The Relationship between Employee Engagement and Organizational Citizenship Behavior in Thai Organizations

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Dedication

This dissertation is dedicated to my family, and all my past and present teachers. Without their support and belief in my potential, I would have never achieved this accomplishment.
Abstract

The purpose of this study was to explore the relationship between employee engagement and organizational citizenship behavior (OCB) in Thai organizations. The study focused on the use of employee perceptions of human resource development (HRD) practices (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support) as possible moderators to explain the strength and/or direction of the association between employee engagement and OCB. This study aimed to contribute to knowledge about employee engagement and shed light on how the field of HRD can be more involved in this knowledge creation.

This study utilized a survey research method and relied on previously developed instruments related to the variables of interest. The study collected data from 522 employees from four large Thai organizations. Data were gathered with either a paper-and-pencil or an online survey format based on the choice of participating organizations and individual respondents. The primary method of data analysis was a series of hierarchical multiple regression analyses.

The findings of this study revealed the positive relationships between employee engagement and every component of OCB. In total, a set of variables of interest in this study accounted for 35% of the variation in civic virtue, 27% for the variation in altruism, 17% for the variation in sportsmanship, and 13% for the variation in conscientiousness, as well as only 5% for the variation in courtesy. However, the findings of this study did not support any of the hypothesized moderating relationships between employee engagement and the various components of OCB.
Based on the findings, recommendations for both research and practice are made. Recommendations for future research, especially in international settings are made to guide additional HRD research related to OCB and employee engagement. One of the most important recommendations for future research is the role of cultural contexts between the research site and the locations where the instruments were developed. The results from the study also point to the importance of collaborative research to create sound and useful knowledge. Finally, recommendations for practice are made to guide organizations related to the need of treating employees fairly and providing sincere support in terms of employees’ well-being and development opportunities from both organizational and supervisory levels.
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CHAPTER ONE
INTRODUCTION

In a knowledge-based economy, it is generally accepted that skilled employees are key assets and the loss of such employees would be unacceptable for most organizations. Attracting and retaining skilled employees is challenging because these workers usually have several other job options (Butler & Waldrop, 1999; Joo & McLean, 2006; Thomas, 2000). However, having employees with the requisite skills is not enough to help an organization achieve its goals. It is essential to manage these skilled employees so that they perform actively and successfully, and are engaged in their work and their organization. It is not sufficient that they just show up; they need to be functioning at the peak level of their potential (Cho & McLean, 2009; D’Abate & Eddy, 2007; Frank, Finnegan, & Taylor, 2004; Rothbard, 2001).

Ulrich (2007) said the success of organizations comes from three essential qualities of employees: competence, commitment or engagement, and contribution. In other words, it is important to be aware that performance does not depend solely on the competence or cognitive skill of employees, but also on how employees respond emotionally to their work and organization. Thus, employee engagement is an important topic for management and human resource development (HRD) because research has confirmed that highly-engaged employees are motivated less through monetary compensation or other extrinsic motivations, and more through intrinsic factors such as being treated fairly, being valued, and having opportunities for professional growth (Gebauer, Lowman, & Gordon, 2008; Lehmann, 2009; Tsui, Pearce, Porter, & Tripoli, 1997).
Employee engagement is increasingly viewed as one component in measuring the health of an organization, along with the traditional measures of sales, profit, cash flow, and customer satisfaction (Piersol, 2007). Numerous definitions of employee engagement have been presented from both academic and practical perspectives (Macey & Schneider, 2008). However, no consensus on the definition of employee engagement has been established (Welbourne, 2007). Generally, employee engagement may be defined as the positive psychological conditions that lead employees to invest themselves actively in their role and the organization. The positive impact of employee engagement can be found on the level of both the individual employee and the organization (Sanchez & McCauley, 2006; Welbourne, 2007).

Although numerous studies have revealed the importance of employee engagement, the number of employees who are actively engaged in their work is relatively low. For example, it was recently estimated that only 14-30% of employees in the United States are actively engaged at work (Welbourne, 2007). Another study revealed that four out of every five employees worldwide do not deliver their full potential to help their organization succeed (Gebauer et al., 2008). Some scholars have attempted to explain this situation by referring to the many pressures from the highly competitive environment that most organizations face (Cartwright & Holmes, 2006; Cohen, 2003; Meyer & Allen, 1991).

Today’s organizations tend to be smaller and flatter compared to those in the past, and are likely to expect more from their employees. This situation can lead employees to become “frustrated and disenchanted with work” (Cartwright & Holmes, 2006, p. 200). In addition, several organizational changes, such as downsizing and
reengineering, may have created a negative environment for employees, while increasing the pressures to perform at a high level without the promise of job security. In other words, employees face changing psychological contracts between themselves and their organizations. Employees learn that the “traditional promise of job security in return for [their] hard work, or an organizational career [advancement] in return for [their] loyalty and hard work” are no longer true (Sturges, Conway, Guest, & Liefooghe, 2005, p. 822). Thus, it is important to develop studies that lead to a deeper understanding of employee engagement, methods of encouraging people to be highly-engaged at work in a new economic environment, and organizational outcomes.

Although highly-engaged employees are expected to deliver superior work performance compared to employees who are not highly-engaged, little is known about performance of highly-engaged employees that goes beyond formal job requirements. Highly-engaged employees are not only expected to work at a superior level, but also to actively apply themselves beyond formal job requirements. Several studies have confirmed that behavior that goes beyond formal job requirements can facilitate organizational performance through the impact on organizational contexts, organizational culture, and individual productivity (Farh, Zhong, & Organ, 2004; Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Thus, the concept of work behavior that is beyond the requirement of job scope, or organizational citizenship behavior (OCB), of highly-engaged employees is a needed area for research.
Problem Statement

A growing body of research has revealed a positive relationship between employee engagement and desired outcomes for both employees and organizations. At the individual level, employee engagement has been related to reduced burnout and lower levels of stress leading to greater work-life balance (Rothbard, 2001; Sanchez & McCauley, 2006; Schaufeli & Bakker, 2004). At the organizational level, employee engagement has been found to be related to reduced turnover intentions and actual turnover, increased productivity, improved customer satisfaction, sales growth, and shareholder return (Truss, Soane, Edwards, Wisdom, Croll, & Burnett, 2006; Welbourne, 2007). However, little is known about the possible link between performance and the behavior beyond formal job requirements of highly-engaged employees. The potential relationship between employee engagement and OCB was explored in this study.

Another possibly important related variable in the relationship between employee engagement and OCB is the influence of employee perceptions related to management practices, especially HRD practices within an organization. To date, very few empirical studies have explored how employee perceptions related to management practices within organizations may influence this relationship. Training opportunities and career growth opportunities have been cited as two of the most important factors influencing engagement level of employees in organizations (Gebauer et al., 2008; Truss et al., 2006). According to the American Society for Training and Development (ASTD), average learning expenditures per employee grew from $799 in 2001 to $1,110 in 2007, representing an approximate 38% growth over six years (ASTD
Although the most recent ASTD data has shown a decrease in average learning expenditures per employee, the overall investment in employee learning is still relatively high. According to ASTD, average learning expenditures per employee in 2008 dropped 3.8%, to $1,068 largely due to the economic downturn (ASTD, n.d.). Leading companies tend to invest more in terms of the amount spent on training and hours of training for their employees (Noe, 2005). Although in general the evidence shows an increasing investment in training and development, most employees (72%) perceive that their organization falls short in this area, especially with regard to training and development for career advancement (Gebaure et al., 2008). This highlights the need for additional research to explore relationships between employee engagement and OCB while also considering the potential moderating role of attitudes towards HRD.

Purpose of the Study

The purpose of this study was to explore the potential relationship between employee engagement and OCB in Thai organizations. The study explored employee perceptions of HRD practices as possible moderators to explain the strength and/or direction of the association between employee engagement and OCB. The five variables related to employee perceptions of HRD practices that were considered as potential moderators were: (1) organizational support, (2) access to training and development opportunities, (3) support for training and development opportunities, (4) benefits of training, and (5) formal career management support.
Research Questions

This study was designed to explore the relationship between employee engagement and OCB. Specifically, the three main research questions of the study were:

(1) What is the relationship between employee engagement and OCB in Thai organizations?

(2) What is the relationship between employee engagement, employee perceptions of HRD practices (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support), and OCB in Thai organizations?

(3) Is the relationship between employee engagement and OCB moderated by employee perceptions of HRD practices (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support)?

To explore these three broad research questions, six hypotheses were tested. In the following section a brief review of relevant theory and previous studies is provided to support the development of each of the six hypotheses.

Based on previous research, it was expected that highly-engaged employees are likely to perform better not only in terms of work behavior described in their job description but also beyond formal job requirements (Cardona, Lawrence, & Bentler, 2004; Cohen & Keren, 2008; Gebauer et al., 2008; Tsui et al., 1997). Thus, a positive relationship between employee engagement and OCB was expected.

Hypothesis 1: There is a positive relationship between employee engagement and OCB.
Employee engagement reflects a behavioral choice made by employees and it can be enhanced by organizations (Kahn, 1990). Applying concepts from social exchange theory, it could be expected that employees may feel engaged to an organization if they believe they are treated fairly and valued (Cardona et al., 2004; Tsui et al., 1997; Turnley, Bolino, Lester, & Bloodgood, 2003). In addition, numerous studies have confirmed the importance of training and career advancement opportunities toward the development of employee engagement (Gebauer et al., 2008; Kahn, 1990; Truss et al., 2006). Research has also confirmed the importance of employee perceptions of organizational support (Gebauer et al., 2008; May, Gilson, & Harter, 2004; Schaufeli & Bakker, 2004). Thus, these five selected employee perceptions of HRD practices used in this study: (1) organizational support, (2) access to training and development opportunities, (3) support for training and development opportunities, (4) benefits of training, and (5) formal career management support, were expected to positively moderate the relationship between employee engagement and OCB, leading to the development of the following hypotheses.

**Hypothesis 2a:** Organizational support is expected to positively moderate the relationship between employee engagement and OCB.

**Hypothesis 2b:** Access to training and development opportunities is expected to positively moderate the relationship between employee engagement and OCB.

**Hypothesis 2c:** Support for training and development opportunities from senior staff and colleagues is expected to positively moderate the relationship between employee engagement and OCB.
Hypothesis 2d: Benefits of training is expected to positively moderate the relationship between employee engagement and OCB.

Hypothesis 2e: Formal career management support is expected to positively moderate the relationship between employee engagement and OCB.

Significance of the Study

This study has both theoretical and practical significance. First, the existing theory on employee engagement was explored and tested in a new cultural context, Thailand. Thailand has a totally different cultural context compared to Western countries, where the concept of employee engagement has been developed. It is important to conduct studies across cultures to compare results in order to create sound knowledge, especially for a relatively new concept like employee engagement. Second, although employee engagement is a topic that has been increasingly examined from both academic and practical perspectives, its conceptual framework is still unclear. This concept has been criticized as an “aggregate of other established constructs” (Thomas, 2007, p. 1), such as organizational commitment and job involvement, or just one of the passing fads (Shuck & Wollard, 2010). In addition, little is known empirically about how HRD may relate to the development and maintenance of employee engagement (Shuck & Wollard, 2010). Thus, a study focusing on the relationship of employee engagement to specific performance outcomes, while also considering potential moderators which are directly related to HRD and management activities in organizations could add needed knowledge to the engagement construct.
Employee perceptions of HRD practices used in this research are also important to study because they are crucial management practices which may influence employee performance. More specifically, organizational support is important since it relates to overall employee perceptions about how well an organization responds to their needs, which can impact the level of engagement (Gebaure et al., 2008). Training and development opportunities related to both current tasks and future developmental preparation have received much attention, especially in terms of the amount each company invests in these activities and their estimated impact (Noe, 2005). Therefore, employee perceptions related to training and development opportunities are important since a developmental opportunity is an essential factor influencing the level of employee engagement, especially in skilled employees (Gebaure et al., 2008).

This study was also significant for practice. Currently, organizations are expressing greater interest in the employee engagement construct. A large number of consulting and training activities are related to efforts of improving engagement, yet the knowledge base for these interventions is limited (Macey & Schneider, 2008). More than 10 millions results related to the concept of employee engagement could be found on popular Internet search engines and most of them are results from consulting firm websites. In contrast, approximately 70,000 articles were found with a search limited to scholarly literature. Having result-based knowledge is important to further knowledge development and to strengthen management practices within organizations. This study hoped to add new knowledge to assist HRD and management practitioners in gaining a greater understanding of the link between employee engagement and employee
performance. This would be especially important in Thailand, given the setting for this research and the considerable interest in employee engagement in that country.

**Limitations of the Study**

Several potential limitations were expected in this study. First, this study relied on previously developed and validated instruments which were originally created in the United States. Differences between the United States and Thailand, where the study took place, could be expected to occur.

Referring to Hofstede’s model, Morakul and Wu (2001) summarized that the greatest difference between Thailand and Western countries is in the individualism/collectivism and the power distance dimensions. Thailand is a collectivist and high power distance society (Hofstede, 2001). According to Hofstede (2001), the individualism rank index value of Thailand is 39 of 50 countries compared to 1 for the United States. The power distance rank index value of Thailand is 21 of 50 countries compared to 38 for the United States. These cultural norms and values have led to a paternalistic management style and hierarchy in Thai organizations, which tends to be quite different from many Western management practices (McKenna, 1995). For example, one of the most important and influential work values in Thailand is personal relationships. Many human resource decisions within an organization, such as hiring, promotion, and rewarding, are often linked to a personal relationship (Lehmann, 2009). It is possible that these kinds of relationships, either positive or negative, affect how employees feel toward the organization. Undoubtedly, these kinds of differences can
impact the reliability of some of the variables in the instruments (Cohen & Keren, 2008) despite a careful review process for translating instruments used in this study.

The second limitation is specifically related to the process of instrument translation. Using the same instrument in different studies facilitates comparison across cultures (Yu, Lee, & Woo, 2004). However, the instrument must be translated appropriately so that the validities and reliabilities of the scales still exist (Yaghi, Goodman, Holton, & Bates, 2008). The steps of instrument translation followed the forward- and backward-translation approach proposed by Brislin (1970; 1986).

Although all necessary steps in the forward- and backward-translation process were implemented to ensure the completeness of the translation, it is almost impossible for the translation process to produce perfectly equivalent meanings from two different languages. Yu and colleagues (2004) summarized the problems of translation they faced in their study, such as a difference in cultural experiences with a particular concept as well as differences in grammatical and syntactical styles of the original and target languages. These problems were also anticipated to occur in the translation of instruments in this study.

Third, the use of self-reported data is another limitation. The main drawback of self-reported data occurs when individuals provide socially desirable answers in order to increase their chance of looking good in other people’s eyes (Barrick, Mount, & Judge, 2001; O’Driscoll, Pierce, & Coghlan, 2006). Although this study assured respondents’ confidentiality, it is unlikely to have completely eliminated all aspects of social desirability in responses.
Fourth, it is to be expected that this study would have limitations in terms of the possible moderators used. This study focused on selected crucial factors directly related to the HRD field. However, several factors influencing the relationship between employee engagement and OCB, such as leadership and personality of employees, were not included in the study, which could also play an important role in this relationship.

The fifth limitation of this study is involved with the research design. This study was not designed to test causal relationships. The design of this study dealt with correlations; thus, the results cannot be interpreted to imply causal inferences.

The final limitation of this study was the generalizability of results. The samples in this study were first-level employees who have no managerial responsibilities in the four large companies in Thailand. Care must be particularly taken to generalize the findings beyond these settings.

Definitions of Terms

Seven key terms used in this study are defined in the following section:

Access to training and development opportunities refers to the perception of employees that training and development opportunities are available for them to access even though it is, in fact, possible that these employees do not want to participate in these activities or that they will be selected by supervisors for training (Bartlett, 2001).

Benefits of training refers to the perception of employees that the effort that they put into the training programs provided by an organization will result in skills, knowledge, and abilities which will lead to positive and valued outcomes (Noe, Wilk, Mullen, & Wanek, 1997). In other words, benefits of training is the perception of
employees related to benefits which they can expect to obtain from participation in training programs provided by an organization.

_Employee engagement_ refers to the positive psychological conditions that lead employees to invest themselves actively in their role and organization. This definition derives from the work of Kahn (1990). Kahn was one of the pioneers in applying the concept of engagement to the workplace (Avery, McKay, & Wilson, 2007). According to Kahn (1990), personal engagement refers to “the simultaneous employment and expression of a person’s ‘preferred self’ in task behaviors that promote connections to work and to others; personal presence (physical, cognitive, and emotional); and active, full role performances” (p. 700).

_Formal career management support_ refers to the perception of employees that their career growth opportunities are supported by an organization. This means that employees perceive an organization has formal career management practices, such as training and skill development activities or personal development opportunities, that influence their career growth in the organization (Sturges, Guest, Conway, & Davey, 2002).

_Organizational citizenship behavior_ (OCB) refers to employee behavior that goes beyond formal job requirements. This type of behavior is not recognized directly by the formal reward system within an organization. Employees can decide whether they want to perform OCB and to what degree. This definition is derived mostly based on the work of Organ (1988).

_Organizational support_ refers to the perception of employees that an organization takes an interest in them in terms of both work and non-work issues, such
as by providing interesting jobs and showing concern for their lives (Eisenberger, Huntington, Hutchison, & Sowa, 1986). In other words, organizational support is a belief held by employees that their organization values them and is sincerely interested in their well-being (Cardona et al., 2004; Gebauer et al., 2008).

Support for training and development opportunities refers to the perception of employees that they are provided with support from senior staff or supervisors and colleagues to participate in and/or to apply skills and knowledge learned from training and development opportunities (Noe & Wilk, 1993).

Summary

The primary purpose of this study was to explore the relationship between employee engagement and OCB in Thai organizations. The findings of this study were expected to provide meaningful theoretical and practical knowledge. In terms of theoretical knowledge, this study hoped to strengthen the current understanding of the construct of employee engagement. In Thailand, the concept of employee engagement is relatively new; thus, it was expected that employee engagement could arouse great interest. In addition, by including five variables which were thought to possibly play a role in the relationship of employee engagement and OCB, this study hoped to generate further knowledge and potential application to assist human resource practitioners in developing and encouraging employees to become more actively engaged in their work. In the following chapters, a review of this literature is presented followed by the description of the research method, the results, and discussion, conclusions, and implications.
CHAPTER TWO

REVIEW OF THE LITERATURE

This chapter provides an overview and review of literature on the two main constructs considered in this study on the relationship between employee engagement and OCB. It provides definitions, presents a theoretical framework, and reviews existing theoretical and empirical studies on employee engagement and OCB. However, because the concept of employee engagement is related to the concept of motivation, this chapter starts with a very brief review of key theories on motivation.

Motivation Theories

The concept of motivation has been studied by numerous scholars. Wright and Noe (1996) defined motivation as “the combination of forces that lead people to behave as they do” (p. 350). Latham and Pinder (2005) defined motivation as “the process that determines how energy is used to satisfy needs” (p. 502). However, the present review in this study focuses mostly on work motivation because it directly relates to organizational settings and has been long recognized as an important factor of personal and organizational accomplishments (Kanfer, Chen, & Pritchard, 2008). Kanfer et al. (2008) defined work motivation as “the set of processes that determine a person’s intentions to allocate personal resources across a range of possible actions” (pp. 3-4).

Motivation theories can be categorized into two types: content theories and process theories (Steers, Mowday, & Shapiro, 2004). Content theories aim to identify factors associated with motivation in a relatively static environment. The well-known examples of content theories are Maslow’s hierarchy of needs and motivational-hygiene
theories. On the contrary, process theories aim to identify factors associated with motivation from a dynamic perspective and look for causal relationships across time and events. The well-known examples of process theories are expectancy and goal setting theories. A brief review of each theory is presented in the following section.

*Maslow’s Hierarchy of Needs Theory*

Maslow (1970) proposed his human motivation theory, or hierarchy of needs, in the first edition of his book in 1954. According to Maslow (1970), all basic human needs are organized into a hierarchy of physiological needs, safety needs, belongingness and love needs, esteem needs, and self-actualization needs. Once individuals satisfy their physiological needs, these needs are no longer the dominant drivers in their current dynamic so higher needs will emerge and this process will continue. However, the physiological needs are the salient needs, especially for those who are “missing everything in life in an extreme fashion” (Maslow, 1970, p. 37). Finally, self-actualization needs are likely to occur when all other needs are satisfied. The term self-actualization needs refers to a person’s desire for self-fulfillment, which is a tendency to become what that person is capable of becoming. Thus, self-actualization needs vary from person to person. However, not every person will develop his/her needs according to the hierarchy of needs as Maslow suggested and some people might satisfy just the lower needs, especially those who have experienced life at a very low level.

*Motivational-hygiene Theory*

Herzberg (1987) proposed his motivational-hygiene theory based on the examination of events in the lives of engineers and accountants, and he found that “the factors involved in producing job satisfaction (and motivation) are separate and distinct
from the factors that lead to job dissatisfaction” (p. 29). Job satisfaction is not the opposite of job dissatisfaction. In fact, two different sets of human needs are involved: the first group of needs relates to basic biological needs, and the second group of needs relates to unique human characteristics such as the ability to achieve and to experience psychological growth. Thus, these two factors called hygiene and motivators are involved to complete these two groups of needs. Hygiene or factors related to job environment, such as company policies, interpersonal relationships, salary, and working conditions, are the primary cause of unhappiness on the job or job dissatisfaction. On the contrary, motivators or job content, such as achievement, recognition for achievement, the work itself, and responsibilities, are the primary cause of happiness on the job or job satisfaction. According to this theory, salary increases cannot lead to an increase in job satisfaction or motivate employees, but can only decrease job dissatisfaction. The only way to motivate employees is to assign challenging work to them so that they can achieve their internal growth.

Expectancy Theory

Expectancy is defined as “a momentary belief concerning the likelihood that a particular act will be followed by a particular outcome” (Vroom, 1964, p. 17). Individuals will behave in a certain way when they believe that this behavior will bring them desired outcomes. In other words, there are three relationships on which expectancy theory focuses (Robbins, 1998). The first is the relationship between effort and performance, or the belief that exerting a given amount of effort will lead to a certain performance. The second is the relationship between performance and reward, or the belief that behavior at a particular level will lead to the attainment of a desired
outcome. The third is the relationship between rewards and personal goals, or the
degree to which rewards satisfy an individual’s personal goals or needs. According to
Vroom (1964), individual performance is dependent both on ability and motivation, or
performance = f(ability × motivation). Thus, increasing the motivation of those
with high ability will bring greater results in increasing performance than increasing the
motivation of those who are low in ability. Similarly, increasing the ability of those who
are highly motivated will boost performance more than increasing the ability of those
who have little or no motivation.

Goal Setting Theory

Locke and Latham originally proposed their goal setting theory in the 1960s
(Miner, 2005). They then fully presented the theory in their book in 1990. Goal setting
theory assumes that “human action is directed by conscious goals and intentions”
(Locke & Latham, 1990, p. 4). Goals have two main attributes: content and intensity.
Goal content refers to the object or result, whereas goal intensity refers to the degree to
which the individual is committed to that goal, including the importance of that goal.
Two main aspects of goal content, specificity and difficulty, have been of interest in
current research, and research has suggested that specific and difficult goals lead to
higher performance (Locke & Latham, 1994). In addition, commitment to the goal or
goal intensity can be enhanced when “people believe that achieving the goal is possible,
and that achieving the goal is important” (Locke & Latham, 1994, p. 17, italics in
original). Thus, encouraging high performance must start with specific, challenging, but
achievable goals. However, individual difference in terms of personal desire toward an
outcome must be considered too.
Studying the concept of motivation needs several approaches because it is not a simple, controllable relationship between conditions and outcomes (Hardre, 2003). Champagne and McAfee (1989), Herzberg (1987), and Kanfer et al. (2008) summarized the features of motivation as the following. First, what motivates one person may not motivate another. People are different. Second, even in the same individuals, what motivates them today may not have the same effect in the future. Third, motivation is the result of the combination of individual and environmental characteristics, and it is subject to change as a function of forces from these factors. One of the most important points related to motivation is that individuals must have “a generator of one’s own…one wants to do it” (Herzberg, 1987, p. 26, italic in original). In other words, people can be motivated only if they want to do so. This main concept is relevant to the concept of employee engagement. Employees can choose whether they want to actively engage with an organization. This is a personal decision (Shuck & Wollard, 2010). An organization, in turn, can enhance the level of employee engagement. However, the starting point depends on the decision and motivation of an employee. In the next section, the concept of employee engagement is examined mainly focusing on the academic literature and not on the results from consulting firms and the business press.

Employee Engagement

Definitions, uniqueness of the construct, and theoretical and empirical studies about employee engagement are examined in this section.
Definitions of Employee Engagement

Kahn (1990) is often credited as the first scholar interested in applying the concept of engagement to the workplace (Avery et al., 2007). In 1990, Kahn developed the first grounded theory regarding personal engagement and disengagement at work to illustrate how “psychological experiences of work and work contexts shape the processes of people presenting and absenting their selves during task performance” (Kahn, 1990, p. 694). He studied personal engagement and disengagement at work in two different contexts: a summer camp and an architecture firm. He used several data collection methods, especially in-depth interviewing, to examine the state of being engaged and disengaged at work. Based on the results, Kahn defined personal engagement as “the simultaneous employment and expression of a person’s ‘preferred self’ in task behaviors that promote connections to work and to others, personal presence (physical, cognitive, and emotional), and active, full role performances” (p. 700). He also defined personal disengagement as “the simultaneous withdrawal and defense of a person’s preferred self in behaviors that promote a lack of connections, physical, cognitive, and emotional absence, and passive, incomplete role performance” (p. 701).

According to Kahn (1990), choosing to become an actively engaged employee depends on the answers to the three questions employees are likely to ask themselves unconsciously. All three questions reflect three psychological conditions: “(1) How meaningful is it for me to bring myself into this performance? (2) How safe is it to do so? and (3) How available am I to do so?” (p. 703). In other words, to become an actively engaged employee, three psychological conditions (psychological
meaningfulness, psychological safety, and psychological availability) must be found. Psychological meaningfulness is a sense of return on the investment of self in role performances. Work elements are the major factors contributing to psychological meaningfulness. Psychological safety, the second psychological condition, is a sense of being able to show and employ oneself without fear of negative consequences. Interpersonal relationships, management styles, and organizational norms are the major factors in creating psychological safety. Finally, the third psychological condition is psychological availability. This is a sense of possessing the physical, emotional, and psychological resources necessary for investing the self in role performances.

