

DYNAMIC CHARACTERISTICS OF CUSTOMER  
PARTICIPATION: BASED ON JOB DEMAND AND  
RESOURCE MODEL

By

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## CHAPTER I

### INTRODUCTION

A significant recent change in business markets involves the increasing involvement of customers in new product developing and service delivering processes. Increasingly, customers are actively engaged in value co-creation, either by serving themselves (such as at an ATM) or by cooperating with frontline employees (e.g., health care; Claycomb et al. 2001). Not surprisingly, a large body of marketing literature has focused on customer participation and coproduction concepts.

According to Chan et al. (2010), encouraging customer participation may represent the next frontier in competitive effectiveness and it reflects a major shift from a good-centered to a service centered logic for marketing. This new service-dominant logic views customers as proactive co-creators rather than as passive receivers of value and views companies as facilitators of the value co-creation process rather than as producers of standardized value (Payne et al. 2008).

Rafaeli (1989) suggests that customers have a great deal of immediate influence over service providers. By its very nature, customer participation is difficult to manage and represents a source of uncertainty for service providers (Argote 1982; Bowen and



Jones 1986; Ennew and Binks 1999). Customers may not understand the service offering or their role in obtaining the service experience. When this occurs, frontline employees have to spend more time with customers (Bowen and Ford 2002). Thus, as a result of customer participation, employees would then have to fulfill the portion of job contents left undone by customers.

A frontline employee (FLE) is a type of employee who works at the front desk or is the first person that a customer comes in contact with in a business environment. Boundary spanners are typically in empathetic relations with their employers and customers, and are valuable sources of ideas on services to meet customer needs, and for how to best implement new service strategies. Schneider and Bowen (1984) argue that frontline employees are “boundary spanners with empathy both for the employing organization and the consumers being served” (p. 87).

Customer participation is provided during the interaction between customers and customer-contact employees. Thus, frontline employees are beneficiaries of customer participation and may work as mediators who connect customer co-creating efforts to positive organizational outcomes. In spite of the importance of the frontline employee’s role, previous research has focused on the positive results of customer participation from the customers’ and companies’ sides while the study of the effect of customer participation on employee attitude and behavior is limited (Bendapudi and Leone 2003; Marzocchi and Zammit 2006).

Thus, a large body of marketing literature has focused on customer participation, creating a host of issues that require exploration. One of the challenges is how this increased

role affects employee's behavioral responses and why these behaviors are different from each other. One useful lens through which to view this issue is that of the job demands-resources (JD-R) model, an example of a balanced approach that seeks to explain negative (burnout) as well as positive (work engagement) aspects of well-being by linking it to a strain and motivational process, respectively (Bakker and Demerouti 2007).

The Job Demands–Resources (JD-R) model is a heuristic and parsimonious model that specifies how job strain (burnout) and betterment (work engagement) may be produced by two specific sets of working conditions that can be found in every organizational context: job demands and job resources. Job demands refer to those physical, social, or organizational aspects of the job that require sustained physical and psychological (i.e., cognitive or emotional) effort, and are therefore associated with certain physiological and psychological costs (Demerouti, Bakker, Nachreiner, and Schaufeli 2001).

The second set of working conditions concerns the extent to which the job offers resources to individual employees. Job resources refer to those physical, social, or organizational aspects of the job that may: (1) reduce job demands and the associated physiological and psychological costs, (2) be functional for achieving work goals, or (3) stimulate personal growth, learning, and development (Demerouti, Bakker, Nachreiner, and Schaufeli 2001).

### **1.1 Research Question**

Customer participation is a required but voluntary behavior of customers for a seller's company. Regardless of a customer's intention, frontline employees may perceive customer

participation either positively or negatively. For example, Yoon et al. (2004) suggest that, from the contact employees' perspective, customer participation in a dyadic interaction encounter is an important human factor that can influence employees' work efforts and emotional states such as job satisfaction. Thus, customer participation can be the signal of a relationship investment for a long-term relationship.

On the other hand, Hsieh, Yen and Chin (2004) explain that customer participation is difficult to manage and represents a source of uncertainty for service providers (Argote 1982; Bowen and Jones 1986) and it increases employee perceived work load and job stress. Thus, from the employee's perspective, previous research has shown inconsistent findings on the effect of customer participation on employee's perceptions.

To fill the significant gap in the literature, this study suggests the following questions about this phenomenon. When do frontline employees regard customer participation as customer positive supports or negative workload? What is the psychological process of the frontline employee after he/she experiences customer participation?

The research questions for this dissertation are the following.

1. When do frontline employees evaluate customer participation as a positive resource or a negative job demand?
2. What are the unique resources from a frontline employees' perspective?
3. To what extent do frontline employee's unique resources (CO, frontline employee-customer fit) impact the relationship between customer participation and employee's work engagement?

4. What are the emotional and behavioral consequences of perceived customer participation?

The central tenet of the JD-R model is that job demands may evoke a strain or health impairment process, whereas job resources induce a motivational process (Bakker and Demerouti 2007; Schaufeli and Bakker 2004).

In this research, I suggest, when frontline employees perceive the level of customer participation as moderate, customer participation can be a unique job resource suggested by customers who are one of the important interactional sources from the frontline employees' perspective. Thus, if employees consider the degree of customer participation as sufficient, customer participation can be regarded as a job resource. However, if employees regard the degree of customer participation as insufficient or excessive, customer participation can be interpreted as a job demand. Based on the Job demands and resources (JD-R) model, I suggest the dynamic role of perceived customer participation results in different effects on work engagement.

The JD-R model suggests two psychological processes. The first, strain process is driven by employees' perceived stress by a trade-off between the protection of their performance goals (benefits) and the mental effort that has to be invested in order to achieve these goals (costs). When job demands increase, regulatory problems occur in the sense that compensatory effort has to be mobilized to deal with the increased demands while maintaining performance levels.

The second, motivational process is driven by the availability of job resources, which by definition, play a motivational role because they foster employees' growth, learning, and

development, because they are instrumental in achieving work goals. In the motivational process, the motivational role of job resources might be explained by the effort-recovery approach (Meijman and Mulder 1998). According to this approach, work environments that offer abundant resources foster the willingness of employees to dedicate their efforts and abilities to the work task.

Generally, working environments of frontline employees are much different from others. Because of their boundary spanning roles, frontline employees play a crucial role in service delivery and building relationships with customers. They are always exposed to the interaction with customers.

Thus, I also suggest different types of unique resources (CO and PCF) that can be applied only to frontline employees and examine the effect of these resources to frontline employee's work engagement based on strain and motivational process assumptions of the JD-R model.

## **1.2 Contribution to the Literature**

The research questions have theoretical and managerial implications and contributions. The primary contribution of this dissertation is a better understanding of frontline employee's psychological processes when they experience customer participation. Previous research on customer participation has advanced our understanding by suggesting the positive results of customer participation from the customers' and companies' sides. However, the lack of research examining the employee's perspective of customer participation is a significant gap in the literature.

