

Employee Engagement in Cambodia: An Examination of the Effects of Job Characteristics,  
Leader-Member and Co-Worker Exchange, HRD Practices, and Personality Traits

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## Abstract

Employee engagement is a topic that has generated a lot of interest among practitioners, consultants, and scholars in various academic disciplines, including human resource development (HRD). However, despite the volume of material that has been written on the topic, many employees around the globe are reportedly disengaged or have low levels of engagement. In addition, as far as academic research is concerned, there appears to be a lack of agreement and consensus over the antecedents and outcomes of the construct. Further, the majority of research on the topic has been conducted in a Western context. Thus, more empirical studies among non-Western samples are needed to advance our understanding of the construct.

The purpose of this study was to investigate the effects of job characteristics, leader-member exchange (LMX), co-worker exchange (CWX), HRD practices, conscientiousness, and openness to experience on employee engagement. Data were collected from 247 employees working at ten commercial banks located in Phnom Penh, Cambodia. The hypotheses of the study were tested using hierarchical regression analyses.

Results suggested that after controlling for demographic variables (age, gender, education, and tenure), job characteristics were found to be a statistically significant predictor of engagement. The results also showed that HRD practices and conscientiousness were predictive of engagement. Interestingly, contrary to the hypothesized model, the results did not present support for the significant effects of LMX, CWX, or openness to experience on engagement. This study concludes by discussing implications for future research and practice.

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## **CHAPTER 1**

### **INTRODUCTION**

This chapter begins by discussing the background to the problem, followed by the problem statement, purpose of the study, and research question. Next, the research hypotheses and hypothesized model of the study, the significance of the study, and definitions of key terms are discussed.

#### **Background to the Problem**

Employee engagement is a topic that has generated a lot of interest among practitioners, consultants, and scholars in various academic disciplines, including management, organizational psychology, organizational behavior, and human resource development (HRD). Such remarkable attention is driven by claims that the notion of engagement is predictive of both individual employee outcomes and organizational success and performance (Harter, Schmidt, & Hayes, 2002; Macey & Schneider, 2008; Saks, 2006; Saks & Gruman, 2014; Shuck & Reio, 2011). For example, Shuck and Reio (2011) maintained that engaged employees “outperform their disengaged counterparts on a number of organizational metrics” (p. 421). Saks’ (2006) study revealed that engagement was positively related to job satisfaction, organizational commitment, and organizational citizenship behavior and inversely related to turnover intentions. Similarly, Hayes (2002) found that both engagement is related to “meaningful business outcomes” – customer satisfaction, productivity, profit, employee turnover, and accidents – and that these relationships generalize across companies (p. 276). May, Gilson, and Harter (2004) argued that disengagement is central to employees’ lack of commitment and motivation and that meaningless work is related to apathy and detachment from one’s works. They also found that workplaces that have highly-engaged employees report fewer accidents on the job and enjoy higher levels of

overall safety ratings. Wollard and Shuck (2011) identified a number of positive outcomes from having an engaged workforce, including organizational citizenship behaviors, discretionary effort, affective commitment, continuance commitment, levels of psychological climate, and customer service.

Given these reported benefits of having engaged employees, it is not surprising that many organizations are examining ways to understand and embrace the concept, surveying their employees to determine what actions need to be taken, and developing initiatives and programs aimed at fostering engagement (Wollard & Shuck, 2011). Hewitt Associates, for instance, maintained that they have established compelling evidence to suggest that there is a strong relationship between engagement and profitability through higher productivity, increasing sales, customer satisfaction, and employee retention (as cited in Macey & Schneider, 2008). North Shore LIJ Health System (States, 2008, as cited in Shuck, Rocco, & Albornoz, 2010) invested \$10 million in training and development initiatives and encouraged their employees to pursue further education as part of their goal of raising the levels of engagement within the organization. Consequently, the company reported a 96% one-year retention rate, an increase in patient-satisfaction scores, and record profits. Caterpillar, a large multi-national construction equipment supplier and manufacturer, estimated the company saved 8.8\$ million in turnover costs by increasing the engagement level of workers at one of their plants (Vance, 2006, as cited in Shuck, Rocco, & Albornoz, 2010).

### **Problem Statement**

The concept of engagement has caught the attention of both researchers and practitioners in many fields, yet, despite the amount of material that has been written on the topic, many challenges still persist (Truss, Delbridge, Alfes, Shantz, & Soane, 2014). Survey research has

consistently reported low levels of engagement and heightening disengagement among employees in many countries (Gallup, 2013; Robertson & Cooper, 2010; Saks, 2006; Saks & Gruman, 2014). Findings from a recent worldwide Gallup survey revealed that at present only 13 percent of employees around the world are engaged on their job and that disengaged workers continue to outnumber their engaged counterparts at a rate of nearly 2 to 1 (Gallup, 2013). In China, for example, 68 percent of workers are reported to be disengaged in their work (Gallup, 2013). In the US, 52 percent of employees in the workforce are reportedly disengaged and 18 percent are actively disengaged on the job (Gallup, 2013). This issue has been referred to as an “engagement gap” and has been known to result in billions of dollars in lost productivity among US businesses each year (Saks & Gruman, 2014, p. 156).

As far as academic research is concerned, the literature on the topic has significantly blossomed since Kahn’s (1990) publication in the *Academy of Management Journal* (Schaufeli, 2014). A quick search of the term *employee engagement* in the Google Scholar database yields at least 2,250 relevant results. As of January 2013, around 1,600 articles had been published with the term ‘work engagement’ or ‘employee engagement’ in the title (Schaufeli, 2014). Yet, we are still far from having a full understanding of the construct, its antecedents, and consequences (Rana, Ardichvili, & Tkachenko, 2014; Saks & Gruman, 2014; Wollard & Shuck, 2011). For instance, Wollard and Shuck (2011) found that the antecedents and outcomes that have been identified “are scattered throughout the literature base” (p. 431). Saks and Gruman (2014) posited that the literature has consistently found support for the effects of job resources on engagement; however, it is not clear which resources might have a more significant effect than others. In addition, other antecedents – such as leadership and individual differences – may also have significant influence on engagement but have received far less attention from researchers

(Saks & Gruman, 2014). Finally, existing research on the topic tends to come from studies conducted in Western contexts; thus, international and cross-cultural research on this topic is especially needed (Rothmann, 2014).

### **Purpose of the Study**

The purpose of this study was to address the abovementioned gaps in the literature and examine the effects of a number of antecedents on employee engagement in the Cambodian commercial banking industry. The main drivers of engagement that were explored are: *job characteristics, leader-member exchange (LMX) and co-worker exchange (CWX), HRD practices, conscientiousness, and openness to experience.*

### **Research Question**

In order to examine the effects of job characteristics, LMX and CWX, HRD practices, and conscientiousness and openness to experience on engagement, I sought to answer the following research question:

- What are the effects of job characteristics, LMX and CWX, HRD practices, and conscientiousness and openness to experience on employee engagement among Cambodian commercial bank employees?

### **Research Hypotheses and Hypothesized Model of the Study**

In this study, I investigated several hypotheses (see Figure 1.1), which will be described more extensively in the review of literature and include the following:

*Hypothesis 1:* Job characteristics will be a significant predictor of employee engagement.

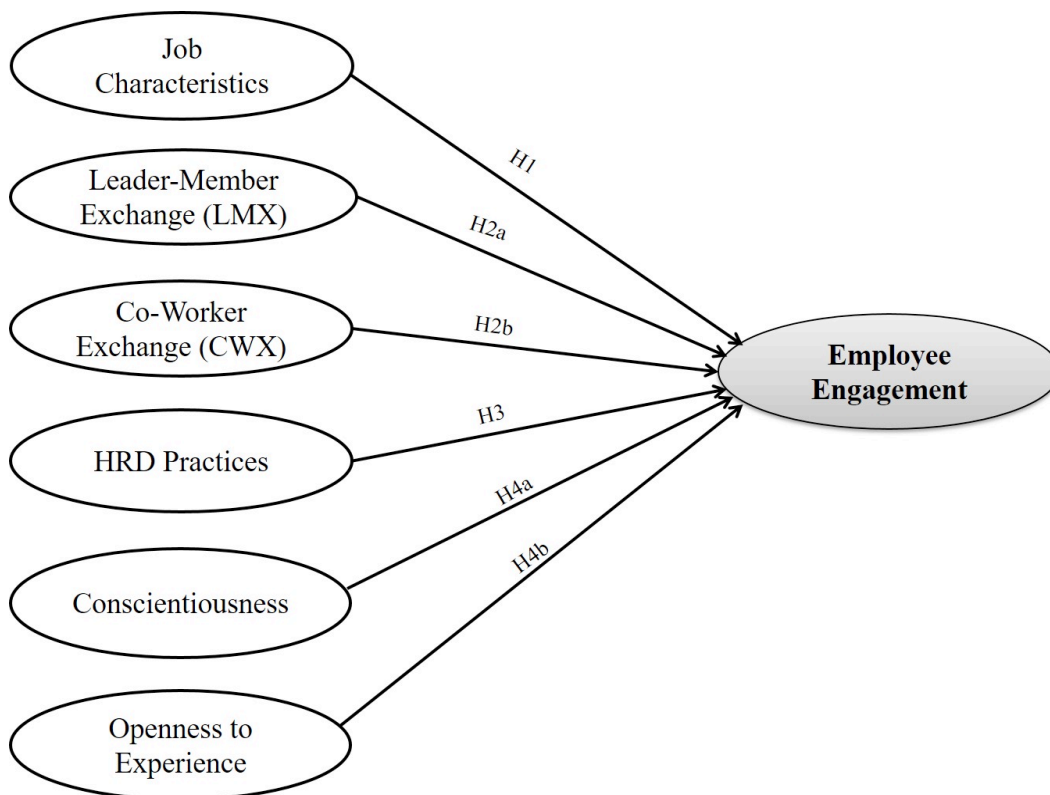
*Hypothesis 2a:* LMX will be a significant predictor of employee engagement.

*Hypothesis 2b:* CWX will be a significant predictor of employee engagement.

*Hypothesis 3:* Employee perceptions of HRD practices will be a significant predictor of employee engagement.

*Hypothesis 4a:* Conscientiousness will be a significant predictor of employee engagement.

*Hypothesis 4b:* Openness to experience will be a significant predictor of employee engagement.



*Figure 1.1.* Hypothesized model of the antecedents of employee engagement

### Significance of the Study

This study aims to make a significant contribution in at least five different ways. On a more general term, the importance of this research owes to the breadth of areas of our society in



which employee engagement is highly valued. Indeed, the potential of employee engagement to increase performance, profitability, and individual well-being has been acknowledged by various stakeholders, including government and policy makers, trade unions, corporate organizations, consulting firms, professional bodies, and higher education institutions (Macey, Schneider, Barbera, & Young, 2009; Truss et al., 2014). Second, through examining a number of key antecedent variables, this study aims to provide a holistic model of employee engagement, thereby significantly contributing to our understanding of the concept. Third, given the lack of empirical research on engagement from a non-Western perspective (Rothmann, 2014), this study aims to make a contribution through a survey of employees in Cambodia. Fourth, this research investigates a number of antecedent variables to engagement that have not or have rarely been explored in the current literature – particularly LMX, CWX, HRD practices, and personality traits. Finally, on a more context-specific level, this research offers valuable insights to managers, human resource practitioners, and academics on the current state of engagement and organizational and management practices in Cambodia, the current literature for which is relatively non-existent.

### **Definitions of Key Terms**

The following terms were defined in accordance with their use in this research study:

*Employee Engagement*: “the harnessing of organization members’ selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performance” (Kahn, 1990, p. 694). Engagement can also be defined as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002, p. 74).

*Job Characteristics*: job attributes that can increase employees' perceived meaningfulness and engagement at work. The core job characteristics are: (1) skill variety, (2) task identity, (3) task significance, (4) autonomy, and (5) feedback from job (Hackman & Oldham, 1975, p. 77).

*Leader-Member Exchange (LMX)*: the working relationship that develops between leaders and members and consists of three dimensions – respect, trust, and obligation (Graen & Uhl-Bien, 1995, p. 237).

*Co-worker Exchange (CWX)*: the working relationship that develops between co-workers and also consists of three dimensions – respect, trust, and obligation (Graen & Uhl-Bien, 1995, p. 237).

*HRD practices*: practices that are aimed at developing employees' knowledge, expertise, and productivity and cover a wide range of activities and processes, including employee training and development, organization development, and career development (McLean & McLean, 2001; Swanson & Holton, 2009; Shuck, Rocco, & Albornoz, 2010).

*Conscientiousness*: one dimension of the Big Five personality traits that can be associated with such characteristics as being dependable, careful, thorough, responsible, and organized.

*Openness to Experience*: one dimension of the Big Five personality traits that can be associated with such characteristics as being imaginative, curious, intelligent, and forward-thinking.

### **Summary**

Chapter 1 provided an introduction to the study. In particular, the background to the problem, the purpose of the study, the main research question, the research hypotheses, the hypothesized model, and the significance of the study were discussed. In addition, the definitions

of key terms were provided. In Chapter II, the review of the literature on employee engagement and key variables of the study will be presented.

## CHAPTER 2

### LITERATURE REVIEW

This chapter presents a review of the literature relevant to the theoretical framework, conceptual model, and research question of the study. This chapter starts by examining the background and definitions of engagement and its relationships with other constructs. Following is a comprehensive review of three main streams of literature on engagement: (1) Kahn's (1990, 1992) framework of the psychological conditions of engagement; (2) the Job Demands-Resources (JD-R) model; and (3) research that falls under neither stream but that has made great contributions toward our understanding of the construct. Finally, a literature review of the proposed antecedents of engagement as well as the proposed conceptual model of the study will be presented.

#### **Employee Engagement: Background and Definitions**

The concept of engagement began to surface in the organizational and business literature around two decades ago and started to gain prominence in HRD research within the last decade (Shuck & Rocco, 2014). Engagement has been mainly discussed in the context of four categories: personal engagement, burnout/engagement, work engagement, and employee engagement (Simpson, 2008). Schaufeli, Taris, and van Rhenen (2008) posited that work engagement emerged from *burnout* research as an attempt to examine not only employee "unwell-being" but also "well-being" (p. 176). Unlike those who experience burnout, engaged employees are energetic and connected with their work activities and feel they are capable of accomplishing those tasks (Schaufeli et al., 2008). Kahn (1990), one of the first scholars to study engagement, defined what he termed personal engagement as the "harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves

physically, cognitively, and emotionally during role performance” (p. 694). In contrast, personal disengagement refers to the “uncoupling of selves from work roles,” during which process people “withdraw and defend themselves physically, cognitively, or emotionally” while performing those tasks (Kahn, 1990, p. 694). In the HRD literature, Shuck and Wollard (2010) defined engagement as “an individual employee’s cognitive, emotional, and behavioral state directed toward desired organizational outcomes.” (p. 103).

Perhaps the most widely cited definition of engagement is that provided by Schaufeli, Salanova, Gonzalez-Roma, and Bakker (2002), who defined engagement as “a positive, fulfilling, work-related state of mind that is characterized by *vigor*, *dedication*, and *absorption*” (p. 74; emphasis added). Vigor refers to high levels of energy and psychological resilience while working, willingness to invest effort in a task, and persistence in difficult times. Dedication is described as having a sense of significance, enthusiasm, inspiration, pride, and challenge, whereas absorption can be considered “flow” – a state of optimal experience – which is long term and is characterized by a “or pervasive and persistent state of mind” (Schaufeli et al., 2002).

### **Employee Engagement and Related Constructs**

To be of any use, the employee engagement construct needs to be shown to be different from other constructs such as job satisfaction, job involvement, and commitment (Albrecht, 2010). Indeed, scholars have debated over whether engagement is just “old wine in a new bottle” (Albrecht, 2011; Macey & Schneider, 2008; Shuck & Reio, 2011).

Newman, Joseph, and Hulin (2010) maintained that engagement can be conceptualized as a higher-order overarching job attitude that encompasses job satisfaction, affective commitment, and job involvement. Similarly, Erickson (2005, as cited in Macey & Schneider, 2008) posited that engagement is more than just mere satisfaction with the arrangement and conditions of their

employment, or basic loyalty to the employer. Engagement, they argued, is about passion and commitment – the willingness to invest oneself to help the organization succeed. Fleck and Inceoglu (2010) argued that engagement is characterized by activated, high-arousal, and positive feelings at work whereas job satisfaction and commitment are characterized by less activated feelings such as contentment and comfort. Satisfaction, therefore, “conveys fulfillment of needs, satiation, and even contentment” but does not include the aspects of “urgency, focus, and intensity that engagement captures” (Macey, Schneider, Barbera, & Young, 2009, p. 40).