Specifically, Kahn summarized all three psychological conditions as follows:

- Psychological meaningfulness was associated with work elements that created incentives or disincentives to personally engage.
- Psychological safety was associated with elements of social systems that created more or less nonthreatening, predictable, and consistent social situations in which to engage. Psychological availability was associated with individual distractions that preoccupied people to various degrees and left them more or fewer resources with which to engage in role performances. (p. 703)

In addition to the definition and conditions of employee engagement, Kahn emphasized one key feature of employee engagement; employee engagement is a choice for employees to choose to be actively engaged or not engaged. Organizations cannot force their employees to be actively engaged, but employee engagement can be enhanced by organizations. Perhaps this is an underlying reason why the studies concerning employee engagement are important and have recently received much attention (Little & Little, 2006).
Since the work of Kahn (1990) in developing theory about personal engagement in the workplace, numerous studies regarding employee engagement have been conducted. Most have adopted key aspects and remain consistent with Kahn’s theoretical framework (Avery et al., 2007; Britt, Dickinson, Greene-Shortridge, & McKinbben, 2007; Thomas, 2007). The evolution of the construct of employee engagement has resulted in various definitions of employee engagement, or what is also termed engagement at work or work engagement. The key definitions are reviewed in the following section.

The definitions of employee engagement can be divided into two main categories: the first are those that reflect the influence of Kahn’s (1990) findings, and the second category is definitions that capture aspects from a job burnout perspective. In the following section, each category of employee engagement definitions is reviewed.

The first category of employee engagement definitions derives mainly from the work of Kahn (1990). According to Kahn, people become actively engaged at work when they are able to express themselves physically, cognitively, and emotionally. This definition has influenced several scholars to define employee engagement as being related to employees’ psychology. For example, the Corporate Leadership Council (2004) in Driving Employee Performance and Retention through Engagement: A Quantitative Analysis of Effective Engagement Strategies defined employee engagement as “the extent to which employees commit both rationally and emotionally to something or someone in their organization and how hard they work and how long they stay as a result of that commitment” (p. 3).
Truss et al. (2006) studied employee attitudes and engagement in United Kingdom. They defined engagement as a psychological state that employees have toward their organization and work. A highly-engaged employee is defined as a “passionate employee, the employee who is totally immersed in his or her work, energetic, committed and completely dedicated…the more engaged they will be, the better they will perform, and the less likely they will be to quit their organization” (p. 1). Their model is similar to Kahn’s (1990) in that engagement is a multifaceted construct which can be distinguished into three dimensions: emotional engagement, which means being involved emotionally with the work; cognitive engagement, which means focusing intellectually on work; and physical engagement, which means being willing “to go [the] extra mile[s]” for organizations and “put work over and above contract” (p. 2).

Britt et al. (2007) have studied engagement at work since 1999. Their most recent definition defined job engagement as “feeling responsible for and [being] committed to superior job performance, so that job performance ‘matters’ to the individual” (p. 144). According to Britt and colleagues, highly-engaged employees are employees who care about their job performance and are committed to performing well because all aspects of performance at work have great implications for their identity, which is important to them.

Harter, Schmidt, and Keyes (2003) defined employee engagement as a combination of cognitive and emotional variables in a workplace such as satisfaction, joy, fulfillment, and caring which increase positive effects. Krug (2008) defined engagement as “a motivational construct that defines the ability of the employee to feel
part of the work process, not only in terms of the physical process it entails, but also emotionally and cognitively” (p. 65). These positive effects lead to the efficient application of work and business outcomes in the end.

Thomas (2007) also defined employee engagement as a “relatively stable psychological state influenced by interactions of individuals and the work environment” (p. 2). Thus, highly-engaged employees are characterized by “a readiness and willingness to direct personal energies into physical, cognitive, and emotional expressions associated with fulfilling required and discretionary work roles” (Thomas, 2007, p. 2). The aspect of employee psychology in the definition of employee engagement can also be seen from the extended work of Endres (2008). Endres has summarized various definitions of employee engagement. In the report from the Institute for Employment Studies (2004), for instance, engagement is defined as “a positive attitude held by the employee toward the organization and its value” (pp. 71-72), and in a Society for Human Resource Management article, Lockwood (2005) defined engagement as “a state by which individuals are emotionally and intellectually committed to the organization or group” (p. 72).

Gebauer et al. (2008) defined employee engagement as “a deep and broad connection that employees have with a company that results in a willingness to go above and beyond what’s expected of them to help their company succeed” (p. 9). In order to be a highly-engaged employee, this connection must occur at three levels: the rational level, or how well an employee understands their role and responsibility; the emotional level, or how much passion and energy an employee brings to his/her work; and finally, the motivational level, or how well an employee performs in their role.
Macey and Schneider (2008) also studied numerous definitions of engagement and concluded that employee engagement is a desirable condition of organizations which aids in furthering the organization’s purposes. Employee engagement connotes “involvement, commitment, passion, enthusiasm, focused effort, and energy, so it has both attitudinal and behavioral components” (p. 4) which benefits organizations. Macey and Schneider (2008) additionally proposed a framework for understanding the elements of employee engagement: trait engagement, state engagement, and behavioral engagement. Trait engagement involves positive views of life and work. Several positive personality traits, such as being proactive and conscientiousness are the main components in trait engagement. State engagement involves feelings of energy and absorption. Finally, behavioral engagement involves organizational citizenship behavior, proactive/personal initiatives, role expansion, and adaptation. These elements are presented orderly. In other words, trait engagement leads to state engagement which finally leads to behavioral engagement which can benefit organizations.

Finally, Shuck and Wollard (2010), recently reviewed studies related to employee engagement since 1990, when Kahn first published the concept of employee engagement, and they defined employee engagement as “an individual employee’s cognitive, emotional, and behavioral state directed toward desired organizational outcomes” (p. 103). In addition, Shuck and Wollard (2010) concluded that even though the concept of employee engagement still has some inconsistencies, such as types and levels of engagement, scholars generally agree that “employee engagement has no physical properties but is manifested and often measured behaviorally” (p. 103). However, because employee engagement is a component of all three factors (cognitive,
emotional, and behavioral), to catalyze employee engagement in organizations, all these factors must be emphasized, especially the cognitive factor. The cognitive engagement factor involves how employees think or perceive of their job and organization. The emotional engagement factor involves how employees feel. Finally, the behavioral engagement factor involves employees’ behavior that meets or exceeds organizational outcomes.

In summary, employee engagement based on the influence of Kahn’s findings (1990) can be defined as the cognitive, emotion, and behavioral states in which employees fully devote themselves to their work and their organization. The second perspective of the definition of employee engagement based on the job burnout perspective is reviewed next.

Another perspective of the definition of engagement at work has risen from research regarding job burnout. Referring to the work of Maslach and Leiter (1997), Cartwright and Holmes (2006) defined job burnout as “a psychological syndrome that involves a prolonged response to chronic interpersonal stressors and leads to poor job performance, withdrawal behaviors and poor mental health and is the negative antithesis of job engagement” (p. 201). Employees with job burnout are not only associated with several forms of job withdrawal, such as lower productivity, absenteeism, and intentional or actual turnover, but they also negatively affect their colleagues and the organization environment (Maslach, Schaufeli, & Leiter, 2001). According to a number of studies, several factors have been found to cause job burnout, such as excessive workload and time pressure, lack of social support, role conflicts, and some specific
organizational characteristics and individual factors such as personality or demographic data (Maslach et al., 2001).

According to Leiter and Maslach (2000), employee engagement can be viewed at the opposite end of a continuum from job burnout. Highly-engaged employees have a sustainable workload, choice and control in their work, sufficient recognition and reward for their efforts, a sense of workplace community, fair treatment, and a sense of meaningful work. In contrast, burned-out employees experience work overload, lack of control in their work, insufficient reward, not being a part of their workplace community, absence of fairness, and value conflict between themselves and the organization. Leiter and Maslach (2000) described that engagement has three components: energy, involvement, and effectiveness. An energetic component is associated with supportive work conditions and manageable work demands; involvement is a close relationship with work or colleagues in an organization; and effectiveness is a sense of being empowered.

Schaufeli and Bakker (2004) also proposed that burnout and engagement are inversely related. Schaufeli and Bakker (2004) defined employee engagement as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (p. 295). Vigor is the willingness to invest effort in work and persistence when facing difficulties; dedication is characterized by a sense of significance, enthusiasm, and challenge; and absorption is the sense of being fully concentrated and happily engrossed in work. In contrast, job burnout consists of high exhaustion, cynicism or “a distant attitude toward the job”, and low professional
efficacy (Maslach et al., 2001, p. 402). Thus, job engagement can be assumed to be “the positive antipode of [job] burnout” (Schaufeli & Bakker, 2004, p. 294).

In summary, although the literature review about employee engagement can be divided into two perspectives, there are similarities between these two perspectives. Highly-engaged employees enjoy meaningful work and they are willing to invest effort in their work when they experience happiness and fairness as a result of being a part of an organization.

Employee engagement is a topic of interest that has been studied for almost 20 years. However, to date, no consensus for a definition of employee engagement has been established (Welbourne, 2007). The literature review highlights an interesting point. Although two main perspectives regarding employee engagement can be found in the current literature, the definition of engagement from these perspectives appears to be similar. Employee engagement can be defined as the positive psychological conditions which lead employees to invest actively in their role and organization. In other words, employee engagement is derived from a positive psychological state leading to positive employee behavior or performance which benefits organizations.

**Uniqueness of the Employee Engagement Construct**

Employee engagement is a relatively new concept which has received significant attention from practitioners, especially from human resource consulting firms, whereas academic researchers “are slowly joining the fray” (Macey & Schneider, 2008, p. 3). However, it is still unclear whether employee engagement is a new unique concept or just an “aggregate of other established constructs” (Thomas, 2007, p. 1) or simply a passing fad (Shuck & Wollard, 2010). Established constructs that are usually
cited as similar to employee engagement are job satisfaction, job involvement, and commitment. In the following section, the concepts and definitions of these constructs are examined.

Job satisfaction is defined as the “degree of pleasure an employee derives from his or her job” (Muchinsky, 2003, p. 307, italic added), whereas employee engagement is not simply limited to jobs. In other words, job satisfaction is “the extent to which work is a source of need fulfillment and contentment...it does not encompass the person’s relationship with the work itself” (Maslach et al., 2001, p. 416). In addition, it is obvious that factors contributing to job satisfaction derive from several dimensions, some of which are related to jobs and some which are non-related. Employees can say they are happy even though factors conducive to them being happy derive from non-job performance reasons, such as happiness with colleagues, satisfaction with benefits or physical work conditions (Latham & Ernst, 2006).

Most importantly, it is questionable whether satisfied employees are also productive workers (Swanson, 2009). This is an important question for a study of employee engagement, since highly-engaged employees are expected to be more productive than employees who are disengaged. Judge, Thoresen, Bono, and Patton (2001) revealed that the percentage of variance shared between job satisfaction and performance is only 9%. This means 91% of the variance in one concept cannot be explained by the other. From this result it might be concluded that job satisfaction is a type of positive attitude that employees have toward their job, but it is not necessarily related to job performance in the same way as employee engagement.
Macey and Schneider (2008) studied the similarities and differences between job satisfaction and employee engagement. Several engagement surveys, mostly developed by consulting firms, adopt similar approaches to the measurement of job satisfaction. However, empirical research findings have increasingly supported that these two constructs are not the same. Conditions conducive to job satisfaction can provide for engagement and engaged behavior, but “they do not directly tap [into] engagement” (Macey & Schneider, 2008, p. 8). Thus, Macey and Schneider concluded that “satisfaction when assessed as satisfaction is not in the same conceptual space as engagement. Satisfaction [however] when assessed as feelings of energy, enthusiasm, and similarly positive affective states becomes a facet of engagement” (Macey & Schneider, 2008, p. 8).

The similarities and differences between the concept of employee engagement and another existing construct, job involvement, are investigated next. Lodahl and Kejner (1965) defined job involvement as the degree to which a person’s work performance affects his/her self-esteem. Muchinsky (2003) also defined job involvement as “the degree to which a person identifies psychologically with his or her work and the importance of work to one’s self-image” (p. 311). The concept of job involvement itself is associated with other work-related constructs as can be seen from the works of Lodahl and Kejner (1965) and Brown (1996). Lodahl and Kejner (1965) reported that the job involvement scale represents a multidimensional attitude having plausible correlations with other variables, such as job satisfaction. According to Brown (1996), job involvement correlates to positive job attitudes, such as work and coworker satisfaction, and organizational commitment. However, a relationship between job
involvement and work behavior was not confirmed in his study. Thus, although May et al. (2004) suggested that employee engagement is associated closely with the concept of job involvement, based on the findings by Lodahl and Kejner (1965) and Brown (1996), job involvement can be distinguished from engagement in terms of the focus on the job, rather than on the whole organization focus of engagement. In addition, unlike engagement, job involvement may not relate to work behavior.

In addition, it has been argued that engagement is a broader concept “encompassing energy and efficacy” (Macey & Schneider, 2008, p. 9), whereas job involvement focuses on the importance of work toward the employee’s self-image. These two concepts are different in terms of how employees invest themselves into their jobs. Highly-engaged employees invest their cognitive, emotional, and physical selves when performing their job. In contrast, job involvement results only from “a cognitive judgment about the need satisfying abilities of the job” (May et al., 2004, p. 12).

Finally, Macey and Schneider (2008) summarized that job involvement can be seen as “a facet of engagement, a part of engagement but not equivalent to it” (p. 9).

The final construct that is associated with the concept of employee engagement is commitment. Some practitioners, especially consulting firms, have defined engagement in terms of commitment, such as Hewitt Associates which defined employee engagement as “the emotional and intellectual involvement and commitment by employees to their organizations” (Harris, 2006, p. 11). In fact, these two constructs of employee engagement and employee commitment are not the same. The similarities and differences between employee engagement and commitment are reviewed in the following section.
Harrison, Newman, and Roth (2006) noted the existence of high correlations between commitment and job satisfaction. It might be concluded that the main difference between these two concepts is their conceptual target. The target of job satisfaction is the work of the individual, whereas the target of commitment is the entire organization (Harrison et al., 2006). Like the concept of commitment, the target of employee engagement is the entire organization; however, commitment and employee engagement are different. Cohen (2003) stated that commitment is a multiple approach to examine the concept of attachment at work. Employees may switch their commitment from one aspect or foci in a workplace to another. For example, if employees are less committed to an organization, they might be more committed to their occupation instead (Cohen, 2003). However, highly-engaged employees choose to actively invest their emotional, cognitive, and physical selves into their role and organization simultaneously.

Commitment has various forms or foci with most research attention directed towards occupational commitment and organizational commitment. According to Cohen (2003), the commitment literature often uses the term occupational, professional, and career commitment interchangeably. These words seem to capture a similar notion, the importance of one’s occupation. Thus, the term occupational commitment is chosen in this study.

According to Muchinsky (2003), occupational commitment is defined as an emotional connection to one particular occupation; people with occupational commitment can transfer their skills, abilities, and knowledge from one organization to another within a same occupation. On the contrary, organizational commitment refers to
“the degree to which an employee feels a sense of allegiance to his or her employer”
(Muchinsky, 2003, p. 312). It is a sense of loyalty to a particular organization. Thus, in
this study, only the concept of organizational commitment is analyzed in terms of its
similarities and differences with the concept of employee engagement.

Organizational commitment can be described as three components: affective,
continuance, and normative, as follows:

Affective commitment refers to the employee’s emotional attachment to,
identification with, and involvement in the organization…Continuance
commitment refers to an awareness of the costs associated with leaving
the organization…Finally, normative commitment reflects a feeling of
obligation to continue employment. (Meyer & Allen, 1991, p. 67)

Based on the definition of each component of commitment, affective
commitment is likely to be in the best position for a potential construct overlap when
compared to employee engagement. Affectively committed employees continue their
employment because “they want to do so” (Meyer & Allen, 1991, p. 67, italic in
original). However, the employee engagement construct has other facets. According to
Kahn (1990), for example, to be highly-engaged at work, all psychological conditions
must be found: psychological meaningfulness, psychological safety, and psychological
availability. Highly-engaged employees do not just want to maintain their employment
with an organization simply because of their emotional attachment to that organization.
On the contrary, employees choose to be engaged as an active part of an organization
because they feel safe, know that they are capable of contributing something
meaningful to the organization, and that they will be rewarded for doing so (Kahn,
1990).
Gebauer et al. (2008) stated that the emotional component is not the only component when employees are wondering whether they choose to be actively engaged or not. Highly-engaged employees must present all three parts of the engagement equation: the thinking part which means understanding their roles and responsibilities, the feeling part which means bringing passion and energy to their work, and the acting part which means performing their role based on their best knowledge and highest motivation.

Hallberg and Schaufeli (2006) also studied the similarities and differences among work engagement, job involvement, and organizational commitment. The authors found that the intercorrelations among these three constructs “ranged between .35 and .46, indicating between 12% and 21% of shared variance” (p. 123). This means that although work engagement, job involvement, and organizational commitment are related, they do not totally overlap with one other. Each construct is distinct and can be used to better understand work attachment. Macey and Schneider (2008) summarized that affective commitment can be regarded as “a facet of state engagement but not the same as state engagement” (p. 8).

Based on these similarities and differences between the concept of employee engagement and other existing constructs, it can be concluded that even though the concept of employee engagement or engagement at work shares aspects with other work related attitudes. It is not just simply an aggregate of existing established constructs. Rather, the concept of employee engagement derives from and builds upon existing theories to explore how and why employees invest in terms of emotional, physical, and cognitive domains in doing their jobs and the extent to which they are actively involved.
with their organizations. In the following section, theoretical and empirical studies of employee engagement are reviewed.

Theoretical and Empirical Studies of Employee Engagement

Kahn (1990) is usually credited as the pioneer in the field of engagement (Avery et al., 2007; Stairs & Galpin, 2010). He developed the first grounded theory regarding personal engagement and disengagement at work. Kahn collected data based on several interpretative methods, such as observation, document analysis, self-reflection, and in-depth interviews to explore employee perceptions related to work experiences. He concluded that to become highly-engaged, employees need three psychological conditions in their work: psychological meaningfulness, psychological safety, and psychological availability. According to Kahn (1990), psychological meaningfulness is associated with interesting work elements; psychological safety is associated with nonthreatening social systems; and psychological availability is associated with personal availability in terms of physical, emotional, and psychological resources that allow people to engage in role performance.

May et al. (2004) developed their work based on Kahn’s findings. The main purpose of their study was to gain a deeper understanding of the psychological conditions that lead to engagement at work. They developed a questionnaire to measure employee perceptions about themselves, their jobs, supervisors, and colleagues. Collecting data from employees at a large insurance company in the midwestern United States, they found there was a positive relationship between all three psychological conditions and engagement, but the strongest relationship came from psychological meaningfulness. As in the case of Kahn’s findings, May et al. suggested that job
enrichment and role fit were predictors of psychological meaningfulness; a supportive environment within an organization was a predictor of psychological safety; and resources available were related to psychological availability.

Rothbard (2001) also studied engagement at work by referring to the work of Kahn (1990). In his survey research study, Rothbard examined the effect of being highly-engaged in a personal role, especially engagement with a family, and being highly engaged at work. He collected data from employees at a large public university in the United States. The main findings revealed different effects between female and male employees. In addition, engagement in one role did not lead to disengagement in another. Another important point from this study is the definition of engagement. Based on Kahn’s definition of engagement, Rothbard conceptualized two distinct but interrelated components of role engagement: attention and absorption. Attention is defined as cognitive availability and the amount of time that an employee spends thinking about his/her role, whereas absorption is defined as the state where an employee is absorbed with his/her role and focuses on it.

By making use of the framework from the work of Kahn (1990), and the motivational theory of Maslow (1970), Shuck and Albornoz (2008) studied factors that contribute to non-salaried employees becoming highly-engaged employees. This was an exploratory piece of research in which the authors interviewed three Latino/a employees in the United States, and focused on these participants’ work experience to understand the phenomenon of engagement at work of non-salaried employees. Based on the interview results, four themes driving employees to become highly-engaged employees
emerged: work environment, supervisor role, employee characteristics, and opportunity for learning.

Thomas (2007) also developed a measurement for employee engagement based on Kahn’s findings (1990). According to Thomas, although highly engaged behaviors as the consequence of engagement occur in the three categories of physical, cognitive, and emotional as Kahn described, the state of mind preceding these behaviors is modeled as a unidimensional approach. Thomas developed a questionnaire to capture the state of mind when people are engaged based on his interview information and then collected data from employees in the southeastern United States. The results revealed that meaningfulness has the strongest correlation with engagement. This finding is in line with the suggestion from May et al. (2004) when they suggested that further research in the meaningfulness aspect is needed. In addition, Thomas found that several behavioral outcomes such as positive emotional displays, role innovation, and other behaviors related to task can be found when people are highly engaged.

Another study regarding employee engagement that was influenced by Kahn’s earlier work was research on employee attitudes and engagement conducted in United Kingdom by Truss et al. (2006). The first main finding from this survey research concerned the effect of working conditions on the level of engagement: flexible activities such as flextime were positively correlated to a high level of emotional engagement. In other words, employees were likely to appreciate the effort of organizations in helping them balance both work and family life. If the findings from Rothbard’s (2001) work are incorporated here, it can be suggested that organizations
can benefit from helping their employees have a work-life balance because engagement in each role is positively related to the other one.

The second important finding of Truss et al.’s work was the effect of management and leadership within organizations: positive perceptions of employees toward their leaders led to more engagement and less intention to quit. Another key finding was the effect of attitudes toward work; overall job satisfaction was correlated to engagement. Truss and colleagues (2006) concluded their study by emphasizing that employee engagement is positively related to a range of other attitudes such as job satisfaction and motivation. Employee engagement is also related to higher levels of performance and commitment to the organizations and lower intention to quit. Finally, the authors suggested several approaches that organizations can employ to encourage employees to become actively engaged. For example, an organization can communicate clearly to their employees to help them understand the vision and mission of their organization. Supervisors should give employees continuous feedback related to their performance to help them get a clear idea of what is expected from them and how they can improve their performance. Finally, organizations should be aware of the importance of meaningfulness of work, the work-life balance approach, and the importance of fulfilling training and development needs of employees.

Studies conducted in the United States also discovered the relationship between employee engagement and employee perceptions related to flexibility and work-life policies from organizations. Richman, Civian, Shannon, Hill, and Brennan (2008) drew data from a database collected by the consulting firm WFD between 1996 and 2006. They selected 15 large American companies with 103,478 employees and found that
employee perceptions related to flexibility and supportive work-life policies were positively correlated to employee engagement and expected retention even after controlling for personal, family, and job characteristics. The authors emphasized the importance of their findings by showing the relatively weak relationship between employee characteristics and level of engagement compared to the results of work environment and the human resource practices within an organization. These findings support the importance of factors influencing employee engagement that are under the control of organizations.

Referring to the same set of data and research procedure as the work of Richman et al. (2008), Johnson, Shannon, and Richman (2008) further analyzed the influence of workplace flexibility between full-time and part-time employees. They found no difference in the employee engagement level between full- and part-time employees, but part-time employees seemed to have lower stress and burnout scores when compared to full-time employees. In addition, employees who reported having the flexibility they needed scored higher on the engagement level no matter how many hours they worked.

Using the Q12®, which is the questionnaire designed to examine the engagement level of employees from the *Gallup Workplace Audit*, Jones and Harter (2005) found that employee engagement was positively correlated with the intent to remain with the organization both in terms of short-term (one year) and long-term periods. Another interesting result from their study is the positive associations between age and both short- and long-term intent to remain. However, the authors found an unexpected result related to race on the engagement-turnover intention relationship
between supervisor and employee dyads relationships (either same-race or cross-race dyads). Highly-engaged employees categorized in cross-race dyads reported a higher short-term intention to remain than those in same-race dyads; on the contrary, less engaged employees in a same-race dyad category reported a higher short-term intention to remain than those in cross-race dyads.

Another study using the Q12® was the work of Harter, Schmidt, and Hays (2002). They found a positive correlation between employee engagement and business outcomes. Business outcomes in this study referred to customer satisfaction, profitability, productivity, employee turnover, and safety outcomes. However, the magnitude of correlations between employee engagement and profitability and productivity were not high. In addition, the authors found that business units with employee satisfaction-engagement above the median had higher performance compared to business units below the median. This result was also confirmed when compared across companies.

Other empirical studies proving the relationship between employee engagement and business outcome were the findings from Bassi and McMurrer (2007). The investment in Human Capital Management (HCM) can be categorized into five drivers: leadership practices, employee engagement, knowledge accessibility, workforce optimization, and learning capacity. These drivers can lead to better business outcomes, such as sales and safety improvement. Employee engagement in this study referred to: (1) an effective and meaningful job design allowing employees to use their skills and talent, (2) a commitment system for employees such as the opportunities for advancements and recognition, (3) an appropriate workload leading employees to have
a work-life balance, and (4) an appropriate system within an organization helping to retain good performers.

Zhu, Avolio, and Walumbwa (2009) examined the relationship between transformational leadership and followers’ level of work engagement. One purpose of transformational leadership usually involves raising the followers’ potential, thus leading to the hypothesis that this type of leadership is positively related to the level of work engagement. However, this relationship might depend upon positive follower characteristics such as being creative, being proactive, and having a learning orientation. Using the Q12® to measure the work engagement and multifactor leadership questionnaire, the authors collected data in various industries in South Africa and found a positive relationship between transformative leadership and follower work engagement. In addition, positive follower characteristics positively moderated this relationship. However, the level of follower work engagement was lower when the employers perceived positive followers’ characteristics less favorably than the employees perceived themselves.

Recently, Babcock-Roberson and Strickland (2010) examined the relationship among charismatic leadership, work engagement, and organizational citizenship behavior (OCB). They collected data from undergraduate students in a large Western university in the United States who had been currently employed for at least six months. The results revealed that both charismatic leadership and employee engagement were positively related to OCB. In addition, after testing for the mediation effect, they found employee engagement was a full mediator of the relationship between charismatic
leadership and OCB. This means that when charismatic leaders are present, employees are more actively engaged in their work, and this in turn promotes OCB.

Schaufeli and Bakker (2004) found a relatively strong and consistent relationship between job resources and engagement. Job resources are defined as extrinsic or intrinsic motivators for employees to continue their employment with the organization and to decrease the desire to leave the organization. Extrinsic motivators are defined as a work environment with supportive colleagues that fosters the willingness of employees to perform well in their jobs. Intrinsically motivating job resources can play an essential role in fostering employees’ growth, learning, and development because they fulfill basic human needs for autonomy, competence, and relatedness. Although the authors found a relationship between job resources and engagement, the cross-link in the relationship between engagement and turnover intention was relatively weak.

Another study that confirmed the relationship between employees’ positive emotion and attitudes in terms of work engagement was the work of Avey, Wernsing, and Luthans (2008). They implemented an online survey to collect data and found that employees with positive psychological capital (i.e., hope, efficacy, optimism, and resilience) and positive emotions were likely to have a desirable attitude (i.e., work engagement) and performed more OCB. The authors concluded their study by emphasizing that psychological capital might be a potential source of positive emotions leading to desired employees’ attitude and behaviors.