In this dissertation, I suggest the positive and negative role of customer participation in the frontline employee's perspective simultaneously. This research will provide empirical evidence in support of the curvilinear relationship between PCP and employees' work engagement. To tap the positive and negative side of customer participation, this study suggests new response anchors for the measurement scales.

Another important contribution is the provision of different types of resources that are unique to customer contact employees. Despite significant research about employee job demands and resources, it did not include the unique characteristics of frontline employees in the JD-R model. Thus, in this research, not only customer participation but CO and person-customer fit (PCF) that are applicable only to frontline employees are suggested.

First, customer participation can be regarded as a job resource or job demand depending on the degree of amounts from the frontline employee's perspective. Social support is one of the conditions in the Maslach et al. (2001) model. A study by Schaufeli and Bakker (2004) found that a measure of job resources that includes support from colleagues predicted engagement. A lack of social support has also consistently been found to be related to burnout (Maslach et al. 2001). In the past, two variables that are likely to capture the essence of social support are perceived organizational support (POS) and perceived supervisor support (PSS). However, considering the importance of interaction between customers and employees in sales contexts, interaction with customers is one of the important job characteristics unique to frontline employees. Although organization support or supervisor support has been found to be related to a number of favorable employee outcomes (Rhoades and Eisenberger 2002), no previous study attempted to examine the effect of

customer participation as a specific type of job resource on the frontline employee work engagement.

Customers may not understand the service offering or their role in obtaining the service experience. When this occurs, frontline employees have to spend more time with customers (Bowen and Ford 2002). Thus, as a result of customer participation, employees would then have to fulfill the portion of job contents left undone by customers. Hsieh and Yen (2004) found that the higher the degree of customer participation, the higher the service employees' perceived workload as a result of increasing psychological burden. Thus, customer participation also can be a job demand from the employee perspective.

To find the answer for differences in employee perceptions, I suggest that the level of customer participation has to be considered. Due to the dynamic characteristics of customer participation, the perception of the employee can be changed positively or negatively. Thus, this study explains that researchers must consider the positive and negative sides of customer participation simultaneously, because frontline employee PCP can be changed depending on the level of participation provided by customers.

Second, this research also shows that CO can be assumed as a personal resource in the work engagement process. Burisch (2002) underscores the importance of personality traits in the burnout process, however, the current prominent view suggests that burnout and work engagement primarily result from the characteristics of the work environment where environmental factors overpower individual differences (Moore 2000, Babakus, Yavas and Asshill 2009). In this context, I focus on frontline employee customer orientation (CO) that can be perceived as a personal resource by employees. De Jonge and Dormann (2006)

explain that CO serves as a stress coping resource in the JD-R model that views the role of CO as a personal resource.

This study will clearly show that the extent of employee work engagement depends on the interaction between CO and PCP. Based on this, firms have a better chance of exploiting the positive and alleviating the negative effect of customer participation, if they remain sensitive to employee's CO.

Third, I also explain employee's perceived fit with the customer (PCF) as an environmental resource. In an organizational context, organizational behavior researchers have approached the notion of fit between worker and environment in several ways, such as person-organization fit (Cable and Judge 1997), person-job fit (Vogel and Feldman 2009) and person-coworker fit (Adkins, Ravlin, and Meglino 1996). In the marketing area, researchers also suggest the importance of customer identification with the salesperson or with organizations. When we consider the boundary spanning role of the salesperson, perceived fit with the customer is another important factor for understanding the salesperson's behavior. Maslach and colleagues (2001) suggest that the greater the gap, or mismatch, between the person and environment, the greater the likelihood of burnout; conversely, the greater the match (or fit), the greater the likelihood of engagement with work (Maslach et al.2001). It may be worthwhile to match employees and customers by their interpersonal compatibility to enhance frontline employee work engagement.

This study examines the emerging service-dominant logic of viewing customers as proactive cocreators of value during the service process. This study provides managerial



contributions as well by providing information that can guide managers to understand their frontline employees' psychological processes when customers participate in the process.

### **1.3 Organization of the Dissertation**

This dissertation is organized into five chapters. This chapter provided an introduction and brief overview of the research, foundation of the topic under investigation, the primary questions of this research, and the contribution to the literature. Chapter 2 is a review of the job demands-resources model and uses them as the theoretical bases for eight hypotheses. The chapter also provides a review of the literature on customer participation, employee's work engagement, customer orientation (CO), and frontline employee-customer fit. Chapter 3 presents the research methodology used, and the methods used for data collection and analysis. A thorough presentation of the results is provided in Chapter 4. In this Chapter, I also provide the information about person-customer fit measurement properties such as dimensionality and discriminant validity. I also investigate the dynamic characteristics of customer participation. A discussion of the results of the analysis, theoretical and managerial implications of the findings, limitations of the study, and additional research needed is presented in Chapter 5. Additional information including detailed tables of data and research survey instrument are included in the appendices.

## CHAPTER II

### REVIEW OF LITERATURE

The purpose of this chapter is to provide a review of the literature regarding the job demands-resources (JD-R) model, customer participation, work engagement, frontline employee-customer fit, and customer orientation (CO). There are four sections to this chapter.

In the first section, a main theoretical base (job demands-resources model) that provides a foundation for the hypothesized relationships in the conceptual model is presented.

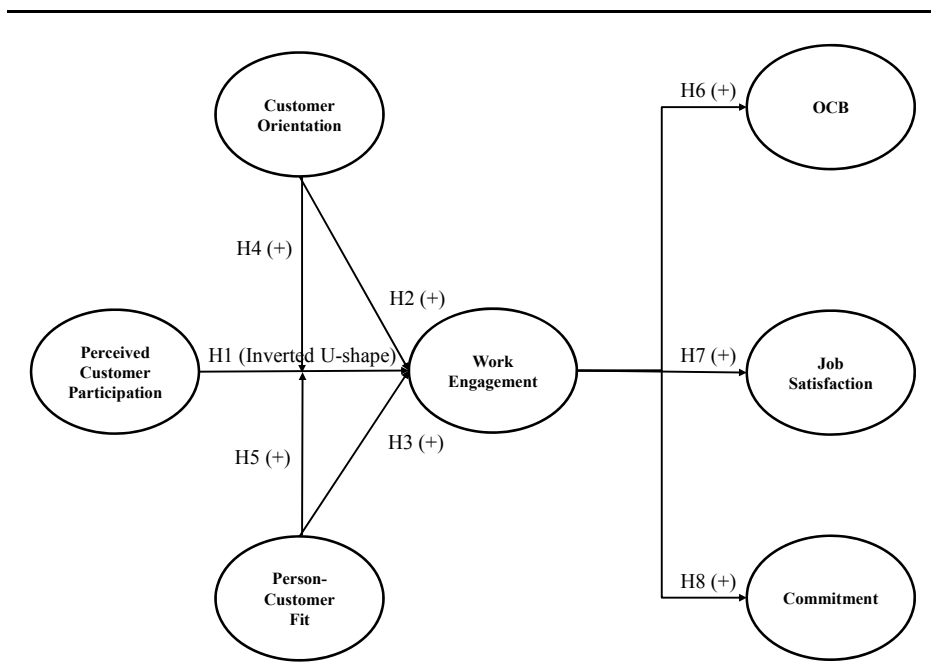
The second section presents a review of the literature on the constructs in the conceptual model. It first examines the antecedent variable “customer participation” followed by a review of employee’s work engagement. Next, I review the CO and employee-customer fit constructs.

