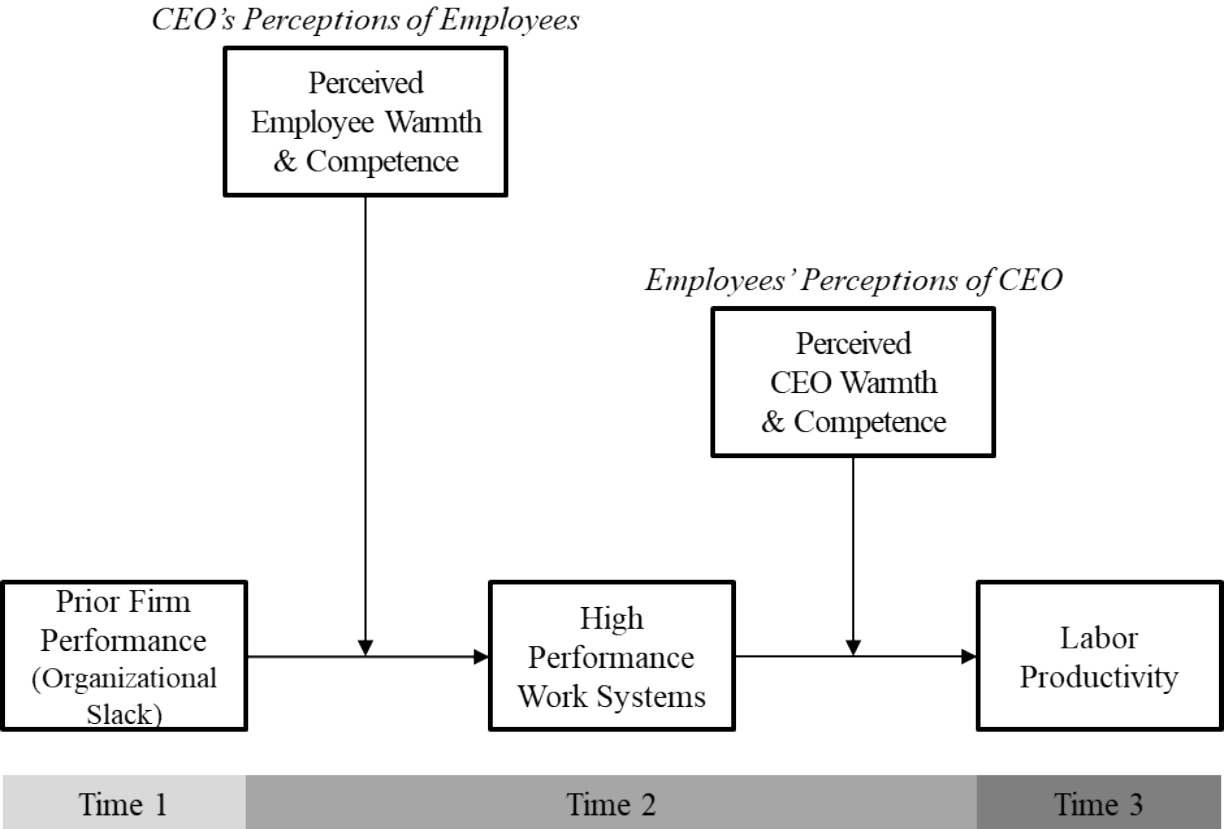
Table 5

*OLS Results – Main Effects on HPWS Utilization*

Dependent Variable: HPWS									
Predictor	<i>Model 1</i>	<i>Model 2a</i>	<i>Model 2b</i>	<i>Model 2c</i>	<i>Model 2d</i>	<i>Model 3a</i>	<i>Model 3b</i>	<i>Model 3c</i>	<i>Model 3d</i>
Gender	1.33 (1.29)	2.02 (1.27)	1.62 (1.27)	1.81 (1.28)	1.80 (1.28)	1.86 (1.25)	1.49 (1.24)	1.70 (1.25)	1.66 (1.26)
Age	0.10 (0.30)	0.23 (0.29)	0.16 (0.29)	0.17 (0.29)	0.19 (0.29)	0.02 (0.29)	-0.04 (0.29)	-0.05 (0.29)	-0.03 (0.29)
Education	0.07 (0.39)	-0.05 (0.38)	-0.03 (0.38)	-0.02 (0.39)	0.03 (0.38)	0.09 (0.38)	0.09 (0.38)	0.10 (0.38)	0.17 (0.38)
Moral attentiveness		0.54 (0.39)				0.53 (0.38)			
Utilitarianism			0.75 (0.55)				0.85 (0.54)		
Formalism				0.40 (0.56)				0.56 (0.55)	
Narcissism					0.12 (0.55)				0.18 (0.53)
Employee warmth		1.08* (0.47)	0.96 (0.49)	1.06* (0.48)	1.08* (0.49)				
Employee competence						1.19* (0.45)	1.14* (0.46)	1.21* (0.46)	1.19* (0.46)
R <sup>2</sup>	0.02	0.11	0.10	0.09	0.08	0.12	0.13	0.11	0.10
R <sup>2</sup> Δ		0.06*	0.05	0.06*	0.06*	0.08*	0.07*	0.08*	0.08*