Salanova, Agut, and Peiro (2005) studied the consequences of employee engagement in a service climate. The authors found that perceived organizational
resources, such as training opportunities and job autonomy, can lead to an effective relationship between service climate and employee engagement. Thus, perceived organizational resources can be treated as a mediator in this relationship. Additionally, when employees are highly engaged, they can influence coworkers to feel and behave in the same way, which can lead to a better service climate. Consequently, customers tend to appreciate services they receive, leading to increased loyalty from customers.

Another study that investigated employee attitude in a restaurant industry setting was carried out by DiPietro and Pizan (2008). In this exploratory study, the authors collected data from employees in quick service restaurants and found that younger and more-educated males, especially African-American, were likely to have higher level of alienation than older and less-educated female employees. The authors proposed that employee alienation might be considered to relate to the lack of work engagement. According to their literature review, employees tend to become alienated from their work when they feel powerlessness, meaninglessness, and self-estrangement. These feelings contrast with the state of highly-engaged employees, according to Kahn (1990), who stated that highly-engaged employees usually present their “personal presence (physical, cognitive, and emotional), and active, full role performances” (Kahn, 1990, p. 700).

Bakker, van Emmerik, and Euwema (2006) investigated the impact of job burnout and engagement among team members in the Netherlands. Similar to the findings from Salanova et al. (2005), Bakker et al. found that working on a team faced with a high level of job burnout led members to develop feelings of exhaustion and negative attitudes toward their work and themselves. In contrast, individuals working in
highly-engaged teams reported higher levels of engagement. These results confirmed
the transferability of the influence of job burnout and engagement among team
members.

Referring to the concept of job burnout, Freeney and Tiernan (2009)
implemented four focus groups with female nurses to examine barriers to employee
engagement. They found six barriers that are consistent with Maslach and Leiter’s
model (1997) about job burnout. These barriers are: too heavy a workload, lack of
control, insufficient reward, lack of fairness, absence of community (i.e., an
uncomfortable atmosphere in the workplace), and incongruent values between an
organization and themselves.

Schaufeli, Bakker, and Salanova (2006) further developed a short-form
questionnaire to measure work engagement based on the original version of Utrecht
Work Engagement Scale (UWES). The UWES was developed based on the works of
Schaufeli and colleagues concerning the definition and conditions of engagement at
work. The results of this short-form questionnaire confirmed their conclusion about the
relationship between engagement and burnout, finding similar results to the original
version. Thus, the authors concluded their study by proposing the idea that engagement
at work can be conceived as the positive antipode of job burnout.

Using the UWES questionnaire developed by Schaufeli et al. (2006), Simpson
(2009) investigated the predictors of work engagement among registered nurses. She
proposed four antecedent factors: job satisfaction, turnover cognitions, job search
behavior, and some demographic data such as age, education, and years of work
experience. The results revealed that registered nurses with lower job satisfaction,
higher level of turnover cognitions, and job search behavior tend to have lower work engagement. However, there was no difference in the level of work engagement among registered nurses based on most demographic data, except the level of education between the associate’s and bachelor’s degrees.

Referring back to the commitment concept, Saks (2006) proposed that engagement should be divided into two main related but distinct categories: job engagement and organizational engagement. The results of his study revealed that perceived organizational support predicted both job and organizational engagement. In contrast, job characteristics predicted job engagement, and perceived procedural justice predicted organizational engagement. Although job engagement and organizational engagement were related to other employees’ attitudes, such as commitment and satisfaction as well as behaviors in the workplace, organizational engagement was a stronger predictor of these outcomes than job engagement.

Gebauer et al. (2008) authored the study, *Closing the Engagement Gap: A Roadmap for Driving Superior Business Performance*, in the *Global Workforce Study 2007-2008* by an international professional consulting firm Towers Perrin. In that study, employees around the world were asked to rank factors driving them to be highly engaged with their organizations. Although the results varied by country and other factors, especially by the demographic factors of employees, some general trends were shown. Senior management’s sincere interest in employee well-being, for example, was the number one driver in 7 of the 18 countries, especially in the developed countries such as the United States, United Kingdom, and Germany. Senior management’s sincere interest was also in the top-five drivers in developing countries, such as in China.
and Brazil. In China, the first driver was having excellent career advancement opportunities, whereas the number one driver in India was the opportunity to participate in decision-making at the department level. In addition, improving employees’ skills and capabilities over the last year was ranked by employees in the United States, United Kingdom, and Brazil as the number two driver.

Another interesting point from Gebauer et al. (2008) was that many employees around the world were found to be capable and ready to be actively engaged; unfortunately, most organizations have not adequately encouraged or motivated these employees. There is an opportunity for organizations to do so by providing and improving their systems related to the important engagement drivers based on these results.

In the following section, empirical studies of employee engagement in Thailand are reviewed.

*Empirical studies of employee engagement in Thailand.*

In Thailand, research about employee engagement is rare, especially before 2005; however, numerous studies related to commitment, especially organizational commitment can be found. Most are term papers or graduate level theses, especially for master’s degrees. These studies usually examined similar topics, especially influential factors toward organizational commitment from the perspectives of Thai employees. For example, in her master’s degree thesis, Suwannawej (2006) examined 74 studies related to organizational commitment in Thailand, published from 1990 to 2005. She found that these studies seemed to discover a similar set of influential factors such as characteristics of their work and organizations (Suwannawej, 2006). In addition, she
found conflicting conclusions related to the importance of demographic data. Most studies concluded that employee demographic data was not related to the level of employee commitment, whereas a few studies stressed the importance of demographic factors. Another interesting point from Suwannawej’s study was the conclusion that employee engagement and employee commitment are interchangeable terms in the Thai language. As a result, she developed a model using results from organizational commitment studies in Thailand and called it an employee engagement model in the Thai context. Her study might be considered as one of the first employee engagement studies in Thailand, even though as described in the uniqueness of the employee engagement construct section, the concepts of employee engagement and organizational commitment are, in fact, distinctive.

Another master’s degree thesis by Unchitti (2008) also studied employee engagement in Thailand. Unchitti (2008) found that the characteristics of an organization and its human resource development activities were the main factors leading to employee engagement. Interestingly, like the results of Suwannawej’s work, Unchitti used the exact same term in the Thai language for both organizational commitment and employee engagement. Thus, based upon these two available Thai studies related to employee engagement, it might be concluded that the concept of employee engagement in Thailand is unclear and has not been well established.

**Conclusions from theoretical and empirical studies of employee engagement.**

Returning attention back to studies conducted mostly in the Western countries, although there is a paucity of existing empirical studies about employee engagement, the studies presented here showed that most research in this area is influenced by
Kahn’s findings (1990). Another interesting point that should be noted is the fact that even though the studies reviewed here were conducted using different research methods or varied samples in terms of demographics, size and type of organizations, or even locations, similar results about the positive outcomes of employee engagement are revealed. In addition, the data highly suggest that psychological conditions, psychological meaningfulness, psychological safety, and psychological availability are important for the creation and development of employee engagement.

Employee engagement can lead to positive emotions and behaviors in the workplaces, and its effect is not limited only to the organizations, but it can affect employees’ personal lives outside of work. Employee engagement can also be enhanced by an organization in many ways. This is an area where organizations can manage in ways to create positive results for both organizations and employees. Benefits for the organization are, for example, increased positive attitudes and enhancing performance as well as decreased intention to leave organizations. Benefits to employees include decreased stress, burnout, and other negative health symptoms.

Results from several studies have suggested that organizations should pay special attention in providing employees necessary job resources, sufficient and appropriate training programs, opportunities to learn and grow their careers, and sincere interest in their well-being because these factors contribute to the level of engagement of employees. Management practices within organizations are also important, such as internal communication, understanding the uniqueness of individual differences, and building trust among leadership and colleagues. Based on the fact that organizations can enhance the level of employee engagement, this leads to the conclusion that perhaps
Social exchange theory can be used in explaining the phenomenon of employee engagement.

Social exchange theory suggests that individuals form, maintain, or terminate relationships with each other “on the basis of the perceived ratio of benefits to costs in the relationship” (Ensher, Thomas, & Murphy, 2001, p. 421). Social exchange can occur in relationships where both parties anticipate a long-term relationship and have trust toward each other (Burns, 1973; Cropanzano & Mitchell, 2005). In terms of employee engagement, when employees perceive they are treated fairly and the relationship is not limited to economic exchange but includes sincere support from the organization, employees will likely intend to maintain their employment and choose to be highly engaged. Consequently, positive results from highly-engaged employees toward organizations occur.

In other words, by using a framework from social exchange theory, this study proposed that employee engagement can be developed and enhanced by organizations. Employees are ready to be engaged in an organization if they believe they are treated fairly and valued (Cardona et al., 2004; Gebauer et al., 2008; Saks, 2006; Tsui et al., 1997; Turnley et al., 2003). In this study, the idea of fair treatment and being valued concentrates on the perceptions of employees related to organizational HRD practices, namely: (1) organizational support, (2) access to training and development opportunities, (3) support for training and development opportunities, (4) benefits of training, and (5) formal career management support. These factors show employees that they are not just a dispensable asset, but that the organizations care for and value them. These factors were chosen for this study based on the results of previous studies. The
importance of training and development opportunities and career management support were confirmed in works such as Gebauer et al. (2008), Khan (1990), Shuck and Alborno (2008), Truss et al. (2006), and the importance of support from organizations in terms of good relationships, fairness, openness, and an interest in employee well-being was confirmed in works such as Gebauer et al. (2008), Kahn (1990), May et al. (2004), Schaufeli and Bakker (2004), Shuck and Alborno (2008), Thomas (2007), and Truss et al. (2006).

In summary, the existing literature regarding employee engagement provides foundational knowledge of the construct of engagement at work. Although a widely accepted definition of employee engagement has not been established, based on the literature review employee engagement can be defined as the positive psychological conditions that lead employees to invest actively into their role and organization. Based on this situation, employees are likely to perform their tasks better and not limit themselves to their work only, but to give their attention to the entire organization.

In the following section, the definitions and theoretical and empirical studies related to OCB are reviewed.

Organizational Citizenship Behavior

As defined, highly-engaged employees invest themselves actively in terms of emotional, physical, and cognitive domains in doing their jobs and are actively involved with their respective organizations. It is thus expected that highly-engaged employees deliver superior performance compared to employees who are disengaged. However, highly-engaged employees are not only expected to deliver superior work performance,
but also to apply themselves beyond formal job requirements. In other words, according to the social exchange theory framework, when employees perceive fairness from their organization, they can develop trust which leads to the development of engagement. Consequently, employees are likely to perform better, not only in terms of work behavior described in their job descriptions, but also beyond formal job requirements because this is a way to reciprocate the input of the organization (Cohen & Keren, 2008; Lavelle, Rupp, & Brockner, 2007; Love & Forrest, 2008; Organ, 1990; Wright & Sablynski, 2008).

Although both superior work performance and behavior that is beyond formal job requirements are possible results from highly-engaged employees, only employees’ behavior that is beyond formal job requirements is included in this study. Several studies have shown that behavior that is beyond formal job requirements can also facilitate organizational performance through the impact on organizational contexts, organizational culture, and individual productivity (Farh et al., 2004; Podsakoff et al., 2000; Van Dyne, Cummings, & McLean Parks, 1995). In addition, this study focused only on the positive effects of behavior that is beyond a given job scope, even though some studies, such as the works of Vigoda-Gadot (2006; 2007), have suggested the possibility of negative outcomes from this type of behavior, such as creating pressure for employees to perform at that level and making employees feel exploited.

In the next sections, definitions as well as theoretical and empirical studies about OCB are reviewed.
Definitions of Organizational Citizenship Behavior

The concept of work behavior that is beyond the job scope requirement has received much attention since Organ published his book, *Organizational Citizenship Behavior: The Good Soldier Syndrome* in 1988. The number of published papers related to OCB or other related constructs increased dramatically from 13 papers during 1983-1988 to more than 122 papers during 1993-1998 (Podsakoff et al., 2000). This reflects to some degree that OCB is extremely important in the current business world.

However, the concept of OCB is not new; this concept can be traced back to the early works of Barnard (1938), and Katz (1964) (LePine, Erez, & Johnson, 2002).

Especially in the less well-defined jobs of today’s business climate, the concept of work behavior that goes beyond formal job requirements is increasingly valued. It is nearly impossible for organizations to anticipate all activities that they may need employees to perform (Love & Forret, 2008; Podsakoff et al., 2000; Morrison & Phelps, 1999). Thus, employees who do not limit themselves to perform only jobs written in their rigid job descriptions are needed by most organizations (Wright & Sablynski, 2008). In the following section, the definitions of OCB are reviewed.

The term organizational citizenship behavior or OCB was coined by Organ (1988), when he defined OCB as:

individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization. By discretionary, we mean that the behavior is not an enforceable requirement of the role of the job description, that is, the clearly specifiable terms of the person’s employment contact with the organization; the behavior is rather a matter of personal choice, such that its omission is not generally understood as punishment. (p. 4, italic in original)
When his book was revised in 2006, Organ, Podsakoff, and MacKenzie added the terms “…in the aggregate promotes the efficient and effective functioning of the organization” (p. 3, italics in original) into the definition of OCB. According to Organ et al., OCB in the aggregate term not only contributes to organizational effectiveness by enhancing the “social and psychological context that support task performance”, but it can also enhance the efficiency of the organization because “OCB by the group or department as a whole has been linked to efficiency of operation, customer satisfaction, financial performance and growth in revenues” (Organ, 1997, pp. 91 and 11).

The concept of OCB based on the works of Organ and colleagues has been widely accepted. Much published literature related to OCB usually referred to the definition of OCB based on the works of Organ and colleagues, such as Becker and Randall (1994), Dalton and Cosier (1988), Love and Forret (2008), and Pare and Tremblay (2007). Although some researchers have tried to propose their own OCB definitions, these definitions tend to show great similarity with the works of Organ and colleagues. For example, Niehoff and Moorman (1993) defined OCB as behaviors that are not included in an employee’s job description. Van Dyne, Graham, and Dienesch (1994) proposed the concept of OCB which was developed mainly from civic citizenship research in philosophy, political science, and social history. Civic citizenship means “all positive community-relevant behaviors of individual citizens” (Van Dyne et al., 1994, p. 766). Based on this perspective, they conceptualized OCB as “a global concept that includes all positive organizationally relevant behaviors of individual organization members” (Van Dyne et al., 1994, p. 766). Thus, it can be concluded that the OCB concept is still much influenced by Organ and colleagues.
However, based on a review of several studies related to similar concepts to OCB, such as pro-social organizational behaviors and organizational spontaneity, Podsakoff et al. (2000) revealed an underlying problem about the unclear distinctions in the widespread definition of Organ and colleagues. Some studies have revealed that, in practice, OCB is not perceived purely as behavior that is beyond formal job requirements as Organ (1988) and Organ et al. (2006) defined (Fischer & Smith, 2006; Lam, Hui, & Law, 1999; Morrison, 1994; Van Dyne et al., 1995; Vey & Campbell, 2004). However, Farh et al. (2004) suggested a possible solution for the unclear distinction in the OCB definition by focusing on results. If a behavior creates “[more] positive effects on the social, psychological, organizational, and political contexts, than on the technical context” (Farh et al., 2004, p. 241), that behavior can be considered an OCB. This suggestion is perhaps a solution to distinguish the difference between formal job requirements and OCB.

In summary, the definition of OCB in this study is based mainly on that of Organ (1988) and Organ et al. (2006). OCB was defined here as performance that is beyond formal job requirements, which means employees can make a decision whether they will perform this type of behavior and to what degree. In addition, only positive results from OCB are included in the focus of this study. In the following section, further details related to the concept of OCB are presented. More specifically, the dimensions of OCB and other related issues of the concept of behavior which go beyond the scope of job requirements are discussed.
Components of organizational citizenship behavior.

According to Organ (1988), employees can demonstrate their citizenship behavior in five ways: (1) altruism, which refers to behavior directed toward a specific person with an organizationally relevant task or problem, (2) conscientiousness, which refers to behavior that goes beyond the minimum required level or expectation; it differs from altruism in terms of the dissimilar targets. The targets of conscientiousness could be a group, department, or organization, whereas the targets of altruism are more personal, (3) sportsmanship, which refers to behavior such as tolerating inconvenient situations without complaints, (4) courtesy, which refers to behavior that helps to prevent problems in advance, rather than helping someone who already has a problem, and finally (5) civic virtue, which refers to behavior involving participation in overall organizational issues, such as discussing and speaking up about issues related to an organization.

Podsakoff et al. (2000) reviewed the existing published literature regarding OCB and other related constructions. They found “a lack of consensus about the dimensionality” of the OCB construct (p. 516). They also found seven common dimensions of citizenship behaviors based on published studies. These were as follows: First, helping behavior refers to voluntarily helping behaviors toward others’ work related problems, including preventing work-related problems. Second, sportsmanship refers to individuals who do not complain when they are inconvenienced by others, and who can maintain their positive attitudes even in the challenging situations. Third, organizational loyalty refers to employees promoting organizations to outsiders, and committing to organizations even under adverse conditions. Fourth, organizational
compliance refers to employees who comply with an organization’s rules even when no one monitors them. Fifth, individual initiative refers to employees who engage in task-related behaviors which are beyond the minimum job expectation. Sixth, civic virtue refers to an interest or commitment which employees have toward an organization as a whole. Finally, self-development refers to employees’ voluntary behavior to engage in the development of their knowledge, skills, and abilities. However, according to Podsakoff et al., the last dimension, self-development, has not received any empirical confirmation.

Based on the works of Organ (1988) and Organ et al. (2006), and Podsakoff et al. (2000), it can be concluded that citizenship behaviors can be divided into two kinds of relationships: citizenship behavior toward certain individuals, such as colleagues or supervisors, and citizenship behavior toward a whole organization (Lavelle et al., 2007). The first type of citizenship behavior is called OCB-I which refers to citizenship behavior which is intended to benefit a specific individual, especially a colleague (Turnley et al., 2003). In contrast, citizenship behavior which is intended to benefit an entire organization is called OCB-O (Turnley et al., 2003). Researchers interested in the studies of OCB should clearly state the type of OCB on which they are focusing: OCB-I or OCB-O (Lavelle et al., 2007; Turnley et al., 2003). However, in this study both types of OCB are included and measured.

Finally, another important issue regarding OCB is who should be responsible for measuring this type of behavior: employee self-rating, supervisory rating, or peer-rating. Becker and Vance (1993) found these three different perspectives of OCB measurement among employees, supervisors, and peers. Love and Forret (2008)
suggested a peer-rating approach. A peer-rating is a good OCB measurement, according to Love and Forret, because an employee is surrounded by peers so they have many opportunities to see whether this employee performs OCB. On the contrary, a supervisor may be prevented from seeing whether an employee really performs OCB. However, Becker and Randall (1994) stated in their study that supervisors can evaluate their subordinates’ performance with reasonable accuracy.

For the employee self-rating approach, even though some studies have revealed the drawbacks of this method, such as the possibility of faking, which occurs when individuals provide socially desirable answers in order to increase their chance of looking good in other people’s eyes (Barrick et al., 2001; O’Driscoll et al., 2006), this method has advantages, particularly in terms of practicability. In addition to contextual factors influencing OCB, several individual factors such as personality and mood get involved when employees are making a decision whether they will perform OCB. For example, Organ and Ryan (1995) found that employees who described themselves as above-average disciplined individuals were rated by their supervisors and colleagues as employees who go beyond the defined task requirements. In addition, some studies have revealed the positive relation between employees in a positive mood at work and their likelihood to perform both in-role performance and OCB (George, 1991; Messer & White, 2006). Thus, based on these reasons, an employee self-rating approach in measuring OCB was relied on in this study.

Overall, although some studies have revealed an unclear distinction between behavior based on formal job requirements and behavior that goes beyond the formal job scope, the concept of OCB based on the work of Organ (1988) and Organ et al.
(2006) has been accepted and widely used. In the next section, theoretical and empirical studies related to OCB are reviewed.

**Theoretical and Empirical Studies of Organizational Citizenship Behavior**

Numerous studies have revealed similar results in the relationship between perceived fairness, both in terms of economic and social exchange relationships, and superior performance of employees, which is not limited to in-role but also includes extra-role behaviors. These studies include the works of Brandes, Dharwadkar, and Wheatley (2004), Chiaburu, Marinova, and Lim (2007), Johnson, Truxillu, Erdogan, Bauer, and Hammer (2009), Messer and White (2006), Tsui et al. (1997), Witt and Wilson (1990), as well as Wright and Sablynski (2008). Some studies have also found that when trust between employees and their organizations has been eroded, employees decreased their extra-role behaviors. Robinson and Morrison (1995), for instance, revealed that the civic virtue behavior of employees, which is one of the five dimensions of OCB defined by Organ (1988) and refers to behavior that shows employees’ concerns about the life of the company, decreased after organizations failed to fulfill psychological contracts. These results emphasize the importance of perceived fairness toward employee performance.

Organ et al. (2006) reviewed several studies related to the importance of different cultural contexts in relation to OCB. It is expected that two major different dimensions of culture, individualism versus collectivism and power distance, may influence how OCB is perceived. Although some studies have confirmed the influence of individualism/collectivism and power distance on OCB, it is obvious that additional research is needed (Organ et al., 2006).
For example, Felfe, Yan, and Six (2008) examined the effect of collectivism on organizational commitment, OCB, and turnover intention from financial services and other service-oriented companies in three countries (China, Romania, and Germany). They found that the idea of collectivism was an essential predictor of employees’ commitment, which in turn promotes OCB. However, in China and Romania, the effect of affective commitment, which refers to an employee’s emotional attachment to an organization (Meyer & Allen, 1991), was stronger than in Germany. The authors concluded their study by pointing out that in collectivistic countries, affective commitment is much more important in creating desired outcomes than in Western countries or individualistic countries.

Referring to a different model of OCB, Paille (2009) studied OCB in the French context. According to her study, the main components of OCB are sportsmanship, civic virtue, and helping behavior. The author collected data from various organizations in France and then conducted exploratory factor analysis (EFA). Rather than showing a three-factor model as in the original version, the results showed a four-factor model because the helping component had two factors. To test this result, another set of respondents was recruited and completed the same instrument as the first group of respondents. Confirmatory factor analysis (CFA) was conducted and the results confirmed the four-factor model like the results from the first stage. Helping was divided into two factors, leading to a four-factor model of OCB in the French context: altruism, helping, civic virtue, and sportsmanship.

Other factors are also important to the engagement in the extra-role behavior of employees. For example, employees’ perceived organizational support was found to
relate to OCB. Wang (2009) examined the effect of organizational support on service-oriented organizational citizenship behavior (SOCB). The concept of SOCB is similar to OCB, except this concept focuses more on dealing with customers and representing an organization to outsiders. The study collected data from employees working in a large supermarket chain in Taiwan and found a positive and strong relationship between organizational support and SOCB.

In Mexico, Tierney, Bauer, and Potter (2002) found that socially-based working relationships (i.e., relationships between supervisors and employees and among employees) were an important factor enhancing employees’ extra-role behavior. More specifically, employee perceptions regarding their relationship with supervisors can explain approximately 38% of the variation in employee self-reporting for extra-role behavior, whereas generally the results collected from the US employees reported only 19% of the variation. This finding emphasizes the importance of the difference in cultural values that can impact the level of OCB.

Cheng and Chiu (2008) also investigated the effects of supervisor support on OCB. They collected data from matched questionnaires between supervisors and subordinates from seven companies in Taiwan. The results showed that supervisor support enhanced employees’ job satisfaction and a person-organization fit which in turn increased the level of OCB. Using the same respondents, Cheng and Chiu (2009) also found a positive relationship between some components of job characteristics (i.e., task identity, task significance, and autonomy) and OCB. Based on these two studies, it might be concluded that an organization can enhance the level of OCB by focusing on the importance of supervisor support and job design.
Leader responsiveness was positively related to OCB, according to the study by Shore, Sy, and Strauss (2006). The authors collected data from managers and subordinates working in a large multinational transportation firm in the United States. The results showed that leader responsiveness had a positive relationship toward job satisfaction, organizational commitment, and OCB. However, these factors had no effect on job performance.

Gilbert, Laschinger, and Leiter (2010) examined the effect of empowerment on OCB. In their study, they referred to the concept of two dimensions of OCB, OCB-I and OCB-O proposed by Williams and Anderson in 1991. OCB-I refers to behaviors aiming to help specific coworkers, which indirectly benefits an organization. In contrast, OCB-O refers to behaviors aiming to help an organization in general. The results from their study showed that a higher level of empowerment was positively related to both OCB-O and OCB-I. In addition, a higher level of empowerment was negatively related to a level of emotional exhaustion, which in turn was negatively related to OCB-O. In other words, emotional exhaustion was a mediator in the relationship between empowerment and OCB-O.

The results from a meta-analysis of 155 studies related to organizational commitment done by Meyer, Stanley, Herscovitch, and Topolnisky (2002) revealed that affective and normative commitment was positively related to OCB, whereas the effect of continuance commitment toward OCB was near zero. Thus, organizations could enhance the level of OCB by focusing on factors influencing both types of commitment, affective and normative commitment.
The influence of personal factors on organizational citizenship behavior.

Apart from manageable factors from an organization’s point of view, personal factors can influence the level of OCB. Personality is expected to play an important role in determining the level of extra-role behavior each employee performs. Motowidlo, Borman, and Schmit (1997) suggested that the personality of employees influences contextual performance. They defined contextual performance as activities that promote the “viability of the social and organizational network and enhance the psychological climate…such as helping and cooperating [with] each other” (p. 76). Extroverted and agreeable employees are likely to perform more contextual performance because these people tend to have better interpersonal skills and pay attention to others.

One of the personal characteristics in the Big Five-factor model, conscientiousness, was also examined for its effect on extra-role behavior. Conscientiousness refers to the attitude of hard-working and responsible employees. Bowling (2010) collected data in various types of organizations and found that conscientiousness was positively related to job satisfaction, and together job satisfaction and conscientiousness related to OCB. In other words, the results from Bowling’s study suggested that there was a moderating effect from conscientiousness on the relationship between job satisfaction and OCB. Based on these results, organizations can enhance the level of OCB by focusing on the importance of conscientiousness and improving job satisfaction.

Self-monitoring, which refers to individuals who rely on the requirements of particular situations and adjust their behaviors to fit that situation rather than focusing on their internal feelings or attitudes to determine their behavior, is another personality
trait which was examined in the effect on OCB. Blakely, Andrews, and Fuller (2003) collected data from professional and managerial employees and their supervisors at a federal government research facility. Their study was a longitudinal study: the first stage was a data collection from supervisors and subordinates, and the second stage was done one year after the first stage. The results showed that self-monitoring was positively related to the interpersonal helping dimension of OCB. It should be noted that their study referred to a different definition and components of OCB. The authors used the OCB model proposed by Moorman and Blakely in 1995. According to this model, OCB has four dimensions: interpersonal helping, which refers to helping others; individual initiative, which refers to communicating to others to improve individual and group performance; loyal boosterism, which refers to promoting the organization’s image; and personal industry, which refers to performing above and beyond the normal role expectations.