The third section presents hypotheses about the relationships between variables in the conceptual model. The final section briefly summarizes the chapter and leads into chapter 3.

Figure 1 presents the conceptual model of the study and illustrates the relationships of the variables investigated in the study.

**Figure 1**

**Conceptual Model and Hypotheses**



## **2.1 Background Theory**

### 2.1.1. Job Demands-Resources Model

In this research, I use the job demands resources (JD-R) model of burnout (Bakker, Demerouti, De Boer, and Schaufeli 2003; Demerouti et al. 2001) to examine how perceived customer participation and work engagement contribute to explaining variance in salespersons' job satisfaction, extra-role performance and organizational commitment.

The impact of various resources on well-being has been widely acknowledged. For example, Hobfoll's Conservation of Resources (COR) theory assumes that various resources are salient factors in gaining new resources and enhancing well-being (Hobfoll 1998; 2001). According to the theory, resources are things that people value and therefore strive to obtain, retain, and protect. In addition, one of the sub-principles of the COR theory posits that whereas those with fewer resources are more vulnerable to resource loss, those with greater resources are, correspondingly, less vulnerable to resource loss and more capable of resource gain (Hobfoll 2001). This signifies a general tendency for enrichment of resources among those with an initial resource reservoir with the consequence that increasing resources tend to form resource caravans (Hobfoll 2002).

Similarly, in an occupational context, the Job Demands–Resources (JD-R) model has underlined the motivational and wellness-promoting potential of job-related resources (Bakker and Demerouti 2007; Demerouti et al. 2001). The JD-R model posits that various job demands (e.g. time pressure, emotional workload, problems in physical work environment) may lead to resource loss, such as health problems and reduction of employee energy resources in the form of burnout. On the other hand, the JD-R model also suggests that job resources (e.g. autonomy, immediate feedback, and rewards) are

especially salient for resource gain such as true well-being and motivation at work. Thus, regarding resource losses and gains, the JD-R model can be viewed as the more general and parsimonious model for a specific work-related application.

Although every occupation may have its own specific work characteristics associated with burnout, one central assumption of the JD-R model is that it is still possible to model these characteristics in two broad categories-namely, job demands and job resources (Bakker, Demerouti, and Verbeke 2004).

Job demands are those physical, social, or organizational aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort on the part of the employee. Therefore, Job demands are associated with certain physiological and/or psychological costs (e.g., exhaustion; cf. Hockey 1997). Although job demands are not necessarily negative, they may turn into job stressors when meeting those demands requires high effort from which the employee does not adequately recover (Meijman and Mulder 1998). This is in line with Rudow (1999), who argued that teachers' cognitive and emotional workload may evoke chronic fatigue and finally burnout, which may lead to psychosomatic disorders and complaints as well as restrictions in pedagogical performance.

Job resources are physical, psychological, social, or organizational aspects of the job that (a) reduce job demands and the associated physiological and psychological costs, (b) are functional in achieving work goals, or (c) stimulate personal growth, learning, and development (Demerouti et al. 2001). Hence, not only are resources necessary to deal with job demands but they are also important in their own right (Hobfoll 2002).

Resources may be located at the following levels: the organization (e.g., salary, career opportunities), interpersonal and social relations (e.g., supervisor and coworker support), the organization of work (e.g., role clarity, participation in decision making), and the task (e.g., performance feedback, skill variety). In general, job demands and resources are negatively related because job demands, such as high work pressure and emotionally demanding workloads, may preclude the mobilization of job resources (Bakker, Demerouti, Taris, Schaufeli and Schreurs 2003; Demerouti et al. 2001). In a similar vein, high job resources, such as social support and feedback, may reduce job demands.

Another important assumption in the JD-R model is that working characteristics may evoke two psychologically different processes. In the first process, demanding aspects of work (i.e., work overload) lead to constant overtaxing and, in the long run, to exhaustion (e.g., Wright and Cropanzano 1998). Exhaustion, in turn, may lead to negative consequences for the organization, such as absenteeism and impaired in-role performance (Bakker, Demerouti, and Verbeke 2004).

In the second process proposed by the JD-R model, job resources lead to engagement and positive outcomes (Schaufeli and Bakker 2004). For instance, Bakker et al.'s (2004) study of human service professionals (including teachers) showed that job resources lead to dedication and extra-role performance. This is consistent with Leithwood, Menzies, Jantzi, and Leithwood (1999), who suggest that schools may develop commitment to the collectively held goals of the organization by providing teachers with opportunities to become increasingly competent and by developing shared decision-making possibilities (i.e., job resources).

However, most research on the JD-R model has been developed in the organizational behavior area and provides us limited insight to increase our understanding of frontline employees.

## **2.2 Customer Participation**

The subject of customer participation in service production and delivery has received significant attention over the past 20 years. While the wealth of research into this topic has favored the development of numerous analytic perspectives, it has also brought to light the active role of customers, who are no longer simply present but rather participate in service co-production. Much attention has focused on analyses aimed at studying the benefits companies can gain from such customer participation (Lovelock and Young 1979; Mills et al. 1983; Kelley et al. 1990); these studies have given rise to the notion that the customer may be likened to a part time employee of the company and should be trained and motivated accordingly (Marzocchi and Zammit 2006).

Customer participation is defined as “the degree to which the customer is involved in producing and delivering the service” (Dabholkar 1990, p. 484). Meuter and Bitner (1998) distinguished among three types of service production based on the level of customer participation: firm production, joint production, and customer production. In this research, I focus on joint production.

The argument suggested by Vargo and Lusch (2004), that the “customer is always a co-creator,” serves as one of the foundational premises for the emerging service-dominant logic of marketing. Further, Prahalad and Ramaswamy (2000) advocated co-

opting customer competence as a competitive strategy. Customers are no longer a “passive audience,” but “active co-producers.” They are actively co-creating value with service providers, through which their personal needs are better served and satisfaction enhanced (Dong, Evans and Xou 2008).

In this dissertation, I define the perceived customer participation (PCP) construct as frontline employee’s subjective evaluation of the extent to which customers provide resources in the form of time and/or effort, information, and co-production for product and service consumption.