*Note.* *N* = 81.a. \* *p* < .05

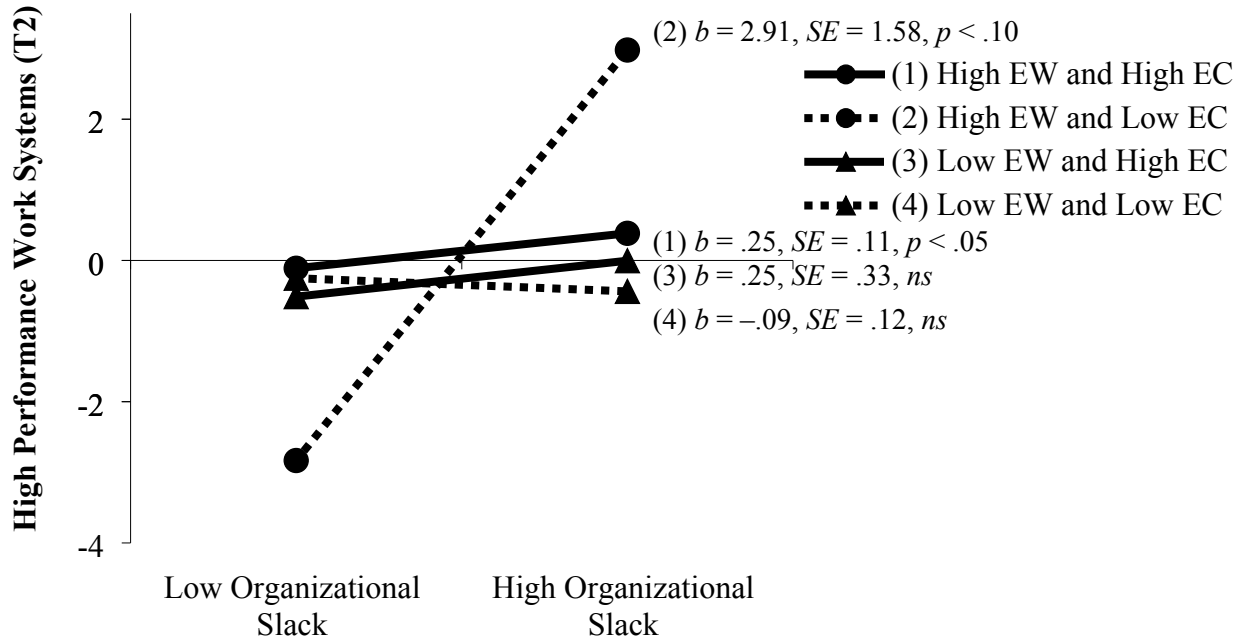
Figure 1  
*Conceptual Model*



## CEO and Employee Perceptions, HPWS and Organizational Slack

Figure 2

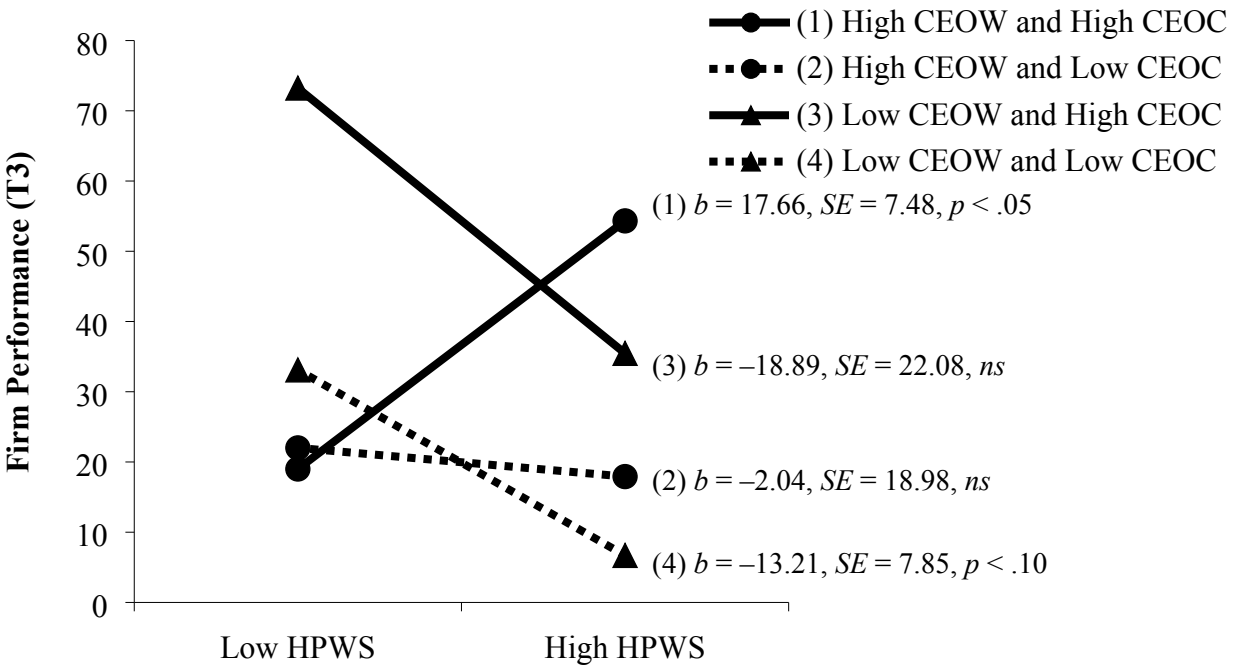
*Effect of Organizational Slack on High Performance Work Systems at Low and High Levels of Employee Warmth (EW) and Employee Competence (EC)*



*Note.* EW = employees warmth; EC = employees competence.



Figure 3  
Effect of High Performance Work Systems on Labor Productivity (T3) at Low and High Levels of CEO Warmth (CEOW) and CEO Competence (CEOC)



Note. HPWS = high performance work systems; CEOW = CEO warmth; CEOC = CEO competence.

## CEO and Employee Perceptions, HPWS and Organizational Slack

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## Appendix - Measures

*Employee Warmth\**

1. Employees in the organization are trustworthy.
2. Employees in the organization are well-intentioned.
3. Employees in the organization are good-natured.
4. Employees in the organization are warm.
5. Employees in the organization are friendly.
6. Employees in the organization are sincere.

*Employee Competence\**

1. Employees in the organization are competent.
2. Employees in the organization are confident.
3. Employees in the organization are capable.
4. Employees in the organization are efficient.
5. Employees in the organization are intelligent.
6. Employees in the organization are skillful.

\* To measure CEO warmth and CEO competence, we changed “employees” in the items to “The CEO”.