Engagement is also thought to be very closely associated with job involvement (Hallberg & Schaufeli, 2006; May, Gilson, & Harter, 2004). Job involvement can be defined as “the extent to which the job situation is central to the person and his [or her] identity” (Lawler & Hall, 1970, pp. 310-311). Therefore, job involvement is a result of a “*cognitive* judgment about the need satisfying abilities” of one’s work (p. 12; emphasis added). In this sense, a person’s job is closely tied to their self-image. Engagement differs from job involvement in that it also entails the active use of emotions and behaviors, not just cognitions. It concerns how a person employs his/her self when performing on the job (May et al., 2004).

Finally, most research on organizational commitment concerns attitudinal and affective aspects (Hallberg & Schaufeli, 2006). In essence, organizational commitment refers to one’s emotional attachment with the organization (Meyer & Allen, 1997). From an empirical perspective, research on commitment is often associated with employee retention attitudes, with the proposition that employees who “develop a strong bond” with the organization are expected to stay at that organization (Hallberg & Schaufeli, 2006, p. 120). Organizational commitment “reflects passive rather active attachment” and does not connote “enthusiasm, urgency, and intensity” (Macey et al., 2009, p. 36).

The extent to which engagement is conceptually distinct from job related attitudes and behaviors remains under scrutiny, given its statistical relationships with these constructs (Schaufeli, 2014). Nevertheless, empirical evidence suggests that these relationships are not “that strong” and that engagement does not overlap with these other concepts to the extent that “they are virtually identical” (Schaufeli, 2014, p. 25). Thus, engagement appears to reflect a “genuine and unique psychological state that employees might experience at work” (Schaufeli, 2014, p. 25).

### **Employee Engagement: Main Streams of the Research Literature**

The purpose of this section is to provide a review of main streams of literature associated with employee engagement. Specifically, the section will cover: (1) Kahn’s (1990, 1992) framework of the psychological conditions of engagement; (2), the Job Demands-Resources (JD-R) model; and (3) research that falls under neither stream but that has made great contributions toward our understanding of the construct.

#### **Kahn’s Psychological Conditions of Engagement**

William Kahn’s (1990) qualitative, grounded-theory study on engagement and disengagement has been one of the most cited works in the literature. In essence, Kahn (1990) built on job-design research pertaining to the relations between employees and the characteristics of their work, and incorporated interpersonal, group, and organizational contexts that bolster or undermine one’s motivation and sense of meaning at work. To wit, Kahn’s research was based on the premise that the psychological experience of work drives a person’s attitudes and behaviors, and that individual, interpersonal, group, intergroup, and organizational factors simultaneously influence those attitudes and behaviors (Kahn, 1990).

In his analysis, Kahn (1990) delineated three main psychological conditions that influence people's engagement and disengagement at work: (1) psychological meaningfulness, (2) psychological safety, and (3) psychological availability. *Psychological meaningfulness* can be understood as one's feeling of being "worthwhile, useful, and valuable" (p. 704) – that their work is not taken for granted. Results from the study suggested that psychological meaningfulness is influenced by three main factors: task characteristics, role characteristics, and work interactions (Kahn, 1990). Ideal task characteristics include having challenging, clearly-identified, "varied, creative, and somewhat autonomous" role (p. 704), whereas role characteristics refer to factors associated with organization members' perceptions of the significance of their work role. Roles carry identities, status, and influence (Kahn, 1990). As Kahn pointed out in reference to his findings, "when people were able to wield influence, occupy valuable positions in their systems, and gain desirable status, they experienced a sense of meaningfulness" (p. 706). Finally, Kahn (1990) maintained that one's psychological meaningfulness is influenced by the extent to which their interpersonal interactions with colleagues, supervisors, and clients are rewarding.

The second psychological condition of engagement, *psychological safety*, refers to one's sense of being able to show and do things without fear of losing reputation, status, or career (Kahn, 1990). According to Kahn (1990), safety is highly influenced by interpersonal relationships, group and intergroup dynamics, management style and process, and organizational norms. Finally, the *psychological availability* condition is "the sense of having the physical, emotional, or psychological resources to personally engage at a particular moment" (p. 714). It measures the extent to which one is ready to engage, especially given the distractions and challenges that they face as "members of social systems" (p. 714). Psychological availability



consists of physical energy, emotional energy, insecurity, and outside life. In other words, engagement demands physical and emotional energies. It is also influenced by the security of one's work role as well as activities outside one's workplace, which could potentially draw away individuals' energies from their work (Kahn, 1990).

In 1992, Kahn developed a framework that synthesized his theory of personal engagement at work and the so-called "psychological presence at work," which he defined as "the experiential state accompanying the behaviors of personally engaged role performances, e.g., expressing thoughts and feelings, creating, and energetic task performances" (p. 339). At the core of this synthesized model are the three psychological conditions discussed earlier: meaningfulness, safety, and availability. Antecedents to these three conditions include work elements (tasks, roles, work interactions, etc.), elements of the social systems (relationships, group and intergroup dynamics, norms, etc.), and individual distractions (physical/emotional energies, outside lives, etc.) (Kahn, 1992). Essentially, the extent to which one is psychologically present and behaviorally engaged at work is influenced by the three conditions (Kahn, 1992). It is worth noting, however, that this relationship (between the psychological conditions and presence/engagement) is moderated by individual differences, such as models of self-in-role, security, courage, and adult development. As Kahn (1992) explained it, even if organization members experience a sense of psychological meaningfulness, safety, and availability, "they may still be rendered partially absent by the subconscious models they carry, insecurity or lack of courage, or the development limits on how present they are able to be in those situations" (p. 341).

Building on Kahn's (1990) ethnographic study, May et al. (2004) conducted a study in a large U.S. Midwestern insurance company that explored the determinants and mediating effects

of the three psychological conditions on employees' engagement level. Findings suggested that *all* three conditions were positively related to engagement with meaningfulness displaying the *strongest* positive relation. The authors examined the determinants of the three psychological conditions and found that job enrichment and work role fit were positively related to psychological meaningfulness. Because psychological meaningfulness has been shown to relate to many significant attitudinal outcomes (e.g. job satisfaction and internal motivation) and behavioral outcomes (e.g. performance and absenteeism), May et al. (2004) suggested that meaningfulness plays an important role in engaging workers and that managers should seek to enhance meaningfulness through effective job design. In addition, they should strive to foster psychological safety through developing "supportive, trustworthy relations" with employees (p. 33). Their findings also indicated that one's physical, emotional, and cognitive resources a significant effect on one's psychological availability; thus, managers should "design jobs that minimize the physical, emotional, and cognitive strain experienced by employees" (p. 33).

Rich, LePine, and Crawford (2012) also followed Kahn's framework and conceptualized engagement as "the investment of an individual's complete self into a role" (p. 617). In their study of 245 firefighters and their supervisors, Rich et al. (2012) found that job engagement – based on Kahn's theory – offers "a more comprehensive explanation of relationships with performance" than other well-known concepts such as job involvement, job satisfaction, and intrinsic motivation (p. 617). The study's results revealed that engagement fully accounts for the relationships between the antecedents (value congruence, perceived organizational support, and core self-evaluations) and performance outcomes (task performance and OCB). Interestingly, job involvement, job satisfaction, and intrinsic motivation were included as mediators, but *did not* surpass engagement in explaining the relationships between the antecedents and outcomes.

Examining the effects of meaningful work on engagement, Fairlie (2011) conducted a web-based survey of 574 employees in the U.S. and Canada. The author compared meaningful work characteristics (self-actualizing work, social impact, fulfilling work, feelings of personal accomplishment, etc.) and “other” work characteristics (intrinsic rewards, leadership and organizational features, supervisory relationships, leadership and organizational features, etc.) in relation to employee engagement. Results showed that meaningful work characteristics had the strongest relationships with engagement and other employee outcomes (burnout [inversely related], job satisfaction, organizational commitment, and turnover cognitions). Fairlie (2011) recommended that organizations need to “maintain and increase levels of meaningful work”, through incorporating its characteristics in employee survey, clearly communicating opportunities for meaningful work to employees, and fostering “deeper social connections among employees and clients” (p. 518).

In the HRD literature, Shuck, Reio, and Rocco (2011) also drew on Kahn’s (1990) framework and conducted a correlational study that sought to examine the relationships between three main factors (job fit, affective commitment, psychological climate) and employee engagement, and two performance-related outcome variables (discretionary effort and intention to turnover). Results from their analyses indicated that all three antecedent variables were significantly related to employee engagement, and that engagement was positively related to the outcome variables. Moreover, when combined, the three factors had relatively strong effects in that they predicted at least 37% of the variance in both the discretionary effort and intention to turnover models (Shuck, Reio, & Rocco, 2011). These findings suggested that when employees perceive that they have supportive managers, that they contribute positively to their workplace,

and that they work is challenging, they are more likely to exhibit discretionary efforts (Shuck, Reio, & Rocco, 2011).

Another study by Shuck, Rocco, and Albornoz (2010) – one of very few studies to utilize a qualitative, constructivist approach to understanding engagement – sought to examine an employee’s “unique experience” of being engaged at work (p. 300). The study employed a “single-case study design to explore the phenomenon of being engaged at work”, which takes a “constructivist perspective to analyzing data” (p. 304). Three significant themes emerged from the case study analysis: relationship development and attachment to co-workers, workplace climate, and opportunities for learning. Findings suggested that relationship development in the workplace, an employee’s immediate supervisor and their role in shaping the organization’s culture, and organizational learning play a “critical role in an engaged employee’s interpretation of their work” (p. 300).

Similarly, Rees, Alfes, and Gatenby (2013) looked at the relationship between employee voice and employee engagement among 2,310 employees within two organizations in the UK. They found that employee voice is a strong predictor of engagement levels; in other words, employees who perceive that they are able to speak up with opinions and provide suggestions are more likely to be engaged with their work. In addition, results also highlighted the importance of trust and the relationship between employees and line management in relation to enhancing employee engagement levels.

The study by Soane, Truss, Alfes, Shantz, Rees, and Gatenby (2012) is seemingly the only publication in the HRD literature that has attempted to develop an instrument to measure employee engagement. The authors utilized Kahn’s (1990) theory and developed a theoretical model characterized by a “work-role focus, activation and positive affect” (p. 529). This model

was then operationalized by a newly proposed engagement scale, labeled the Intellectual, Social, Affective Engagement Scale (ISA Engagement Scale), comprising of three components of engagement: intellectual, social, and affective engagement. Intellectual engagement refers to the extent to which an individual is “intellectually absorbed” in their work (p. 532). This is similar to Kahn’s cognitive engagement and Schaufeli et al.’s (2002) dedication component. Affective engagement refers to the extent to which an individual “experiences a state of positive affect” that is related to their work (p. 532), whereas social engagement concerns working collectively, sharing the same values with colleagues, and being connected to other people.

Soane et al.’s (2012) Study 1 was conducted among 540 employees working for a UK-based manufacturing company and aimed at testing the reliability of their proposed measure. Results showed that the reliability of their engagement scale was strong for the overall construct ( $\alpha = 0.91$ ), and for each component (alphas were 0.90, 0.92, and 0.94 for intellectual, social, and affective engagement respectively). The purpose of Study 2 was to confirm the reliability and explore the construct validity of the measure by examining the relationships between engagement and task performance, OCB, and turnover intentions. Results from their survey of 759 UK-based respondents demonstrated the construct validity of the new ISA Engagement Scale – when controlling for the Utrecht Work Engagement Measure, there was an  $R^2$  change of 0.06 for in-role performance, 0.01 for COB, and 0.06 for turnover intentions. Furthermore, employee engagement explained 14% of the variance in performance, 10% of the variance in OCB, and 24% of the variance in turnover intentions.

In sum, Kahn’s (1990, 1992) theory of the psychological conditions of engagement provides a conceptual foundation that undergirds much of existing research on engagement. His framework emphasizes the interplay between a person’s individual, group, and organizational

contexts, and postulates that one's psychological experience strongly influences their attitudes and behaviors. Thus, Kahn identified three main psychological conditions – meaningfulness, safety, and availability – as essential to driving a person's engagement level. As my review of this stream of literature suggests, efforts to increase employee engagement should be geared towards influencing the three psychological conditions. As such, antecedents to engagement include factors such as work characteristics (job fit; challenging, rewarding, clearly-identified, and autonomous role; opportunities for learning); job resources (physical, emotional, and psychological resources; perceived organizational support); significance of a person's work (self-actualizing, fulfilling work); relationships and interpersonal interactions with colleagues, supervisors, and customers; and group and intergroup dynamics. Kahn (1992) also noted the possible moderating role of individual differences in the relationships between these antecedents and employee engagement. Finally, existing research also provides ample evidence to suggest that employee engagement does indeed matter, mainly because it has been shown to be related a number of important work-related outcomes such as discretionary effort, intention to turnover, task performance, and organizational citizenship behavior.

### **The Job Demands-Resources (JD-R) Model**

The Job Demands-Resources model, which is perhaps the most widely used and cited engagement model (Albrecht, 2010), postulates that job burnout and engagement are influenced by “two specific sets of working conditions that can be found in every organizational context: job demands and job resources” (Schaufeli, Bakker, & van Rhenen, 2009, p. 894). Job demands are the “things that have to be done” (Jones & Fletcher, 1996, p. 34, as cited in Schaufeli & Bakker, 2004) and refer to the aspects of job that require “sustained physical and/or psychological effort” on the employee's part and therefore may lead to certain “physiological

and/or psychological costs” (Schaufeli & Bakker, 2004, p. 296). Job demands are not necessarily negative; however, they may become “job stressors” if fulfilling them requires extremely high effort from the individual and thus may lead to negative outcomes such as anxiety, depression or burnout (p. 296). Job resources, on the other hand, refer to all aspects of the job that reduce job demands and their associated costs, that are essential toward achieving work-related goals, and that can enhance an individual’s growth, learning, and development (Schaufeli & Bakker, 2004). Job resources may include things such as physical resources, performance feedback, supervisor and co-worker support, supervisory coaching, and so forth.

Scholars adopting the JD-R approach typically maintain that the concept of engagement emerged from burnout research, and that engagement is thought to be the positive antipode of burnout (Maslach & Leiter, 2008; Schaufeli & Bakker, 2004; Schaufeli, Taris, & van Rhenen, 2008; Schaufeli, Bakker, & van Rhenen, 2009). As Maslach and Leiter (2008) argued, “people’s psychological relationships to their jobs have been conceptualized as a continuum” between burnout and engagement; and there exists three “interrelated dimensions” within this continuum – exhaustion-energy, cynicism-involvement, and inefficacy-efficacy (p. 498). Exhaustion refers to feelings of “being overextended and depleted” of physical and emotional resources; cynicism refers to the state of being detached from one’s job; and inefficacy refers to feelings of being incompetent and unproductive in one’s work (Maslach & Leiter, 2008, p. 498).

The notion that engagement is the direct opposite of burnout has come under some criticism, at least in terms of its operationalization. For instance, Schaufeli et al. (2002) maintained that although from a conceptual standpoint, engagement can be thought of as the positive antithesis to burnout, the measurement of both constructs should differ. As such, Schaufeli et al. (2002) disagreed with Maslach and Leiter’s (1997) view that engagement can be

assessed using the same Maslach-Burnout Inventory (MBI) that measures the three dimensions of burnout (exhaustion, cynicism, efficacy). In their study, Schaufeli et al. (2002) proposed a new definition of engagement: “a positive, fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption” (p. 74). They developed a new instrument to measure the construct, also known as the Utrecht Work Engagement Scale (UWES), which would later prove to be one of the most widely used instruments in engagement research.

It is important to note, however, that despite the UWES’s ubiquitous use, questions still arise over the issue of “construct redundancy” between engagement and burnout (Cole, Walter, Bedeian, & Boyle, 2012, p. 1576). For instance, Cole et al. (2012) employed meta-analytic techniques to attempt to assess the extent to which job burnout and employee engagement are “independent and useful constructs”, and found that “construct redundancy” is a major challenge for understanding and advancing research on burnout and engagement (p. 1576). Their findings illustrate that the UWES is “shown to be empirically redundant with a long-established, widely employed measure of job burnout (viz, MBI)” (p. 1576). The authors suggested that engagement researchers should avoid treating the UWES as an instrument that measures a distinct and independent construct, and that more effort vis-à-vis the conceptualization and operationalization of engagement is needed if we are to avoid further confusion and advance our understanding of the engagement phenomenon.