Other personal factors also contribute to the level of OCB. For example, gender, specifically female, was found to be a significant moderator on the level of OCB as shown in the work of Dieffendorff, Brown, Kamin, and Lord (2002). In another study, Williams and Shiaw (1999) collected data from employees in Singapore and they found that employees who reported being in a good mood were likely to perform more OCB than employees who were in a negative mood. Additionally, the status of employees, whether full-time or part-time, can determine the level of OCB. Stamper and Van Dyne (2001) found that part-time service employees in a restaurant business were likely to perform OCB less well than full-time employees. This result is not beyond expectation since it is possible that part-time employees tend to perceive they are treated unfairly
and consequently are less engaged than full-time employees. However, Moorman and Harland (2002) collected data from supervisors of client organizations and temporary employees in the United States. They found that the attitudes of temporary employees toward their client organizations and toward their own agency determined the level of OCB they performed. These findings suggested that an organization can enhance the level of OCB among temporary employees if they have positive attitudes toward an organization.

Blatt (2008) also studied the effect of temporary employees on OCB, and they found that temporary knowledge workers engaged in OCB because of two main reasons: (1) a perceived norms of professional behavior from their occupation, and (2) a positive experience with colleagues. In other words, these temporary knowledge workers performed OCB because they perceived this behavior as a part of their duties that they should perform, “regardless of where they do so” (Blatt, 2008, p. 861, italic in original). However, it should be noted that Blatt studied temporary knowledge workers so it is possible that this finding came from the unique character of knowledge workers.

Another study which confirmed the similar effect of OCB between permanent and temporary employees was conducted by Kuvaas and Dysvik (2009). The authors collected data from temporary employees in Norway. The results showed that temporary employees also positively responded by performing more OCB and task performance when they perceived an investment in permanent employee development, even though these temporary employees did not benefit directly from that investment. The authors explained these findings by referring to the temporary employee perception related to a supportive work environment. Organizations that invest in their employee
development send the message publicly that they nurture and focus on long-term relationships with their employees; thus, even temporary employees can realize that they are working in a safe environment where they can deliver their high performance (Kuvaas & Dysvik, 2009).

In summary, based on social exchange theory, it is expected that employees are actively engaged with organizations when they believe that they are treated fairly in terms of both economic and social exchange. As a result, these highly-engaged employees are likely to perform well both in terms of their formal job requirements and beyond their formal job scope since this is a way to reciprocate to their organizations.

Relevance of the Research Questions to Human Resource Development

This study proposed that there was a possible positive relationship between employee engagement and OCB. According to the literature, numerous factors influence the levels of employee engagement and OCB, such as individual differences, leadership in organizations, and the compensation and benefits system. However, only significant variables related to the HRD field were chosen in this study to examine as possible moderators that affect the relationship between employee engagement and OCB. These variables were employee perceptions of HRD practices.

More specifically, employee perceptions of HRD practices examined in this study were organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support. As can be seen from numerous studies that have emphasized the importance of social exchange and perceived fairness (Cardona et al.,
employee perception related to organizational support was chosen. In addition, four other variables (access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support) were chosen because in a knowledge-based economy, talented employees usually have two choices, “grow or go” (Gebauer et al., 2008, p. 101).

Most importantly, these five variables are related directly to the work of HRD. If the results of this study confirm the relationship between employee engagement and their performance in terms of OCB based on these five variables, HRD professionals can be aware of what they should do in terms of employee engagement enhancement that can eventually lead to superior employee performance that goes beyond formal job requirements. This involves adherence to HRD’s purpose to improve organizational, work process, team, and individual performance (Gilley & Gilley, 2003; Swanson, 2008).

However, a study related to the perceptions of people from a specific culture must take into account the importance of differences both in terms of culture and assumptions underlying these people’s values and beliefs between countries where an instrument was developed and where the study takes place. These differences might be one of the major limitations of such studies.

Like other studies, this study faced one major limitation: the differences between Thailand and the Western countries where these instruments were developed. Thailand is collectivist and a high power distance society (Hofstede, 2001). In a collectivist culture, the primary concern of people is maintaining relationships with their in-group
members. Their priority is to achieve the goals of the group, and people usually perform on the basis of the group norms (Triandis, 2001). Hofstede (2001) summarized the key characteristics of an organization in high power distance societies as follows: tall organization pyramids with centralized decision structures and hierarchy, subordinates expect to be told and supervised closely, and relationships between subordinates and superiors are often emotional and polarized. In addition, key characteristics of organizations in low individualist societies (i.e., collectivist societies) can be considered in terms of the group. For example, Hofstede (2001) explained that the relationship between employees and organizations in collectivist societies is usually like a family, and employees in the same group usually treat each other better than others who are in the out-group, and they act in the interest of their in-group, not of themselves.

Furthermore, Triandis (2001) explained the varieties of collectivism and individualism. Both collectivism and individualism can be explained by several possible aspects, including the horizontal-vertical aspect. Equality is emphasized in a horizontal society, whereas hierarchy is usually emphasized in a vertical society. Thus, rather than distinguishing culture as two main types, collectivist and individualist, culture can be explained as four different types: horizontal individualist, horizontal collectivist, vertical individualist, and vertical collectivist. The difference between horizontal and vertical collectivist is the extent to which people blend into their group. People in a horizontal collectivist society are likely to merge themselves with the group, whereas people in a vertical collectivist society are likely to sacrifice themselves to the authorities and the group. Considering the fact that Thailand is a high power distance country, Thailand is likely to be classified as vertical collectivism.
Triandis (1989) also explained three dimensions of cultural variation, and one of these dimensions is tightness-looseness. The concept of tightness-looseness relates to how the behavior of people in one culture is influenced by the strengths of its social norms and severity of its social sanctions (Gelfand, Nishii, & Raver, 2006). Triandis (1989) explained that homogenous cultures often require members to follow the in-group norms; this type of culture is tight, and Japan is the good example of a tight culture. In contrast, heterogeneous cultures can tolerate differences; this type of culture is loose. Thailand can be considered as a loose culture. As a result, Thais are more flexible and open to new things (Triandis, 1989). The concept of tightness-looseness also influences how organizations work (Gelfand et al., 2006). Organizations in tight societies usually have high restrictions with a limited range of acceptable behaviors by employees, and predictability is an important dimension, whereas employees in organizations in loose societies have a wide range of acceptable behaviors, and organizations usually encourage openness, risk taking, and flexibility (Gelfand et al., 2006).

However, another important factor is needed to understand Thai character. The majority of Thais share a system of beliefs rooted in Buddhism, specifically Threvada Buddhism (Runglertkrengkrai & Engkaninan, 1987; Thorelli & Sentell, 1982). Believing in karma is one of the most important beliefs in Buddhism. Believing in karma means the belief in the concept that every good or bad thought and behavior brings consequences either in this present life or future life (Toews & McGregor, 1998). People will eventually receive things they deserve either good or bad. This belief leads
to the acceptance of different places in a hierarchy system both in personal life and the workplace (Toews & McGregor, 1998).

In summary, according to Hofstede (2001), Gelfand et al. (2006), and Triandis (1989), collectivism, a high power distance society or hierarchical society, and a loose culture are main characteristics of Thai society. Additionally, these characteristics result from the belief in Buddhism. Several scholars have studied the characteristics of Thai employees and concluded that people should not use assumptions drawn from other cultures, even from other Asian countries, to interpret behaviors of Thai employees (Komin, 1991; Runglertkrengkrai & Engkaninan, 1987; Thompson, 1989). Special care must be taken to understand the Thai culture. For example, studies usually have claimed that one of the distinctive characters of Thais is obedience, especially toward superiors or authorities because of their high power distance society (Thompson, 1989). As a result, authoritarianism seems to be an appropriate management style in Thai organizations. However, understanding the assumptions underlying this conclusion is required to comprehend this character. Thai values are derived mostly from Buddhism, as described above. Thais will continue their obedience, loyalty, and deference as long as they feel that their superior is worthy (Runglertkrengkrai & Engkaninan, 1987; Thompson, 1989; Thorelli & Sentell, 1982). This invisible contract leads to a well-balanced reciprocity between a superior and subordinates: superiors are expected to be in control of themselves, act as a role model, and take care of subordinates, while these subordinates reciprocate the virtues of their superiors by showing their respect and obedience. According to this kind of relationship, a paternalistic management style and hierarchy in Thai organizations seems prevalent and appropriate (McKenna, 1995).
Although these characteristics of organizations and people can be found in Thailand, they are not always prevalent, especially among modern Thais and large organizations that tend to adopt the Western approach because of changes in economic and social contexts (Kamoche, 2000; Runglertkrengkrai & Engkaninan, 1987). For example, evidence suggests that some traditional management styles in Thai organizations have changed and have adopted more Western management practices, such as implementing a formal merit-based recruitment and selection system instead of a “cronyism and nepotism” style (Ohtaki, 2003, p. 189). These changes toward Western management styles can be found especially in relatively large and formal Thai organizations, whereas most small Thai family enterprises still rely on the simple and informal approach (Lawler & Atmiyanandana, 1995).

Summary

This chapter provides an overview of the literature regarding two main variables under examination in this study, employee engagement and OCB. The literature suggests a possible positive relationship between employee engagement and OCB. In addition, some organizational factors which are related to the field of HRD can influence this relationship, such as the perception of being treated with fairness and being supported, as well as learning and growth opportunities within an organization.

In other words, based on the literature review, this study proposed a positive relationship between employee engagement and OCB, and hypothesized positive moderating effects from employee perceptions of HRD practice (organizational support, access to training and development opportunities, support for training and development
opportunities, benefits of training, and formal career management support) in this relationship. In the next chapter, the research method and the details related to how this study was executed are described.
CHAPTER THREE

RESEARCH METHOD

This chapter provides an overview of the research method used in this study. The purpose of this study was to explore the potential relationship between employee engagement and OCB in Thai organizations. Potential influencing factors on the relationship between employee engagement and OCB were also considered with employee perceptions of HRD practices (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support).

The purpose of this study was to explore the relationship between employee engagement and employee performance; thus, a quantitative or positivistic research paradigm was used in this study. More specifically, this study utilized a survey research method with either a paper-and-pencil or an online survey format depending on each organization’s and individual participant’s choices. A survey research method is the most frequently used data collection method in organizational research (Bartlett, 2005).

In the following sections, the primary information related to population and sample, instruments, research procedures, and data analysis method is provided.

Population and Sample

The population for this study consisted of employees of four large Thai organizations, which were selected based on personal contacts. Two organizations are publicly traded companies in the Stock Exchange of Thailand (SET) and the other two are privately owned companies. Although these four organizations were chosen based
on personal contacts, these companies are fairly representative of many large public and private organizations in Thailand. In drawing up a sample of employees from these companies, I included only first-level professional employees who have no managerial responsibilities. Managerial responsibilities in this study were defined as the absolute authority to make final decisions within a section, department, or function of an organization. Generally in Thai organizations, a functional or departmental head with an absolute authority for decision-making carries the title of vice president or director. I expected that the majority of the population in this study would be university graduates. This group of employees was chosen for this study because they are expected to form the future leadership of organizations (Sturges et al., 2002); they can impact the future of an organization. Details about each participating company are provided in the following section.

Company A is a publicly traded company in the petrochemical and chemical industry with approximately 1,080 employees. The second publicly traded company called Company B is in the energy and utilities industry. Company B has approximately 100 employees with approximately 70 employees working in Thailand and roughly 30 employees working in Indonesia. Company C is a private company in the agribusiness and food industry. Company C has approximately 287 employees. Finally, Company D is a private company in the industrial materials and machinery industry with approximately 100 employees. In total, there were 1,567 first-level employees with no managerial responsibilities from all four companies who were invited to participate in the study.
Research Procedures

I contacted the human resource department of each of the four companies to explain the research purpose and processes of this study. To encourage participation, the findings based on each company and the summary results were offered to each participating company. In addition, each company could choose its preferred data collection method of either a paper-and-pencil or an online survey format. After agreeing to participate, each company provided me with the total number of employees who met the criteria of being first-level employees with no managerial responsibilities and each company chose which data collection method the company preferred.

Companies A and B selected the online survey, whereas C and D chose the paper-and-pencil format. Following suggestions for increasing response rates, I tried to implement as many positive factors as possible including advance notice, identification numbers, and salience (Dillman, 2007; Miller, 1991; Roth & BeVier, 1998). I provided an introductory letter describing the importance of this study and a brief pre-notice letter to an assigned human resource officer of each company and asked him or her to introduce the study to their employees. These human resource officers were charged with contacting the target participants to explain the purpose, procedure, voluntary nature, risks and benefits, confidentiality, and importance of the study.

Approximately five to seven days after the participants received information related to the study from their human resource officers, the survey and other related documents were sent to the assigned human resource officer at each company. Email or regular postal mail was used depending on the survey format requested by each firm. These assigned human resource officers then distributed the surveys to employees. The
participants in the two organizations choosing the online survey could send their surveys back to me electronically. The participants in the two organizations choosing the paper-and-pencil survey format received a postage-paid reply envelope to send the survey back to me. In the case of the paper-and-pencil survey, each survey had an individual identification number. However, this number was assigned for tracking purposes only (Dillman, 2007). An explanation related to the purpose of the individual identification number on each survey was included in the introductory letter. In addition, the introductory letter described all related information about the study along with a copy of the survey instrument.

Approximately ten days after the initial mailing, a reminder postcard or email depending on the first contact method was sent to the assigned human resource officers to inform them about the current status of the response rate. In addition, I asked these assigned human resource officers to convey my appreciation to all employees who had already responded and encouraged those who had yet to complete the survey. However, a second follow-up with a replacement survey to increase the response rate could not be done in this study since I did not have access to a complete list of all 1,567 employee names. This limitation perhaps affected the response rate of the study.

In addition to the choice of survey format offered to each company, individual employees agreeing to participate in this study could also contact me directly to ask for the survey version they preferred. Every participant was also asked to voluntarily provide their full name and address to have an opportunity to win one of seven gift vouchers worth Baht 3,000 (approximately $85 as of the exchange rate in February 2010).
Instrumentation

The survey used in this study was divided into three main parts: (1) employee engagement as the independent variable, (2) OCB as the dependent variable, and (3) employee perceptions related to organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support as possible moderators.

This study relied on previously developed and validated scales and instruments. Using the same instrument in different studies facilitates comparison across cultures (Yu et al., 2004). However, the instrument must be translated appropriately so the validities and reliabilities of the instruments are still relevant (Yaghi et al., 2008). In this study, the steps of instrument translation followed the model of translation proposed by Brislin (1970; 1986) which is described in the section below.

All scales used in this study were originally developed in the English language. This study was conducted in Thailand where Thai is a national official language. Thus, all surveys were translated from English into Thai. The first step in the Brislin translation method is forward-translation where the original version of the instrument is translated into the target language. The second step was a review of the Thai version of the instrument by a monolingual reviewer, who does not have any knowledge of the English version of the instruments, for incomprehensible or ambiguous wordings. A Thai colleague who is a human resource assistant director at a publicly traded organization was asked to perform this task. The third step is backward-translation. This step should be done by someone who is not only fluent in both Thai and English, but also qualified enough to understand the instrument. A Thai classmate who graduated in
the HRD field with a master’s degree and works in a multinational company was asked to translate the revised Thai version of the instrument. Then, a native English speaker who is a professor of language and writing at the University of Minnesota and I compared the original version of instruments with backward-translated version for “linguistic congruence and cultural relevancy” (Yu et al., 2004, p. 310). Items with apparent discrepancies were examined and the process repeated until a maximum equivalence between the original English version and the Thai version was achieved.

Although the scales used in this study have reported high levels of reliability and validity, the instruments were originally developed in English, not Thai. To ensure the appropriateness and clarity of the Thai version of the instrument, it is suggested to test both semantic and content equivalences of the translated version of instrument (Yu et al., 2004). Thus, prior to data collection, the complete translated instrument was presented to a group of Thai subject matter experts. Six professors employed at three Thai universities in human resource or management departments were asked to review and verify the appropriateness of the survey. Additional revisions to the survey were made based on the feedback from the expert panel. Finally, the complete translated instrument was tested in the pilot test.

In the following sections the measurement instrument for each variable is described in detail.

*Employee Engagement*

In this study, the employee engagement scale developed by Schaufeli et al. (2006) was used. Schaufeli and colleagues further developed a short-form questionnaire to measure work engagement based on the original version of the Utrecht Work
Engagement Scale (UWES). The original version of UWES was developed by Schaufeli and colleagues to measure employee engagement as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli & Bakker, 2004, p. 295). The original version of the UWES measured these three conditions of employee engagement with 17 items. The coefficient alpha values, which were tested with 31,916 employees from 16 countries, were acceptable ranging from 0.80 to 0.90 (Schaufeli, 2006). The results of the confirmatory factor analyses (CFA) have supported the three dimensional structures of the UWES (Schaufeli, 2006). In addition, it has been reported that the UWES can be used as an “unbiased instrument to measure work engagement because its equivalence is acceptable for different racial groups” (Schaufeli et al., 2006, p. 703). In their study to further develop the short version of the questionnaire, 27 studies conducted in the years 1990-2003 in 10 countries were selected. The results indicated that the original 17 items in the UWES could be shortened to 9 items without impacting internal consistency. Cronbach’s alpha values for the total 9 questions from 27 studies in 10 countries varied between 0.85 and 0.92, and the median was 0.92.

The nine-item version of the employee engagement scale by Schaufeli et al. (2006) was chosen because this study collected data in a country outside the United States. Responses to these nine items are provided on a seven-point Likert-type scale ranging from 1 (Never) to 7 (Always/Every day). An example item from this scale is: “At my work, I feel bursting with energy”. The employee engagement scale can be found as a part of the full survey in Appendix B.
Organizational Citizenship Behavior

In this study, the scale developed by Podsakoff, MacKenzie, Moorman, and Fetter (1990) was used. Podsakoff and colleagues developed the OCB scale based on the OCB definition of Organ (1988). According to Organ (1988), employees can demonstrate their OCB in five ways: altruism, conscientiousness, sportsmanship, courtesy, and civic virtue. Each component of OCB is described as the following:

1. Altruism which refers to behavior directed toward a specific person with an organizationally relevant task or problem

2. Conscientiousness which refers to behavior that goes beyond the minimum required level or expectation

3. Sportsmanship which refers to behavior such as tolerating inconvenient situations without complaints

4. Courtesy which refers to behavior that helps to prevent problems in advance, rather than helping someone who already has a problem, and

5. Civic virtue which refers to behavior involving participation in the overall organizational issues such as discussing issues related to an organization

Podsakoff et al. (1990) generated items for each component of the OCB definition by Organ (1988). The list of possible items was presented to a group of ten of their colleagues who were provided with definitions of the five dimensions and were then asked to place each item in the most appropriate OCB category. The final scale consisted of items which had at least 80% agreement. The final version of the survey has 24 items. The coefficient alpha for the final version of the survey was 0.96, and the average inter-correlation among the OCB dimensions was 0.52. Responses to these
items are provided on a seven-point Likert-type scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree).

The OCB scale by Podsakoff et al. (1990) was chosen in this study because it was developed to capture all five dimensions of OCB. In this study, all dimensions of OCB are of interest. Thus, the Podsakoff et al.’s survey was appropriate for the purpose of this study.

However, in this study, an employee self-rating approach was used. It was therefore necessary to reword the items as the original Podsakoff et al.’s scale was designed to be used with a supervisory rating survey. All items were reworded from “This employee…” to “I…” For example, the first item: “This employee helps others who have heavy work load” was changed to “I help others who have heavy work load”.

The OCB scale can be found as a part of the full survey in Appendix B.

Employee Perceptions of HRD Practices

Possible moderators in this study, which were called employee perceptions of HRD practices, were categorized into five variables as the following:

(1) organizational support

(2) access to training and development opportunities

(3) support for training and development opportunities

(4) benefits of training

(5) formal career management support

Details of each possible moderator are presented in the following section.

Organizational Support refers to the perception of employees that an organization shows an interest in them in terms of both work and non-work issues, such
as providing interesting jobs and showing concern for them (Eisenberger et al., 1986).
In other words, this attitude reflects the perception of employees that an organization
values and supports them and is sincerely interested in their well-being (Cardona et al.,
2004; Gebauer et al., 2008; Kroth & Keeler, 2009). The 16-item organizational support
scale is the work of Eisenberger and colleagues (1986). It is measured with responses
provided on a seven-point Likert-type scale ranging from 1 (Strongly Disagree) to 7
(Strongly Agree). An example item from this scale is: “The organization values my
contributions to its well-being”. The reliability of this scale is reported at 0.97
(Eisenberger et al., 1986). The organizational support scale can be found as a part of the
full survey in Appendix B.

Access to Training and Development Opportunities refers to the perception of
employees that training and development opportunities are available for them to access,
even though it is possible that these employees do not want to participate in these
activities or that they may not be selected by supervisors for training (Bartlett, 2001).
The scale is measured with three items on a seven-point Likert-type scale ranging from
1 (Strongly Disagree) to 7 (Strongly Agree). An example item from this scale is: “My
organization has stated policies on the amount and type of training the employee can
expect to receive”. The reliability of this scale is reported at 0.77 (Bartlett, 2001). The
access to training and development opportunities scale can be found as a part of the full
survey in Appendix B.

Support for Training and Development Opportunities refers to the perception of
employees that they are provided support from their senior staff or supervisors and
colleagues to participate in and/or to apply skills and knowledge learned from training
and development opportunities (Noe & Wilk, 1993). The scale is measured by 23 items on a five-point Likert-type scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The scale is divided into two sections: support for training and development opportunities from colleagues which had been reported the Cronbach’s alpha at 0.83, and support for training and development opportunities from senior staff which had been reported the Cronbach’s alpha at 0.96 (Noe & Wilk, 1993). The support for training and development opportunities from colleagues has 6 items, and the support for training and development opportunities from senior staff has 17 items. An example item from this scale is: “I can count on my co-workers to provide me with help and services needed to complete my job assignments”. The support for training and development opportunities scale can be found as a part of the full survey in Appendix B.

*Benefits of Training* refers to the perception of employees that the effort they put into the training program will result in skills, knowledge, and abilities which will lead to positive and valued outcomes (Noe et al., 1997). The benefits of training scale was developed from expectancy theory which suggests that a person’s behavior is based on three factors: expectancy, instrumentality, and valence (Mathieu, Tannenbaum, & Salas, 1992; Noe, 2005; Noe et al., 1997; Tharenou, 2001). First, an individual must believe in the link between trying to perform a behavior and actually performing that behavior, which is called expectancy. This stage is similar to the concept of self-efficacy (Noe, 2005). Second, an individual must believe in the link between performing a particular behavior and an outcome, which is called instrumentality. Finally, the outcome must be something that a person values, which is called valence.
Benefits of training measures perception of employees related to the benefits which they can expect to obtain from participation in training programs provided by their organization. Employees are likely to participate in training and development opportunities when they perceive that they can obtain some or all types of benefits. Noe and Wilk (1993) explained that there are three different types of potential benefits from attending training programs: personal benefits, job benefits, and career benefits. The benefits of training scale is measured with 14 items with responses provided on a five-point Likert-type scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The personal benefits scale has five items and its reliability is reported at 0.88; the job-related benefits scale has three items and its reliability is reported at 0.74; and the career benefits scale has six items and its reliability is reported at 0.70 (Noe & Wilk, 1993). An example item from this scale is: “Participating in training programs [provided by the current employer] will help my personal development”. The benefits of training scale can be found as a part of the full survey in Appendix B.

*Formal Career Management Support* refers to the perception of employees that their career growth opportunities are supported by their organization. It measures whether employees perceive their organization has formal career management practices that influence their career growth (Sturges et al., 2002). The formal career management support scale is measured with responses provided on a five-point Likert-type scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) on six items. An example item from this scale is: “I have been given training to help develop my career”. The reliability of this scale is reported at 0.77 (Sturges et al., 2002). The employee perceived
career growth opportunities scale can be found as a part of the full survey in Appendix B.

Reliability Analysis

Cronbach’s alpha values represent internal consistency, which refers to the extent to which the items in a test measure the same construct (Ho, 2006). The greater than 0.80 rule-of-thumb is generally accepted (Crano & Brewer, 1973). Cronbach’s coefficient alpha values of main scales in this study varied from 0.84 to 0.95 which could be considered acceptable. The Cronbach’s alpha values of all seven scales are presented in Table 1.
Table 1. Cronbach’s Alpha Values of all Seven Scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Numbers of Items</th>
<th>Item Mean</th>
<th>Scale Mean</th>
<th>Standard Deviation</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee engagement scale¹</td>
<td>9</td>
<td>5.41</td>
<td>48.71</td>
<td>8.41</td>
<td>0.93</td>
</tr>
<tr>
<td>Revised OCB scale²</td>
<td>20</td>
<td>5.50</td>
<td>109.93</td>
<td>12.13</td>
<td>0.87</td>
</tr>
<tr>
<td>• Altruism</td>
<td>5</td>
<td>5.62</td>
<td>28.10</td>
<td>3.39</td>
<td>0.77</td>
</tr>
<tr>
<td>• Sportsmanship</td>
<td>4</td>
<td>5.26</td>
<td>21.05</td>
<td>4.22</td>
<td>0.77</td>
</tr>
<tr>
<td>• Civic virtue</td>
<td>3</td>
<td>5.31</td>
<td>15.94</td>
<td>2.64</td>
<td>0.78</td>
</tr>
<tr>
<td>• Courtesy</td>
<td>4</td>
<td>5.74</td>
<td>22.94</td>
<td>3.12</td>
<td>0.67</td>
</tr>
<tr>
<td>• Conscientiousness</td>
<td>4</td>
<td>5.48</td>
<td>21.90</td>
<td>3.14</td>
<td>0.67</td>
</tr>
<tr>
<td>Revised organizational support scale³</td>
<td>9</td>
<td>4.50</td>
<td>40.49</td>
<td>8.57</td>
<td>0.92</td>
</tr>
<tr>
<td>Access to training and development opportunities scale⁴</td>
<td>3</td>
<td>5.24</td>
<td>15.72</td>
<td>3.50</td>
<td>0.84</td>
</tr>
<tr>
<td>Revised support for training and development opportunities scale⁵</td>
<td>19</td>
<td>3.82</td>
<td>72.56</td>
<td>12.78</td>
<td>0.95</td>
</tr>
<tr>
<td>• Support for T&amp;D opportunities from colleagues</td>
<td>3</td>
<td>3.80</td>
<td>11.41</td>
<td>2.34</td>
<td>0.66</td>
</tr>
<tr>
<td>• Support for T&amp;D opportunities from senior staff</td>
<td>16</td>
<td>3.82</td>
<td>61.15</td>
<td>11.68</td>
<td>0.96</td>
</tr>
<tr>
<td>Revised benefits of training scale⁶</td>
<td>10</td>
<td>3.64</td>
<td>36.41</td>
<td>6.12</td>
<td>0.90</td>
</tr>
<tr>
<td>• Job-related and career benefits of training</td>
<td>6</td>
<td>3.36</td>
<td>20.13</td>
<td>18.45</td>
<td>0.87</td>
</tr>
<tr>
<td>• Personal benefits of training</td>
<td>4</td>
<td>4.07</td>
<td>16.27</td>
<td>2.39</td>
<td>0.84</td>
</tr>
<tr>
<td>Formal career management support scale⁷</td>
<td>6</td>
<td>3.72</td>
<td>22.33</td>
<td>4.09</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Note:
¹ = Schaufeli et al. (2006)
² = Podsakoff et al. (1990)
³ = Eisenberger et al. (1986)
⁴ = Bartlett (2001)
⁵ = Noe & Wilk (1993)
⁶ = Noe & Wilk (1993)
⁷ = Sturges et al. (2002)

Demographic Items

This study collected data on five demographic variables from respondents:

- gender,
- age,
- level of educational attainment,
- work experience at the current company,
and current position. Gender was a dichotomous variable measured with a check-the-box item. Respondents were also asked to check the boxes related to the range of; (1) their current age, which ranged from younger than or equal to 19 years to older than or equal to 40 years, and (2) level of education, which ranged from high school to higher than bachelor’s degree. They were also asked to specify how long they have been employed at the organization, and their current job position. Finally, at the end of the survey an open response format item was used to allow respondents to voluntarily write their opinion or suggestion about the survey.