Past research in customer participation is primarily represented by three streams. The first contains studies of why customers should engage in the service provision process, largely from the firm’s perspective. This work has mainly addressed the economic benefits of productivity gains by using customers as substitutes for portions of employee labor (e.g., Mills and Morris 1986). Bendapudi and Leone (2003, p. 15) explicitly point out that “the logic of these exhortations has relied almost exclusively on an economic rationale.” To address this oversight in the literature, they suggest the need to explore customers’ potential psychological responses to participation as well as the impact of those responses on satisfaction.

The second customer participation theme focuses on managing customers as “partial employees” and applies traditional employee management models (Bendapudi and Leone 2003). Drawing on the idea of customer socialization, Claycomb et al. (2001) proposed the idea that as customers participate more actively in service provision, organizational socialization increases correspondingly, leading to greater perceived



service quality and enhanced customer satisfaction. Kelley et al. (1990) proposed a conceptual framework of service quality to capture the behavioral and affective outcomes of organizational socialization through customer participation, whereas Dabholkar (1990) suggests that customer participation might enhance service quality perceptions and satisfaction.

The third theme regarding customer participation centers on customer motivation to co-create a service. Bateson (1985) investigated the motivation of self-service consumers. Dabholkar and Bagozzi (2002) examined the effect of consumer traits and situational factors on technology adoption. More recently, Meuter et al. (2005) explored the key factors that influence the initial trial decision of self-service technologies, demonstrating that consumer readiness variables (role clarity, motivation, and ability) are key mediators between the established adoption constructs (innovation characteristics and individual differences) and the likelihood of trial.

In an exploratory study on employee effort, Mohr and Bitner (1995) found that customer behavior at a service encounter is one of the major factors in determining employee effort level. In most encounters, customers credited their own positive behavior towards employees with producing high effort on the part of employees. Yoon et al. (2004) also explain that customer participation is an important human factor that can influence employee work effort and emotional state such as job satisfaction. If an employee perceives friendliness, respect, courtesy, and clear and attentive communication from a customer, this will stimulate the employee's efforts based on the norm of reciprocity, and it will also increase the employee's job satisfaction (Yoon et al. 2004).

However, in spite of the importance of the employee's role, recent studies (Bendapudi and Leone 2003; Marzocchi and Zammit 2006) have considered the customer's point of view, especially the customer's psychological process for participation, and have been less focused on the employee's perspective.

### **2.3 Work engagement**

The two most often studied negative and positive outcomes in the JD-R model are burnout and work engagement, respectively. Burnout is usually defined as a syndrome of exhaustion, cynicism, and lack of professional efficacy (Maslach, Schaufeli, and Leiter 2001). Work engagement is defined as a positive work-related state of mind that is characterized by vigor, dedication, and absorption (Bakker and Schaufeli 2008). Burnout and work engagement are distinct, yet negatively correlated concepts (Maslach, Schaufeli, and Leiter 2001).

The concept of work engagement has been characterized in two different ways. According to Maslach and Leiter (1997), engagement refers to energy, involvement, and professional efficacy, which are considered to be the direct opposites of burnout dimensions (i.e., exhaustion, cynicism, and lack of professional efficacy). On the other hand, Schaufeli and his co-researchers (2002a, p. 465; 2002b, p. 74) defined engagement as “a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption.” This definition is very much in line with Rothbard's (2001) earlier conceptualization of role engagement, which has two core components—attention and absorption in a role—that are both motivational phenomena. Furthermore, Schaufeli and

his colleagues (2002a; 2002b) have stressed that work engagement is likely to remain relatively stable over time (Hallberg and Schaufeli 2006; Schaufeli, Bakker, and Salanova 2006).

Based on the Schaufeli and colleagues suggestion (2002a, 2002b), I define work engagement as positive affective-motivational experience of vigor, dedication, and absorption at work (Bakker and Demerouti 2008; Schaufeli and Bakker 2004). Vigor is associated with high levels of energy, resilience, and personal investment at work; dedication refers to feelings of pride, meaningfulness, challenge, and enthusiasm about the work; and, absorption describes being fully immersed in the work and losing the sense of time while working.

Work engagement is a concept relevant for employee well-being and work behavior for several reasons. First, work engagement is a positive experience in itself (Schaufeli et al. 2002a). Second, it is related to good health and positive work affect (Demerouti, Bakker, Nachreiner, and Schaufeli 2001; Rothbard 2001). Third, work engagement helps employees derive benefits from stressful work (Britt, Adler, and Bartone 2001). Fourth, work engagement is positively related to organizational commitment (Demerouti, Bakker, Nachreiner, and Schaufeli 2001) and is expected to affect employee performance (Kahn 1990).

Work engagement is determined by both environmental and individual factors (Hobfoll 1989). Personal resources can be defined as positive self-evaluated traits that are linked to resiliency and refer to employees' sense of their ability to control and impact their environment successfully based on Hobfoll et al, (2003) research. As such, personal

resources (a) are functional in achieving goals, (b) protect employees from threats and the associated physiological and psychological costs, and (c) stimulate personal growth and development. It has been shown that positive self-evaluations relate strongly to various aspects of work related well-being (e.g., job satisfaction; Judge, Van Vianen, and De Pater 2004). The level of personal resources relate positively to individual self-regard. In turn, it is likely that individuals experience high levels of accordance between the goals they set and their capabilities (Judge, Bono, Erez, and Locke 2005). Individuals with such goal-self concordance are intrinsically motivated to pursue their goals and as a result they trigger satisfaction (see also Luthans and Youssef 2007).

#### **2.4 Customer Orientation**

The CO of salespeople is central to modern sales theory. The primary focus of marketing and sales efforts in the current business environment is to accurately determine and satisfy customer needs in order to create value in long-term relationships, and this is the essence of CO.

Research on customer orientation has shown the importance of differentiating between individual-level and firm-level variables (Brown et al. 2002; Donovan, Brown, and Mowen 2004; Narver and Slater 1990). Generally, research has found CO to be related positively to employee performance (e.g. Boles et al. 2001; Brown et al. 2002; Swenson and Herche 1994). Other research has supported a link between CO and customer satisfaction, both at the firm level (Goff et al. 1997; Humphreys and Williams 1996) and at the individual level (Goff et al. 1997).

Siguaw, Brown, and Widing (1994) maintain that salesperson CO is essentially the implementation of a market orientation at the individual level. Brown et al. (2002) also suggest that CO, an individual-level construct, is the key to a service organization's ability to be market oriented. Donovan et al., (2004) also examine CO at the individual service-worker level. Thus, based on this research, I focus on employee's CO as an individual level construct.