Schaufeli and Bakker (2004) used the two separate instruments – MBI and UWES – to measure burnout and engagement respectively. Their study examined the relationships between job demands, job resources, and the two constructs. Results revealed that burnout and engagement are significantly and negatively related; burnout is mainly predicted by job demands and lack of job resources; engagement is predicted by the availability of job resources; and



engagement is related to turnover intention. These findings offer some interesting practical insights. For instance, to prevent burnout, organizations should strive to reduce job demands through effective job redesign, flexible working schedules, and so forth (Schaufeli & Bakker, 2004). On the other hand, to enhance engagement, organizations should increase the availability of job resources (e.g. participative management, fostering social support, increasing team building). Schaufeli and Bakker (2004) concluded: “from a preventive point of view, decreasing job demands is to be preferred above increasing job resources” (p. 311).

Bakker and Demerouti (2008) reviewed existing empirical evidence vis-à-vis the antecedents and outcomes of engagement and proposed a JD-R model, in which job resources and personal resources are key predictors of engagement. Job resources include factors such as work autonomy, performance feedback, social support, whereas personal resources include optimism, self-efficacy, resilience, and self-esteem (Bakker & Demerouti, 2008). When combined, these two types of resources are predictive of engagement. In addition, job demands – such as work pressure, emotional demands, and physical demands – moderate the relationship between job resources and personal resources and work engagement (Bakker & Demrouti, 2008). At the other end of the model, work engagement is predictive of key performance indicators such as in-role and extra-role performance, creativity, and financial turnover.

Exploring how changes in job demands and resources predict burnout and engagement, Schaufeli, Bakker, and van Rhenen (2009) conducted a longitudinal survey of 201 managers in the telecom sector. Their findings provide longitudinal evidence that suggests that job demands and job resources predict future burnout and work engagement. In other words, when job demands increase and job resources decrease, future burnout scores also increase, even after

controlling for initial burnout. In addition, when job resources increase, work engagement tends to also increase, even after controlling for initial engagement.

Also drawing on the JD-R model, Menguc, Auh, Fisher, and Haddad (2012) examined the effect of resources (autonomy, feedback, and support) on engagement in the service sector as well as how engagement mediates the relationship between resources and customers' perceived level of service employee performance. They surveyed 482 service employees and customers in 66 retail stores and found that supervisory feedback and perceived autonomy are positively linked to engagement but supervisory support is not. This (non-significant) finding is surprising given that previous research has suggested that support plays an important role in increasing engagement. Nevertheless, the authors suspected that it might be due to the fact that feedback alone may already be sufficient, and that what the employees may instead yearn for was co-worker support. Another important finding from the study is that when retail managers are concerned about enhancing employees' engagement level, their customers also perceive that those employees have superior performance (Menguc et al., 2012). This is interesting because previous research tended to look at the relationships between engagement and employee attitude and performance (Menguc et al., 2012). Finally, their study looked at the interactions between resources (autonomy, feedback, and support) and found that there is a significant, positive interaction between supervisory support and perceived autonomy, and a negative interaction between supervisory feedback and perceived autonomy. This suggests that employees appreciate feedback more when there is little perceived autonomy in their workplace.

Another study by Xanthopoulou, Bakker, Demerouti, and Schaufeli (2009) took a slightly different approach and investigated *longitudinal* relationships between job resources, personal resources, and engagement. Hypothesizing that these three constituencies are reciprocal over

time, the scholars conducted a study among 163 employees and followed up with them over a period of 18 months. Findings from this study replicate previous research on the positive relationships between job resources, personal resources, and engagement. More interestingly, the results showed that engagement was related to both resources over time; in other words, they found that *Time 1* job and personal resources were positively related to engagement in *Time 2*, and that *Time 1* work engagement was positively related to resources in *Time 2*. According to the scholars, these findings clearly indicate that job resources, personal resources, and work engagement cannot be “considered in isolation” (Xanthopoulou et al., 2009, p. 241). Rather, this evidence of reciprocity suggests that job resources and personal resources are “mutually related with work engagement, and also with each other” (pp. 241-242).

To recap, the JD-R model is probably the most widely-used engagement model in the literature (Albrecht, 2010). JD-R scholars specifically posited that job demands and resources influence one’s engagement level. Job demands refer to all the duties and responsibilities that need to be fulfilled by the employees and that might lead to certain physiological or psychological costs. Job resources include such things as physical resources, support, participative management, team building, feedback, autonomy, and personal resources (e.g., optimism, self-efficacy, resilience, etc.). It is worth reiterating, however, that these demands and resources are in many ways related to Kahn’s espoused psychological conditions. In fact, it would be naïve to assume that these two ubiquitous models are exclusively distinctive from each other. For instance, resources such as autonomy, feedback, and support, play an indispensable role in enhancing one’s psychological meaningfulness.

On the other hand, the JD-R model also differs from Kahn’s framework in a number of ways. First of all, scholars adopting this framework typically view engagement as having

emerged from burnout research and consider engagement as the positive antipode to burnout (Maslach & Leiter, 2008; Schaufeli et al., 2002). Secondly, although Kahn's work, as discussed in the preceding section, offers a comprehensive conceptual foundation for research on engagement, Kahn did not discuss the operationalization of the construct. Under the JD-R model, two popular engagement instruments have been developed: the MBI and UWES. Schaufeli et al. (2002) posted that engagement should not be operationalized as the direct opposite of burnout – as done by the MBI instrument – and developed their own UWES instrument, which has gained popularity in many different countries, although the issue of construct redundancy remains a major challenge in engagement research (Cole et al., 2012). Third, JD-R scholars tend to conduct research studies that specifically encompass the entire JD-R model – employing job resources and job demands as antecedents or moderators – in relation to engagement and other work outcomes. Scholars espousing Kahn's theory, on the other hand, typically identify their own set of antecedents, derived from Kahn's proposed psychological conditions. For example, Shuck et al. (2011) examined only three factors (job fit, affective commitment, and climate) vis-à-vis engagement; Rich et al. (2012) explored the effects of value congruence, perceived organizational support, and self-evaluations; Fairlie (2011) specifically looked at a number of meaningful work characteristics in relation to engagement.

### **Other Perspectives on Engagement**

In addition to Kahn's approach and the JD-R model, there is substantial literature that has significantly contributed to understanding of the engagement construct as well as its antecedents and outcomes. This section is dedicated to discussing research that falls specifically into neither of the two aforementioned models, or that consolidates both approaches and offers significant, interesting contribution to the current literature.

William Macey and Benjamin Schneider, in particular, are two recognized scholars whose work has significantly contributed to the engagement literature. Macey and Schneider (2008) viewed employee engagement as a multidimensional construct, comprising trait, state, and behavioral engagements. As the scholars contended, “we see engagement as not only a set of constructs but also a tightly integrated set, interrelated in known ways, comprising clearly identifiable constructions with relationships to a common outcome” (p. 24). Macey and Schneider (2008) defined *state engagement* as the positive affectivity that is linked with a person’s job or workplace, and that presents feelings of vigor, dedication, absorption, energy, persistence, and pride. Thus, state engagement consists of a number of components: organizational commitment, job involvement, and the positive affectivity elements of job satisfaction. *Behavioral engagement* follows from state engagement and can be understood as “adaptive behavior”, referring to a range of behaviors that are linked to organizational effectiveness (p. 24). “Engagement behaviors” tend to go beyond one’s prescribed duties and responsibilities, and “focus on initiating or fostering change in the sense of doing more and/or something different” (p. 24). The third component, *trait engagement*, is a combination of a number of interconnected personal attributes, including “trait positive affectivity, conscientiousness, the proactive personality, and the autotelic personality” (p. 24). Trait engagement, the authors argued, would be a cause of and be directly connected to state engagement and indirectly related to behavioral engagement. Finally, Macey and Schneider’s (2008) conceptual framework incorporates certain conditions that might influence the relationships between the three engagements. In particular, they proposed that job design attributes – in the forms of challenge, variety, autonomy, etc. – would directly influence state engagement; and so would the presence of a transformational leader. In addition, the presence of

a transformational leader would directly affect employees' trust and, as a consequence, indirectly impact behavioral engagement (Macey & Schneider, 2008).

In 2009, Macey, Schneider, Barbera, and Young published their book – *Employee Engagement: Tools for Analysis, Practice, and Competitive Advantage* – aimed at providing a conceptual discussion and practical application of employee engagement. Macey et al. (2009) identified culture as a key to an engaged workforce. Organizations, they argued, must create and sustain a “culture where engagement is not only a norm, but one which attracts the kinds of people who are disposed to doing well in that kind of environment, thereby creating a virtuous cycle of engagement behavior reinforcing and reinforced by employees” (p. 43). This culture is one that is based on trust (in senior leadership, management, and the system as a whole), fairness, meaningful work (variety, autonomy, challenge, and feedback), effective reward system, recruitment (i.e. hiring people with skills, motivation, positive affect and conscientiousness) as well as organizational success.

One study that integrates Kahn's and JD-R model and that provides a unique and interesting lens through which to examine engagement is the study conducted by Saks (2006) among 102 employees from a variety of job and organizations. Saks (2006) argued for a distinction between two levels of engagement: *job engagement* and *organization engagement*, with the results suggesting that job engagement scores were significantly higher among participants than organization engagement. The study also found that a number of factors predicted job and organization engagement. First of all, perceived organizational support predicted both engagements, whereas job characteristics predicted job engagement and procedural justice predicted organization engagement. As far as outcomes are concerned, job and organization engagements were significant predictors of job satisfaction, organizational

commitment, intention to quit, and organization citizenship behavior. Finally, employee engagement (i.e. job and organization engagement) partially mediates the relationships between the aforementioned antecedents and outcomes. These findings, therefore, suggest that employee engagement is a meaningful construct, and that organizations striving to foster engagement should increase employees' perceptions of organizational support, procedural justice, and desired job characteristics.

Fearon, McLaughlin, and Morris (2013) also conceptualized employee engagement from a multi-level perspective. Their study sought to explore “the role of multi-level forms of efficacy and organizational interaction necessary for promoting effective work engagement” (Fearon et al., 2013, p. 244). The authors proposed that organizational and social interactions should be developed in such a way that responds to the demands at individual and collective levels. Organizations should establish “rich meaningful processes of social interaction” in which an individual's personal goals and values are aligned with those of the organizations (Fearon et al., 2013, p. 250). As such, Fearon et al. (2013) concurred with Saks (2006) that both individual and organizational engagements are significant forms of engagement. However, the authors further proposed a “group”-level type of engagement that integrates the aforesaid two types of engagement. This group level can be thought of as a “social interaction layer” (p. 251) that gives impetus to effective communication and relationships between employees and managers, provides a sense of support, and promotes collaboration, all of which are essential to increasing the level of employee engagement.

Xu and Thomas (2010) adopted a slightly different perspective and conducted a study that focuses specifically on the impact of leader behaviors on engagement. Results from their study of 236 employees within a large New Zealand insurance company revealed that

relationship- and task-oriented leader behaviors are significantly related to the followers' engagement levels. In particular, one relationship-oriented leader behavior – being supportive of teams; e.g., being concerned about team members' growth and personal development, and celebrating successes of the team – was shown to be the strongest unique predictor of engagement. The other two leader behaviors – displaying integrity and performing effectively – were also significant predictors of employee engagement. Interestingly, tenure was not associated with engagement, implying that, at least in the context of the study, engagement does not necessarily decrease as one works longer at the organization.

In the HRD literature, Shuck and Herd (2012) also examined the connections between leadership behaviors and the development of employee engagement. Their proposed conceptual model links (1) followers' needs and motivation perceptions, (2) leader's emotional intelligence, (3) transactional leadership, and (4) transformational leadership to the main variable – employee engagement. The beginning building block of the conceptual framework is the followers' needs and motivation perceptions; in other words, employees respond to the workplace environment according to their needs and expectations. Secondly, leaders use “emotional intelligence skills to connect with employees,” whereas employees make decisions about their relationship with the leader as well as their workplace climate based on their perceptions of these emotional intelligence skills of that leader (Shuck & Herd, 2012, p. 172). Third, the leader may demonstrate transactional leadership behaviors to “clarify expectations and meet lower level needs” (p. 172), or transformational leadership behaviors to inspire, motivate, and have a higher level of influence on followers' goals. Both leadership styles have an effect on engagement; and engagement is in turn shown to be related to employee performance outcomes.



In sum, the studies grouped under this category do not fall strictly under the JD-R model or Kahn's framework but nevertheless provide unique perspectives towards better comprehension of the engagement construct. For instance, Macey and Schneider (2008) viewed engagement as a multi-dimensional construct, consisting of state, behavioral, and trait engagements. One interesting argument is that personal attributes (i.e. trait engagement) may play an important role in influencing a person's engagement behaviors. Macey et al.'s (2009) book discusses the importance of culture in building and sustaining a highly engaged workplace. Other scholars such as Saks (2006) and Fearon et al. (2013) have informed us that it is necessary to examine engagement at different levels: individual, group, and organizational. Finally, leadership development and leader behaviors may also greatly influence engagement, as pointed out by Xu and Thomas (2010) and Shuck and Herd (2012); as such, one should not overlook the importance of leadership when conducting research on engagement.

### **Proposed Antecedents of Employee Engagement**

The purpose of this study was to examine the effects of (1) job characteristics, (2) LMX and CWX, and (3) HRD practices, and (4) two personality dimensions – conscientiousness and openness to experience – on employee engagement in the Cambodian commercial bank industry. The following section examines the relevant literature on each of the variables explored in this study.

#### **Job Characteristics and Employee Engagement**

Job characteristics have been a prominent feature in research on the antecedents of engagement. The Job Characteristics Theory (JCT), developed by Hackman and Oldham (1974), posited that the existence of certain job attributes can increase employees' perceived meaningfulness of their work, help them experience responsibility of their work outcomes, and

allow them to have good knowledge of the results of their work. The “core” job characteristics are: (1) skill variety, (2) task identity, (3) task significance, (4) autonomy, and (5) feedback from job (Hackman & Oldham, 1975, p. 77).

Hackman and Oldham (1975) proposed that the first three job characteristics could have a significant impact on an individual’s experienced meaningfulness of work. *Skill variety* refers to the extent to which a job requires a person to be involved in variety of different activities and utilize different skills and talents, whereas *task identity* is the extent to which a job requires “completion of a whole and identifiable piece of work, that is, doing a job from beginning to end with a visible outcome” (p. 78). *Task significance* refers to the extent to which the job has sizable impact on the lives of others (both within and outside the organization).

The fourth core job characteristic, *autonomy*, could significantly enhance a person’s feelings of personal responsibility of their work outcomes (Hackman & Oldham, 1975). Autonomy refers to the “degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out” (p. 79). Finally, *job feedback*, the extent to which the job provides direct and clear information about the effectiveness of a person’s work, can directly impact their knowledge of the results of their work (Hackman & Oldham, 1975).

Evidence exists in the literature to suggest that a person’s engagement level is affected by the characteristics of their job. Kahn (1990) found that the meaningfulness condition of engagement is significantly influenced by the characteristics of a person’s job, including challenging work, skill variety, and clearly identified, creative, and autonomous role. Meaningfulness is also shaped by the formal positions that a person holds – positions that offer “attractive identities,” self-image, status, and reputation (Kahn, 1990, p. 705). Building on

Kahn's (1990) engagement framework, May et al. (2004) found that job enrichment and work role fit were positively associated with psychological meaningfulness. Managers, the authors argued, could enhance employees' perception of meaningfulness through effective job design.

Results from Saks' (2006) study also indicated that job characteristics – based on Hackman and Oldham's theory – significantly predict job engagement. Saks (2006) recommended that managers should try to identify and provide resources and benefits that are considered important for employees, which would “oblige them to reciprocate in kind with higher levels of engagement” (p. 614). In another study, Fairlie (2011) found that meaningful work characteristics had a significant effect on engagement in a sample of 574 North Americans employees. Meaningful work – “defined as job and other workplace characteristics that facilitate the attainment or maintenance of one or more dimensions of meaning” – include types of work that enable a person to fulfill their potential, have a social impact, accomplish their life goals and values, and have a sense of personal accomplishment (Fairlie, 2011, p. 510). Organizations, therefore, should ensure that opportunities for meaningful work are present and clearly communicated to employees at all levels (Fairlie, 2011).

Sarti (2014) studied the effects of job resources on engagement in a long-term care context and found that decision authority, learning opportunity, supervisor and co-worker support, and financial rewards strongly influenced work engagement among caregivers. Schaufeli and Bakker (2004) found that the job resources of feedback, social support, and coaching significantly predicted work engagement among employees at four different service organizations in the Netherlands. Crawford et al. (2014) identified job challenge, autonomy, task variety, feedback, rewards, and recognition as crucial to enhancing employee engagement.