Pilot Testing

After the translated version of the instrument was ready, the pilot test began. The pilot test used an online survey format. Traditionally, it has been more common to use a paper-and-pencil survey format in Thailand. In contrast, an online survey is considered a new method. Thus, I wanted to be certain that an online survey would work properly with the planned sample of Thai employees. The pilot test used a convenience sample. There were two main types of a convenience sample that I contacted: (1) former colleagues and friends from high school and colleges, and (2) former supervisors. Former colleagues and friends from high school and colleges with no managerial responsibilities were invited to participate in the pilot test. In addition, these people were asked to tell their colleagues about the pilot test. If their colleagues were interested in participating, they could contact me to receive the online survey link. The second group I contacted included my former supervisors from two organizations. I asked them to inform their current subordinates who have no managerial responsibilities
about my pilot test. Again if their subordinates were interested in participating, they could contact me to receive the link to the online survey.

Following this procedure resulted in 90 online surveys sent to participants’ email addresses. A total of 51 employees completed the survey representing a 57% response rate. These 51 employees were employed in six publicly traded companies in three major industries: services (commerce, and media and publishing), property and construction (construction materials), and technology (information and communication technology). All participants in the pilot test received the same materials used in the actual study. Thus, they had the opportunity to complete the survey and to review the introductory letter in order to check that all information and directions stated in the letter were clear (Krueger, 2007). The survey and introductory letter were revised based on the results and these comments. It took approximately two months to complete the pilot test. The collected demographic data of participants in the pilot test is presented in Appendix C. The demographic profile from the respondents in the pilot test compared well to the demographics of participants in the full study.

The results of the pilot test also suggested dropping five items because of redundancies and confusions when presented in the Thai language. These five items were made up of one item from the OCB scale, the organizational support scale, and the benefits of training scale, as well as of two items from the support for training and development opportunities scale.

All Cronbach’s alpha values in the seven scales used in the pilot study ranged from 0.81 to 0.93, even though some subscales had relatively low alpha values, especially the conscientiousness component of OCB. The comparisons between
Cronbach’s alpha values of the original and translated scales used in the pilot test are presented in Table 2.

### Table 2. Cronbach’s Alpha Values of the Original and Translated Scales in the Pilot Test

<table>
<thead>
<tr>
<th>Name of Scale</th>
<th>Numbers of Items</th>
<th>Cronbach Alpha Original Study</th>
<th>Cronbach Alpha Pilot Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee engagement scale&lt;sup&gt;1&lt;/sup&gt;</td>
<td>9</td>
<td>0.92</td>
<td>0.93</td>
</tr>
<tr>
<td>OCB scale&lt;sup&gt;2&lt;/sup&gt;</td>
<td>24</td>
<td>0.96</td>
<td>0.83</td>
</tr>
<tr>
<td>- Altruism</td>
<td>5</td>
<td>0.85</td>
<td>0.72</td>
</tr>
<tr>
<td>- Sportsmanship</td>
<td>5</td>
<td>0.85</td>
<td>0.61</td>
</tr>
<tr>
<td>- Civic virtue</td>
<td>4</td>
<td>0.70</td>
<td>0.70</td>
</tr>
<tr>
<td>- Courtesy</td>
<td>5</td>
<td>0.85</td>
<td>0.73</td>
</tr>
<tr>
<td>- Conscientiousness</td>
<td>5</td>
<td>0.82</td>
<td>0.46</td>
</tr>
<tr>
<td>Organizational support scale&lt;sup&gt;3&lt;/sup&gt;</td>
<td>16</td>
<td>0.97</td>
<td>0.93</td>
</tr>
<tr>
<td>Access to training and development opportunities scale&lt;sup&gt;4&lt;/sup&gt;</td>
<td>3</td>
<td>0.77</td>
<td>0.84</td>
</tr>
<tr>
<td>Support for training and development opportunities scale&lt;sup&gt;5&lt;/sup&gt;</td>
<td>23</td>
<td>-</td>
<td>0.93</td>
</tr>
<tr>
<td>- From colleagues</td>
<td>7</td>
<td>0.83</td>
<td>0.72</td>
</tr>
<tr>
<td>- From senior staff</td>
<td>16</td>
<td>0.96</td>
<td>0.95</td>
</tr>
<tr>
<td>Benefits of training scale&lt;sup&gt;6&lt;/sup&gt;</td>
<td>14</td>
<td>-</td>
<td>0.89</td>
</tr>
<tr>
<td>- Personal benefits</td>
<td>5</td>
<td>0.88</td>
<td>0.76</td>
</tr>
<tr>
<td>- Job-related benefits</td>
<td>3</td>
<td>0.74</td>
<td>0.74</td>
</tr>
<tr>
<td>- Career benefits</td>
<td>6</td>
<td>0.70</td>
<td>0.82</td>
</tr>
<tr>
<td>Formal career management support scale&lt;sup&gt;7&lt;/sup&gt;</td>
<td>6</td>
<td>0.77</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Note:
1 = Schaufeli et al. (2006)
2 = Podsakoff et al. (1990)
3 = Eisenberger et al. (1986)
4 = Bartlett (2001)
5 = Noe & Wilk (1993)
6 = Noe & Wilk (1993)
7 = Sturges et al. (2002)
Description of the Sample

A total of 1,567 surveys were sent out and 698 surveys were returned with 170 partial responses. One hundred forty-two partial responses came from two organizations participating in the online survey, whereas 28 partial responses came from other two organizations participating in the paper-and-pencil format. The high numbers of partial responses from the online survey came from the fact that the online survey system started collecting responses when participants visited the webpage and answered the questions, no matter how many questions they answered. Accordingly, some partial responses from the online survey had just a few questions answered. In addition, six returned surveys were deleted because of obvious response pattern biases.

Thus, completed and usable surveys were collected from 522 first-level employees with no managerial responsibilities from four organizations. Response rates ranged from 20% to 81% from the four organizations in this study with the overall average being 33%. The average response rate from the paper-and-pencil format was 55%, whereas the average response rate from the online survey was 27%. The lower response rate from online surveys is normally expected (Egan, 2002). A 20% response rate is considered acceptable in an online survey (Song, Kim, & Kolb, 2009).

Of the 522 respondents, 274 were female (52.5%) and 248 were male (47.5%). One hundred forty-nine respondents (28.5%) reported their ages in the 25-29 years category, and 136 respondents (26.1%) reported their ages in the 30-34 years category. The average time employed at the current organization was 8.76 years (ranging from 0.1 month to 27 years, and SD = 7.14). The majority of respondents (54%) reported completion of a four-year college degree, and 21.8% reported completion of higher than
bachelor’s degree. In addition, the current positions of the respondents varied from officers to managers. The demographic data of the 522 respondents is presented in Table 3.

### Table 3. Sample Demographic Data

<table>
<thead>
<tr>
<th>Variables</th>
<th>Values</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>274</td>
<td>52.5</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>248</td>
<td>47.5</td>
</tr>
<tr>
<td>Age</td>
<td>19 years or younger</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>20-24 years</td>
<td>29</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td>25-29 years</td>
<td>149</td>
<td>28.5</td>
</tr>
<tr>
<td></td>
<td>30-34 years</td>
<td>136</td>
<td>26.1</td>
</tr>
<tr>
<td></td>
<td>35-39 years</td>
<td>91</td>
<td>17.4</td>
</tr>
<tr>
<td></td>
<td>40 years or older</td>
<td>117</td>
<td>22.4</td>
</tr>
<tr>
<td>Education</td>
<td>High school degree</td>
<td>24</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td>Vocational education</td>
<td>79</td>
<td>15.1</td>
</tr>
<tr>
<td></td>
<td>Associate’s degree</td>
<td>23</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s degree</td>
<td>282</td>
<td>54.0</td>
</tr>
<tr>
<td></td>
<td>Higher than bachelor’s degree</td>
<td>114</td>
<td>21.8</td>
</tr>
<tr>
<td>Experience at this organization</td>
<td>Less than 1 year</td>
<td>37</td>
<td>7.1</td>
</tr>
<tr>
<td></td>
<td>More than or equal to 1 but less than 3 years</td>
<td>94</td>
<td>18.0</td>
</tr>
<tr>
<td></td>
<td>More than or equal to 3 but less than 5 years</td>
<td>80</td>
<td>15.3</td>
</tr>
<tr>
<td></td>
<td>More than or equal to 5 but less than 10 years</td>
<td>105</td>
<td>20.1</td>
</tr>
<tr>
<td></td>
<td>More than 10 years</td>
<td>206</td>
<td>39.5</td>
</tr>
</tbody>
</table>

### Data Analysis

To better understand the complexity of organizational phenomena like the relationship between employee engagement and OCB with several possible moderators, this study relied on multivariate analysis methods. According to Bates (2005), multivariate analysis methods are “key tools for organizational researchers because of their ability to incorporate multiple variables” (p. 116) to explore the relationship between these variables.
The main purpose of this study was to explore the relationship between employee engagement and OCB. This relationship between employee engagement and OCB considered five possible moderators.

A moderator is an independent variable that affects the strength and/or direction of the relationship between another independent variable and a dependent variable (Bennett, 2000). More specifically, a moderator is the third variable affecting the zero-order correlation between two other variables (Baron & Kenny, 1986). In other words, the relationship between an independent variable and a dependent variable depends on the value or level of the moderator variable. According to Howell (2007), moderating relationships refer to “situations in which the relationship between the independent and dependent variables changes as a function of the level of a third variable (the moderator)” (p. 531). Bennett (2000) noted that a moderator variable is usually included in the study when a researcher is interested in answering the question “when the relationship occurs” (p. 417). On the contrary, a mediator variable is usually used to explain how and why the effect occurs (Baron & Kenny, 1986).

Baron and Kenny (1986) illustrated the relationship among a predictor, a dependent variable, and a moderator (Figure 1). The moderator hypothesis is supported when the interaction term between a predictor and a moderator (path c) is statistically significant in addition to the significant main effects from path a, and path b.
Multiple regression was the main data analysis method used in this study. More specifically, a series of hierarchical multiple regression analyses were implemented to examine the relative unique contribution of adding each variable into the model to explain the variation in the dependent variable, OCB. Each moderator was entered orderly into the regression model based on:

(1) organizational support  
(2) access to training and development opportunities  
(3) support for training and development opportunities  
(4) benefits of training  
(5) formal career management support

This order was determined by reviewing existing theories and research findings about the expected contribution to the variance in OCB (Gebauer et al., 2008; Kahn, 1990; May et al., 2004; Schaufeli & Bakker, 2004; Truss et al., 2006). In addition to the previous literature review, the order of adding variables in the regression model was
determined by reviewing the correlation matrix from the results and the main purpose of this study. In the regression model, variables were added orderly. The first variable entered in the model contained a set of the demographic data as control variables. Before adding the variables in the next step, I examined the correlation matrix to review an initial idea about the correlations between each variable and the dependent variable. The second order of data entry was the test of the main effect by adding all variables of interest. If an added variable did not significantly increase the predictive power of the model, that variable was dropped from the model before the third order of variables was added. Finally, the third variable entered in the model was the test of the two-way interactions based on the results of the second order of data entry.

In addition, it should be noted that the two-way interaction terms tested in this study were created by using the mean centered variables because of concerns with multicollinearity (Howell, 2007). Multicollinearity refers to the situation in which the independent/predictor variables are highly correlated leading to the problem of sharing predictive power among these variables (Ho, 2006). Therefore, rather than using an interaction computed by multiplying two variables together, which typically has a significant correlation, the mean-centered approach reduces the collinearity problem between the original and interactions.

Summary

This study proposed exploring the relationship between employee engagement and OCB. Based on the literature review, it was expected that highly-engaged employees are likely to report higher level of OCB than employees who are disengaged.
In addition, this study considered the importance of employee perceptions related to HRD practices that may influence the relationship between employee engagement and OCB. These five variables (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support) were selected because they are considered important to the HRD field. In this chapter the procedures for data collection, instrument design, and analysis were also described. In the next chapter, the research findings are presented.
CHAPTER FOUR

RESEARCH FINDINGS

The purpose of this study was to explore the potential relationship between employee engagement and OCB in Thai organizations. The relationship between employee engagement and OCB was also considered with five possible moderators (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support). A combination of seven existing scales was used to collect data from a sample of 522 first-level professional employees from four large Thai organizations. This chapter provides a description of the results related to these seven measures associated with employee engagement, OCB, and all five possible moderators.

This study had three main research questions to examine the relationship between employee engagement and OCB. These research questions were:

1. What is the relationship between employee engagement and OCB in Thai organizations?

2. What is the relationship between employee engagement, employee perceptions of HRD practices (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support), and OCB in Thai organizations?

3. Is the relationship between employee engagement and OCB moderated by employee perceptions of HRD practices (organizational support, access to
training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support)?

The results in this chapter are presented in six main stages. First, the results of an analysis for normal distribution from collected responses are described. Second, the results of factor analysis to test the theoretical framework underlying each variable are presented. Third, the assumptions of regression analysis were tested. Fourth, the results of correlation matrix table for original variables are presented. Fifth, the results from the first research question examining the relationship between an independent variable, employee engagement, and a dependent variable, OCB, are presented. Finally, a series of hierarchical multiple regression analyses was implemented to examine the relatively unique contribution of adding each variable to a model to explain the variation in OCB. This step was conducted to examine the second and third research questions. Results from each stage are presented in the following sections.

**Normal Distribution of Sample**

Before conducting any statistical analysis, the rule of normal distribution of collected responses should be tested. According to the central limit theorem, three rules apply: (1) when the population is normal, the sampling distribution of the mean will be normal regardless of the numbers of sample, (2) when the population is symmetrical but non-normal, the sampling distribution of the mean will approach normal even in small sample sizes, and (3) when the population is skewed, sample sizes of at least 30 must be
obtained to make the sampling distribution of the mean close to a normal distribution (Howell, 2007).

This study collected data from 522 respondents which was a large enough sample to assume that they followed the rule of normal distribution. The results also confirmed the normal distribution of collected data. In addition, the results for each question did not show evidence of extreme skewness as can be seen from the values of skewness ranging from -1.44 to .004 and the values of Kurtosis ranging from -0.78 to 2.97. Thus, it can be concluded that the rule of normal distribution of sample in this study is satisfied.

Factor Analysis

The goal of factor analysis is to find whether it is possible to “reduce the set of measured variables to a smaller set of underlying factors” (Spicer, 2005, p. 181). In other words, factor analysis is used to identify the “interrelationships among a large set of observed variables, and then, through data reduction, to group a smaller set of these variables into dimensions or factors that have common characteristics” (Pett, Lackey, & Sullivan, 2003, p. 2, italic in original). Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) are two types of factor analysis. EFA is used when there is uncertainty about the number of factors that are appropriate to explain the interrelationships among a set of items, whereas CFA is used when researchers have some knowledge about the underlying structure of the construct they want to investigate (Pett et al., 2003). In other words, in EFA the number of factors would be determined from data, whereas in CFA the number of factors would be defined a priori from theory
(Lance & Vandenberg, 2002). In this study, although I implemented the developed scales to measure variables of interest, EFA was used because according to my knowledge it was the first time that these scales were translated into the Thai language and used to collect data in the Thai context. Thus, it was uncertain that these translated scales still contained the same factor structure as the original versions.

In addition, it should be noted that in this study only factors with eigenvalues of 1 or greater were considered to be significant, whereas factors with eigenvalues less than 1 were ignored (Pett, et al., 2005). Another rule applied in this study was the value of factor loadings. Only factor loadings that were greater than ± 0.33 were considered to meet the minimal level of practical significance (Ho, 2006). The results of factor analysis for each scale are presented in the next sections.

**Employee Engagement Scale**

The employee engagement scale was originally developed by Schaufeli and colleagues (2006). The short version of this scale has nine items, and it has been reported that both one-factor and three-factor models were almost equally fitted in all 10 national samples (Schaufeli et al., 2006). In this study, the results of both the Kaiser-Meyer-Olkin (KMO) test (0.94) and Bartlett’s test of sphericity ($\chi^2 = 3.43, p = .000$) were acceptable to proceed with the factor analysis. The results of the EFA showed that the eigenvalue from the first extracted factor was 5.93, whereas eigenvalues from the remaining extracted factors were less than 1 with values ranging from 0.18 to 0.75. Thus, the results clearly revealed that the one-factor model best fitted the data as can be seen from the cumulative extraction of 65.91%. Factor loadings for this scale are presented in Table 4.
Table 4. Factor Loadings for the Employee Engagement Scale

<table>
<thead>
<tr>
<th>Employee Engagement Items</th>
<th>Factor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>At my work, I feel bursting with energy.</td>
<td>.85</td>
</tr>
<tr>
<td>At my job, I feel strong and vigorous.</td>
<td>.85</td>
</tr>
<tr>
<td>I am enthusiastic about my job.</td>
<td>.88</td>
</tr>
<tr>
<td>My job inspires me.</td>
<td>.81</td>
</tr>
<tr>
<td>When I get up in the morning, I feel like going to work.</td>
<td>.82</td>
</tr>
<tr>
<td>I feel happy when I am working intensely.</td>
<td>.81</td>
</tr>
<tr>
<td>I am proud of the work that I do.</td>
<td>.76</td>
</tr>
<tr>
<td>I am immersed in my work.</td>
<td>.70</td>
</tr>
<tr>
<td>I get carried away when I am working.</td>
<td>.82</td>
</tr>
</tbody>
</table>

**Organizational Citizenship Behavior Scale**

The OCB scale was originally developed by Podsakoff and colleagues (1990). It has 24 items in five major categories of OCB: altruism (5 items), sportsmanship (5 items), civic virtue (4 items), courtesy (5 items), and conscientiousness (5 items). However, the pilot test of this study suggested dropping one item because of potential confusion when presented in the Thai language. The scale used to collect data in this study therefore had total 23 items.

The results of both the KMO test (0.90) and Bartlett’s test of sphericity ($\chi^2 = 3.99, p = .000$) were acceptable to proceed with the factor analysis. The results of the EFA stated that the six-factor model was extracted with the eigenvalues of 6.96, 1.87, 1.44, 1.23, 1.06, and 1.04, respectively, whereas other eigenvalues from the remaining extracted factors were less than 1 with values ranging from 0.89 to 0.26. Thus, rotating the factors was required to gain meaningful and easily interpretable clusters of items (Pett et al., 2005). Orthogonal and oblique are the two main types of factor rotation methods. Orthogonal rotation assumes that the subscales from the factors are
independent of each other, whereas oblique rotation seems to be more realistic for most research because it assumes that the factors are related (Ho, 2006; Pett et al., 2005). Promax was chosen in this study as one of the oblique rotation methods because of its practicability. Promax is one of two oblique rotation methods available in SPSS and this method generally creates faster results than another oblique rotation method (Pett et al., 2005; Thompson, 2004). After being rotated, the results can be interpreted from either the pattern matrix or structure matrix tables. In this study, the results of the pattern matrix table were interpreted because of the possibility of contamination from the correlations between variables and factors that usually occurs in the structure matrix table (Ho, 2006).

The results of Promax rotation revealed that the sixth factor had only one item, and two items were placed in the factors that differed from the original version. After reviewing each item carefully, it became clear that these items were likely confusing and not appropriate to the Thai context; thus, these three items were dropped. Further analysis was conducted with the remaining 20 items. The five-factor model was extracted with the total cumulative 58.34% with eigenvalues 6.32, 1.76, 1.39, 1.18, and 1.01, respectively. Eigenvalues from the remaining extracted factors were less than 1 with values ranging from 0.26 to 0.85. Based on the five-factor model being extracted and the previous result from the pilot test, the composition of the OCB scale was somewhat changed from the original version. The altruism factor still had five items, whereas each sportsmanship, courtesy, and conscientiousness had four items, and finally the civic virtue had three items. Factor loadings for this scale are presented in Table 5.
Table 5. Factor Loadings from the Rotated Factor Structure Matrix for the Revised Organizational Citizenship Behavior Scale

<table>
<thead>
<tr>
<th>OCB Items</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Altruism</td>
</tr>
<tr>
<td>I help others who have heavy work load.</td>
<td>.59</td>
</tr>
<tr>
<td>I am the classic “squeaky wheel” that always needs greasing.</td>
<td>-.15</td>
</tr>
<tr>
<td>I consume a lot of time complaining about trivial matters.</td>
<td>-.02</td>
</tr>
<tr>
<td>I try to avoid creating problems for coworkers.</td>
<td>-.19</td>
</tr>
<tr>
<td>I keep abreast of changes in the organization.</td>
<td>-.11</td>
</tr>
<tr>
<td>I tend to make “mountains out of molehills”.</td>
<td>-.02</td>
</tr>
<tr>
<td>I consider the impact of my actions on coworkers.</td>
<td>.29</td>
</tr>
<tr>
<td>I am always ready to lend a helping hand to those around me.</td>
<td>.64</td>
</tr>
<tr>
<td>I attend functions that are not required, but help the company image.</td>
<td>.22</td>
</tr>
<tr>
<td>I read and keep up with organization announcements, memos, and so on.</td>
<td>.10</td>
</tr>
<tr>
<td>I help others who have been absent.</td>
<td>.78</td>
</tr>
<tr>
<td>I do not abuse the rights of others.</td>
<td>.27</td>
</tr>
<tr>
<td>I willingly help others who have work related problems.</td>
<td>.72</td>
</tr>
<tr>
<td>I always focus on what’s wrong, rather than the positive side.</td>
<td>.12</td>
</tr>
<tr>
<td>I take steps to try to prevent problems with other workers.</td>
<td>.21</td>
</tr>
<tr>
<td>My attendance at work is above the norm.</td>
<td>-.27</td>
</tr>
<tr>
<td>I do not take extra breaks.</td>
<td>-.03</td>
</tr>
<tr>
<td>I obey company rules and regulations even when no one is watching.</td>
<td>.15</td>
</tr>
<tr>
<td>I help orient new people even though it is not required.</td>
<td>.61</td>
</tr>
<tr>
<td>I am one of the most conscientious employees.</td>
<td>.26</td>
</tr>
</tbody>
</table>

Note: Bold indicates factor loadings for each item.
The organizational support scale was originally developed by Eisenberger and colleagues (1986). The short version of the scale has 16 items compared to 36 items in the original version. Both the short and original versions have been confirmed as a single factor model. The scale used in this study was the shortened version. However, one item was dropped following the results from the pilot test. Thus, 15 items were measured in the study with 9 items positively worded and 6 items negatively worded in order to control for an agreement response bias (Eisenberger et al., 1986).

The results of both the KMO test (0.94) and Bartlett’s test of sphericity ($\chi^2 = 5.19, p = .000$) were acceptable to proceed with the factor analysis. However, the results of the EFA revealed that the two-factor model was extracted with the eigenvalues of 7.61 and 2.08, whereas all eigenvalues from the remaining extracted factors were less than 1 with values ranging from 0.22 to 0.81. Promax rotation was conducted resulting in a two-factor structure. The first factor was composed with all the negative items and the second factor held only the positive items. To resolve this situation the negative items were deleted, resulting in a one-factor model composed of only the positively worded items. The rational for this decision was based on the suggestion of Thompson (2004) that proposed the underlying purpose of EFA is to discover interpretable factors. Very little difference was made to the reliability of this scale before and after the six negative items were deleted. The reliability values were 0.93 for all 16 items compared to 0.92 for 9 positive items. Thus, it was decided to drop all six negative items as the remaining nine items seemed to provide a reasonably robust and reliable measure for organizational support in the Thai context.
The results of the nine positive items of both the KMO test (0.93) and Bartlett’s test of sphericity ($\chi^2 = 2.89$, $p = .000$) were acceptable to proceed with the factor analysis. The results of the EFA clearly revealed that a one-factor model was supported as can be seen from the cumulative extraction of 60.90%. The eigenvalue was 5.48, whereas the eigenvalues from the remaining extracted factors were less than 1 with values ranging from 0.24 to 0.82. Thus, in this study a revised version of the short form of the Eisenberger et al. (1986) organizational support scale with only 9 items was used instead of the 16 items as the original version. Factor loadings for this scale are presented in Table 6.

**Table 6. Factor Loadings from the Rotated Factor Structure Matrix for the Revised Organizational Support Scale**

<table>
<thead>
<tr>
<th>Organizational Support Items</th>
<th>Factor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization values my contributions to its well-being.</td>
<td>.76</td>
</tr>
<tr>
<td>The organization strongly considers my goals and values.</td>
<td>.55</td>
</tr>
<tr>
<td>Help is available from the organization when I have a problem.</td>
<td>.78</td>
</tr>
<tr>
<td>The organization really cares about my well-being.</td>
<td>.79</td>
</tr>
<tr>
<td>The organization is willing to extend itself in order to help me perform my job to the best of my abilities.</td>
<td>.87</td>
</tr>
<tr>
<td>The organization is willing to help me when I need a special favor.</td>
<td>.84</td>
</tr>
<tr>
<td>The organization cares about my opinions.</td>
<td>.77</td>
</tr>
<tr>
<td>The organization takes pride in my accomplishments at work.</td>
<td>.82</td>
</tr>
<tr>
<td>The organization tries to make my job as interesting as possible.</td>
<td>.80</td>
</tr>
</tbody>
</table>
Access to Training and Development Opportunities Scale

The measure for access to training and development opportunities was developed by Bartlett (2001). It has three items, and it has been reported as a one-factor model. The results of both the KMO test (0.71) and Bartlett’s test of sphericity ($\chi^2 = 672.73, p = .000$) were acceptable to proceed with the factor analysis. The result of the EFA also clearly revealed that the one-factor model was suggested as can be seen from the cumulative extraction of 76.42%. The eigenvalue was 2.29, whereas all other eigenvalues were less than 1 ranging from 0.28 to 0.43. Factor loadings for this scale are presented in Table 7.