CO in this research can be traced to a seminal article by Saxe and Weitz (1982), who found evidence that a two-dimensional "selling orientation-customer orientation" measure was connected to salesperson performance (Donovan et al. 2004). Saxe and Weitz (1982) propose that customer-oriented selling is a behavioral concept that refers to "the degree to which salespeople practice the marketing concept by trying to help their customers make purchase decisions that will satisfy customer needs. This long-term orientation of salespeople toward their customers, or customer orientation (CO), is "the practice of the marketing concept at the level of the individual salesperson and customer" (Saxe and Weitz 1982, p. 343).

A high level of CO reflects a high level of concern for the customer's long-term needs, while a low level of CO reflects a selfish concern for the achievement of short-term sales objectives. A salesperson's concern for the customer is an emotional investment, which has been shown to act as a strong motivator that is associated with higher levels of performance (Brown et al. 1997).

However, Brown et al. (2002) found that CO was influenced by deeper personality traits and, in turn, influenced worker performance. This perspective is consistent with

traditional views of personality. For example, Pervin and John (1997, p. 4) define personality as the “characteristics of the person that account for consistent patterns of feeling, thinking, and behaving.” Although viewing CO as a trait is inconsistent with Saxe and Weitz’s (1982) approach, it is consistent with the research that takes a hierarchical approach to personality (Donavan et al. 2004). As do Brown and Colleagues (2002), I treat CO as a personality trait. I define CO as employee’s tendency or predisposition to meet customer needs in and on the job context based on Brown and colleagues (2002).

More recently, researchers (Donavan, Brown, and Mowen 2004) have examined the role of CO in service contexts, often among frontline service workers. Research in marketing has demonstrated that CO, conceptualized as a state-like psychological variable, is related to a number of important individual-level outcomes, including the performance of COBs (customer orientated behaviors: Stock and Hoyer 2005), service worker overall performance (Brown et al. 2002), and service worker job attitudes such as commitment and satisfaction (Donavan et al. 2004). However, the role of CO in the JD-R model has yet to be explored.

In this research, I show that individual difference variables such as personality traits (e.g., hardiness, neuroticism, and optimism) may play direct and/or moderator roles in the Job demand and resources model (Bakker et al. 2003; Demerouti, Bakker, Nachreiner, and Schaufeli 2001). However, the current prominent view suggests that work engagement primarily results from the characteristics of the work environment where environmental factors overpower individual differences (Moore 2000). The weak role personality variables play in explaining work engagement may be attributable to the

nature of the basic personality traits used in such studies, which are far removed from the context of the sales.

## **2.5 Person-customer fit**

The concept of fit in employee selection has received growing attention in recent years. The overarching concept of fit in this field stems from person-environment (PE) congruence or PE fit in the interactionist theory of behavior (Lewin 1951).

Person-environment (P-E) fit refers to employees' congruence with their work environment. Within the P-E fit framework, researchers have found that an employee may achieve congruence with the work environment on one or more levels: the job, the work group, the organization, and the broader vocation (Kristof-Brown, Jansen, and Colbert 2002; O'Reilly, Chatman, and Caldwell 1991). Beginning with some of the earliest research in the organizational sciences (Argyris 1960) and extending over the next half-century (Kristof 1996; Tinsley 2000), scholars have found that P-E fit relates positively to important job attitudes (e.g., job satisfaction, subjective career success, and intentions to remain) and job behaviors (e.g., core task performance and citizenship behavior) (Hoffman and Woehr 2006; Kristof-Brown, Zimmerman, and Johnson 2005).

There are a variety of dimensions along which congruence of fit may be achieved (Judge and Ferris 1992; Kristof 1996), and each of these dimensions can contribute to positive work-related outcomes (Vogel and Feldman 2009).

Kristof (1996) called the congruence between employees and their organization person-organization (P-O) fit. While researchers have used several different dimensions

along which to conceptualize P-O fit, the most commonly used dimensions are values and goals (Piasentin and Chapman 2006). In explaining why P-O fit leads to positive outcomes, many researchers rely upon the notion of “supplementary” fit (Ostroff et al. 2002). That is, fit is achieved when the person and the organization have similar characteristics. The logic here is that employees prefer to work in environments that reinforce their self-concepts. Thus, since values are a fundamental part of how employees view situations and judge acceptable behavior, achieving value congruence is fundamental to successful adaptation to the workplace (Adkins et al. 1996; Rokeach 1973). Similarly, the attraction–selection–attrition (ASA) paradigm suggests that individuals are attracted to others who have similar goals or who can help them attain their own goals (Schneider 1987). Consequently, achieving goal congruence has both positive affective outcomes (Lazarus 1991) and motivational outcomes (Locke 1976) for employees.

Person-job (P-J) fit refers to employees’ congruence with the requirements of their jobs and the inducements provided to perform them (Bretz 1993). Two distinct types of P-J fit have been identified in previous research. The first type, abilities–demand fit, is the congruence between employees’ skills and abilities and the specific demands of the job. The second type of P-J fit, needs–supplies fit, is achieved when employees’ needs are provided for by the supplies (rewards) of the job. These two different components of P-J fit (abilities–demand fit and needs–supplies fit) were initially studied as two separate types of fit but are now generally combined into the overall conceptualization of P-J fit (Cable and DeRue 2002; Scroggins 2007).



Person-vocation (P-V) fit refers to the congruence between employees' interests and abilities and the characteristics and requirements of their vocations (Holland 1985). Like P-J fit, P-V fit has also been linked to job satisfaction and in-role performance (Spokane 1985; Tranberg et al. 1993).

Person-group (P-G fit) or person-team fit focuses on the interpersonal compatibility between employees and their work groups (Judge and Ferris 1992; Kristof 1996). Of all types of fit, P-G fit research is the most nascent. Despite high levels of interest in coworker similarity on demographic variables (Riordan 2000), little research has emphasized how the psychological compatibility between coworkers influences employee outcomes in group settings. Only a handful of published studies have examined the fit on characteristics such as goals (Kristof-Brown and Stevens 2001; Witt 1998) or values (Adkins, Ravlin, and Meglino 1996; Becker 1992).

A final form of P-E fit exists in the dyadic relationships between employees and others in their work environments. Although dyadic fit may occur between coworkers (Antonioni and Park 2001), applicants and recruiters (Graves and Powell 1995), and mentors and protégés (Turban and Dougherty 1994), by far the most well-researched area is the match between supervisors and subordinates (Adkins, Russel, and Werbel 1994). Given the limited number of studies on other types of dyadic fit and the importance of supervisor-subordinate relationships on work outcomes (Griffeth, Horn, and Gaertner 2001), the final area is person-supervisor (P-S) fit. Studies of leader-follower value congruence (Krishnan 2002), supervisor-subordinate personality similarity (Schaubroeck and Lam 2002), and manager-employee goal congruence (Witt 1998) are included in this category.

The objective of boundary spanning is to link and coordinate an organization with key constituents in its external environment (Bartel 2001). Boundary-spanning agents can signal the quality and character of their company through a variety of means, including personality, dress and other tangibles, responsiveness, empathy, knowledge, assurance, and reliability. So, as boundary spanners, frontline employees interact with both members of their own organizations as well as members of customer organizations (Jelinek and Ahearne 2006).