Finally, Tims and Bakker (2014) cited several empirical studies that provide additional support for the relationship between job characteristics and engagement.

Given that ample evidence exists in support of the positive effects of job characteristics on engagement, the following hypothesis was formulated:

*Hypothesis 1: Job characteristics will be a significant predictor of employee engagement.*

### **LMX, CWX, and Employee Engagement**

This study also aimed at examining the effects of supervisor and co-worker relationships – specifically in the forms of LMX and CWX – on employee engagement. Existing research on engagement has consistently pointed to the significance of workplace relationships. As Kahn (1990) noted, supportive and trusting interpersonal relationships can enhance the psychological safety of individuals because such relationships enable them to work on their tasks and try without fearing the consequences of failures. People feel “safe” when they know that they will not “suffer from their personal engagement” (Kahn, 1990, p. 708). Such a ‘safe’ environment is characterized by openness, support, trust, and flexibility (Kahn, 1990). In their study, May et al. (2004) found support for the notion that supportive workplace relationships enhance psychological safety and engagement. Similarly, Schaufeli and Bakker (2004) found that social support from co-workers and supervisors strongly influenced work engagement. Saks (2006) maintained that perceived organizational and supervisor support is a significant predictor of engagement and that engaged employees tend to have a high-quality relationship with the employer, “leading them to also have more positive attitudes, intentions, and behaviors” (p. 613). Findings from Shuck, Rocco, and Albornoz’s (2011) qualitative study also underscored the importance of relationship development and attachment to co-workers. In a study of Indian service sector employees, Agarwal, Datta, Blake-Beard, and Bhargava (2012) found that the

quality of exchanges between employees and their immediate supervisors significantly influenced their engagement levels. Leaders therefore should strive to support their employees both professionally and emotionally, offer them direction and information, and provide them with the resources needed to accomplish their tasks (Agarwal et al., 2012).

Although the current literature has provided evidence as regards the importance of workplace relationships in developing engagement, there is a paucity of research that specifically examines the effects of LMX or CWX. LMX is a different type of relationship in that it represents the “working relationship” as opposed to a personal or friendship relationship between leaders and members (Graen & Uhl-Bien, 1995, p. 237). LMX signifies an exchange and a relationship that develops between the two parties (Wayne & Green, 1993). The main idea behind LMX theory is that “effective leadership processes occur when leaders and followers are able to develop mature leadership relationships (partnerships) and thus gain access to the many benefits these relationships bring” (Graen & Uhl-Bien, 1995, p. 225). LMX consists of three main dimensions – respect, trust, and obligation. These three constituents refer specifically to “individuals’ assessments of each other in terms of their professional capabilities and behaviors” and are different from the “liking-based dimensions of interpersonal attraction and bonding” (Graen & Uhl-Bien, 1995, p. 238). LMX theory suggests that supervisors hold different levels of relationships with their subordinates (Graen & Uhl-Bien, 1995) and that these relationships influence the nature of the transactions between them in the workplace (Lam & Lau, 2012). Strong LMX relationships are characterized by high levels of interaction, trust, and support (Crawford et al., 2014). On the other hand, employees who have low-quality LMX relationships with their supervisors will only take part in basic economic exchanges with their supervisors whereas those in high-quality LMX relationships will demonstrate trust, respect, and

commitment, assume greater responsibility in their tasks, and are more likely to engage in OCB (Graen & Uhl-Bien, 1995; Lam & Lau, 2012).

Existing research has demonstrated the significant influence of LMX and CWX on employees' attitudes and behaviors. Janssen and van Yperen (2004) conducted a survey of 170 employees of a Dutch firm; results showed that LMX quality significantly influenced leader-rated in-role job performance. Avery, McKay, and Wilson (2007) examined the relationship between satisfaction with older (older than 55) and younger (younger than 40) coworkers and engagement and found that satisfaction with one's coworkers was significantly related to engagement. A meta-analysis conducted by Ilies, Nahrgang, and Morgeson (2007) revealed that there is a moderately strong, positive relationship between LMX and OCB. Lam and Lau (2012) found that in a study of schoolteachers in Macau, LMX mediated the relationship between workplace loneliness and OCB, and that organization-member exchange mediated the relationship between workplace loneliness and in-role performance. Joo, Yang, and McLean (2014) studied the impact of LMX quality on employee creativity among knowledge workers in five Korean firms and found that LMX quality was significantly related to manager-rated creativity; in other words, employees who have a high LMX relationship were more likely to get supervisory support and perceive themselves as being more creative. Finally, Sherony and Green (2002) conducted a study on 110 coworker dyads and found that the interaction between the LMX scores between two coworkers were predictive of the CWX quality for the coworker dyad.

These findings suggest that LMX and CWX could significantly influence the attitudes and behaviors of employees within an organization. Moreover, a review of the engagement literature shows that workplace relationships play a crucial role in engaging the workforce. This

study sought to specifically examine the relationships between LMX and CWX and engagement; thus, the following hypotheses were derived:

*Hypothesis 2a:* LMX will be a significant predictor of employee engagement.

*Hypothesis 2b:* CWX will be a significant predictor of employee engagement.

### **HRD Practices and Employee Engagement**

HRD is defined as “any process or activity that, either initially or over the long term, has the potential to develop adults’ work-based knowledge, expertise, productivity and satisfaction” within the organization (McLean & McLean, 2001, p. 322). HRD is increasingly being recognized as essential to organizational functioning and effectiveness (Swanson & Holton, 2009; Vince, 2003); it covers a wide range of activities and processes, including employee training and development, organization development, and career development (Swanson & Holton, 2009; Shuck, Rocco, & Albornoz, 2010).

Development opportunities are important because they make work meaningful and provide employees with avenues for growth and fulfillment (Crawford et al., 2014). Organizations that are committed to providing formal and informal training and development opportunities are more likely to have engaged employees (Shuck, Rocco, & Albornoz, 2010). Lee and Bruvold (2003) investigated the effects of perceived investment in employees’ development among a sample of 405 nurses and found that perceived investment in development was positively associated with job satisfaction and affective commitment. In addition, job satisfaction and affective commitment fully mediated the relationship between perceived investment in development and intention to leave. In a review of the literature on engagement antecedents and consequences, Wollard and Shuck (2011) identified opportunities for learning as an important driver of engagement. Schaufeli and Salanova (2010) proposed that career

development and work training programs specifically focused on enhancing employees' growth and development could positively impact their engagement. Employees need to be able to continuously develop their knowledge, skills, and abilities so as to increase their employability and remain competitive in the labor market (Schaufeli & Salanova, 2010). In a similar vein, Rana (2015) proposed that organizations could enhance engagement through effective utilization of high-involvement work practices, which include providing opportunities for training and development to employees so as to increase their knowledge, skills, and abilities.

Shuck and Rocco (2014) also proposed a set of strategies aimed at fostering engagement through the use of HRD practices, including workplace learning, organization development, and career development initiatives. Organizations, they argued, could foster employee workplace learning by investing in employee development and management training programs. As far as organization development is concerned, organizations should focus on collecting, analyzing, and utilizing employee engagement data so as to develop better communication strategies and promote employee accountability (Shuck & Rocco, 2014). Furthermore, career development – a major component of HRD – is salient to enhancing employee engagement. Organizations should communicate with their employees about the issues that are important to their careers and invest in programs associated with career progression, competency building, and talent development (Shuck & Rocco, 2014).

Despite the recognized importance of HRD, very few empirical studies have been conducted to understand its impact on employee engagement and those that have investigated the issue offer contradictory results. For example, Rurkkhum and Bartlett (2012) found no support for the moderating impact of HRD practices on the relationship between engagement and employee organizational citizenship behavior, whereas Shuck et al. (2014) found that HRD



practices are related to employee engagement and inversely related to turnover intention in a convenience sample of health care employees. This clearly implies that more empirical research, especially within a different context, is needed to augment our understanding on the impact of HRD practices on engagement. Thus, the following hypothesis was derived:

*Hypothesis 3:* Employee perceptions of HRD practices will be a significant predictor of employee engagement.

### **Personality Traits and Employee Engagement**

This study also sought to investigate the moderating effects of two personality traits – Conscientiousness and Openness to experience – on the relationships between engagement and the variables identified in the previous section. Empirical research on the impact of personality traits on engagement is particularly limited, in spite of arguments suggesting that individual differences may play a significant role in developing engagement (Kahn, 1990; Macey & Schneider, 2008; Saks & Gruman, 2014). Kahn (1990) maintained that individual characteristics can shape people’s engagement or disengagement in all types of work roles because of their own experiences of psychological meaningfulness, safety, and availability. In his 1992 publication, Kahn elaborated further on the influence of individual factors on organization members’ psychological presence at work and their personal engagement:

People will differ on how psychologically present they are when they experience equivalent levels of meaningfulness, safety, and availability because of their different models of self-in-role, senses of security, levels of courage, and individual developments. That is, even if organization members experience their situations as meaningful and safe and themselves as available they may still be rendered partially absent by the

subconscious models they carry, insecurity or lack of courage, or the developmental limits on how present they are able to be in those situations. (p. 341)

Shuck, Rocco, and Albornoz (2010) argued that personality can influence engagement as every organization member holds certain assumptions about their work and has various characteristics that may result in different behaviors at work. Macey and Schneider (2008) proposed a conceptual framework for understanding the elements of employee engagement, which comprises state engagement, behavioral engagement, and trait engagement. The authors argued that engagement could be regarded as a disposition or personality characteristic and identified proactive personality, autoletic personality, trait positive affect, and conscientiousness as the major elements of trait engagement (Macey & Schneider, 2008). Other personality characteristics proposed in the literature include self-efficacy, high-achievement orientation, proactivity, self-esteem, optimism, and resilience (Bakker & Demerouti, 2008; Fleck & Inceoglu, 2010; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007).

The Big Five taxonomy of personality has received considerable attention from researchers and practitioners in various disciplines and has been shown to be valid predictors of job performance (Barrick & Mount, 1991), academic achievement (O'Connor & Paunonen, 2007; Paunonen & Ashton, 2001), and training-related aspects of motivation (Rowold, 2007). The Big Five personality dimensions are: extraversion, neuroticism, agreeableness, conscientiousness, and openness to experience. Extraversion refers to being sociable, talkative, and assertive, whereas neuroticism is associated with traits such as being anxious, insecure, depressed, and worried. The third dimension, agreeableness, refers to being flexible, trusting, cooperative, and tolerant. The fourth type, conscientiousness, can be associated with being

dependable, careful, thorough, responsible, and organized. Finally, openness to experience can be defined as being imaginative, curious, intelligent, and forward-thinking.

In a meta-analysis, Barrick and Mount (1991) examined the relationships between the Big Five personality dimensions and job performance and found that the five personality traits were significant predictors of job performance across different occupational groups, with conscientiousness displaying consistent relations with all job performance criteria across all occupational groups. O'Connor and Paunonen (2007) also conducted a meta-analysis and found relations between the Big Five personality dimensions and post-secondary academic achievement, with conscientiousness showing strong and consistent associations with academic success. Rowold (2007) studied the effects of the Big Five variables on training-related aspects of motivation and found that extraversion and agreeableness significantly influenced motivation to learn while motivation to learn, extraversion, and emotional stability (neuroticism) predicted transfer motivation. In addition, Akhtar, Boustani, Tsivrikos, and Chamorro-Premuzic (2014) studied the effects of the Big Five personality traits on work engagement among a sample of 1050 working adults and found that all five dimensions were significant predictors of engagement.

Investigating all five personality dimensions would be beyond the scope of this study; therefore, two of the Big Five personality variables, namely conscientiousness and openness to Experience, have been selected because they have been shown to consistently predict job performance (Barrick & Mount, 1991) and scholastic achievement (O'Connor & Paunonen, 2007). It is worth noting that very little research has been done to examine the effects of conscientiousness and openness to experience above and beyond the effects of organizational

factors such as job resources or workplace relationships; thus, the following hypotheses were derived:

*Hypothesis 4a:* Conscientiousness will be a significant predictor of employee engagement.

*Hypothesis 4b:* Openness to experience will be a significant predictor of employee engagement.

This study sought to investigate the effects of job characteristics, LMX, CWX, HRD practices, conscientiousness, openness to experience on employee engagement in the Cambodian commercial bank industry. Figure 1.1, shown earlier in the Introduction chapter, summarizes the framework for this study. It also shows the proposed antecedents of employee engagement, and the study's corresponding research hypotheses.

### **Chapter Summary**

In this chapter, I provided an overview of the literature on engagement and discussed the major definitions of the construct. I also provided a review of three major streams of research associated with engagement, specifically Kahn's psychological conditions of engagement, the JD-R model, and other perspectives on engagement. In addition, I identified and explicated the literature associated with the proposed engagement antecedents and moderators, namely job characteristics, LMX and CWX, HRD practices, conscientiousness, and openness to experience. In the next chapter, the research methodology used to conduct this study will be provided.

## **CHAPTER 3**

### **METHODOLOGY**

This chapter provides a description of the study design, the population of the study, the sample of the study, the instruments used to collect data, the procedures employed for the collection of data, and the methods utilized for the analyses of the data.

#### **Research Design**

The purpose of this study was to examine the effects of job characteristics, LMX, CWX, HRD practices, conscientiousness, and openness to experience on employee engagement in the Cambodian banking sector. The design of this research was cross-sectional. A cross-sectional design is often used in survey research and “involves the collection of quantitative data on at least two variables, at one point in time and from a number of cases” (Lewin, 2011, p. 222). These data are then analyzed to examine patterns of association or relationships between different variables (Lewin, 2011).

In this study, an electronic questionnaire survey was employed to collect data. The survey was designed using the ‘tailored design method’ guidelines presented by Dillman, Smith, and Christian (2009). Tailored design refers to the use of “multiple motivational features in compatible and mutually supportive ways to encourage high quantity and quality of response to the surveyor’s request” (Dillman et al., 2009, p. 16). The tailored design method assumes that the quality and quantity of responses are greater when the respondents understand that the expected rewards will outweigh the anticipated costs of responding (Dillman et al., 2009).

There are three main underlying principles to the tailored design method (Dillman et al., 2009). First, tailored design is a scientific approach that aims to reduce four sources of survey error: coverage, sampling, nonresponse, and measurement. Second, it involves establishing a set

of survey procedures – such as contact emails and follow-up responses – that engender interaction and communication with the respondents and that encourage them to respond to the survey. Finally, tailored design involves developing procedures aimed at building positive social exchange with the respondents; it takes into consideration issues such as the nature of the population, the characteristics of the respondents, the content of the survey questions, and incentives, among others.

The survey utilized five existing instruments to measure the variables of interest. One pilot study – among HRD subject experts and a small group of Cambodian bank employees ( $N = 15$ ) – was conducted in order to determine the clarity and readability of the survey instructions and questions, and the functionality of the online instrument. After the data collection, rigorous instrument validity and reliability examinations were employed in order to confirm the validity and reliability of the final overall instrument. Hierarchical regression analyses were conducted to test the hypothesized relationships of the study.

### **Target Population and Sample**

The target population of this study were employees from commercial banks located in Phnom Penh, Cambodia. The banking industry was selected as the population of the study because it represents one of the more rapidly growing and developed sectors in Cambodia (Hidenobu, Chea, & Daiju, 2014) and would enable the researcher to examine various organizational and HR practices such as professional development programs, organization development initiatives, reward systems, and job design and characteristics. Chen, Sok, and Sok (2006), for instance, argued that the performance of employees in the Cambodian banking sector is high compared to other industries and that the banking industry offers effective training to its employees. In addition, Hidenobu, Chea, and Daiju (2014) maintained that the Cambodian

financial system has witnessed remarkable development in terms of growth, performance, policies and regulations, and structural reforms. It is important to note, however, there are also many challenges facing the banking industry (Hidenobu, Chea, & Daiji, 2014; IMF, 2012), including the risk of being “overbanked” (i.e. density of banks), efficiency, and financial stability risk management.

According to the National Bank of Cambodia (2014), there are currently 35 commercial banking institutions employing 19,763 staff in the country. For this study, convenience sampling was used. In particular, employees from 10 commercial banks with branches in Phnom Penh were invited to participate in the study using the researcher’s personal network. The unit of analysis of this study was the individual employee.