<table>
<thead>
<tr>
<th>Access to Training and Development Opportunities Items</th>
<th>Factor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>My organization has stated policies on the amount and type of training the employee can expect to receive.</td>
<td>.91</td>
</tr>
<tr>
<td>I am aware of the amount and type of training that my organization is planning for me in the coming year.</td>
<td>.85</td>
</tr>
<tr>
<td>This organization provides access to training.</td>
<td>.86</td>
</tr>
</tbody>
</table>

Support for Training and Development Opportunities Scale

The support for training and development opportunities scale was developed by Noe and Wilk (1993). It has 23 items to measure employee perceptions regarding support from colleagues and senior staff or supervisors to attend training and development opportunities. However, the results of the pilot test of this study suggested dropping two items. Thus, 21 items were used to collect data. Noe and Wilk (1993) also
reported that their scale has a two-factor model, colleagues’ support and senior staff’s support.

The results of both the KMO test (0.95) and Bartlett’s test of sphericity ($\chi^2 = 8.03, p = .000$) were acceptable to proceed with the factor analysis. However, the three-factor model was presented with the eigenvalues of 10.63, 2.17, and 1.15, respectively, and other eigenvalues from the remaining factors were less than 1 with values ranging from 0.14 to 0.80. After considering each item, I found only two items were placed in the third factor. These two items were dropped resulting in 19 items to further conduct with the factor analysis. The results of the EFA from these 19 items showed both the KMO test (0.96) and Bartlett’s test of sphericity ($\chi^2 = 7.43, p = .000$) were still acceptable to proceed with the factor analysis, and the two-factor model was extracted with the cumulative 63.986%. The eigenvalues were 10.13 and 2.03, whereas the remaining eigenvalues were less than 1 with values ranging from 0.15 to 0.81. Promax rotation was performed next and this confirmed the two-factor model. Thus, in this study, the support for training and development opportunities from colleagues subscale had 3 items, whereas the support for training and development opportunities from senior staff subscale had 16 items. Factor loadings for this scale are presented in Table 8.
Table 8. Factor Loadings from the Rotated Factor Structure Matrix for the Revised Support for Training and Development Opportunities Scale

<table>
<thead>
<tr>
<th>Support for Training and Development Opportunities Items</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 Support from Senior Staff</td>
</tr>
<tr>
<td>It will be difficult for me to try and work on improving my skills because of my relations with my co-workers.</td>
<td>-.05</td>
</tr>
<tr>
<td>My co-workers tend to resist my effort to apply new knowledge or skills on the jobs.</td>
<td>.01</td>
</tr>
<tr>
<td>More experienced co-workers are usually reluctant to give me guidance.</td>
<td>.05</td>
</tr>
<tr>
<td>I feel comfortable discussing my skill weaknesses with my manager.</td>
<td>.63</td>
</tr>
<tr>
<td>My manager can be counted on to help me develop the skills emphasized in training programs.</td>
<td>.84</td>
</tr>
<tr>
<td>My manager is supportive of my efforts to acquire new knowledge and skills.</td>
<td>.82</td>
</tr>
<tr>
<td>My manager is usually willing to discuss any problems I am having in try to use new knowledge or skills in my work.</td>
<td>.87</td>
</tr>
<tr>
<td>My employer values development of new skills or acquisition of new knowledge.</td>
<td>.53</td>
</tr>
<tr>
<td>When I make a mistake, my manager usually treats it as a learning experience that can prevent failure and improve performance in the future.</td>
<td>.76</td>
</tr>
<tr>
<td>I can expect my manager to assign me to special projects requiring use of the skills and knowledge emphasized in training.</td>
<td>.83</td>
</tr>
<tr>
<td>My manager share information with me about problems or trends in the company that can influence my career path.</td>
<td>.75</td>
</tr>
<tr>
<td>My manager enthusiastically supports my participation in training programs.</td>
<td>.81</td>
</tr>
<tr>
<td>In the past, my manager has helped me understand how to perform my job effectively.</td>
<td>.87</td>
</tr>
<tr>
<td>My manager provides sufficient coaching and guidance to help me achieve my work objectives.</td>
<td>.88</td>
</tr>
<tr>
<td>The frequency of feedback I get from my manager is just about right.</td>
<td>.85</td>
</tr>
<tr>
<td>My manager believes advising or training are one of his/her major job responsibilities.</td>
<td>.82</td>
</tr>
<tr>
<td>I would not hesitate to tell my manager of a training need I have in a particular area.</td>
<td>.62</td>
</tr>
<tr>
<td>My manager makes sure I get the training needed to remain effective in my job.</td>
<td>.81</td>
</tr>
<tr>
<td>My manager provides advice on specific opportunities for exposure or visibility on the job.</td>
<td>.82</td>
</tr>
</tbody>
</table>

Note: Bold indicates factor loadings for each item.
Benefits of Training Scale

The benefits of training scale was also developed by Noe and Wilk (1993). It has 14 items to measure employee perceptions regarding three types of expected benefits resulting from participating in training and development activities provided by their organization. The three types of expected benefits are job-related benefits (three items), career benefits (six items), and personal benefits (five items). However, the pilot test suggested dropping one item from the job-related subscale. Therefore, the scale used in this study had 13 items.

The results in both the KMO test (0.90) and Bartlett’s test of sphericity ($\chi^2 = 3.77, p = .000$) were acceptable to proceed with the factor analysis. However, instead of the three-factor structure as found by Noe and Wilk (1993), the results of the EFA suggested the two-factor model with the cumulative extraction of 59.31%. The eigenvalues were 6.29 and 1.22, respectively, and the remaining eigenvalues were less than 1 with values ranging from 0.19 to 0.97. It seemed clear that one factor in the model was related to personal benefits, whereas the second factor was a combination between job-related and career benefits. After reviewing items in job-related and career benefits again, it became clear that these items seemed to be hard to separate from each other when presented in the Thai language. A possible reason might come from the fact that the concepts of job and career in Thailand are not clearly distinguished. Thus, I decided to merge the job-related and career benefits subscales together resulting in a two-factor model as the results suggested. The next step was considering each item in the two new subscales. One item was placed in a different factor compared to the original version; another item had approximate same factor loadings values from two
factors (.51 and .55), and the last item seemed to be hard to understand clearly in the Thai language. The item can be interpreted in either a positive or negative way. Thus, these three items were dropped, resulting in 10 items in this scale.

The results of the ten items of both the KMO test (0.87) and Bartlett’s test of sphericity ($\chi^2 = 2.81, p = .000$) were still acceptable to proceed with the factor analysis, and the two-factor model was extracted with the cumulative extraction of 63.55%. The eigenvalues were 5.22 and 1.13, whereas the remaining eigenvalues were less than 1 with values ranging from 0.21 to 0.94. Promax rotation was performed and this confirmed the two-factor model, job-related and career benefits (six items), and personal benefits (four items). Factor loadings for this scale are presented in Table 9.
Table 9. Factor Loadings from the Rotated Factor Structure Matrix for the Revised Benefits of Training Scale

<table>
<thead>
<tr>
<th>Benefits of Training Items</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating in training programs conducted by my current employer will help my personal development.</td>
<td>-0.09</td>
</tr>
<tr>
<td>Participating in training programs conducted by my current employer will increase my chances of getting a promotion.</td>
<td>0.71</td>
</tr>
<tr>
<td>Participating in training programs conducted by my current employer will help me obtain a salary increase.</td>
<td>0.78</td>
</tr>
<tr>
<td>Participating in training programs conducted by my current employer will help me perform my job better.</td>
<td>0.02</td>
</tr>
<tr>
<td>Participating in training programs conducted by my current employer will result in more opportunities to pursue different career paths.</td>
<td>0.65</td>
</tr>
<tr>
<td>Participating in training programs conducted by my current employer will help me get along better with my manager.</td>
<td>0.91</td>
</tr>
<tr>
<td>Participating in training programs conducted by my current employer will help me get along better with my peers.</td>
<td>0.82</td>
</tr>
<tr>
<td>Participating in training programs conducted by my current employer will help me reach my career objectives.</td>
<td>0.51</td>
</tr>
<tr>
<td>Participating in training programs conducted by my current employer will help me network with other employees.</td>
<td>0.15</td>
</tr>
<tr>
<td>Participating in training programs conducted by my current employer will help me stay up-to-date on new processes and products, or procedures related to my job.</td>
<td>-0.07</td>
</tr>
</tbody>
</table>

Note: Bold indicates factor loadings for each item.
Formal Career Management Support Scale

The career management support scale was developed by Sturges and colleagues (2002). The original version of this scale has been reported as having a two-factor model: formal career management support (six items) and informal career management support (four items). However, in this study only the formal career management support subscale (six items) was used to collect data. Thus, a one-factor model was expected. The results in both the KMO test (0.86) and Bartlett’s test of sphericity ($\chi^2 = 1.45, p = .000$) were acceptable to proceed with the factor analysis, and the one-factor model was supported as expected at the cumulative extraction of 61.49%. The eigenvalue was 3.69, whereas the remaining eigenvalues were less than 1 with values ranging from 0.28 to 0.68. Factor loadings for this scale are presented in Table 10.

Table 10. Factor Loadings for the Formal Career Management Support Scale

<table>
<thead>
<tr>
<th>Formal Career Management Support Items</th>
<th>Factor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have been given training to help develop my career.</td>
<td>.78</td>
</tr>
<tr>
<td>My boss has made sure I get the training I need for my career.</td>
<td>.84</td>
</tr>
<tr>
<td>I have been taught things I need to know to get on in this organization.</td>
<td>.80</td>
</tr>
<tr>
<td>I have been given a personal development plan.</td>
<td>.73</td>
</tr>
<tr>
<td>I have been given work which has developed my skills for the future.</td>
<td>.81</td>
</tr>
<tr>
<td>My boss has given me clear feedback on my performance.</td>
<td>.74</td>
</tr>
</tbody>
</table>

Assumptions of Regression Analysis

Assumptions underlying regression analysis should be tested before conducting further analysis. Howell (2007) and Spicer (2005) explained two important assumptions, homogeneity of variance or homoscedasticity and normality in arrays. The
assumption of homogeneity of variance in arrays states that “the variance of $Y$ for each value of $X$ in constant (in the population)” (Howell, 2007, p. 249, italics in original). This assumption can be tested by looking at data as displayed in the residual plots. Examining the data in the study showed that most data appeared to have the same ranges and there was no noticeable pattern. In addition, the relationships between employee engagement and each component of OCB showed the linearity of the relationship. Thus, the first assumption of regression analysis was satisfied.

The second assumption is normality in arrays. This means that “in the population, the values of $Y$ corresponding to any specified value of $X$—that is, the conditional array of $Y$ for $X_i$—are normally distributed around $\hat{Y}$” (Howell, 2007, p. 249, italics in original). This assumption was tested by looking at data in the histograms and the p-p plots which showed an almost perfect normal distribution of the residuals. The second assumption of regression analysis was also satisfied. Thus, further analyses could be performed.

**Correlation Matrix**

Table 11 presents the correlation matrix for all original variables. As can be seen from the table, the employee engagement variable is correlated to all components of OCB, even though these correlation values were not strong ranging from $r = 0.12$ to $0.48$. Other predictor variables also showed correlation to the dependent variables ranging from $r = 0.02$ to $0.51$. 
Table 11. Pearson Correlation Matrix for all Original Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Engagement(^1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Org Support(^2)</td>
<td></td>
<td>.44(^*)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Access Training(^3)</td>
<td>.37(^*)</td>
<td>.49(^*)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. TS_Colleagues(^4)</td>
<td>.14(^*)</td>
<td>.22(^*)</td>
<td>.15(^*)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. TS_Senior Staff(^5)</td>
<td>.43(^*)</td>
<td>.53(^*)</td>
<td>.45(^*)</td>
<td>.25(^*)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. B_Job&amp;Career(^6)</td>
<td>.28(^*)</td>
<td>.52(^*)</td>
<td>.36(^*)</td>
<td>-.05</td>
<td>.41(^*)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. B_Personal(^7)</td>
<td>.35(^*)</td>
<td>.50(^*)</td>
<td>.45(^*)</td>
<td>.13(^*)</td>
<td>.44(^*)</td>
<td>.62(^*)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Career Mgt(^8)</td>
<td>.42(^*)</td>
<td>.66(^*)</td>
<td>.62(^*)</td>
<td>.20(^*)</td>
<td>.76(^*)</td>
<td>.45(^*)</td>
<td>.59(^*)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. OCB Altruism(^9)</td>
<td>.42(^*)</td>
<td>.34(^*)</td>
<td>.24(^*)</td>
<td>.20(^*)</td>
<td>.36(^*)</td>
<td>.25(^*)</td>
<td>.38(^*)</td>
<td>.36(^*)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. OCB Sports(^10)</td>
<td>.27(^*)</td>
<td>.12(^*)</td>
<td>.16(^*)</td>
<td>.31(^*)</td>
<td>.19(^*)</td>
<td>.02(^_)</td>
<td>.15(^*)</td>
<td>.17(^*)</td>
<td>.40(^*)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. OCB Civic virtue(^11)</td>
<td>.48(^*)</td>
<td>.45(^*)</td>
<td>.38(^*)</td>
<td>.09(^*)</td>
<td>.37(^*)</td>
<td>.38(^*)</td>
<td>.42(^*)</td>
<td>.44(^*)</td>
<td>.42(^*)</td>
<td>.26(^*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. OCB Courtesy(^12)</td>
<td>.12(^*)</td>
<td>.08 (^*)</td>
<td>.09 (^*)</td>
<td>.14 (^*)</td>
<td>.16 (^*)</td>
<td>.06 (^_)</td>
<td>.20 (^*)</td>
<td>.12 (^*)</td>
<td>.39 (^*)</td>
<td>.29 (^*)</td>
<td>.25 (^*)</td>
<td></td>
</tr>
<tr>
<td>13. OCB Conscient(^13)</td>
<td>.36(^*)</td>
<td>.17(^*)</td>
<td>.12(^*)</td>
<td>.04(^_)</td>
<td>.20(^*)</td>
<td>.20(^_)</td>
<td>.22(^*)</td>
<td>.22(^*)</td>
<td>.51(^*)</td>
<td>.30(^*)</td>
<td>.37(^*)</td>
<td>.30(^*)</td>
</tr>
</tbody>
</table>

Note: \(^*\) \(p < 0.05\), \(^*\) \(p < 0.01\)

1 = Employee Engagement Scale
2 = Revised Organizational Support Scale
3 = Access to Training and Development Opportunities Scale
4 = Revised Support for Training and Development Opportunities from Colleagues Scale
5 = Revised Support for Training and Development Opportunities from Senior Staff Scale
6 = Revised Job-related and Career Benefits of Training Scale
7 = Revised Personal Benefits of Training Scale
8 = Formal Career Management Support Scale
9 = OCB Scale (Component: Altruism)
10 = Revised OCB Scale (Component: Sportsmanship)
11 = Revised OCB Scale (Component: Civic virtue)
12 = Revised OCB Scale (Component: Courtesy)
13 = Revised OCB Scale (Component: Conscientiousness)
Results of Research Questions

This section presents the results to three main research questions: (1) What is the relationship between employee engagement and OCB in Thai organizations? (2) What is the relationship between employee engagement, employee perceptions of HRD practices (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support), and OCB in Thai organizations? and (3) Is the relationship between employee engagement and OCB moderated by employee perceptions of HRD practices (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support)?

The results for each research question are presented in the next sections.

Results from Research Question 1

The first research question of this study was: What is the relationship between employee engagement and OCB in Thai organizations?

To answer this question, the set of relationships between employee engagement and OCB were tested. The alpha value was set at 0.05 (two-tailed) for all tests throughout the study. In addition, the adjusted R-square value was selected, rather than the R-square value. However, the values for R-square and adjusted R-square were approximately equal because of the relatively large sample size in the study ($n = 522$).

Relationship between employee engagement and altruism.

The value of the Pearson correlation coefficient between employee engagement and altruism was 0.42 which means the relationship between these two
variables was positive. More specifically, the $F$-statistic showed that $F(1,520) = 113.35$ with a $p$-value of .000; thus confirming that these two variables were related to each other. However, in this section, the $t$-test was not reported since it has only one degree of freedom. Finally, the adjusted R-square was 0.18 which means employee engagement alone can explain approximately 18% of the variation in the altruism component of OCB, indicating full support of the first hypothesis.

**Relationship between employee engagement and sportsmanship.**

The value of the Pearson correlation coefficient between employee engagement and sportsmanship was 0.27 which means the relationship between these two variables was positive. The $F$-statistic showed that $F(1,520) = 41.75$ with a $p$-value of .000; thus confirming that these two variables were related to each other. Finally, the adjusted R-square was 0.07 which means employee engagement alone can explain only 7% of the variation in the sportsmanship component of OCB, indicating full support of the first hypothesis.

**Relationship between employee engagement and civic virtue.**

The value of the Pearson correlation coefficient between employee engagement and civic virtue was 0.48 which means the relationship between these two variables was positive. The $F$-statistic showed that $F(1,520) = 156.07$ with a $p$-value of .000; thus confirming that these two variables were related to each other. Finally, the adjusted R-square was 0.23 which means employee engagement alone can explain approximately 23% of the variation in the civic virtue component of OCB, indicating full support of the first hypothesis.
**Relationship between employee engagement and courtesy.**

The value of the Pearson correlation coefficient between employee engagement and courtesy was 0.12, which means the relationship between these two variables was positive but the relationship was not strong. The $F$-statistic showed that $F(1,520) = 7.88$ with a $p$-value of .005; thus confirming that these two variables were related to each other. Finally, the adjusted R-square was 0.01 which means employee engagement alone can explain only 1% of the variation in the courtesy component of OCB, indicating full support of the first hypothesis.

**Relationship between employee engagement and conscientiousness.**

The value of the Pearson correlation coefficient between employee engagement and conscientiousness was 0.36 which means the relationship between these two variables was positive. The $F$-statistic showed that $F(1,520) = 78.50$ with a $p$-value of .000, thus confirming that these two variables were related to each other. Finally, the adjusted R-square was 0.13 which means employee engagement alone can explain approximately 13% of the variation in the conscientiousness component of OCB, indicating full support of the first hypothesis.

In summary, the results showed positive relationships between employee engagement and every component of OCB, providing full support of the first hypothesis. However, employee engagement accounted differently for the variation in each component of OCB. The R-square values ranged from 1% to 23% in all five components of OCB. Employee engagement can explain as much as 23% of the variation in civic virtue compared to only 1% of the variation in courtesy. In the next section, the findings of second and third research questions are presented.
Results from Research Questions 2 and 3

The second research question of this study was: What is the relationship between employee engagement, employee perceptions of HRD practices (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support), and OCB in Thai organizations? The third research question of this study was: Is the relationship between employee engagement and OCB moderated by employee perceptions of HRD practices (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support)?

To answer these questions, a set of hierarchical multiple regression analyses of the relationship between employee engagement and OCB with all possible moderators was tested. In the next section details related to the regression analysis are described.

In this study, the demographic variables were used as statistical controls in the regression models; thus this data (gender, age, level of educational attainment, and work experience at the current company) was entered in as the first step of every regression equation. This was then followed by the sets of predictors entered in subsequent steps. In addition, it should be noted that three items from the demographic data (age, level of educational attainment, and work experience at the current company) were converted into a set of dichotomous variables by using dummy variable coding, as these variables were discrete and had more than two categories. More specifically, the first step of every regression equation tested in this study was the demographic data as control variables. The second step was the test of the main effect by adding the variables (1)
employee engagement, (2) organizational support, (3) access to training and development opportunities, (4) support for training and development opportunities from (a) senior staff and from (b) colleagues, (5) benefits of training from (a) job-related and career benefits and from (b) personal benefits, and (6) formal career management support. Finally, the third step was the test of the two-way interactions based on the results of the second step. It was expected that moderating effects would be found in this study. More specifically, it was expected that all of these five possible variables would positively moderate the relationship between employee engagement and OCB, as stated in the five hypotheses testing for a moderating effect. The results from a set of hierarchical regression analyses to examine the relationship between employee engagement and OCB with the five possible moderators are presented in the following sections.

*Relationship between employee engagement and altruism.*

After controlling for the demographic data, all original variables were entered into an initial regression model. The results show that the demographic variables accounted for 2.1% of the variance in altruism, $F(13,508) = 1.86$ with a $p$-value of .032, and all variables accounting for approximately 27% of the variance in altruism, $F(21,500) = 10.26$ with a $p$-value of .000. This means that the entry of these variables increased the explained variance in altruism. However, examining the results in the coefficient table showed that only employee engagement, support for training and development opportunities from senior staff and from colleagues, and personal benefits of training were statistically significant ($p$-values of .000, .049, .024, and .000, respectively); thus, the other variables were dropped.
The next step was testing the interaction terms based on the previous results. The results of the correlation matrix presented that the relationships between the interaction terms and altruism were statistically significant. However, the results of the hierarchical regression analysis clearly showed that these interaction terms were not statistically significant, leading to the decision to drop the variables.

The final model with four original significant variables was retested and the findings confirmed that employee engagement, support for training and development opportunities from senior staff and from colleagues, and personal benefits of training were still statistically significant (p values of .000, .009, .015, and .000, respectively). The adjusted R-square was 0.27 which means together these four variables explained approximately 27% of the variation in altruism compared to only 18% from the original regression model from employee engagement alone, with the set of demographic variable accounted for 2.1% of the variation in altruism.

In addition, the ANOVA table showed that the set of demographic data alone yielded a significant predictor equation, $F(13,508) = 1.86$ with a $p$-value of .032, and adding a set of variables as a second block resulted in a significant prediction equation, $F(17,504) = 12.59$ with a $p$-value of .000. Finally, as shown on the coefficient table all four of these variables were significant predictors of altruism. These variables presented according to their significances were: employee engagement ($\beta = .27, t = 6.18, p = .000$), personal benefits of training ($\beta = .23, t = 5.37, p = .000$), support for training and development opportunities from senior staff ($\beta = .12, t = 2.61, p = .009$), and support for training and development opportunities from colleagues ($\beta = .10, t = 2.43, p = .015$). In addition, two demographic variables, age and work experience, were found to be
significant predictors of altruism. Two different levels of age were found to be significant: 25-29 years ($\beta = -0.21, t = -2.77, p = .006$), and 35-39 years ($\beta = -0.09, t = -1.97, p = .050$), and one level of work experience was found significant: more than or equal to three but less than five years ($\beta = 0.13, t = 2.25, p = .025$).

In summary, the results of the hierarchical multiple regression analyses revealed that only four variables of interest in this study (employee engagement, personal benefits of training, and support for training and development opportunities from senior staff and from colleagues) were found to be statistically significant with the altruism component of OCB. Furthermore, no moderating effects found. Age (25-29 years and 35-39 years) and work experience (more than or equal to three but less than five years) were also found to be statistically significant with altruism. Together these variables accounted for approximately 27% of the variation in altruism. However, the second hypotheses were not supported in terms of the relationship between employee engagement and the OCB subscale of altruism.

**Relationship between employee engagement and sportsmanship.**

After controlling for the demographic data, all original variables were entered into an initial regression model. The results showed that the demographic variables accounted for 1.9% of the variance in sportsmanship, $F(13,508) = 1.80$ with a $p$-value of .041, and all variables accounting for approximately 17% of the variance in sportsmanship, $F(21,500) = 5.93$ with a $p$-value of .000. This means that entry of these variables increased the explained variance in sportsmanship. However, examining the results in the coefficient table showed that only employee engagement and support for
training and development opportunities from colleagues were statistically significant (both $p$-values of .000); thus, the other variables were dropped.

The next step was testing the interaction terms based on the previous results. The correlation matrix showed that the relationships between the interaction and sportsmanship was statistically significant ($r = -0.15$). The results of the regression model showed that this interaction term was statistically significant (a $p$-value of .020), and employee engagement was also still statistically significant (a $p$-value of .002). However, support for training and development opportunities from colleagues was no longer statistically significant (a $p$-value of .389). This conflicts with the moderating relationship concept which requires statistically significances from both original variables. Thus, this interaction term was dropped.

The final model with two original variables was retested and the findings confirmed that employee engagement and support for training and development opportunities from colleagues were statistically significant (both $p$ values of .000). The adjusted R-square was 0.17 which means together these two variables explained approximately 17% of the variation in sportsmanship compared to only 7.3% from the original regression model from employee engagement alone. The demographic data accounted for 1.9% of the variation in sportsmanship.

In addition, the ANOVA table showed that the set of demographic data alone yielded a significant predictor equation, $F(13,508) = 1.80$ with a $p$-value of .041, and adding a set of variables resulted in a significant prediction equation, $F(15,506) = 8.00$ with a $p$-value of .000. Finally, as shown on the coefficient table all two of these variables were significant predictors of sportsmanship. These variables presented
according to their significances were: support for training and development opportunities from colleagues ($\beta = .29$, $t = 7.07$, $p = .000$) and employee engagement ($\beta = .21$, $t = 5.11$, $p = .000$). In addition, three demographic variables (age, education, and work experience) were found to be significant predictors of sportsmanship. Specifically, three different age levels were found to be statistically significant: 25-29 years ($\beta = -.29$, $t = -3.58$, $p = .000$), 30-34 years ($\beta = -.14$, $t = -2.10$, $p = .036$), and 35-39 years ($\beta = -.13$, $t = -2.56$, $p = .011$). Two different levels of education were also found to be statistically significant: high school completion ($\beta = .10$, $t = 2.09$, $p = .037$), and vocational education completion ($\beta = .11$, $t = 2.15$, $p = .032$). Another two levels of work experience at the current organization were found to be statistically significant as well: less than one year ($\beta = .14$, $t = 2.42$, $p = .016$), and more than or equal to three but less than five years ($\beta = .14$, $t = 2.24$, $p = .026$).

In summary, the results of the hierarchical multiple regression analyses revealed that only two variables of interest in this study, employee engagement and support for training and development opportunities from colleagues, were found to be statistically significant with the sportsmanship component of OCB. Furthermore, no moderating effects found. Age (25-29 years, 30-34 years, and 35-39 years), education level (high school completion and vocational degree completion), and work experience (less than one year, and more than or equal to three but less than five years) were also found statistically significant with sportsmanship. Together these variables account for approximately 17% of the variation in sportsmanship. The second hypotheses were not supported in terms of the relationship between employee engagement and the OCB subscale of sportsmanship.
After controlling for the demographic data, all original variables were entered into an initial regression model. The results showed that the demographic variables accounted for 4% of the variance in civic virtue, $F(13,508) = 2.69$ with a $p$-value of .001, and all variables accounting for approximately 35% of the variance in civic virtue, $F(21,500) = 14.54$ with a $p$-value of .000. This means that entry of these variables increased the explained variance in civic virtue. However, examining the results in the coefficient table showed that only employee engagement, organizational support, and personal benefits of training were statistically significant ($p$-values of .000, .002, and .013, respectively); thus, the other variables were dropped.