Although many researchers in marketing investigate the relationship between customers and frontline employees, the research has primarily focused on the employees' perceived fit with their organization and members in those organizations and overlooked the importance of person-customer fit. Thus in this dissertation, I suggest the concept of frontline employee's perceived fit with customer (PCF). Frontline employee-customer fit can be referred to as interpersonal congruence between frontline employees and customers and focuses on the interpersonal compatibility between employees and their customers during the interaction among them. Based on previous research, I define the frontline employee-customer fit construct and suggest a measurement scale, reliability and validity of this concept, and finally, examine the dynamic role of employee-customer fit as an environmental resource in the JD-R model.

## **2.6 Model Development and Hypotheses**

Work engagement is an affective-motivational, work-related state of fulfillment in employees that is characterized by vigor, dedication and absorption (Schaufeli and Bakker 2004). According to the JD-R model, work engagement is determined by both environmental and individual factors (Hobfoll 1989).

The Job Demands–Resources (JD-R) model is a heuristic and parsimonious model that specifies how job strain (burnout) and betterment (work engagement) may be produced by two specific sets of work conditions that can be found in every organizational context: job demands and job resources. Job demands are “the things that have to be done” (Jones and Fletcher 1996, p. 34) and refer to those physical, social, or organizational aspects of the job that require sustained physical and psychological (i.e., cognitive or emotional) effort, and are therefore associated with certain physiological and psychological costs (Demerouti, Bakker, Nachreiner, and Schaufeli 2001).

On the other hand, job resources are those physical, social, psychological and/or organizational aspects of the job that (a) are functional in achieving work goals, (b) reduce job demands and the associated physiological and psychological costs, and (c) stimulate personal growth and development (Demerouti, Bakker, Nachreiner, and Schaufeli 2001). Job resources may have both intrinsic motivational potential by facilitating learning or personal development and extrinsic motivational potential by providing instrumental help or specific information for goal achievement (Schaufeli and Bakker 2004).

The JD–R model assumes that job demands and job resources may evoke two different, albeit related processes (Hakanen, Bakker, and Schaufeli 2006): (1) an energetic (strain) process of wearing out in which high job demands exhaust employees' mental and physical resources and may therefore lead to burnout, and eventually to ill health; and (2) a motivational process in which job resources foster engagement and concomitant organizational commitment (Schaufeli and Bakker 2004). The energetic process from high job demands through burnout to ill health can be illuminated using Hockey's (1997) compensatory regulatory-control model.

It is hypothesized that job demands (e.g., quantitative workload, role ambiguity, job insecurity) are likely to result in different strain reactions (stress, impaired well-being), whereas lack of resources (e.g., lack of social support in the workplace, lack of job control) probably hinder goal accomplishment, resulting in feelings of frustration and failure. Such feelings, in turn, are likely to cause withdrawal behavior and negative attitudes to work, e.g., reduced organizational commitment, job involvement, work motivation, and increased turnover intentions (e.g., Bakker et al. 2003).

In the past, many scholars studied the process through which customers participate in the service delivery process as “partial employees” (Bateson 1985). Customers were viewed as partial employees due to their participation in supplying labor and knowledge to the service creation process, just like employees of a firm (Kelley et al. 1990). The PCP construct can be defined as frontline employee's subjective evaluation of the extent to which customers provide resources in the form of time and/or effort, information, and co-production for product and service consumption.

Considering the boundary spanning role, we can expect that customer contact employees also can get resources from customers. For example, when customers actually provide participatory behavior, they try to behave as partial employees by contributing effort, time or other resources to meet employee expectations. Thus, from the employee's perspective, customer participation can be a signal of the customer's support. In this case, employees regard customer participation as a type of job resource that customers provide. Perceived customer participation (PSP) is referred to as a frontline employee's subjective evaluation of the extent to which customers provide resources in the form of time and/or effort, information, and co-production for product and service consumption based on Claycomb et al. (2001)'s research.

The JD-R model assumes a motivational process in which job resources foster engagement and concomitant organizational commitment. Previous studies (Hakanen, Bakker, and Schaufeli 2006; Saks 2006; Xanthopoulou, Bakker, Dermerouti and Schaufeli 2007) also have indeed shown that job resources like social support and performance feedback related positively to work engagement. Based on this, I can predict that PCP will enhance employee work engagement when customers provide the appropriate level of customer participation.

However, previous research also indicates some negative characteristics of customer participation. By its very nature, customer participation is difficult to manage and represents a source of uncertainty for service employees (Argote 1982; Bowen and Jones 1986; Ennew and Binks 1999). Customers may not understand the service offering or their role in obtaining the service experience. When this occurs, employees have to spend more time with customers (Bowen and Ford 2002). Thus, as a result of customer

participation, employees would then have to fulfill the portion of job contents left undone by customers. Hsieh and Yen (2004) found that the higher the degree of customer participation, the higher the service employees' perceived workload as a result of the increased psychological burden.

For example, if customers provide an insufficient level of participatory behaviors, frontline employees must fulfill the rest of work that customers have left undone. However, if customers provide an excessive amount of participatory behavior beyond the required level, employees also need more time and effort to handle the surplus behavior, often causing delays for other customers. Thus in both cases, employees perceive customer participation as work load and job demand to fulfill. Hsieh and Yen (2004) find that higher customer participation leads to task uncertainty and changes in frontline employees' work content, resulting in a higher level of job stress

Therefore, an inappropriate level of customer participation can constrain the potential efficiency of the service system (Chase 1978; Chase and Tansik 1983), and disrupt organizational routines (Danet 1981). In this case, frontline employees may perceive customer participation as workload or job demand. As suggested by the energetic (strain) process of the JD-R assumption, an inappropriate level of customer participation can be regarded as a job demand and negatively relate to employee work engagement.

Due to inconsistent results of previous research, this study suggests that a moderate level of customer participation is preferred by customer contact employees. In other words, work engagement is maximized when PCP falls into the middle of the

continuum. When this is the case, consumers provide the proper level of customer participation to employees, with no additional work required to proceed with customers requests. Accordingly, I propose H1 below.

*Hypothesis 1: The relationship between perceived customer participation and employee's work engagement follows a curvilinear (inverted U-shape). Specifically, when frontline employees perceive customer participation as either very little or too much, these perceptions negatively affect employee work engagement.*

Customer orientation (CO) is an employee's tendency or predisposition to meet customer needs in an on the job context (Brown et al. 2002). Brown et al. (2002) treat customer orientation (CO) as a surface-level personality trait within a hierarchical personality model. As Mowen (2000) proposes, surface traits are enduring dispositions to act within context-specific situations.