Overall, 285 employees working in branches across Phnom Penh completed the survey. After examining the responses, I judged 259 to be acceptable because the rest of the responses contained a relatively large number of missing cases. Twelve cases were further removed because they were considered outliers. The final sample used in the statistical analyses of this research was 247. More information on the demographic characteristics of the respondents and the statistical methods used for detecting outliers could be found in the next chapter.

### **Data Collection Procedure**

This study utilized a self-administered electronic survey tool, *Qualtrics®*, to capture individual-level perceptions. Qualtrics is the recommended web-based survey tool for researchers and students at University of Minnesota.

Upon obtaining the IRB approval from the University of Minnesota (see Appendix D), I contacted the HR representatives from each of the 10 banking institutions. I first contacted the HR representatives via emails and phone calls and explained to them the purpose and general

outlines of the survey, potential risks and benefits associated with participation in the study, application of results, and the potential contribution and significance of the study (see Appendix C).

After receiving approval from the banking institutions, I sent another email to the HR representatives and asked them to forward it to the employees at their respective organization. The email (see Appendix B) served as a formal invitation to those employees to participate in this research study and contained a brief summary of the purpose of the study, a web link to the actual questionnaire, contact information, and an opportunity to be entered into a lucky draw. Following the tailored design method (Dillman et al., 2009), I kept my invitation email short and to the point, and provided clear instructions on how to access the online survey. I also sent follow-up and reminder emails to increase the response rate (Dillman et al., 2009). Finally, the respondents were informed that they would be entered into a lucky draw to win one of thirty USD 10 gift cards to a coffee shop in Phnom Penh. According to Dillman et al. (2009), incentives such as gift cards to participants have been shown to slightly increase response rates compared to sending survey requests without incentives.

For research data collection, informed consent is extremely important. The first page of the electronic questionnaire contained the most important information about the study: the purpose and significance of the study, procedure and duration of the questionnaire, privacy and confidentiality of the responses, voluntary nature of participation in the study, lucky draw information, contact information, and an informed consent statement that asked whether the respondents agreed to participate in the survey (see Appendix B). The informed consent page also explained to the participants that they were free to not answer any question or withdraw their participation at any time during the survey session. In addition, the page also ensured the



participants that the records of this study will be kept absolutely confidential and private, and that only the researcher would have access to these records.

### **Instrumentation**

This study utilized six existing and well-established instruments to collect data. The instruments were *The Job Engagement Measure* (Rich et al., 2010), *the Job Diagnostic Survey* (Hackman & Oldham, 1974), *the LMX7* (Graen & Uhl-Bien, 1995), *the CWX scale* (Graen & Uhl-Bien, 1995), *the Perceived Investment in Employee Development scale* (Lee & Bruvold, 2003), and Mowen and Spears' (1999) *Big Five Personality Measure*. The first five instruments were used in their entirety, whereas relevant parts from Mowen and Spears' Big Five Personality Measure were selected and used because the study only attempted to measure the conscientiousness and openness to experience variables of the Big Five Personality Traits. In addition to these measures, background information was included in the questionnaire.

### **Measuring Employee Engagement**

Employee engagement was the sole dependent variable in the study and was measured using Rich et al.'s (2010) 18-item *Job Engagement Measure*. Rich et al. (2010) specifically built upon Kahn's (1990) conceptualization of the engagement construct and developed the three subscales that measured the three dimensions of engagement – cognitive, emotional, and physical engagement. Participants were asked to rate the items on a scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items include “At work, my mind is focused on my job” (cognitive engagement), “I am enthusiastic in my job” (emotional engagement), and “I work with intensity on my job” (physical engagement).

It is important to note that the overall employee engagement factor was used as the primary operationalization of employee engagement in this study. Due to the interrelatedness of

each dimension of engagement, the overall phenomenon is probably best captured through an understanding of the overall factor. This is consistent with previous research on the construct (e.g. Rich et al., 2010; Shuck et al., 2014). Thus, to determine the aggregate experience of engagement, overall engagement was measured by averaging the scores for each dimension (physical, emotional, and cognitive engagement). Nevertheless, I conducted validity and reliability analyses for both the overall engagement scale and the subscales in order to further explore the nuanced influence of each facet.

### **Measuring Job Characteristics**

Job characteristics were measured using Hackman and Oldham's 15-item (1974) *Job Diagnostic Survey (JDS)*. The JDS is one of the most frequently cited instruments in the Social Sciences Citation Index (Kim, 2010). The JDS can be used "to diagnose existing jobs to determine if (and how) they might be redesigned to improve employee motivation and productivity" (Hackman & Oldham, 1975, p. 159). The JDS provides measures of the five core job characteristics (Hackman & Oldham, 1974, 1975): skill variety, task identity, task significance, autonomy, and feedback from the job. Respondents were asked to rate the items on a scale ranging from 1 (very little) to 7 (very much). Sample items include: "To what extent does the job require you to do many different things at work, using a variety of your skills and talents?" (skill variety), "Are the results of your work likely to significantly affect the lives or well-being of other people" (task significance", and "To what extent does your job permit you to decide on your own how to go about doing the work?" (autonomy).

There were originally 15 items measuring job characteristics. However, after confirmatory factor analyses were conducted, I removed five items that did not substantially load on a factor or that lowered the reliability of the instrument.

### **Measuring LMX and CWX**

LMX was measured using Graen and Uhl-Bien's (1995) LMX7 scale. This self-rated 7-item, 5-point Likert-type scale includes items such as "How well does your leader understand your problems and needs?" and "How would you characterize your working relationship with your leader?". For CWX, the same scale was used but the items were rephrased to gauge the respondent's assessment of his or her relationship with a coworker, which is consistent with previous research (e.g. Sherony & Green, 2002). In addition, one item – "how well does your leader recognize your potential? – was dropped from the CWX scale because it did not seem suitable for measuring co-worker relations.

### **Measuring HRD Practices**

Employee perception of HRD practices was measured using the Perceived Investment in Employee Development (PIED) scale developed by Lee and Bruvold (2003). This measure has been proven to be valid and reliable in HRD research (Shuck et al., 2014). The 9-item scale includes items such as "My organization trains employees on skills that prepare them for future jobs and career development" and "My organization provides career counselling and planning assistance to employees".

### **Measuring Conscientiousness and Openness to Experience**

Measures for these two personality dimensions were adapted from Mowen and Spears (1999), which have been used and shown to be valid and reliable in HRD research (Rowold, 2007). Respondents were asked to rate the items on a scale ranging from 1 (never) to 7 (always). Sample items from 4-item scale measuring Conscientiousness are "I am precise" and "I am orderly". With regard to the 5-item scale assessing Openness to Experience, sample items include "I frequently feel highly creative" and "I am imaginative".

## **Demographic Variables**

In addition to the aforementioned variables, the survey asked the respondents to describe the following demographic characteristics: age, gender, education, and job tenure. These demographic variables were entered as control variables for the study.

## **Validity of the Measures**

Validity refers to the extent to which an instrument measures the construct it is intended to measure. In this study, despite the fact that previously validated instruments in the literature were utilized, I conducted Confirmatory Factor Analyses (CFAs) using list-wise deletion to verify the underlying theoretical constructs and examine the validity of the seven instruments employed in this study within the Cambodian context.

First, given that employee engagement was the main dependent variable of the study, CFAs were conducted to examine whether the construct is composed of three sub-dimensions – physical, emotional, and cognitive engagement – as suggested by the current literature (Kahn, 1990; May et al., 2004; Shuck & Reio, 2011). Results from the analyses presented support for a three-factor engagement model, indicating that the Job Engagement Measure (Rich et al., 2010) has construct validity. The item loadings are between .56 to .89, as shown in Table 3.1. The model fit estimates for both the one- and three-factor engagement scales are presented in Table 3.2.

Table 3.1  
*Standardized Loadings by Confirmatory Factor Analysis for the Three-Factor Employee Engagement Model*

Item	Factor		
	Physical Engagement	Emotional Engagement	Cognitive Engagement
I work with intensity on my job	.58		
I exert my full effort to my job	.74		
I devote a lot of energy to my job	.75		
I try my hardest to perform well on my job	.81		
I strive as hard as I can to complete my job	.73		
I exert a lot of energy on my job	.74		
I am enthusiastic about my job		.74	
I feel energetic at my job		.74	
I am interested in my job		.81	
I am proud of my job		.87	
I feel positive about my job		.80	
I am excited about my job		.89	
At work, my mind is focused on my job			.79
At work, I pay a lot of attention to my job			.84
At work, I focus a great deal of attention on my job			.86
At work, I am absorbed by my job			.70
At work, I concentrate on my job			.85
At work, I devote a lot of attention to my job			.79

CFAs were also conducted to examine the validity of the other six instruments utilized in this study. The likelihood ratio  $\chi^2$  and degrees of freedom were calculated. The following fit indices were used in order to determine model fit (Fletcher, 2015; Kline, 2011): (a) Root Mean Square Error of Approximation (RMSEA), where values of .10 or below indicates a plausible fit; (b) the Comparative Fit Index (CFI), where values of .90 or above indicates a plausible fit; and (c) the Standardized Root Mean Square Residual (SRMR), where values of .08 or below indicates a plausible fit. CFA results, as presented in Table 2, suggest that all measurements have construct validity.

Table 3.2  
*Confirmatory Factor Analyses of all Latent Variables in the Study*

Model	<i>df</i>	$\chi^2$	$\chi^2/df$	RMSEA	CFI	SRMR
Employee Engagement	132	274.92	2.08	.06	.95	.05
Job Characteristics	25	61.87	2.47	.08	.94	.05
LMX	14	25.14	1.80	.06	.98	.03
CWX	9	56.08	6.23	.14	.90	.06
HRD Practices	27	170.28	6.31	.15	.91	.05
Conscientiousness	2	6.57	3.29	.09	.97	.04
Openness to Experience	5	11.80	2.36	.07	.98	.03

*Note.* RMSEA = root mean square error of approximation; CFI = comparative fit index; SRMR = standardized root mean square residual

### Reliability of the Measures

Reliability refers to the extent to which a measure consistently reflects the construct it is intended to measure (Field, 2009). In this present study, reliability analyses were conducted by examining Cronbach's alpha coefficients for each of the factors measured. Cronbach's alpha,  $\alpha$ , is widely recognized as the most common measure of scale reliability (Field, 2009; Kline, 2011). Values of around .70 are generally considered acceptable and values of around .8 are good (Field, 2009; Kline, 2011). As presented in Table 3, Cronbach's alpha values for all measures except Conscientiousness range from .70 to .94, indicating that these measures have internal consistency. For Conscientiousness, Cronbach's alpha was slightly below the standard of .70; however, reliability estimates also depend largely on the number of items for the scale (Kline, 2011; Rowold, 2007). Given that there are only four items in this scale, the observed Cronbach's alpha value can be considered in an acceptable range.

Table 3.3  
*Reliability Analyses for the Measures of the Study*

Measure	Number of Items	Cronbach's $\alpha$
Overall Employee Engagement	18	.94
Physical Engagement	6	.87
Emotional Engagement	6	.92
Cognitive Engagement	6	.92
Job Characteristics	10	.82
LMX	7	.86
CWX	6	.81
HRD	9	.94
Conscientiousness	4	.63
Openness to Experience	5	.79

### Data Analysis Methods

The data collected from the study were analyzed quantitatively using the software packages RStudio 0.99.484 and SPSS 19.0. A three-step procedure was employed. First, Confirmatory Factor Analyses (CFAs) were conducted, followed by correlation analysis and hierarchical regressions.

#### Confirmatory Factor Analysis

In the social sciences, researchers often attempt to measure latent variables, which refer to variables that cannot directly be observed and measured (Field, 2009). Factor analysis is a prominent and useful tool because it allows the researchers to understand the structure of a set of variables or to construct a questionnaire to measure an underlying variable (Field, 2009). CFA is a version of factor analysis in which specific hypotheses about the structure and links between the latent variables are tested. In this study, CFA was an appropriate method because the researcher had a priori theory about the structure of the variables and would like to evaluate items on the scales used to measure the latent variables as well as the reliability and validity of those scales.

## **Correlation Analysis and Descriptive Statistics**

In the second step, a correlation analysis was employed to examine the relationships between the variables of the study as well as the strength of the relationships between those variables. The correlation coefficient,  $r$ , has to lie between -1 and +1. It is generally accepted that correlation coefficient values of  $\pm.1$  represent a small effect, whereas values of  $\pm.3$  indicate a medium effect and values of  $\pm.5$  represent a large effect (Field, 2009). In addition to correlation coefficients, descriptive statistics were used to report the demographics of the sample as well as the mean and standard deviation of each of the variables tested.

## **Hierarchical Multiple Regression**

Multiple regression is statistical tool that allows for an investigation of the relationships between a dependent variable and two or more predictor variables (Field, 2009). Hierarchical regression is an extension of multiple regression, whereby the order in which predictors are entered into the regression models is determined by the researcher based on existing theory (Field, 2009). In this study, the relationships between each antecedent and its independent variable, employee engagement, were tested using multiple regression models. In addition, the relative importance of each independent variable to engagement was examined using hierarchical regression analyses. That is, relevant control variables were entered into the regression first, followed by each respective predictor variable – job characteristics, LMX and CWX, HRD practices, conscientiousness, and openness to experience.

## **Summary**

In this chapter, I described the research design, context, population, and sample of the study. I also delineated the data collection procedure and provided a description of each of the



measures used in this study as well as results from the reliability and validity analyses of these measures. Finally, I described the data analysis techniques of the study.

## CHAPTER 4

### RESULTS

This chapter presents the results of the statistical analyses. First, data screening is performed to detect univariate and multivariate outliers. Second, descriptive statistics, demographic characteristics, and correlations are reported. Third, the regression assumptions of linearity, absence of multicollinearity, homoscedasticity of variance, independence of errors, and normality of residuals are tested. Finally, results from the hierarchical multiple regression analyses are presented.

#### Data Screening

Prior to performing the regression analyses, the data were screened to detect any outliers that can exert undue influence over the parameters of the model. Two types of outliers were examined: univariate and multivariate outliers.

Univariate outliers refer to cases that have an unusual value for a single variable. According to Kline (2011), a case can be considered an outlier if it is more than three standard deviations beyond the mean. In this study, outliers were identified by examining standardized scores and boxplots of all variables. There were 11 cases that had extreme standardized scores (in excess of 3.0); consequently, these cases were deleted from the dataset.

Multivariate outliers are cases that have an unusual combination of values for a number of variables. These outliers were detected by examining the Mahalanobis distances, which measure the distance of cases from the means of the predictor variables (Field, 2009). The Mahalanobis distance of a case was evaluated using the  $\chi^2$  distribution. Cases that had probability values of less than .001 were regarded as outliers (Kline, 2011). One case had an extreme

Mahalanobis distance value ( $p < .001$ ) and thus was removed from the data. The final sample employed in the regression analyses was 247.

### Demographic Characteristics, Descriptive Statistics, and Correlations

The demographic characteristics of the respondents are provided in Table 4.1. Within the convenience sample ( $N = 247$ ), 129 were female (52.2%). The largest group was between 21 to 25 years of age ( $n = 102$ , 41.3%), followed by 26 to 30 ( $n = 85$ , 34.4%). The majority of the respondents indicated having a Bachelor's degree ( $n = 160$ , 64.8%), while 31.6% reported having a master's degree ( $n = 78$ ). Most of the respondents ( $n = 203$ , 82.2%) have worked at their organization for 5 years or less.

Table 4.1  
*Demographic Characteristics of the Participants (N = 247)*

Characteristic	<i>n</i>	%
Age		
20 years old or younger	0	0
21-25 years old	102	41.3
26-30 years old	85	34.4
31-40 years old	47	19.0
41-50 years old	6	2.4
51-60 years old	2	.8
Missing	5	2.0
Gender		
Male	113	45.7
Female	129	52.2
Missing	5	2.0
Education		
High school	1	.4
Bachelor's degree	160	64.8
Master's degree	78	31.6
Doctoral degree	3	1.2
Missing	5	2.0
Tenure		
5 years or less	203	82.2
6-10 years	36	14.6
11-15 years	0	0
16-20 years	0	0
More than 20 years	2	.8
Missing	6	2.4

Position		
Sales and Marketing	21	8.5
Management	34	13.8
Customer Service	42	17
Business Development	24	9.7
Finance	49	19.8
Human Resources	25	10.1
Information Technology	12	4.9
Others	40	16.2

Correlation analyses provide useful information on the relationships between the variables of interest as well as the strength of the relationship between two variables. The correlation coefficient,  $r$ , has to lie between -1 and +1. Values of  $\pm 0.1$  represent a small effect;  $\pm 0.3$  indicates a medium effect; and  $\pm 0.5$  represents a large effect (Field, 2009).