The next step was testing the interaction terms based on the previous results. The correlation matrix showed that the relationships between the interaction terms and civic virtue were statistically significant. However, the results of the hierarchical regression analyses clearly showed that only the interaction between organizational support and personal benefits of training was statistically significant (a $p$-value of .027), whereas the other two interaction terms were not statistically significant ($p$ values of .055 and .104). Thus, two of three interaction terms were dropped and the model was retested.

The final model with three original significant variables and one remaining interaction was retested and the findings confirmed that employee engagement, organizational support, and personal benefits of training were statistically significant ($p$ values of .000 each). An interaction between organizational support and personal benefits of training was also statistically significant (a $p$-value of .021). The adjusted R-
square was 0.35 which means together these three variables and one interaction explained approximately 35% of the variation in civic virtue compared to only 23% from the original regression model of employee engagement alone, with the demographic variables accounted for 4% of the variation in civic virtue.

In addition, the ANOVA table showed that the demographic data alone yielded a significant predictor equation, \( F(13,508) = 2.69 \) with a \( p \)-value of .001, and adding a set of original variables as a second block resulted in a significant prediction equation, \( F(16,505) = 18.45 \) with a \( p \)-value of .000; and adding an interaction as a third block resulted in a significant prediction equation, \( F(17,504) = 17.83 \) with a \( p \)-value of .000. Finally, as shown on the coefficient table all three of original variables and one interaction were significant predictors of civic virtue. These variables presented according to their significances were: personal benefits of training (\( \beta = .30, t = 4.91, p = .000 \)), organizational support (\( \beta = .29, t = 5.71, p = .000 \)), employee engagement (\( \beta = .28, t = 6.88, p = .000 \)), and the interaction term between organizational support and personal benefits of training (\( \beta = .16, t = 2.31, p = .021 \)). In addition, one demographic variable, age, was also statistically significant. Specifically, three different levels of ages were found to be statistically significant: 25-29 years (\( \beta = -.24, t = -3.40, p = .001 \)), 30-34 years (\( \beta = -.20, t = -3.30, p = .001 \)), and 35-39 years (\( \beta = -.18, t = -4.06, p = .000 \)).

In summary, the results of the hierarchical multiple regression analyses revealed that only three variables of interest in this study, one interaction term, and one demographic variable were found to be statistically significant with the civic virtue component of OCB. Furthermore, no moderating effects found. Together these
variables: employee engagement, organizational support, personal benefits of training, and an interaction between organizational support and personal benefits of training, as well as age, accounted for approximately 35% of the variation in civic virtue. The second hypotheses were not supported in terms of the relationship between employee engagement and the OCB subscale of civic virtue.

**Relationship between employee engagement and courtesy.**

After controlling for the demographic data, all original variables were entered into an initial regression model. The results showed that the demographic variables accounted for 1% of the variance in courtesy, $F(13,508) = 1.53$ with a $p$-value of .103, and all variables accounting for approximately 6% of the variance in courtesy, $F(21,500) = 2.62$ with a $p$-value of .000. This means that entry of these variables increased the explained variance in courtesy. However, examining the results in the coefficient table showed that only personal benefits of training was statistically significant (a $p$-value of .001). Although the results showed that employee engagement was not statistically significant, the main purpose of this study was to examine the relationship between employee engagement and OCB. Thus, two original variables (employee engagement and personal benefits of training) were kept in the model while all other variables were dropped.

The next step was testing the interaction term based on the previous results. The correlation matrix showed that the relationship between the interaction term and courtesy was statistically significant ($r = 0.13$). However, the results clearly showed that this interaction term was not statistically significant (a $p$-value of .463), leading to the decision to drop the variable.
The next model with two original variables was retested and the results showed that both employee engagement and personal benefits of training were statistically significant (\(p\)-values of .045, and .000, respectively). The adjusted R-square was 0.05, which means these two variables explained approximately 5% of the variation in courtesy compared to only 1% from the original regression model of employee engagement alone, with the demographic variable accounted for just 1% of the variation in courtesy.

In addition, the ANOVA table showed that the demographic data alone did not yield a significant predictor equation, \(F(13,508) = 1.53\) with a \(p\)-value of .103, but adding the original variables resulted in a significant prediction equation, \(F(15,506) = 3.00\) with a \(p\)-value of .000. Finally, as shown on the coefficient table two original variables were significant predictors of courtesy: personal benefits of training (\(\beta = .16, t = 3.51, p = .000\)) and employee engagement (\(\beta = .09, t = 2.01, p = .045\)). In addition, two demographic items, education and work experience, were found to be statistically significant. One level from each education and work experience was found to be statistically significant: bachelor’s degree completion (\(\beta = -.13, t = -2.23, p = .026\)) and more than or equal to 5 years but less than 10 years of work experience at the current organization (\(\beta = .13, t = 2.09, p = .037\)).

In summary, the results of the hierarchical multiple regression analyses revealed that two variables of interest in this study, personal benefits of training and employee engagement, as well as the demographic variables, education (bachelor’s degree completion) and work experience (more than or equal to 5 but less than 10 years) were found statistically significant with the courtesy component of OCB.
Furthermore, no moderating effects found. Together these variables accounted for approximately 5% of the variation in courtesy. The second hypotheses were not supported in terms of the relationship between personal benefits of training and the OCB subscale of courtesy.

*Relationship between employee engagement and conscientiousness.*

After controlling for the demographic data, all original variables were entered into an initial regression model. The results showed that the demographic variables accounted for approximately 0.4% of the variance in conscientiousness, \( F(13,508) = 1.16 \) with a \( p \)-value of .303, and all variables accounting for approximately 15% of the variance in conscientiousness, \( F(21,500) = 8.38 \) with a \( p \)-value of .000. This means that entry of these variables increased the explained variance in conscientiousness. However, the coefficient table showed that only employee engagement was statistically significant (a \( p \)-value of .000); thus, the other variables were dropped.

The final model with one original variable was retested and the results confirmed that employee engagement was statistically significant (a \( p \)-value of .000). The adjusted R-square was 0.13, which means this variable explained approximately 13% of the variation in conscientiousness, with the demographic data accounted for only 0.4% of the variation in conscientiousness.

In addition, the ANOVA table showed that the demographic data alone did not yield a significant predictor equation, \( F(13,508) = 1.16 \) with a \( p \)-value of .303, and adding a variable as a second block resulted in a significant prediction equation, \( F(14,507) = 5.77 \) with a \( p \)-value of .000. Finally, as shown on the coefficient table only one original variable was a significant predictor of conscientiousness: employee
engagement ($\beta = .37, t = 8.70, p = .000$). In addition, one level of one demographic variable, age, was found statistically significant: 25-29 years ($\beta = -.20, t = -2.43, p = .016$).

In summary, the results from the hierarchical multiple regression analyses revealed that only one variable of interest in this study, employee engagement, and one age level (25-29 years) were found statistically significant with the conscientiousness component of OCB. Furthermore, no moderating effects found. Together these two variables accounted for approximately 13% of the variation in conscientiousness. The second hypotheses were not supported in terms of the relationship between employee engagement and the OCB subscale of conscientiousness.

Overall, the variation in OCB can be explained by a set of variables of interest in this study. The summary results of each subscale in OCB are presented in table 12.
Table 12. Summary Hierarchical Regressions with Significant Demographic and Variables Predicting OCB

<table>
<thead>
<tr>
<th>Variables</th>
<th>Altruism</th>
<th>Sportsmanship</th>
<th>Civic virtue</th>
<th>Courtesy</th>
<th>Conscientiousness</th>
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<tr>
<td></td>
<td>(\beta)</td>
<td>(\Delta R^2)</td>
<td>(\beta)</td>
<td>(\Delta R^2)</td>
<td>(\beta)</td>
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<tr>
<td><strong>Step 1: Control</strong></td>
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<td></td>
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<td>Age</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>25-29 years</td>
<td>-.21</td>
<td>-.29</td>
<td>-.24</td>
<td>-</td>
<td>-.20</td>
</tr>
<tr>
<td>30-34 years</td>
<td>-</td>
<td>-.14</td>
<td>-.20</td>
<td>-</td>
<td>-</td>
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<tr>
<td>35-39 years</td>
<td>-.09</td>
<td>-.13</td>
<td>-.18</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Education</td>
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<td></td>
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</tr>
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<td>High School</td>
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<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vocational Education</td>
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<td>.11</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
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<td>-</td>
<td>-</td>
<td>-.13</td>
<td>-</td>
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<tr>
<td>Experience</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>Less than 1 year</td>
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<td>More than or equal to</td>
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<tr>
<td>3, but less than 5 years</td>
<td>.13</td>
<td>.14</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>More than or equal to</td>
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<tr>
<td>5, but less than 10 years</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.13</td>
<td>-</td>
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<tr>
<td><strong>Step 2: Main Effect</strong></td>
<td></td>
<td></td>
<td>.25</td>
<td>.15</td>
<td></td>
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<tr>
<td>Engagement</td>
<td>.27</td>
<td>.21</td>
<td>.28</td>
<td>.09</td>
<td>.37</td>
</tr>
<tr>
<td>Organizational Support</td>
<td>-</td>
<td>-</td>
<td>.29</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Support for T&amp;D from Senior Staff</td>
<td>.12</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Support for T&amp;D from Colleagues</td>
<td>.10</td>
<td>.29</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Personal Benefits of Training</td>
<td>.23</td>
<td>-</td>
<td>.30</td>
<td>.16</td>
<td>-</td>
</tr>
<tr>
<td><strong>Step 3: Interaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OrgSup×PersonBenefit</td>
<td>-</td>
<td>-</td>
<td>.16</td>
<td>.01</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total R^2</strong></td>
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<td>.17</td>
<td>.35</td>
<td>.05</td>
<td>.13</td>
</tr>
</tbody>
</table>
Summary

This chapter provides the results of the study. Overall, the findings revealed positive relationships between employee engagement and all five components of OCB. These findings fully confirmed the first hypothesis (there is a positive relationship between employee engagement and OCB). After controlling for the demographic variables and testing the R-square of all variables, although the findings still confirmed the positive relationships between employee engagement and all five components of OCB, the level of the variation in OCB explained by a set of variables of interest in this study varied from 5% to 35%.

More specifically, first, employee engagement, personal benefits of training, and support for training and development from senior staff and from colleagues were found to be important contributors to the altruism component of OCB. The variables of interest in this study explained 27% of the variation in altruism. Second, support for training and development from colleagues and employee engagement were found statistically significant with the sportsmanship component of OCB. The variables of interest in this study explained 17% of the variation in sportsmanship. Third, personal benefits of training, organizational support, employee engagement, and the interaction between organizational support and personal benefits of training were found to play an important role in the civic virtue component of OCB. The variables of interest in this study explained 35% of the variation in civic virtue. Fourth, personal benefits of training and employee engagement were found statistically significant with the courtesy component of OCB. The variables of interest in this study explained 5% of the variation in courtesy. Finally, only employee engagement was found to be an essential
contributor to the conscientiousness component of OCB, and 13% of the variation in conscientiousness was explained in this study.

However, the study did not find any support for moderating effects in the relationship between employee engagement and any of the five components of OCB. This finding was counter to the stated hypotheses of the study. It was expected that all five employee perceptions of HRD practices (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support) would positively moderate the relationship between employee engagement and all five components of OCB. A discussion of these results with recommendations and implications is presented in the next chapter.
CHAPTER FIVE

DISCUSSION

The purpose of this study was to explore the potential relationship between employee engagement and OCB in Thai organizations. The possible relationship between employee engagement and OCB was also considered with five possible moderators (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support).

Data were collected from 522 employees from four large Thai organizations. The data were drawn from a final sample with 53.5% of the respondents female and 47.5% male. The majority of respondents reported ages in the 25-29 years category (28.5%), and in the 30-34 years category (26.1%). The average time employed at the current organization was 8.76 years. In addition, most respondents (54%) reported completion of a four-year college degree and 21.8% reported completion of advanced degrees.

This study had three research questions to examine the relationship between employee engagement and OCB. These research questions were:

1. What is the relationship between employee engagement and OCB in Thai organizations?

2. What is the relationship between employee engagement, employee perceptions of HRD practices (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support), and OCB in Thai organizations?
(3) Is the relationship between employee engagement and OCB moderated by employee perceptions of HRD practices (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support)?

This chapter summarizes the results of the study and discusses the important findings, along with how these present findings can link back to previous research to show how the study contributes to the knowledge of employee engagement and other variables of interest. In addition, the chapter presents recommendations drawn from what I have learned from the study for both future research and practice. In the following section, conclusions and discussions are presented, followed by recommendations.

Conclusions and Discussions

Positive relationships between employee engagement and the five components of OCB were found in this study. In addition to fully supporting the first hypothesis of this study, the finding of positive relationships between employee engagement and OCB confirmed the results of previous research. For example, Avey et al. (2008) found employees with psychological capital and positive emotion were likely to have a work engagement attitude and performed more OCB. Meyer et al. (2002) conducted a meta-analysis of studies related to organizational commitment and found that affective and normative commitment was positively related to OCB. Similar to the findings from the work of Meyer et al. (2002), Felfe et al. (2008) found a positive relationship between employee commitment and OCB. According to the literature review, the employee
engagement and organizational commitment constructs are related. Based on both previous and present findings, it might be concluded that both organizational commitment and employee engagement constructs are positively related to OCB. Although OCB may not be able to directly impact business outcomes, this type of highly-valued workplace behaviors can facilitate organizational performance through the impact on organizational culture and individual productivity (Farh et al., 2004; Podsakoff et al., 2000).

However, OCB is not the only outcome from employee engagement. Several studies have confirmed the positive relationships between employee engagement and other desired behaviors. Higher levels of performance, both in terms of individual and business levels, are usually found to be positively related to employee engagement (Bassi & McMurrer, 2007; Harter et al., 2002; Truss et al., 2006). Another desired behavior which is usually found to have a positive relationship with employee engagement is an intention to stay with an organization (Jones & Harter, 2005; Richman et al., 2008; Truss et al., 2006). In addition, several studies have confirmed one of the important features of employee engagement: the transferability of the influence of employee engagement among employees (Bakker et al., 2006; Salanova et al., 2005). Working on a team with highly-engaged members can influence other team members to feel and behave in the same way, which in turn promotes a supportive work environment, leading to better customer service. Thus, based on the findings of this study and previous research it might be concluded that employee engagement is related to several desired outcomes.
In summary, similar to the findings of previous research, this study found a positive relationship between employee engagement and OCB. An organization can promote OCB by paying attention to factors conducive to employee engagement. Important factors which an organization should pay attention to for enhancing employee engagement included: an effective and meaningful job design, an appropriate workload, supportive supervisors and colleagues, an organization’s sincere interest in employees’ well-being, opportunities for development and for career advancements, and fairness procedures in an organization (Bassi & McMurrer, 2007; Freeney & Tiernan, 2009; Gebauer et al., 2008; Salanova et al., 2005; Schaufeli & Bakker, 2004).

Although training and development and career advancement opportunities were cited in numerous previous studies as important factors conducive to employee engagement, the results of this study did not find support for a relationship between these factors and OCB. Specifically, this study did not find statistically significant relationships from the variables access to training and development opportunities and formal career management support. However, this study did find statistically significant relationships between OCB and employee engagement, support for training and development opportunities from senior staff and colleagues, personal benefits of training, and organizational support as perceived by the employees. Conclusions and a discussion of the relationships between employee engagement and all five components of OCB are presented in the following section.

**Statistically Significant Variables**

First, employee engagement, personal benefits of training, and support for training and development from senior staff and from colleagues were found to be
important contributors to the altruism component of OCB. The variables of interest in this study explained 27% of the variation in altruism. Second, support for training and development from colleagues and employee engagement were found statistically significant with the sportsmanship component of OCB. The variables of interest in this study explained 17% of the variation in sportsmanship. Third, personal benefits of training, organizational support, employee engagement, and the interaction between organizational support and personal benefits of training were found to play an important role in the civic virtue component of OCB. The variables of interest in this study explained 35% of the variation in civic virtue. Fourth, personal benefits of training and employee engagement were found statistically significant with the courtesy component of OCB. The variables of interest in this study explained 5% of the variation in courtesy. Finally, only employee engagement was found to be an essential contributor to the conscientiousness component of OCB, and 13% of the variation in conscientiousness was explained in this study.

Although it was hypothesized that moderating effects would exist on the relationships between employee engagement and OCB, the findings provided no support of moderation between employee engagement and the five components of OCB. Examining moderating effect is an appropriate analysis approach when existing theory and research cause uncertainty whether a relationship occurs in a specific setting. By contrast, a mediating effect is typically introduced to examine the strong relationship between independent and dependent variables (Baron & Kenny, 1986). This study selected to examine potential moderating effects because this was the first time that the relationship between employee engagement and OCB has been measured in Thailand.
Employee engagement is a relatively new concept and how it operates is unclear in Thailand. There appears to be great confusion with the concepts of OCB and organizational commitment (Suwannawej, 2006; Unchitti, 2008).

Although the current state of theory and limited research in the Thai context supported the examination of potential moderated effects, McClelland and Judd (1993) noted the difficulty of detecting moderating effect in non-experimental studies “despite compelling theoretical expectations for such effects” (p. 377). While this study did not find any moderated effect in the relationship between employee engagement and OCB, the results do provide important data on the positive relationships between employee engagement and all five components of OCB in the Thai context.

The relationship between employee engagement and the civic virtue component of OCB was the only relationship in the study in which the organizational support variable was a statistically significant contributor. The civic virtue component of OCB refers to behaviors of responsibly participating in or being involved with or concerned about the life of an organization (Podsakoff et al., 1990); thus, organizational support can be expected to play an essential role in this relationship. When employees perceived sincere interest from an organization in terms of their well-being and their development opportunities, employees were likely to reciprocate by willingly participating in non-mandatory activities hosted by an organization. This is an obvious way to show their appreciation toward an organization. In addition, the results of this study was similar to the finding of Wang (2009) in which a positive and strong relationship between organizational support and OCB was found even though in his study he used the term service-oriented OCB. The concept of service-oriented OCB
mainly focuses on employees’ loyalty toward and participation within an organization, and how well they serve the customers. In other words, service-oriented OCB has three components: loyalty, participation, and service delivery (Wang, 2009). Based on both previous and present findings, it might be concluded that employees’ belief that an organization values them and is sincerely interested in their overall well-being was an important contributor to the civic virtue component of OCB.

Another finding from this study was that personal benefits of training was an important variable in the relationships between employee engagement and three components of OCB: altruism, civic virtue, and courtesy. Benefits of training refers to the perception of employees related to benefits which they can expect to obtain from participation in training programs provided by an organization (Noe & Wilk, 1993). When employees perceive personal benefits attainment as a result of participation in training programs provided by an organization, they were more likely to report a willingness to perform altruism, civic virtue, and courtesy as components of OCB. These findings highlight the importance of training which is not limited to direct benefits from improving employees’ skills and knowledge (Swanson & Holton, 2009), but also encourages positive employees’ attitudes toward an organization, leading to an increased desire to perform OCB.

Support for training and development opportunities was another important variable in the relationship between employee engagement and two components of OCB: altruism and sportsmanship. In the relationship between employee engagement and the sportsmanship component of OCB, support for training and development opportunities from colleagues was found to be an essential contributor. Respondents
might be able to tolerate increasingly unpleasant circumstances if they perceive that they have coworker support and that they are willing to help. If the findings of the transferability of the influence of employee engagement among team members (Bakker et al., 2006; Salanova et al., 2005) and the importance of socially-based working relationships (Tierney et al., 2002) are incorporated here, I suggest that working with highly-engaged and supportive colleagues will not only enhance the level of performance and OCB, but also create a better work environment because team members are more likely to perform sportsmanship behaviors to help each other.

In the relationship between employee engagement and the altruism component of OCB, support for training and development opportunities from senior staff and colleagues were important. Similar to the findings on the relationship between employee engagement and sportsmanship, supportive colleagues might influence employees to reciprocate the way they are treated (Ensher et al., 2001), leading to more helping behaviors from employees. In addition, senior staff or supervisors usually play a crucial role in influencing employees and a work environment (Cheng & Chiu, 2008; Harter & Blacksmith, 2010; Stairs & Galpin, 2010). For example, Babcock-Roberson and Strickland (2010) found a mediation effect from employee engagement in the relationship between charismatic leadership and OCB. Shore et al. (2006) found a positive relationship between leader responsiveness and OCB. Thus, it is not surprising to find support for training and development opportunities from senior staff influencing the altruism component of OCB.

Surprisingly, only employee engagement was found to be an essential contributor to the conscientiousness component of OCB, which refers to behaviors of
going well beyond the minimum roles requirements (Podsakoff et al., 1990). This behavior is highly desired from an organization point of view (Wright & Sablynski, 2008). In fact, the beta weight value, 0.37, of employee engagement in the relationship between employee engagement and conscientiousness was the highest value found in this study. Similar to the results of Truss et al. (2006), this finding emphasizes the importance of the influence of employee engagement on desired behaviors which is not limited to in-role performance.

*Statistically significant demographic data.*

Regarding the impact of the demographic data (gender, age, level of educational attainment, and work experience at the current company) on the relationships between employee engagement and OCB, only three variables: age, level of educational attainment, and work experience at the current company, were found to be statistically significant contributors to the variation in the altruism, sportsmanship, and civic virtue components of OCB. A gender effect was not found. This contrasts Dieffndorff et al. (2002) which found that being female was a significant moderator on the level of OCB. In the following section, the effect of demographic data in the study is presented.

In general, age had a statistically significant negative impact toward all four components of OCB, except the courtesy component. However, only three age levels (25-29, 30-34, and 35-39 years) were statistically significant negative predictors. For the altruism, sportsmanship, and civic virtue components of OCB, the strongly negative effect of age was found in younger respondents (25-29 years). Different characteristics among generations might explain these findings. Respondents who were 25-29 years were born in the 1980s, and those aged 35-39 years were born in the 1970s. The term
Generation X is used to refer to those born between 1961 and 1980, and Generation Y or Millennials refers to those born between 1981 and 2000 (Arsenault, 2004; Carver & Candela, 2008; Glass, 2007). Different characteristics, values, preferences, and motivations can be found among these generations (Arsenault, 2004; Glass, 2007; Hubbard & Singh, 2009).

To my knowledge, no research findings have explored differences among Thai generational cohorts. However, it is generally accepted that those who were born and grew up in different time periods usually develop different attitudes and perceptions which affect how they see the world (Arsenault, 2004; Glass, 2007). In addition, considering the fact that one dominant characteristic of Thai culture is collectivism (Hofstede, 2001), the negative statistical significance of age seems a little surprising. However, this might be explained by the fact that like other developing countries, Thailand is changing from a poor agriculture-based economy to a newly industrial country (Ashton, Green, Sung, & James, 2002). The proportion of people employed in an agriculture sector has declined, while the employment in industrial and services sectors has continuously increased (International Labor Organization, 2007). The number of non-agriculture workers has outnumbered the agriculture workers since 1995 (Mephokee, n.d.). In addition, the evidence of an impressive economic growth can be seen from the important economic indexes, Thailand’s national income per capita increased from $110 in 1962 to the most current number of $3,670 in 2008 (World Bank, 2010). GDP increased from $2.76 billion in 1960 to $261 billion in 2008 (U.S. Department of State, 2009). This huge economic growth affects individuals and the entire society (Michel, 2010). The past three decades have seen major improvements in
the educational attainment of Thai people. There have been significant increases in the level of primary and secondary school completion since the 1980s (Oudin, 2010). Employment in non-agriculture sectors has been increasing (Mephokee, n.d.), and the average wage of the Thai labor force has been rising (International Labor Organization, 2007). However, negative effects from the fast economic growth in the country have occurred, including regional income disparities, especially between Bangkok and the rural northeastern part of the country, as well as many other social problems (National Economic and Social Development Board, 2010; Zebioli, 2009).

Using this fact to explain the findings from this study, the changing economic and social factors in Thailand may affect attitudes and behaviors at work. Like most people in collectivist cultures, older people seem to continue traditional culture norms, such as helping or taking care of others (Hofstede, 2001; Triandis, 2001), whereas younger people are more likely to follow increasingly dominate Western cultural norms such as having a higher individualistic mind frame. This might explain why older respondents were likely to have a lower beta weight value than younger respondents (-0.09 compared to -0.21) in the relationship between employee engagement and the altruism component of OCB.

Thai people seem to tolerate unpleasant situations to maintain relationships; conflict avoidance is important in Thai culture (Thorelli & Sentell, 1982). *Mai pen rai* which roughly means “never mind”, and *jai yen* which translates as “having a cool heart” are often used phrases in Thai society (Thorelli & Sentell, 1982). It is possible to potentially see evidence of this in the results. Similar to the findings of the altruism component of OCB, older respondents were more likely to have a lower beta weight
value than younger respondents (-0.13 compared to -0.29), meaning younger respondents were likely to report a willingness to perform with less sportsmanship behaviors as compared to older respondents. This situation might also be explained by Friedman’s (2005) explanation about the changing nature of society, the familiarity of younger people with advanced technology, and their resulting desire for instant gratification which leads to reduced tolerance for unpleasant and inconvenient situations.

Studies from Western countries usually state that Generation X values flexibility and a work-life balance, whereas Generation Y values the opportunity to participate in and contribute to an organization (Arsenault, 2004; Carver & Candela, 2008; Glass, 2007; Hubbard & Singh, 2009). Thus, it might be expected that Generation Y is more likely to report a willingness to perform the civic virtue component of OCB. However, the findings from this study were counter to previous findings from Western countries. Similar to the findings of the altruism and sportsmanship components of OCB, older respondents were likely to have a lower beta weight value than younger respondents (-0.13 compared to -0.24), meaning younger respondents were less likely to report a willingness to perform civic virtue behaviors than older people. Reconsidering the economic and social changes in Thailand, younger respondents might feel free to participate less in non-mandatory organizational activities when compared to older respondents who might feel under pressure from group norms. Additionally, although a whole set of demographic data did not statistically account for the variation in the conscientiousness component of OCB, younger respondents (25-29 years) were more likely to report a willingness to perform with less conscientiousness behavior as
compared to older respondents. Similar to other reasons explained above, younger respondents might feel less pressure to work any harder beyond a minimum requirement. Younger workers seem to have more employment options in the current labor market because the employment rate in non-agriculture sectors has been increasing and the jobs in these sectors require well educated younger workers (Mephokee, n.d.; Oudin, 2010). Oudin (2010) also explained that during the Asian financial crisis in 1997, less educated and older workers in Thailand suffered most from significant lay-offs. Thus, it is not surprising to find negatively statistically significant values regarding age in the relationship between employee engagement and OCB.