From this perspective, CO is an enduring disposition (i.e., consistent over time) to meet customer needs. The context-specific situation is the interaction that takes place between the service provider and the customer. In a hierarchical model, CO is influenced by more basic traits (e.g., agreeability, emotional stability, activity needs); in turn, it influences outcome variables, such as service-worker performance on job-related tasks (Donavan et al. 2004).

Work engagement is also determined by individual factors such as personal resources (Hobfoll 1989). Consistent with more recent extensions of the job demands-resources (JD-R) model (Bakker and Demerouti 2007), which emphasize the

consideration of personal resources in mitigating the negative effects of role stressors in the burnout process, the conservation of resources theory (conceptual origin of JD-R model) encompasses personal resources as well as organizational resources as important tools to cope with role stressors (Hobfoll 2001).

According to Mauno et al., (2007) research, personality factors have recently received attention as potential antecedents of work engagement who experienced a high level of work engagement were low in neuroticism and high in extraversion (of the big five personality characteristics). De Jonge and Dormann (2006) explain that CO serves as a stress coping resource in the JD-R model that defines the role of CO as a personal resource. Babakus et al., (2009) also argue that CO plays a critical role in the primary appraisal of job demands and also serves as a coping resource to alleviate the effects of job demands on burnout and job outcomes. Within COR (conservation of resource) theory, resources are defined in terms of conditions and attributes that are valued (Hobfoll 1998). Individual difference variables can be included under this definition because these traits often affect how people react to the resource-based processes of loss, threat, and investment (Grandey and Cropanzano 1999). For this reason, personality can be considered a valuable resource (Halbesleben, Hurvey and Bolino 2009).

Since frontline employees with high CO can read the needs of customers and enjoy solving their problems, this gives them the ability to cope effectively with stressors to neutralize or reduce the detrimental effects of job demands on burnout and job outcomes. In other words, their strong disposition to enjoy serving customers should serve as an internal resource for sensing what needs to be done to cope effectively with potential conflicts with customers, supervisors, or coworkers, as well as ambiguities and



role overload. Conversely, those employees with low CO are expected to experience an internal resource deficit, face difficulty in coping with job demands, and allow job demands to exert stronger detrimental effects on burnout and job outcomes (Babakus et al. 2009).

Personal resources are positive self-evaluations that are linked to resiliency and refer to individuals' sense of their ability to control and impact their environment successfully (Hobfoll, Johnson, Ennis, and Jackson 2003). As such, personal resources (a) are functional in achieving goals, (b) protect from threats and the associated physiological and psychological costs, and (c) stimulate personal growth and development. It has been shown that positive self-evaluations related strongly to various aspects of work related well-being (e.g., job satisfaction; Judge, Van Vianen, and De Pater 2004). The reason for this is that higher personal resources lead to more positive employee self-regard. In turn, it is likely that employees experience high levels of accordancy between the goals they set and their capabilities (Judge, Bono, Erez, and Locke 2005). Employees with such goal self concordance are intrinsically motivated to pursue their goals and as a result they trigger satisfaction (see also Luthans and Youssef 2007).

As far as the motivational process of the JD-R model is concerned, it has been consistently found that job resources are positively related to work engagement (Hakanen et al. 2006; Schaufeli and Bakker 2004). Mauno, Kinnunen and Ruokolainen (2007) also provide that personality factor have recently received attention as potential antecedents of work engagement. Thus the following hypothesis is proposed:

*Hypothesis 2: Frontline employee customer orientation is positively related to employee work engagement.*

There is a long history in psychology of trying to explain behavior in terms of the interaction of person and environment. Many of these interactional models view person and environment as independent entities, but characterize them along commensurate dimensions so that the degree of fit, or congruence, between person and environment can be assessed. Thus, a model of person-environment fit would seem to be an appropriate framework for understanding burnout and work engagement (Maslach et al. 2001).

Much research in organizational behavior has provided empirical support for the effect of person-environment fit on employee attitudes and behaviors or positive outcomes (Erdogan and Bauer 2005; Adkins and Caldwell 2004). Salespeople serve a critical boundary-spanning role (Dubinsky et al. 1986) and customers are important interaction sources of frontline employees. Thus, frontline employees' environmental aspects are different from those of other "internal" employees. Person-customer fit would be a unique concept to frontline employee-environment fit and, thus, can be one of the major influential factors for determining a salesperson's attitudes, behaviors, and outcome performance.

In this dissertation, the concept of person-customer fit (PCF) can be defined as the interpersonal congruence between employees and customers and focuses on the interpersonal compatibility between individuals and their customers during the interaction among them. The notion that person-customer fit leads to more favorable

work attitudes and behaviors toward customers is straightforward. Thus, I suggest employee perceived fit with customer (PCF) as an employee environmental resource.

According to the JD-R model, work engagement is determined by both environmental and individual resources (Hobfoll 1989). Schaufeli and colleagues (2009) also suggest that, according to the motivational process of JD-R model, work environments offer abundant resources foster the willingness of employees to dedicated their efforts and abilities to the work task. In such environments, it is likely that the task will be completed successfully and that the work goal will be attained (Schaufeli, Bakker and Rhenen 2009).

As discussed in the previous hypothesis, the motivational process in the JD-R model suggests that job resources are positively related to work engagement. Maslach and Leiter (1997) have begun to address this challenge by formulating a model that focuses on the degree of match, or mismatch, between the person and six domains of his or her job environment. The greater the gap, or mismatch, between the person and the environment, the greater the likelihood of burnout; conversely, the greater the match (or fit), the greater the likelihood of engagement with work (Maslach et al. 2001).

Based on previous research, I suggest that frontline employee-customer fit is a component of various frontline employee-environment congruencies and can be viewed as an environmental resource that will determine work engagement. Thus I can expect that employees will show more work engagement, when they perceive higher fit with customers,

*Hypothesis 3: Frontline employee perceived fit with customers is positively related to employee work engagement.*

The JD-R model postulates that job resources may buffer the impact of job demands on strain, including burnout (Bakker, Hakanen, Demerouti and Xanthopoulou, 2007). Typically, the buffering hypothesis explains interactions between job demands (i.e., stressors) and job resources by proposing that the relationship between job demands and strain is weaker for those enjoying a high degree of job resources (Caplan, Cobb, French, Van Harrison, and Pinneau 1975).

Applied to work engagement, the negative relationship between job demands and work engagement is weaker for those enjoying high job resources (Bakker et al. 2007). This hypothesis is consistent with the demand–control model and the effort–reward imbalance model (Siegrist 1996). The demand–control model claims that job control or autonomy may buffer the influence of workload on strain, whereas the effort–reward imbalance model states that rewards (in terms of salary, esteem reward, and security/career opportunities, i.e., promotion prospects, job security, and status consistency) may buffer the influence of effort (extrinsic job demands and intrinsic motivation to meet these demands) on strain.