As Table 4.2 suggests, all the variables were statistically significantly correlated with one another, with values ranging from .13 to .49. In particular, the relationship between HRD practices and LMX appeared to be the strongest ( $r = .49, p < .01$ ), followed by engagement and job characteristics ( $r = .42, p < .01$ ).

Table 4.2

*Means, Standard Deviations, and Intercorrelations for Employee Engagement, Job Characteristics, Leader-Member Exchange, Co-Worker Exchange, HRD Practices, Conscientiousness, and Openness to Experience*

Measure	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. EE	4.04	.43	-						
2. JC	5.08	.75	.42**	-					
3. LMX	3.59	.60	.33**	.41**	-				
4. CWX	3.54	.52	.23**	.22**	.34**	-			
5. HRD	5.04	1.18	.36**	.29**	.49**	.22**	-		
6. Consc	5.32	.81	.30**	.25**	.19**	.13*	.13*	-	
7. OpenE	4.82	.87	.25**	.35**	.30**	.13*	.23**	.32**	-

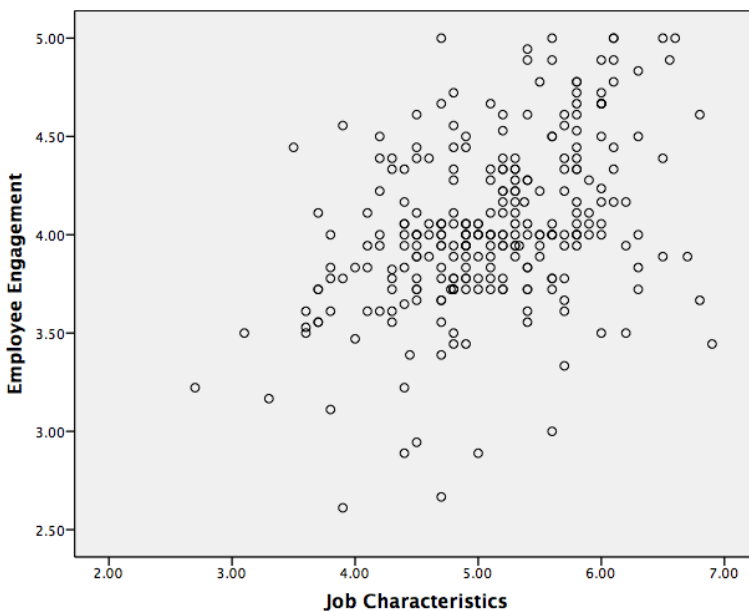
*Note.* \* $p < .05$ . \*\* $p < .01$ . EE = Employee Engagement; JC = Job Characteristics; LMX = Leader-Member Exchange; CWX = Co-Worker Exchange; HRD = Human Resource Development Practices; Consc = Conscientiousness; OpenE = Openness to Experience.

## Checking Regression Assumptions

In order to draw conclusions about a population from a sample using multiple regression analysis, several assumptions must hold true (Field, 2009). Those assumptions are *linearity*, *absence of multicollinearity*, *homoscedasticity of variance*, *independence of errors*, and *normality of residuals*.

### Linearity

Linearity assumes that each predictor variable has a linear relationship with the outcome variable. To assess linearity, scatterplots were used to plot the data. As shown in Figures 4.1 to 4.6, each of the predictor variables appears to have a linear relationship with the main outcome variable, employee engagement.



*Figure 4.1.* Scatterplot showing the relationship between job characteristics and employee engagement

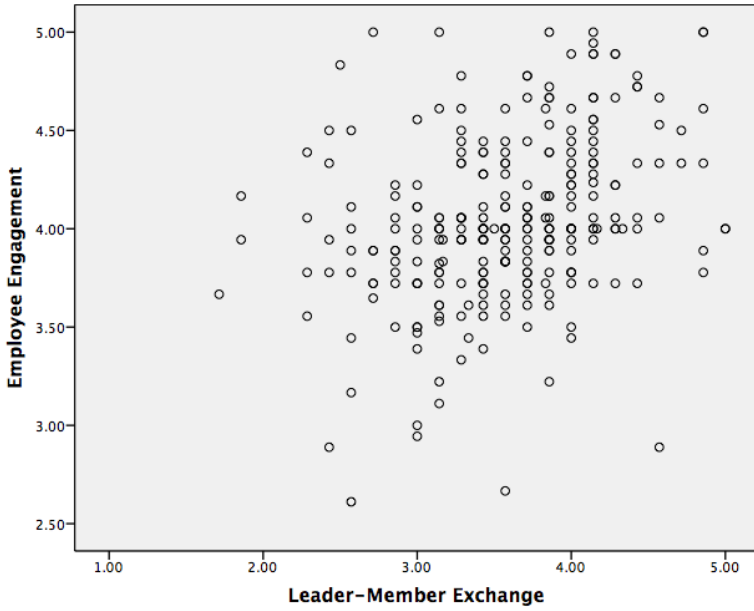


Figure 4.2. Scatterplot showing the relationship between leader-member exchange and employee engagement

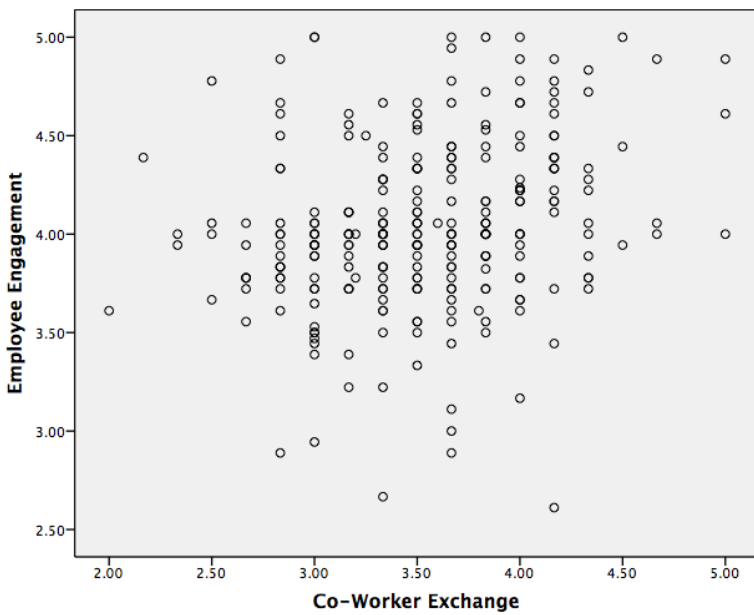


Figure 4.3. Scatterplot showing the relationship between co-worker exchange and employee engagement

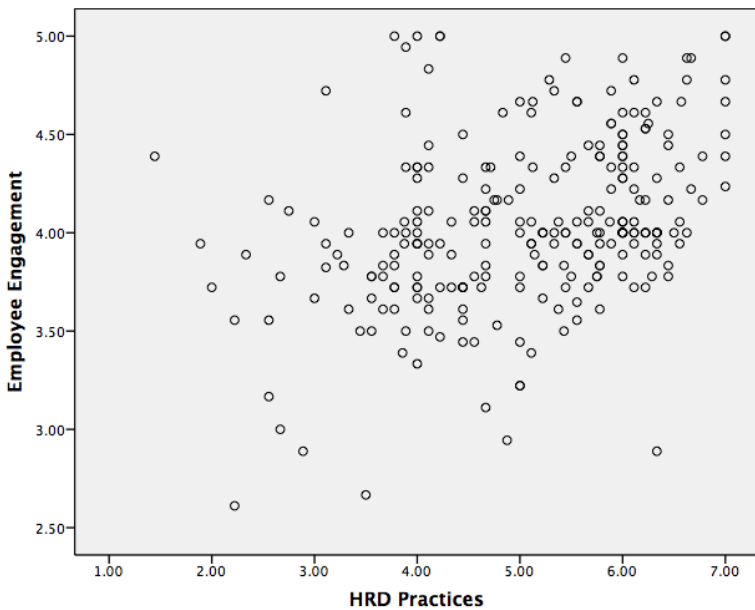


Figure 4.4. Scatterplot showing the relationship between HRD practices and employee engagement

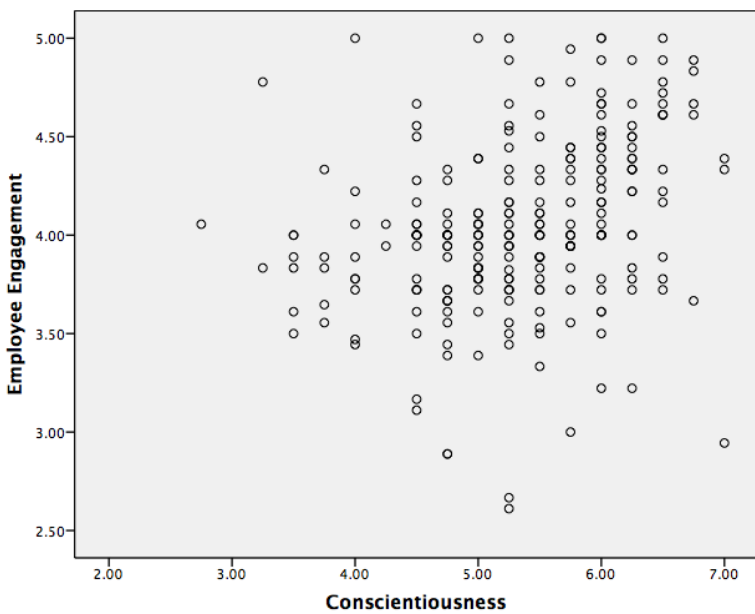
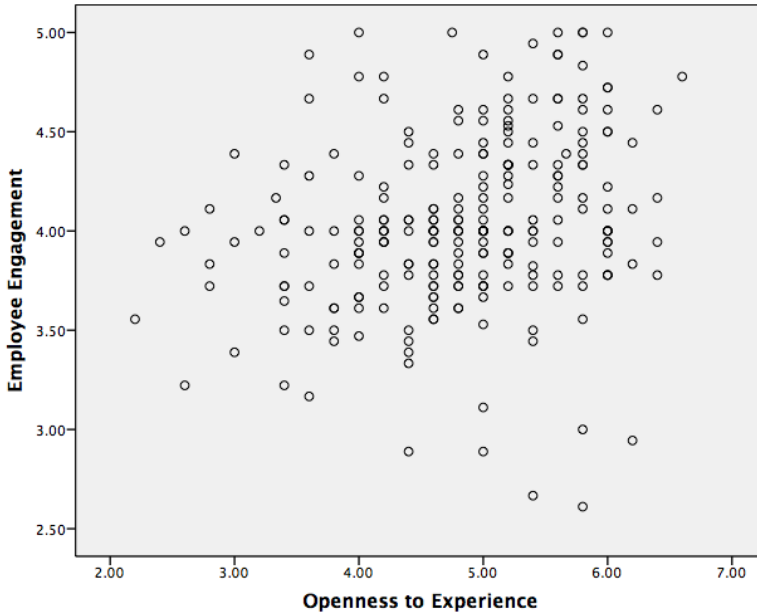


Figure 4.5. Scatterplot showing the relationship between conscientiousness and employee engagement



*Figure 4.6.* Scatterplot showing the relationship between openness to experience and employee engagement

### **Absence of Multicollinearity**

Multicollinearity occurs when the predictor variables are highly correlated with one another ( $R > .08$ ). The bivariate correlation matrix (Table 4.2) shows that the largest correlation among the independent variables was .49.

In addition to bivariate correlations, tolerance statistics and variance inflation factor (VIF) values were examined to detect multicollinearity. Field (2009) pointed out that multicollinearity is an issue if VIF is greater than 10 or if the tolerance statistic is below .10. The tolerance statistics and VIF values shown in Table 4.3 indicate that multicollinearity does not appear to be a problem in this study.



Table 4.3

*Collinearity Diagnostics for Predictor Variables of Employee Engagement*

Variable	Tolerance	VIF
Age	.64	1.57
Gender	.84	1.19
Education	.65	1.54
Tenure	.84	1.19
Job Characteristics	.71	1.41
LMX	.58	1.73
CWX	.87	1.15
HRD Practices	.72	1.40
Conscientiousness	.86	1.16
Openness to Experience	.77	1.30

**Homoscedasticity**

Homoscedasticity means that the residuals at each level of the predictors should have the same variance (Field, 2009). This assumption was tested by plotting the standardized residuals against the standardized predicted values based on the regression equation. Figure 4.7 shows a random array of dots that are evenly dispersed around zero, illustrating that the assumption of homoscedasticity was met.

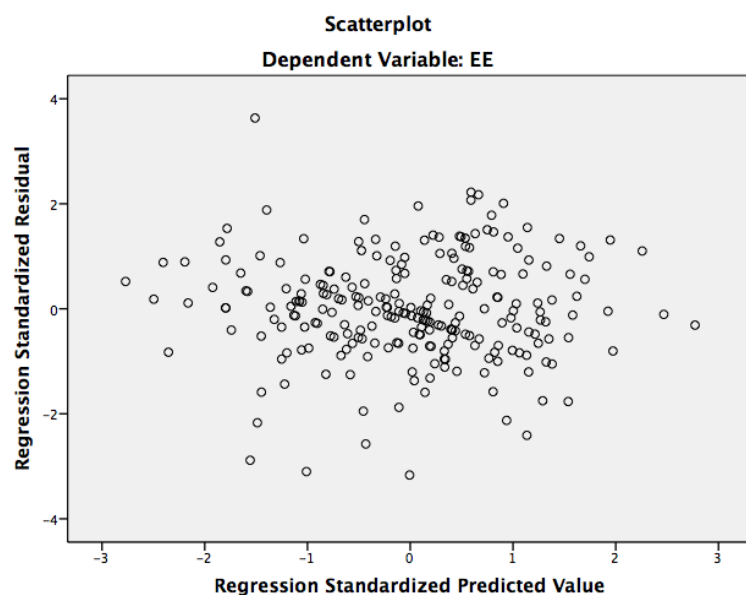


Figure 4.7. Scatterplot of standardized residuals in predicting employee engagement

## Independence of Errors

The assumption of independent errors was investigated using the Durbin-Watson test, which tests whether the adjacent residual errors are correlated (Field, 2009). The test statistic varies between 0 and 4, with a value close to 2 being generally acceptable and a value of less than 1 or greater than 3 representing a cause of concern. The Durbin-Watson statistic for the model of this study was 2.12; thus, it can be concluded that the assumption of independent errors was met.

## Normality of Residuals

In regression, it is assumed that the residuals in the model are normally distributed (Field, 2009). This assumption was tested by plotting a histogram and normal probability plot of standardized residuals (see Figures 4.8 and 4.9). Both the histogram and normal probability plot illustrated that the residuals are normally distributed.