The level of educational attainment was the second variable from a set of demographic data found to be statistically significant in the relationships between employee engagement and the sportsmanship and courtesy components of OCB. However, the effect from the level of educational attainment was not equal. The high school and vocational education completion levels of education were found to be statistically significant positive contributors of sportsmanship, but the completion of a bachelor’s degree was found to be a statistically significant negative predictor of courtesy. The finding of the study seemed to be counter the majority of the literature review which showed the relatively weak importance of demographic data towards the variables of interest in this study (Simpson, 2009; Suwannawej, 2006).

In addition to the findings of this study that seemed to contrast previous research about the statistically significant of demographic data, the unequal effect among three levels of educational attainment made it harder to explain. In fact, it was expected that respondents with a bachelor’s degree and an advanced degree would be an essential
positive contributor towards all components of OCB. These groups of employees are the future leaders of an organization (Sturges et al., 2002). According to the work of DiPietro and Pizan (2008), younger and more educated part-time male employees were likely to have a higher level of alienation than older and less educated female part-time employees. Although this study and that of DiPietro and Pizan (2008) examined different groups of respondents, as well as different business types, I did not expect to see conflicting results. However, the findings of this study showed a negative effect from respondents with a bachelor’s degree. The best reason to potentially explain this phenomenon is that it might be easy for this group of employees to find new jobs in the Thai labor market, leading them to engage less in courtesy behaviors. In 2002 only 6.19% of Thai workers had a bachelor’s degrees or advanced degrees (Mephokee, n.d.), leading to the shortage of educated workers in the labor market. In contrast, respondents who have completed high school and vocational education may feel more pressure to perform sportsmanship behavior as a part of acceptable characteristics of good employees in Thai organizations because of their potentially limited employability.

The final demographic variable which was found to be statistically significant toward the relationships between employee engagement and the altruism and sportsmanship components of OCB was work experience at the current company. Respondents with equal to three but less than five years of experience were more likely to report a willingness to perform altruism behavior as compared to other groups with different lengths of work experience. This finding emphasizes the importance of long-term relationships among employees within an organization. In addition, respondents with less than one year and more than or equal to three but less than five years of
experience were more likely to report a willingness to perform sportsmanship behavior as compared to other groups with different lengths of work experience. The effect from the length of work experience might be explained by the effect of “honeymooners”, referring to new employees who are likely to increase their chances of looking good in other people’s eyes (Harter & Blacksmith, 2010, p. 122).

In summary, although this study did not find all eight variables of interest to play a statistically significant role in accounting for the variation in OCB, the five variables that were found are important and have implications for both future research and practice. Employee engagement was an important contributor to conscientiousness ($\beta = 0.37$), and altruism ($\beta = 0.27$). Personal benefits of training was a major contributor to civic virtue ($\beta = 0.30$) and courtesy ($\beta = 0.16$). Support for training and development opportunities from colleagues was an essential contributor to sportsmanship ($\beta = 0.29$). In total, a set of variables of interest from this study accounted for 35% of the variation in civic virtue, 27% of the variation in altruism, 17% of the variation in sportsmanship, and 13% of the variation in conscientiousness, as well as only 5% of the variation in courtesy. In the following section, recommendations for both research and practice are presented.

**Recommendations**

The following recommendations based on the findings from this study are presented in two parts: recommendations for research, and recommendations for practice, especially for human resource departments in Thai organizations.
Recommendations for Research

The findings from this study provided several recommendations for researchers, not only those who are in the HRD field but also those interested in organization-related studies. First, one of the main purposes of this study was to examine the relationship between employee engagement and OCB. This decision was based on the literature review that proposed expected positive outcomes from employee engagement for organizations. The results of this study confirmed that employee engagement is an essential contributor to OCB, which ultimately positively affects an organization (Farh et al., 2004; Podsakoff et al., 2000).

Testing several variables as possible moderators was also beneficial to future research, especially to the field of HRD. All selected variables in this study were management practices directly related to the HRD field. Thus, in addition to the benefits for HRD practitioners, HRD academics and researchers can gain much understanding about which variables account for the variations in OCB. According to Spitzmuller, Van Dyne, and Ilies (2008), previous research on the antecedents of OCB has revealed the importance of dispositions, attitudes, task characteristics, and relationships between employees and supervisors, as well as relationships between employees and colleagues. Although this study did not examine all factors conducive to OCB, the results of this study confirmed the importance of positive attitudes and social relationships. The role of social relationships as antecedents of OCB is an increasing trend in much of the present research on OCB (Spitzmuller et al., 2008). This study contributes to knowledge on the importance of two antecedents of OCB. However, future research related to OCB is needed, especially research on the consequences of OCB, including potential positive
and negative consequences of OCB toward individual, group, and organizational performance, as well as for those who perform OCB (Spitzmuller et al., 2008).

In addition, this study provides ideas related to the moderating effect between employee engagement and OCB. Although this study did not find any statistically significant moderating effect, future research should avoid examining only independent and dependent variables as a simple model. Including potential variables likely to cause either mediated or moderated effects in the model can help researchers discover how and when the relationships occur (Bennett, 2000). Thus, another recommendation for future research is the continued exploration of possible variables into the model which could be moderators and/or mediators. This could lead to a better understanding about the complex organizational phenomena related to employee behavior and performance. In addition, these possible variables should not be drawn or limited to a single field of knowledge; for example, HRD researchers should not limit themselves to the HRD variables, but rather consider possible effects from other organization science related field of study to expand the frontier of knowledge. Researchers might start by considering possible variables from related fields of knowledge, such as human resource management. The findings from collaborative studies among academic fields can definitely play an important role in creating new knowledge.

Most of the existing research on employee engagement has considered variables and factors that are related or influence the formation and maintenance of engagement. However, this study considered the relationship between employee engagement and OCB. The results of this study are important when considering how engagement may relate to other desired workplace attitudes. This study could be used as an example to
guide future research to explore associations between employee perceptions and outcomes, especially in terms of desired behaviors, including OCB.

According to the results of this study, a set of variables of interest in this study account for only 1% of the variation in the OCB construct of courtesy, making this the lowest adjust R-square in the study. This result perhaps points to the fact that numerous factors contributing to courtesy have not yet been examined. In fact, this study tried to examine a set of variables directly related to HRD practices within an organization; thus leaving aside other potential factors that may account for the variation in courtesy. Thus, it is important to examine these additional factors and try to contribute more to the understanding of variables related to OCB. This suggestion emphasizes the importance of collaborative research among different fields.

An important recommendation can be made based on the findings of this study related to the OCB component of conscientiousness. The results found that employee engagement was able to explain as much as 13% of the variance in conscientiousness. Conscientiousness refers to behaviors of going well beyond the minimum role requirements (Podsakoff et al., 1990). Increasingly organizations value employees who demonstrate high level of conscientiousness. Thus, if researchers discover other important factors contributing to conscientiousness, organizational leaders may be able to develop management strategies that enhance this aspect of OCB.

Recommendations are also made regarding conducting research on the construct of employee engagement and OCB in different cultural contexts. Previous research of Paille (2009) discovered a different model of OCB that was more appropriate to the French context. Work by Felfe et al. (2008), and Meyer et al. (2002) found important
differences in employee attitudes between cultures characterized as being collectivist as oppose to individualist. It might be possible that the concepts of employee engagement and OCB are simply not relevant in the Thai cultural context. The results from this study are more likely to suggest that the perceptions and understanding of Thai people toward the concepts of employee engagement and OCB are different from the Western countries where these two constructs have been developed. For example, Thai studies related to employee engagement have also used the term organizational commitment interchangeably (Suwannawej, 2006; Uncitti, 2008). In addition, some components of OCB might not be considered as behaviors of going beyond the minimum requirements, but rather expected and normal within the cultural context of organizations in Thailand.

Although the translation process in this study was carefully implemented, it is almost impossible for the translation process to produce perfect meanings between two different languages and cultures. A concrete example of the limitations in using a translated instrument can be seen from the results of the factor analysis. For example, the organizational support scale developed by Eisenberger et al. (1986) showed different factor structures. In the original version, this scale has been confirmed as having a one-factor model. However, a two-factor model was initially found in the translated version; negatively worded items were placed in one factor, and positively worded items were placed in another factor. This problem may have resulted because of the different languages between two versions of the scale. In addition, some items were deleted as a result of the pilot test and from the factor analysis because of wording confusion in the Thai language. Thus, it might be useful if researchers develop a
specific instrument representing the main characteristics in a particular culture (Meyer et al., 2002).

Finally, research studying engagement and OCB should not be limited to a quantitative paradigm. Other research paradigms can also contribute useful knowledge. Researchers should consider a broad range of other research methods to study complex phenomena of interest. Although this study was not designed for causal inferences and the results cannot be interpreted to imply causality, studies focusing on causal effects are needed. Research in this area could be well suited to quantitative research designs adopting various statistical modeling approaches. This type of research is also important to the development of theory.

Recommendations for Practice

The findings of this study have numerous implications for organizations, especially for those who are working in human resource departments in Thailand. The results of this study confirmed the existing positive relationship between employee engagement and every component of OCB. Every construct and variable selected in this study was directly related to management practices within an organization. In other words, the constructs and variables used in this study reflect job attitudes that can be shaped and influenced by management action.

Previous studies on employee engagement have shown that although some factors influencing engagement are internal such as traits or emotions of employees, most factors are external and therefore manageable and improvable. According to the literature review and this study, organizations can enhance employee engagement by implementing several management activities, such as providing meaningful and
challenging work, supporting training and career advancement opportunities, creating a supportive work environment, focusing on flexibility or a work-life balance approach, and building positive relationships among employees and between employees and supervisors (Babcock-Roberson & Strickland, 2010; Gebauer et al., 2008; Kahn, 1990; Leiter & Maslach, 2000; Macey & Schneider, 2008; May et al., 2004; Richman et al., 2010; Shuck & Wollard, 2010; Stairs & Galpin, 2010; Truss et al., 2006; Zhu et al., 2009).

Furthermore, the findings from this study when added to knowledge from previous research would suggest that organizations can enhance desired employee behaviors that go beyond formal job requirements. This can be achieved by encouraging perceived fairness and organizational support within an organization, providing training and development opportunities, and focusing on job design elements that empower and provide meaningful work experiences to employees (Brandes et al., 2004; Cheng & Chiu, 2008; 2009; Gilbert et al., 2010; Johnson et al., 2009; Tsui et al., 1997; and Wang, 2009). Senior staff (i.e., supervisors) can also help to increase the level of desired OCB of their employees by showing support and helping employees to develop themselves (Babcock-Roberson & Strickland, 2010; Shore et al., 2006; Zhu et al., 2009). Besides the positive impacts of senior staff, other employees can be encouraged to show support to their co-workers, especially in terms of attending training programs and/or applying knowledge acquired from HRD programs. This type of behavior encourages colleagues to reciprocate and encourage more desired behaviors.

Training and development opportunities play an essential role in improving job performance and assisting organizations (Noe, 2005; Swanson & Holton, 2009).
Moreover, according to the results of this study, organizations also benefit when employees perceive support for training and development opportunities from both colleagues and supervisors, and when they become aware that participating in training and development opportunities provided by the organization can bring personal benefits. These findings emphasize the importance of training and development opportunities, or HRD activities, within organizations. The outcomes of HRD programs are not limited to learning or performance (Swanson & Holton, 2009). In fact, HRD programs are not only aimed at improving the work performance of employees, but also lead employees towards positive perceptions toward an organization and encourage desired behaviors such as OCB. In other words, organizations investing in HRD programs can gain more than simple direct economic values (Watkins, 2009).

In addition, many organizations now believe it is a duty of human resource departments to promote a supportive and development-oriented environment (Noe, 2005). This means an environment that helps employees feel safe to learn and to apply new knowledge, skills, and attitudes without fear. Additionally, it should be noted that even well-designed HRD activities might not be enough by themselves. As can be seen from the results of this study, employees’ perceived personal benefits from participating in HRD programs are essential and contribute to positive behaviors. This emphasizes the importance of the marketing role of HRD (McLagan, 1989). HRD professionals should market their training and development products and services; in other words, the expected benefits from participation in the HRD activities should be advertised so participants realize the importance of the activities and value them.
Summary

The major purpose of this study was to examine the relationship between employee engagement and OCB with the use of employee perceptions of HRD practices (organizational support, access to training and development opportunities, support for training and development opportunities, benefits of training, and formal career management support) as possible moderators. The results collected from 522 first-level employees with no managerial responsibilities in four large Thai organizations showed positive relationships between employee engagement and every component of OCB. Although the results did not find support for the predicted moderating effect as expected, the study revealed the findings of a positive relationship between employee engagement and discretionary employee behaviors that go beyond formal job requirement. This is considered an important finding given that employee engagement is a new concept of increasing interest in Thailand.

The level of the variation in OCB explained by the variables in this study ranged from 5% to 35%. Based on the findings of the study, it is possible to conclude that the results of this study have added to a growing body of literature suggesting that employee engagement is positively related to desired workplace attitudes and behaviors (Avey et al., 2008; Bassi & McMurrer, 2007; Harter et al., 2002; Jones & Harter, 2005; Richman et al., 2008; Truss et al., 2006). Moreover, this study contributes by responding the previous calls for research related to the consequences of employee engagement. Much published literature related to engagement has examined antecedents of engagement (Freeney & Tiernan, 2009; Gebauer et al., 2008; Kahn, 1990; May et al.,
2004; Salanova et al., 2005; Schaufeli & Bakker, 2004; Simpson, 2009; Thomas, 2007; Zu et al., 2009), while little is focused on the consequences of engagement as this study.

Although not all the tested hypotheses were supported, this study contributes to theory and practice. The construct of employee engagement is continuing to develop a robust academic literature. To my knowledge, this was the first time that the employee engagement scale developed by Schaufeli et al. (2006) was translated and used in Thailand. The results from the translated employee engagement scale revealed the acceptable coefficient alpha value and a one-factor model, confirming that this scale can be used as an acceptable instrument to measure work engagement (Schaufeli et al., 2006). This study also distinguished the concept of employee engagement from other related constructs and added knowledge on the positive relationships of OCB to other desired workplace attitudes.

In addition to the first time of the use of the translated employee engagement scale in Thailand, the other scales used in this study provided addition testing and confirmation of existing constructs when presented in the Thai language. The results revealed that the OCB scale developed by Podsakoff et al. (1990), the organizational support scale developed by Eisenberger et al. (1986), the support for training and development opportunities and the benefits of training scales developed by Noe and Wilk (1993) were appropriate for use in the Thai culture although some minor structural and measurement related changes were noted. Thus, it can be concluded that in addition to the important need to test the appropriateness of the existing scales translated from other languages and cultural contexts, it is equally vital to develop instruments fitting the characteristics of the location of the study (Meyer et al., 2002).
Finally, the results of this study also showed the positive associations between employee perceptions and OCB, leading to areas for future research and a series of recommendations for organizations to implement. Future research will benefit by learning from this study about the importance of third variables as possible moderators and/or mediators and of the critical role of cultural context. In particular, care must be taken by researchers conducting studies beyond the contexts where instruments were originally developed. Finally, it is hoped that this study and much additional future research will continue to explore how HRD can enhance the well-being and productive behaviors of an organization’s most valuable asset; their human resources.
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APPENDIX A

COVER LETTER
August 10, 2009

HR Vice President,

Thailand

Dear,

It is generally accepted that the success of organizations comes in part from three essential qualities related to employees: competence, engagement, and contribution. A growing body of research is revealing the value of a positive relationship between employee engagement and desired outcomes for both employees and organizations. Understanding the connection between highly engaged employees and their work performance is therefore of significant interest and importance. I am writing to request that you consider the invitation for participation in a research study being conducted by my Ph.D. student, Ms. Suthinee Rurkkhum, a Thai doctoral student in the Organizational Leadership, Policy and Development program at the University of Minnesota.

In this study Suthinee will examine the connection between employee engagement and the willingness of employees to exhibit high levels of organizational citizenship behaviors in which they go above and beyond the formal requirements of their job. A large number of previous studies, mostly conducted in the United States, have shown that employee willingness to go above and beyond job requirements has an impact on organizational performance. Yet, very little is known on this topic in Thailand. It is also likely that the results of this study will be of great interest to your business.

Driven to Discover™
It is my understanding that Suthinee has already made contact with you and your organization seeking your participation in this research. Only a small number of firms listed on the Thai SET50 are being invited. The target population for this research is first-level white-collar professional employees with no supervisory responsibilities. The study will use an internet survey to collect information on the work-related attitudes of Thai employees. It will take 20-30 minutes for employees to answer the approximately 90 questions on the survey. There are minimal risks in participating in this study. Each participating organization will receive an executive summary of the results. In addition, individual participating employees who complete the survey will have one of three chances to win a drawing of Baht 3,000 gift voucher (approximately $80).

If your organization agrees to participate in this study, I am hopeful you will be able to provide Suthinee a list of employees who meet the criteria of being first-level professional white-collar employees without supervisory responsibilities. Suthinee will randomly select employees to receive an e-mail invitation for participation in the study. Individual employees will be free to choose if they wish to participate in the study. All information and responses that employees provide will be anonymous, held in strict confidence, and only used to produce aggregate summaries. The research is designed so that the name of the organization and any individual employee will be protected and it will not be possible to identify any respondent. Suthinee is more than willing to provide you more information if you have additional questions or concerns on the survey or method of contacting employees. Your decision whether or not to participate will not affect your current or future relation with the University of Minnesota.

Please do not hesitate to contact Suthinee at 612-868-3381 or rurkk001@umn.edu or me as her adviser, if you have any questions or concerns. Thank you for your willingness to consider her invitation for this important research study.

Yours sincerely,

[Signature]

Associate Professor Dr. Kenneth R. Bartlett

bartlett@umn.edu
APPENDIX B

SURVEY INSTRUMENT
Survey of Employee Engagement in Thai Organization

Suthinee Rurkkhum
rurkk001@umn.edu
University of Minnesota, United States

All information collected will be kept absolutely confidential

Please respond to each statement according to the directions provided above each section. There are two main sections. Despite of similarity of some statements, it is very important that you respond to each and every statement. Only then can we include your opinions in the final analysis.

This survey is not a test and does not have right or wrong answers.
Thus, please respond honestly and accurately as you can.

Your responses will be held in strict confidence.
No individual data will be released to anyone.
Please indicate your level of agreement by circling the number that best reflects your feelings.

### Engagement

<table>
<thead>
<tr>
<th>Statement</th>
<th>Never</th>
<th>Almost</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>At my work, I feel bursting with energy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>At my job, I feel strong and vigorous.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I am enthusiastic about my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My job inspires me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>When I get up in the morning, I feel like going to work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel happy when I am working intensely.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I am proud of the work that I do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I am immersed in my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I get carried away when I am working.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

### Organizational Support

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization values my contributions to its well-being.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>The organization strongly considers my goals and values.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Help is available from the organization when I have a problem.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>The organization really cares about my well-being.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>The organization is willing to extend itself in order to help me perform my job to the best of my abilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>The organization is willing to help me when I need a special favor.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>The organization cares about my opinions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>The organization takes pride in my accomplishments at work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>The organization tries to make my job as interesting as possible.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

### Training and Development Opportunities

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Slightly Disagree</th>
<th>Neither</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My organization has stated policies on the amount and type of training the employee can expect to receive.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I am aware of the amount and type of training that my organization is planning for me in the coming year.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>This organization provides access to training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Statement</td>
<td>Strongly Disagree</td>
<td>Somewhat Disagree</td>
<td>Neutral</td>
<td>Somewhat Agree</td>
<td>Strongly Agree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>---------</td>
<td>---------------</td>
<td>----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It will be difficult for me to try and work on improving my skills because of my relations with my co-workers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My co-workers tend to resist my effort to apply new knowledge or skills on the jobs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More experienced co-workers are usually reluctant to give me guidance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel comfortable discussing my skill weaknesses with my manager.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My manager can be counted on to help me develop the skills emphasized in training programs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My manager is supportive of my efforts to acquire new knowledge and skills.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My manager is usually willing to discuss any problems I am having in try to use new knowledge or skills in my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My employer values development of new skills or acquisition of new knowledge.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I make a mistake, my manager usually treats it as a learning experience that can prevent failure and improve performance in the future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can expect my manager to assign me to special projects requiring use of the skills and knowledge emphasized in training.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My manager share information with me about problems or trends in the company that can influence my career path.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My manager enthusiastically supports my participation in training programs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In my past, my manager has helped me understand how to perform my job effectively.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My manager provides sufficient coaching and guidance to help me achieve my work objectives.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The frequency of feedback I get from my manager is just about right.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My manager believes advising or training are one of his/her major job responsibilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would not hesitate to tell my manager of a training need I have in a particular area.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My manager makes sure I get the training needed to remain effective in my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My manager provides advice on specific opportunities for exposure or visibility on the job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Benefits of Training

| Participation in training programs conducted by my current employer will help my personal development. | 1 | 2 | 3 | 4 | 5 |
| Participating in training programs conducted by my current employer will increase my chances of getting a promotion. | 1 | 2 | 3 | 4 | 5 |
| Participating in training programs conducted by my current employer will help me obtain a salary increase. | 1 | 2 | 3 | 4 | 5 |
| Participating in training programs conducted by my current employer will help me perform my job better. | 1 | 2 | 3 | 4 | 5 |
| Participating in training programs conducted by my current employer will result in more opportunities to pursue different career paths. | 1 | 2 | 3 | 4 | 5 |
| Participating in training programs conducted by my current employer will help me get along better with my manager. | 1 | 2 | 3 | 4 | 5 |
| Participating in training programs conducted by my current employer will help me get along better with my peers. | 1 | 2 | 3 | 4 | 5 |
| Participating in training programs conducted by my current employer will help me reach my career objectives. | 1 | 2 | 3 | 4 | 5 |
| Participating in training programs conducted by my current employer will help me network with other employees. | 1 | 2 | 3 | 4 | 5 |
| Participating in training programs conducted by my current employer will help me stay up-to-date on new processes and products, or procedures related to my job. | 1 | 2 | 3 | 4 | 5 |

### Formal Career Management Support

| I have been given training to help develop my career. | 1 | 2 | 3 | 4 | 5 |
| My boss has made sure I get the training I need for my career. | 1 | 2 | 3 | 4 | 5 |
| I have been taught things I need to know to get on in this organization. | 1 | 2 | 3 | 4 | 5 |
| I have been given a personal development plan. | 1 | 2 | 3 | 4 | 5 |
| I have been given work which has developed my skills for the future. | 1 | 2 | 3 | 4 | 5 |
| My boss has given me clear feedback on my performance. | 1 | 2 | 3 | 4 | 5 |
### Organizational Citizenship Behavior

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Slightly Disagree</th>
<th>Neither</th>
<th>Slightly Agree</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I help others who have heavy work load.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I am the classic “squeaky wheel” that always needs greasing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I consume a lot of time complaining about trivial matters.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I try to avoid creating problems for coworkers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I keep abreast of changes in the organization.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I tend to make “mountains out of molehills”.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I consider the impact of my actions on coworkers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I am always ready to lend a helping hand to those around me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I attend functions that are not required, but help the company image.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I read and keep up with organization announcements, memos, and so on.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I help others who have been absent.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I do not abuse the rights of others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I willingly help others who have work related problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I always focus on what’s wrong, rather than the positive side.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I take steps to try to prevent problems with other workers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>My attendance at work is above the norm.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I do not take extra breaks.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I obey company rules and regulations even when no one is watching.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I help orient new people even though it is not required.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I am one of the most conscientious employees.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
Please provide me a little information about yourself. All information will be kept confidential.

### Demographic Data

1. **What is your gender?**
   - [ ] Female
   - [ ] Male

2. **How old are you?**
   - [ ] 19 years old or younger
   - [ ] 20-24 years old
   - [ ] 25-29 years old
   - [ ] 30-34 years old
   - [ ] 35-39 years old
   - [ ] 40 years old or older

3. **What is your highest educational level completed?**
   - [ ] High School Degree
   - [ ] Vocational Education
   - [ ] Associate’s Degree
   - [ ] Bachelor’s Degree
   - [ ] Higher than Bachelors’ Degree

4. **How long have you been employed at this organization?** ................................................ ....years

5. **What is your job title?** ........................................................................................................

### Additional Comments

..................................................................................................................................................
..................................................................................................................................................
..................................................................................................................................................
..................................................................................................................................................
..................................................................................................................................................
..................................................................................................................................................
..................................................................................................................................................
..................................................................................................................................................

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### Thank you for your time!

After completing the survey, you are eligible to fill out your name and address on this detachable part to have one of seven chances to win Baht 3,000 gift voucher (approximately $85). However, completing this part is absolutely voluntary, and you could be assured that your personal information would be only used for drawing a winner.

**Full Name:** ..............................................................................................................................

**Address:** ................................................................................................................................
..................................................................................................................................................
..................................................................................................................................................
..................................................................................................................................................
..................................................................................................................................................
..................................................................................................................................................

**Telephone or Email Address:** ......................................................................................................
APPENDIX C

DEMOGRAPHIC DATA

IN THE PILOT TEST
Demographic Data of 51 Participants in the Pilot Test

<table>
<thead>
<tr>
<th>Variables</th>
<th>Values</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>40</td>
<td>78.4</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>11</td>
<td>21.6</td>
</tr>
<tr>
<td>Age</td>
<td>19 years or younger</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>20-24 years</td>
<td>5</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td>25-29 years</td>
<td>21</td>
<td>41.2</td>
</tr>
<tr>
<td></td>
<td>30-34 years</td>
<td>19</td>
<td>37.3</td>
</tr>
<tr>
<td></td>
<td>35-39 years</td>
<td>3</td>
<td>5.9</td>
</tr>
<tr>
<td></td>
<td>40 years or older</td>
<td>3</td>
<td>5.9</td>
</tr>
<tr>
<td>Education</td>
<td>High school degree</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Vocational education</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Associate’s degree</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s degree</td>
<td>38</td>
<td>74.5</td>
</tr>
<tr>
<td></td>
<td>Higher than bachelor’s degree</td>
<td>13</td>
<td>25.5</td>
</tr>
<tr>
<td>Experience at this organization</td>
<td>Less than 1 year</td>
<td>5</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td>More than or equal to 1 but less than 3 years</td>
<td>22</td>
<td>43.1</td>
</tr>
<tr>
<td></td>
<td>More than or equal to 3 but less than 5 years</td>
<td>22</td>
<td>43.1</td>
</tr>
<tr>
<td></td>
<td>More than or equal to 5 but less than 10 years</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>More than 10 years</td>
<td>1</td>
<td>2.0</td>
</tr>
</tbody>
</table>