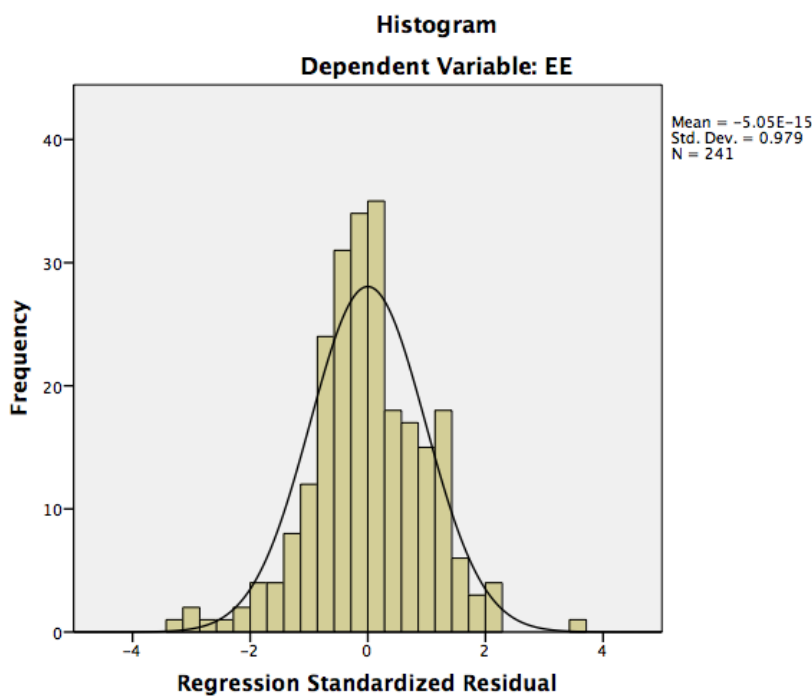
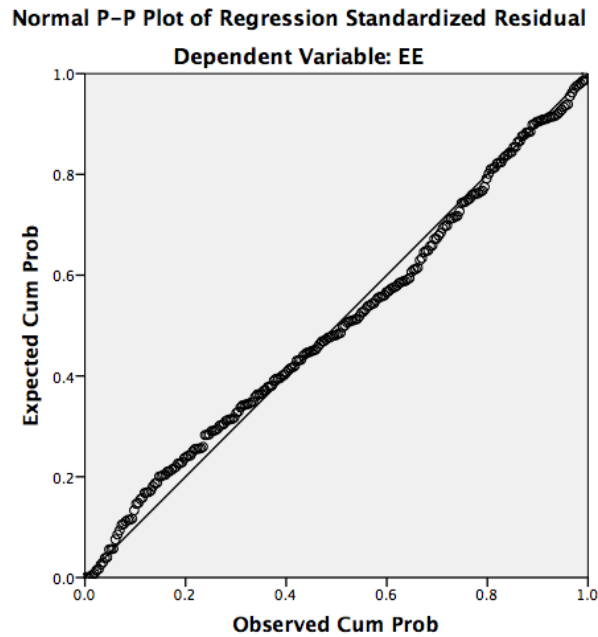


Figure 4.8. Histogram of standardized residuals in predicting employee engagement



*Figure 4.9.* Normal P-P Plot of standardized residuals in predicting employee engagement

### **Hierarchical Multiple Regression Analyses**

To test hypotheses 1 through 4, hierarchical regressions with listwise deletion were performed. Entry order was determined using the “theoretical (rational)” standard (Kline, 2011, p. 27). In other words, the order of the blocks of variables entered was based on existing theory or research on engagement. Demographic variables (age, gender, education, and tenure) were entered at the first step as controls. The job characteristics variable was entered at the second step because research has shown that job resources play a fundamental role in enhancing engagement. At the third step, LMX, CWX, and HRD were entered. Finally, conscientiousness and openness to experience were entered in order to assess their effects above and beyond the preceding four antecedent variables.

Table 4.4  
*Hierarchical Regression Analysis Summary of Variables Predicting Employee Engagement*

Step and predictor variable	<i>B</i>	<i>SE B</i>	$\beta$	$R^2$	$\Delta R^2$
Step 1:					
Age	.057	.038	.115	.073	
Gender	-.028	.057	-.032		
Education	.023	.063	.027		
Tenure	.161	.058	.186**		
Step 2:					
Age	.062	.035	.125	.210	.137***
Gender	.041	.054	.047		
Education	-.030	.059	-.036		
Tenure	.112	.054	.129*		
Job characteristics	.223	.035	.392***		
Step 3:					
Age	.039	.034	.078	.282	.073***
Gender	.043	.052	.049		
Education	-.011	.059	-.014		
Tenure	.128	.052	.148*		
Job characteristics	.160	.036	.282***		
LMX	.043	.052	.060		
CWX	.069	.050	.083		
HRD practices	.082	.024	.226**		
Step 4:					
Age	.026	.034	.052	.320	.038**
Gender	.039	.051	.045		
Education	-.005	.057	-.006		
Tenure	.120	.051	.139*		
Job characteristics	.134	.037	.236***		
LMX	.025	.051	.035		
CWX	.063	.049	.076		
HRD practices	.080	.023	.221**		
Conscientiousness	.103	.032	.191**		
Openness to experience	.022	.031	.044		

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## Results

Results of the hierarchical regression analyses are presented in Table 4.4. The demographic variables (age, gender, education, and tenure) were controlled for in the first step of the analysis. Results indicated that these demographic variables explained 7.3% of the variance in engagement ( $R^2 = .073$ ,  $F(4, 236) = 4.63$ ,  $p = .001$ ).

The job characteristics variable was entered in the second step and was found to significantly increase the model's explanatory power for employee engagement. Results showed that this second model explained 21% of the variance in engagement ( $R^2 = .21$ ,  $F(5, 235) = 12.46$ ,  $p < .001$ ).

In the third step of the analyses, LMX, CWX, and HRD practices were entered. Adding these variables increased the proportion of variance explained by the model to 28.2% ( $R^2 = .282$ ,  $F(8, 232) = 11.41$ ,  $p < .001$ ).

The two personality variables – conscientiousness and openness to experience – were entered in the final step of the hierarchical regressions. Results showed that adding these two variables increased the proportion of variance to 32% ( $R^2 = .32$ ,  $F(10, 230) = 10.84$ ,  $p < .001$ ).

Results of the regressions indicated that the predictor variables accounted for 32% of the variance in employee engagement ( $R^2 = .32$ ,  $F(10, 230) = 10.84$ ,  $p < .001$ ), which represents a large effect (Field, 2009). Specifically, it was found that job characteristics were a significant predictor of employee engagement ( $\beta = .24$ ,  $p < .001$ ), a finding that supported Hypothesis 1. Regarding the workplace relationships items, LMX was not found to significantly predict employee engagement ( $\beta = .04$ ,  $p > .05$ ), nor was CWX ( $\beta = .08$ ,  $p > .05$ ); thus, Hypotheses 2a and 2b were not supported. As far as HRD practices are concerned, results showed that this variable significantly predicted engagement ( $\beta = .22$ ,  $p = .001$ ), a finding that supported

Hypothesis 3. Finally, conscientiousness was a statistically significant predictor of engagement ( $\beta = .19, p < .01$ ), providing support for Hypothesis 4a, whereas openness to experience did not have a significant effect on engagement ( $\beta = .04, p > .05$ ), indicating that there was no support for Hypothesis 4b.

### **Summary**

This chapter presented the results of the statistical analyses employed in the study. First, the data were screened to detect univariate and multivariate outliers that might exert undue influence over the parameters of the model. Next, the chapter presented the demographic characteristics of the respondents, descriptive statistics, and correlations between the variables of the study. Results from the correlation analysis showed that all variables were statistically significantly related to one another. Third, assumptions of multiple regressions were tested. Finally, hierarchical multiple regressions were performed. Results showed that job characteristics, HRD practices, and conscientiousness were predictive of engagement, whereas LMX, CWX, and openness to experience did not have a significant effect on engagement. Discussion of results and implications will be presented in the next chapter.

## CHAPTER 5

### DISCUSSION, IMPLICATIONS, AND CONCLUSION

This chapter discusses the results of the study in relation to the literature on employee engagement. Limitations of the study and implications for theory, research, and practice are also discussed.

#### Summary of the Study

Over the past 20 years, employee engagement has attracted a lot of attention from scholars and practitioners in the fields of management, organizational psychology, organizational behavior, and HRD. Employee engagement is defined as “the harnessing of organization members’ selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performance” (Kahn, 1990, p. 694). Employees who are engaged are more likely to perform better than their disengaged counterparts and have higher job satisfaction, and are less likely to leave the organization (May et al., 2004; Saks, 2006; Wollard & Shuck, 2011).

In spite of the popularity of the construct, it has been reported that many employees around the world have low levels of engagement and that disengagement is on the rise in many countries (Gallup, 2013; Robertson & Cooper, 2010; Saks & Gruman, 2014). In addition, academic research on engagement is plagued with inconsistent definitions and operationalizations, and a lack of understanding over the major antecedents and outcomes of the construct (Cole et al., 2014; Saks & Gruman, 2014; Truss et al., 2014).

This study aimed to contribute to the literature by investigating the effects of a number of key drivers of engagement – specifically job characteristics, LMX, CWX, HRD practices, conscientiousness, and openness to experience – among a sample of Cambodian commercial

bank employees. In addition, unlike most studies that have utilized the UWES instrument, this study employed the Job Engagement Measure (Rich et al., 2010) to measure engagement, allowing the researcher to operationalize the construct in accordance with Kahn's (1990) conceptualization. The overarching research question that guided this study was: *What are the effects of job characteristics, LMX and CWX, HRD practices, and conscientiousness and openness to experience on employee engagement among Cambodian commercial bank employees?* The following hypotheses were tested to examine this research question:

*Hypothesis 1:* Job characteristics will be a significant predictor of employee engagement.

*Hypothesis 2a:* LMX will be a significant predictor of employee engagement.

*Hypothesis 2b:* CWX will be a significant predictor of employee engagement.

*Hypothesis 3:* Employee perceptions of HRD practices be a significant predictor of employee engagement.

*Hypothesis 4a:* Conscientiousness will be a significant predictor of employee engagement.

*Hypothesis 4b:* Openness to experience will be a significant predictor of employee engagement.

### **Discussion of Results**

Findings from this study illustrate that a number of key factors contribute significantly to explaining individuals' level of engagement within the context of the commercial banking industry in Cambodia. In particular, after controlling for the demographic variables, job characteristics were found to be a statistically significant predictor of engagement. Furthermore, the results showed that HRD practices and conscientiousness were predictive of engagement. Interestingly, contrary to the hypothesized model, the results did not present support for the



significant effects of LMX, CWX, or openness to experience. Guided by existing theory and research, the following section discusses the results of each of the hypotheses tested. First, *H1* is discussed, followed by *H2a*, *H2b*, *H3*, *H4a*, and *H4b*.

### **Job Characteristics and Employee Engagement**

Hypothesis 1 stated that job characteristics would be positively related to employee engagement. Results from the hierarchical regression analyses showed that when controlling for age, gender, education, and tenure, the job characteristics variable explained a unique 13.7% ( $\Delta R^2 = .137, p < .001$ ) of the variance in engagement. This medium effect (Field, 2009) is consistent with much of the existing research on engagement, which suggests that a person's engagement level is significantly affected by the characteristics of their work (Crawford et al., 2014; May et al., 2004; Kahn, 1990; Saks, 2006; Sarti, 2014).

The Job Characteristics Theory (JCT; Hackman & Oldham, 1975) proposed that a number of core job characteristics (skill variety, task identity, task significance, autonomy, and feedback from job) could increase individuals' perceived meaningfulness of their work. Similarly, Kahn (1990) maintained that the psychological meaningfulness condition of engagement – one's feeling of being worthwhile and valuable – is largely influenced by such job characteristics as challenging work, skill variety, and autonomous role. May et al. (2004) also proposed that managers and supervisors could invest time and resources in designing tasks and roles that fit with employees' needs and aspirations, and that will allow them to better express themselves. Saks' (2006) study also built upon the JCT and found that the core job characteristics significantly predicted engagement. Finally, Crawford et al. (2014) reported that job challenge, autonomy, variety, feedback, and rewards and recognition are all associated with

increased engagement because they provide opportunities for employees to express their preferred selves in the workplace.

This study's findings contribute to the body of research on engagement in a non-Western context and support the existing notion that job characteristics are pivotal to increasing the level of engagement of individual employees. In fact, these core job characteristics appeared to have explained the most variance in the model. When controlled for the job characteristics variable, the proportion of variance explained by the other variables in the model only increased slightly. Thus, it can be concluded that skill variety, task identity, task significance, autonomy, and feedback from job are perhaps the most important factors in enhancing the engagement levels of individual employees in the Cambodian banking sector.

### **LMX, CWX, and Employee Engagement**

Hypotheses 2a and 2b stated that LMX and CWX would be significant predictors of employee engagement. Results from the correlational analyses showed that both LMX and CWX were positively related to engagement. However, results from the hierarchical regressions indicated that after controlling for the demographic variables and job characteristics, neither LMX nor CWX had a statistically significant effect on engagement, implying that there was no support for the two hypotheses.

These findings are inconsistent with existing research that investigates the effects of workplace relationships on engagement (Agarwal et al., 2012; May et al., 2004; Saks, 2006; Shuck, Rocco, & Albornoz, 2011). In the current literature, supportive workplace relationships are recognized as pivotal to increasing employee engagement levels because trusting interpersonal relationships can enhance the level of psychological safety among individuals such that they feel they can go about doing their work without fearing the negative consequences of

failures (Kahn, 1990; May et al., 2004). One possible explanation for the inconsistent findings is that LMX or CWX signifies a relationship that is relatively different from a social or interpersonal relationship. LMX or CWX specifically refers to a 'working relationship' that develops between an individual and their leader or colleagues, and consists of three main dimensions: respect, trust, and obligation. Hence, it could be because in such a collectivist society as Cambodia, employees are more concerned about interpersonal or social relationships in the workplace than relationships that are specifically directly related to work itself. Another possible reason is that employees in the Cambodian commercial banking industry place a strong emphasis on job characteristics than other workplace factors. As the regression results suggest, the job characteristics variable explained the most variance in the engagement factor, indicating that the employees strongly valued skill variety, task identity, task significance, autonomy, and feedback about their work. In this study, when the LMX and CWX variables were entered as sole predictors of engagement, the results were significant. Nevertheless, these inconsistent findings clearly demonstrate that more research is needed to augment our understanding of the effects of LMX and CWX on engagement relative to other workplace factors and within different contexts.

### **HRD Practices and Employee Engagement**

Development opportunities are important to increasing engagement levels because they provide avenues for employees' growth and skill development and make work more meaningful (Crawford et al., 2014). Much of the existing research, however, tends to focus on training and development efforts (Crawford et al., 2014; Salanova, Agut, & Peiro, 2005) and less so on HRD practices, which consist of organization development, career development, and training and development (Swanson & Holton, 2009; Shuck, Rocco, & Albornoz, 2010). In addition, the few studies that have investigated the effects of HRD practices on engagement have found

inconsistent results (Rurkkhum & Bartlett, 2012; Shuck et al., 2014). Furthermore, research on the relationship between HRD and engagement in a non-Western context has been largely overlooked.

This study's third hypothesis stated that HRD practices would be a significant predictor of engagement. Results from the regressions provide support for this hypothesis. The findings indicated that HRD practices had a significant effect on engagement above and beyond job characteristics, which were controlled for in the preceding block of variables that were entered in the regressions. In fact, the third model, of which HRD practices were the only variable that showed a significant effect, increased the variance in engagement by 7.3% ( $\Delta R^2 = .073, p < .001$ ). This illustrates that within the context of the commercial banking industry in Cambodia, employees who reported a high level of satisfaction with their organization's efforts to prepare them for future jobs and career development, and to support them with the necessary resources they need for their work-related training, were more likely to be physically, emotionally, and cognitively engaged.

### **Conscientiousness and Openness to Experience**

Numerous engagement scholars have proposed that besides working conditions such as job resources, leadership, and workplace relationships, individual differences may have significant effect on engagement (Kahn, 1990; Macey & Schneider, 2008; Saks & Gruman, 2014). Kahn (1992), for instance, argued that individual characteristics can influence a person's psychological presence at work and their personal engagement. Macey and Schneider (2008) proposed and conceptualized *trait engagement* as a type of engagement which comprises of various interconnected personality attributes, such as proactive personality and

conscientiousness. However, to date there has been very little empirical research that investigates the effects of individual differences (Saks & Gruman, 2014).

In Hypotheses 4a and 4b of this study, it was proposed that two of the Big Five Personality dimensions – conscientiousness and openness to experience – would significantly predict employee engagement. Consistent with the current literature, it was found that conscientiousness had a positive significant effect on engagement; thus hypothesis 4a was supported. Results from the regression analyses, however, found no support for hypothesis 4b. This implies that employees who reported a high level of conscientiousness – which refers to being dependable, careful, thorough, responsible, and organized – were likely to be more engaged. This positive effect could potentially be attributed to the highly dynamic nature of the Cambodian commercial banking industry, which has seen remarkable growth, increased performance, and various significant structural reforms (Hidenobu et al., 2013; IMF, 2012). Employees within this industry are expected to perform to a relatively high standard; thus, employees that have a conscientiousness personality may fit very well in this work environment and thus tend to be more engaged. However, it is somewhat surprising that the results of this study found no support for a positive effect of the openness to experience variable. Clearly, more research on the relationships between engagement and personality traits is needed to enhance our understanding of the drivers of the construct.

### **Implications for Research**

This study presents a number of implications for research. First, more research could be conducted to further test the model and hypothesized relationships of this study. Given that the study was conducted among a very specific population – commercial bank employees in Phnom Penh, Cambodia – future research studies could investigate the relationships between

engagement and the proposed antecedents in different industries (e.g. healthcare, higher education, government institutions) or with diverse populations (e.g. low-status groups, older workers, ethnic or cultural minorities) (Shuck et al., 2014). Future research could also investigate the extent to which employee engagement mediates the relationships between the proposed antecedent variables and other organizationally pertinent variables such as profit, growth, customer satisfaction, and employee turnover.

In addition, despite research consistently showing that job resources are predictive of engagement, we do not seem to have a clear understanding of which job resources may be more important than others (Saks & Gruman, 2014). Given that the job characteristics variable of this study explained a relatively large amount of unique variance in engagement, it may be of interest to further examine the effects of each of five core job characteristics presented in the study to see which of these variables may be more significant to increased levels of engagement.

In the current body of literature, individual differences and personality traits have been found to be positively related to engagement but have received very little attention (Macey & Schneider, 2008; Saks & Gruman, 2014). Future studies could investigate the effects of other personality trait variables that were not explored in this study.

Further, given that most engagement studies have utilized correlational and cross-sectional designs, the literature could considerably benefit from longitudinal designs. For instance, it may be of interest to follow a specific group of employees for a specific period of time, using longitudinal designs, to better understand fluctuations in engagement overtime (Rich et al., 2010; Saks & Gruman, 2014).

The current body of research could also benefit from experimental studies of specific employee engagement interventions (Saks & Gruman, 2014; Shuck et al., 2014). Currently, very

few studies have tested the effects of specific interventions for increasing engagement levels and of those that have been conducted, some have utilized questionable instruments to measure engagement (Saks & Gruman, 2014). Experimental designs could enable us to have a better understanding of the causal relationships between specific interventions and engagement.

Finally, qualitative research – for example, using the grounded-theory, case study, or phenomenological approach – might provide us with a more in-depth understanding of the phenomenon of engagement. Researchers could conduct structured interviews, focus groups, or case studies aimed at obtaining direct insights from employees regarding what specifically drives them to be more engaged in the workplace. Given that the majority of engagement studies have been quantitative in nature, qualitative approaches are necessary to augment our understanding of the construct.

### **Implications for Practice**

Findings from this study present various implications for practice. Organizations looking to increase employee engagement levels could design and implement initiatives that are specifically related to the antecedent variables examined in this study. For example, in this study it was found that job characteristics had a significant effect on employee engagement. Organizations could strive to provide support and resources geared towards enhancing these core job characteristics: skill variety, task identity, task significance, autonomy, and feedback (Hackman & Oldham, 1975). In other words, organizations should aim at designing work roles that allow employees to be involved in a variety of activities and to utilize different skills and talents. Jobs should also be designed in such a way that enables employees to have a sense of significance and identity about their work. Further, organizations could strive to foster a sense of autonomy among employees by providing them with substantial freedom, independence and

discretion in going about their work. Moreover, employees should regularly receive clear and extensive feedback about their work assignments.

In addition, organizations should invest and encourage employees to participate in various HRD initiatives, such as training and development programs, career counseling and management programs. Such initiatives could be directed towards upgrading the skills and competences of the employees to meet the needs of their current jobs, or aimed at preparing them for future jobs and progress further in their careers.

This study also demonstrated a positive relationship between a person's personality characteristics and their engagement levels. In particular, employees who have a conscientious personality are more likely to be more engaged at work. This finding implies that organizations could design HRD interventions and programs that are congruent with the distinct personalities of their employees.

### **Limitations**

Several limitations of this study should be taken into consideration. First, the data collected were based on self-reports. Self-report surveys are the most common method of data collection in the social sciences (Reio, 2010). They offer various benefits to the researcher (e.g. low costs, convenience in distributing questionnaires); however, they may also produce common method variance bias, resulting in the inflation or deflation of the correlations among the research variables (Reio, 2010). In this study, data were collected from a single source, implying that common method variance may be a potential issue. Several steps, however, were taken to minimize the likelihood of this problem. For example, the researcher ensured the confidentiality of the participants and provided clear instructions for completing the survey (Reio, 2010). Also, the questionnaire used scale items that were written clearly and precisely (Reio, 2010). In



addition, the survey was designed using Dillman et al.'s (2009) 'tailored design method' guidelines – such using motivational features, having the survey reviewed by subject experts, conducting a pilot study, and following specific steps for designing a web-based questionnaire.

Second, this study used convenience sampling and was conducted in the context of 10 commercial banks in Phnom Penh, Cambodia. Therefore, caution should be applied when attempting to generalize the results beyond this population.

Finally, the study utilized existing instruments developed in the Western literature and assumed that these measures could be used in a Cambodian context. It is possible, therefore, that the content of the instruments drawn from the Western literature may not fully capture the meaning of the response provided by employees in the commercial banking industry in Cambodia.

### **Concluding Thoughts**

The potential for employee engagement to increase levels of organizational performance, productivity, and profitability has been increasingly recognized by public and private organizations, governments, and policymakers (Truss et al., 2014). HRD researchers and practitioners, therefore, are gradually being called upon to make contributions to a better understanding of the construct and to develop initiatives that could positively influence the engagement levels of organizational members.

This study sought to provide some useful indications on the drivers of employee engagement within the Cambodian context. Findings from this study confirm the importance of job characteristics, HRD practices, and conscientiousness in fostering engagement. Therefore, organizations that place emphasis on engagement could potentially design initiatives and interventions that are associated with the antecedents investigated in this study.

In closing, it is hoped that this study contributes to addressing the paucity of structured literature on the antecedents of engagement within a non-Western context. Future research could examine the effects of the engagement antecedents proposed in this study in different industries, with diverse populations, or using different research design methods. Given the lack of agreement and consensus over the definitions, operationalizations, drivers, and outcomes of the construct, more empirical research, discussions, and practical findings are needed to augment our understanding of the concept of employee engagement.

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Appendix A:  
Survey Instruments

**Project Title:** Employee engagement in Cambodia: An examination of the effects of job characteristics, leader-member and co-worker exchange, HRD practices, and personality traits

### **Instruments**

#### **Employee engagement (18 items)**

Five-point Likert-type scale:

1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), 5 (strongly agree)

#### *Physical engagement*

1. I work with intensity on my job
2. I exert my full effort to my job
3. I devote a lot of energy to my job
4. I try my hardest to perform well on my job
5. I strive as hard as I can to complete my job
6. I exert a lot of energy on my job

#### *Emotional Engagement*

7. I am enthusiastic about my job
8. I feel energetic at my job
9. I am interested in my job
10. I am proud of my job
11. I feel positive about my job
12. I am excited about my job

#### *Cognitive Engagement*

13. At work, my mind is focused on my job
14. At work, I pay a lot of attention to my job
15. At work, I focus a great deal of attention on my job
16. At work, I am absorbed by my job
17. At work, I concentrate on my job
18. At work, I devote a lot of attention to my job

#### **Job characteristics (15 items)**

Seven-point Likert-type scale:

1 (very little) -----2-----3----- 4 (moderately) -----5-----6-----7 (very much)

1. How much autonomy is there in your job? That is, to what extent does your job permit you to decide on your own how to go about doing the work?
2. To what extent does your job involve doing a “whole” and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? Or is it only a small part of the overall piece of work, which is finished by other people or by automatic machines?





6. I have enough confidence in my leader that I would defend and justify his/her decision if he/she were not present to do so?

Strongly disagree    Disagree    Neutral    Agree    Strongly agree

7. How would you characterize your working relationship with your leader?

Extremely ineffective    Worse than average    Average    Better than average  
Extremely effective

### **Co-worker Exchange (6 items)**

1. Do you usually know how satisfied your co-worker is with what you do?

Rarely    Occasionally    Sometimes    Fairly often    Very often

2. How well does your co-worker understand your job problems and needs?

Not a bit    A little    A fair amount    Quite a bit    A great deal

3. Regardless of how much formal authority he/she has built into his/her position, what are the changes that your co-worker would use his/her power to help you solve problems in your work?

None    Small    Moderate    High    Very high

4. Again, regardless of the amount of formal authority your co-worker has, what are the chances that he/she would "bail you out," at his/her expense?

None    Small    Moderate    High    Very high

5. I have enough confidence in my co-worker that I would defend and justify his/her decision if he/she were not present to do so?

Strongly disagree    Disagree    Neutral    Agree    Strongly agree

6. How would you characterize your working relationship with your co-worker?

Extremely ineffective    Worse than average    Average    Better than average  
Extremely effective

### **Human Resource Development Practices (9 items)**

Seven-point Likert-type scale:

1 (strongly disagree), 2 (disagree), 3 (somewhat disagree), 4 (neutral), 5 (somewhat agree), 6 (agree), 7 (strongly agree)

1. My organization trains employees on skills that prepare them for future jobs and career development.
2. My organization provides career counselling and planning assistance to employees.
3. My organization allows employees to have the time to learn new skills that prepare them for future jobs.
4. My organization provides support when employees decide to obtain ongoing training.
5. My organization is receptive to employees' requests for later transfers (transfer to another department).

6. My organization ensures that employees can expect confidentiality when consulting staff.
7. My organization provides employees with information on the availability of job openings inside the organization.
8. My organization is fully supportive of a career-management program for the employees.
9. My organization provides a systematic program that regularly assesses employees' skills and interests.

### **Conscientiousness (4 items)**

Seven-point Likert-type scale:

1 (never), 2 (rarely), 3 (occasionally), 4 (sometimes), 5 (frequently), 6 (usually), 7 (always)

1. I am precise.
2. I am organized.
3. I am sloppy.
4. I am orderly

### **Openness to experience (5 items)**

Seven-point Likert-type scale:

1 (never), 2 (rarely), 3 (occasionally), 4 (sometimes), 5 (frequently), 6 (usually), 7 (always)

1. I frequently feel highly creative
2. I am imaginative
3. I appreciate art
4. I find novel solutions
5. I am more original than others

### **Demographics (4 items)**

1. Age (in years)
  - Less than 25 years
  - 26-30 years
  - 31-40 years
  - 41-50 years
  - 51-60 years
  - More than 61 years
2. Gender
  - Male
  - Female
3. Highest education level
  - High school
  - Bachelor's degree
  - Master's degree

- Doctoral degree
- Other: please specify

4. Tenure (how long have you been working at your organization?)

- 5 years or less
- 6-10 years
- 11-16 years
- 16-20 years
- More than 20 years

Appendix B:  
Research Consent Form

## Introduction and Research Consent Form

### A Survey on Employee Engagement in Cambodia

*Sowath Rana*

*University of Minnesota*

Thank you for your interest in participating in this research study of employee engagement at commercial banking institutions in Cambodia. Please read this form carefully and ask any questions you may have before agreeing to be in this study.

This study is being conducted by: Mr. Sowath Rana, doctoral candidate in Human Resource Development, Department of Organizational Leadership, Policy, and Development, University of Minnesota, Minneapolis, USA.

#### **Significance of the Study:**

Findings from this study will provide valuable information to employees, managers, organizations, and researchers on the effects of various organizational practices on the level of engagement among employees in Cambodia.

#### **Procedure:**

If you agree to be in this study, you will be asked to complete a short electronic survey. The survey is divided into six short sections and should take approximately 20 minutes to complete.

#### **Confidentiality:**

The records of this study will be kept **confidential** and **private**. In any sort of report that we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only the researcher will have access to these records.

#### **Voluntary Nature of the Study:**

Participation in this study is **voluntary**. Your decision whether or not to participate will not affect your current or future relations with your organization or with the University of Minnesota. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

#### **Lucky Draw**

I understand that your time is highly valuable. Therefore, as a token of appreciation, you will be entered into a lucky draw to win a \$10 coffee shop gift card. 30 gift cards will be available. You will be asked to enter your contact information at the end of the survey.

**Contacts and Questions:**

This study has been reviewed and approved by the University of Minnesota Institutional Review Board for human subject participation. If you have any questions about the study, you are encouraged to contact Sowath Rana at 012 709 972 or [ranax031@umn.edu](mailto:ranax031@umn.edu).

If you agree to participate in this study, please click on the "**Next >>**" button to continue.

Appendix C:

Invitation Letters to HR Representatives and Research Participants

## Invitation Letter to HR Representatives

July 30, 2015

Subject: Request for Permission to Conduct an Employee Engagement Survey

Dear Madam or Sir:

My name is Sowath Rana. I am a doctoral candidate majoring in Human Resource Development at the University of Minnesota and am currently conducting my doctoral dissertation research on the topic of employee engagement at Cambodian banking institutions.

I am writing this letter to ask for your kind permission to conduct a questionnaire survey of employees at your organization. The purpose of my empirical research study is **to examine the positive effects of a number of key drivers of employee engagement**, including job characteristics, workplace relationships, and human resource practices at the organization.

Employee engagement is a very important topic in various social science disciplines, including human resource development, management, and organizational psychology. Findings from this study will potentially make a significant contribution to the current body of research on employee engagement and may be of relevance and interest to HR scholars, practitioners, consultants, as well as organizations operating in Cambodia such as yours.

Furthermore, as a return of favor, I would be pleased to present aggregate results and findings from this study to your organization upon request. These findings may be useful to your organization in terms of developing HR initiatives that are aligned with the needs of your employees.

This study has been reviewed and approved by the University of Minnesota Institutional Review Board for human subject participation. Employees' participation in this study is completely voluntary. The records of this study will be kept **private** and **confidential**. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject or your organization. Research records will be stored securely and only the researcher will have access to the records.

Participants will be asked to complete a short electronic survey. The link to the survey is: [z.umn.edu/sowathrana](http://z.umn.edu/sowathrana). The survey should take approximately 15 minutes to complete. In addition, as a token of appreciation, participants will be entered into a lucky draw to win a \$10 coffee shop gift card. 30 gift cards will be available.

I would really appreciate an opportunity to discuss the various aspects of the study with you in person anytime at your convenience. I can be contacted at +855 (12) 709 972 or [ranax031@umn.edu](mailto:ranax031@umn.edu). Thank you very much for your time and consideration. I look forward to hearing from you.



Sincerely yours,

A handwritten signature in black ink, appearing to read "Sowath Rana". The signature is written in a cursive style with a large initial "S" and "R".

Sowath Rana, University of Minnesota

## Invitation Letter to Research Participants

Dear Madam or Sir:

My name is Sowath Rana. I am a doctoral candidate majoring in Human Resource Development at the University of Minnesota and am currently conducting my doctoral dissertation research on the topic of employee engagement in Cambodian banking institutions.

I would like to invite you to participate in this research study by completing an electronic survey. You were selected as a possible participant because you are a current employee at a banking institution and therefore fit well with the research population of this study. If you agree to participate, please click on the following link: [*online survey web address*]. The survey should take approximately 15 minutes to complete.

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with your current organization. If you'd like to participate, you are free not to answer any question or withdraw from the study at any time.

As a token of appreciation for your time and effort, you will be entered into a drawing of thirty \$10 gift cards to a coffee shop in Phnom Penh, Cambodia.

If you have any questions or concerns regarding participation in this study, please do not hesitate to contact me at +855 (12) 709972 or [ranax031@umn.edu](mailto:ranax031@umn.edu).

Thank you very much for your time. I look forward to hearing from you.

Sincerely,

Sowath Rana, PhD Candidate, Human Resource Development  
University of Minnesota, Twin Cities

Appendix D:  
IRB Approval Letter

TO: [ardic001@umn.edu](mailto:ardic001@umn.edu), [ranax031@umn.edu](mailto:ranax031@umn.edu),

The IRB: Human Subjects Committee determined that the referenced study is exempt from review under federal guidelines 45 CFR Part 46.101(b) category #2 SURVEYS/INTERVIEWS; STANDARDIZED EDUCATIONAL TESTS; OBSERVATION OF PUBLIC BEHAVIOR.

**Study Number:** 1504E68581

**Principal Investigator:** Sowath Rana

**Title(s):**

Employee engagement in Cambodia: An examination of the effects of job characteristics, leader-member and co-worker exchange, HRD practices, and personality traits

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This e-mail confirmation is your official University of Minnesota HRPP notification of exemption from full committee review. You will not receive a hard copy or letter. This secure electronic notification between password protected authentications has been deemed by the University of Minnesota to constitute a legal signature.

The study number above is assigned to your research. That number and the title of your study must be used in all communication with the IRB office.

Research that involves observation can be approved under this category without obtaining consent.

**SURVEY OR INTERVIEW RESEARCH APPROVED AS EXEMPT UNDER THIS CATEGORY IS LIMITED TO ADULT SUBJECTS.**

This exemption is valid for five years from the date of this correspondence and will be filed inactive at that time. You will receive a notification prior to inactivation. If this research will extend beyond five years, you must submit a new application to the IRB before the study's expiration date.

Upon receipt of this email, you may begin your research. If you have questions, please call the IRB office at [\(612\) 626-5654](tel:6126265654).

You may go to the View Completed section of eResearch Central at <http://eresearch.umn.edu/> to view further details on your study.

The IRB wishes you success with this research.

We value your feedback. We have created a short survey that will only take a couple of minutes to complete. The questions are basic, but your responses will provide us with insight regarding what we do well and areas that may need improvement. Thanks in advance for completing the survey. <http://tinyurl.com/exempt-survey>