The JD-R model conceptually integrates and expands these models (demand–control model and effort–reward imbalance model) by claiming that several different job resources can play the role of buffer for several demanding work conditions. Which job demands and resources play a role in certain organizations or occupations depends on the specific job characteristics that prevail. Whereas the demand–control model states that

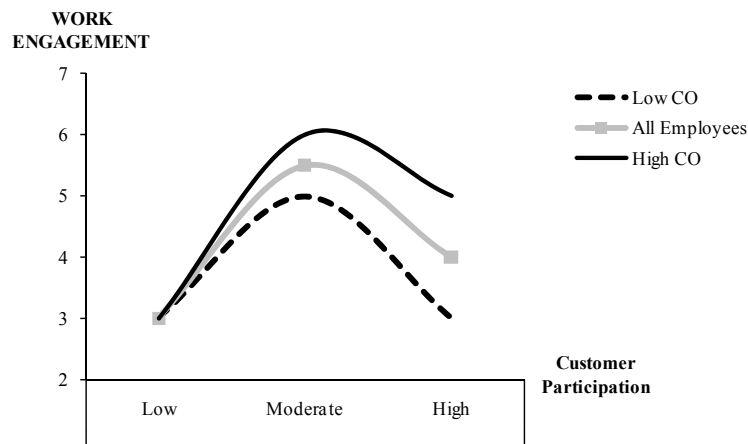
autonomy may buffer the impact of work and time pressure on job strain, the JD-R model expands this view and states that many different types of job resources may buffer the undesirable influence of job demands, including disruptive customer behaviors.

In this study, two additional resources for frontline employees are suggested: CO and frontline employee-customer fit. Kahn and Byosiere (1992) also argue that the buffering or interaction effects can occur between any pair of variables in the stressor-strain sequence. When customers exhibit inappropriate levels of participation, employees evaluate this as job demands as shown in hypothesis 1. In this situation, CO and frontline employee-customer fit will buffer more the negative effect of customer participation on work engagement.

For some individuals, CO is a type of personal resource, and frontline employees with high CO appraise job demands (stressors) as less threatening than those with lower CO due to their natural disposition to view the work environment and people around them with a customer service focus (Babakus et al. 2009).

*Hypothesis 4: CO strengthens the positive relationship between participation and frontline employee work engagement (i.e., the linear term) and weakens the negative relationship between participation and work engagement (i.e., the quadratic term).*

**Figure 2**  
**Hypothesis Four**



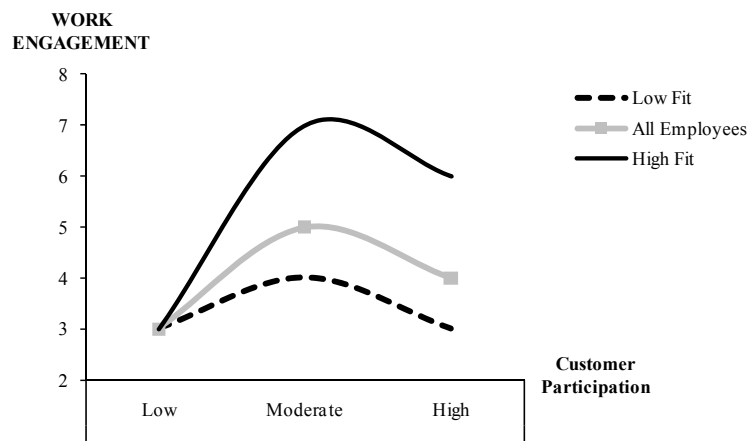
The buffer hypothesis (interaction effect) is consistent with Kahn and Byosiere (1992), who argue that the buffering or interaction effect can occur between any pair of variables in the stress-strain sequence. They claim that properties of the work situation, as well as characteristics of the individual can buffer the effect of a stressor. The buffering variable can reduce the tendency of organizational properties to generate specific stressors, alter the perceptions and cognitions evoked by such stressors, moderate responses that follow the appraisal process, or reduce health-damaging consequence of such responses (Kahn and Byosiere 1992). Employee's PCF is probably a situational variable that can be proposed as a potential buffer against job demand.

As previously explained, if individuals experience high levels of accordance between the self and environment, then, they are intrinsically motivated to pursue their goals and as a result they trigger satisfaction. So, employees who experience person-customers fit will regard this perceived match as an environmental resource. When the positive environmental resource exists, the effect of inappropriate customer participation

on individual work engagement will be reduced. This relationship is proposed below in hypothesis five and depicted graphically in Figure 3.

*Hypothesis 5: Perceived customer fit strengthens the positive relationship between participation and frontline employee work engagement (i.e., the linear term) and weakens the negative relationship between participation and work engagement (i.e., the quadratic term).*

**Figure 3**  
**Hypothesis Five**



Work engagement is a concept relevant for employee well-being and work behavior for several reasons. First, work engagement is a positive experience in itself (Schaufeli et al. 2002a). Second, it is related to good health and positive work affect (Demerouti, Bakker, De Jonge, Janssen, and Schaufeli 2001; Rothbard 2001). Third, work engagement helps employees derive benefits from stressful work (Britt, Adler, and Bartone 2001). Fourth, work engagement is positively related to organizational

commitment (Demerouti, Bakker, Nachreiner, and Schaufeli 2001) and is expected to affect employee performance (Kahn 1990).

Employees have been documented to perform a wide variety of extra-role activities (also called organizational citizenship behaviors (OCB) for which they are neither paid, nor obliged to accomplish by superiors. Organ's (1988) conceptualization of organizational citizenship behavior, OCB provides the foundation for sales research involving this construct (e.g., MacKenzie et al. 1999; Netemeyer, Boles, Mckee, and McMurrian 1997). Netemeyer et al. (1997) indicated that the conceptual domain of the OCB construct is still evolving, but that the construct displays these characteristics: (1) behavior which is above and beyond that formally prescribed by a person's organizational role, (2) discretionary behavior on the part of the employee, (3) behaviors not directly or explicitly rewarded in the organization's formal reward system, and (4) behaviors important for the effective and successful functioning of the organization. Helping (normally a higher order construct comprising altruism, courtesy, and peacekeeping), sportsmanship, and civic virtue are the OCBs most often considered in marketing studies (MacKenzie et al. 1999). In this research, I define OCBs as the noncompulsive, helpful, and constructive behaviors that are directed to the organization or to its members based on Donovan et al.'s (2004) research (Bateman and Organ 1983; Podsakoff and MacKenzie 1994).

To date, only a few quantitative studies have shown that work engagement is positively related to job performance (Demerouti and Bakker 2006). Nevertheless, the results look promising (Bakker and Demerouti 2008). Bakker et al. (2004) show that work engaged employees receive higher ratings from their colleagues on in-role and



extra-role performance, indicating that engaged employees perform well and are willing to go the extra mile. Gierveld and Bakker (2005) also found that work engaged secretaries scored higher on in-role and extra-role performance than their non-work engaged counterparts.

Thus I can predict that employees with higher work engagement will experience more positive affect and experience, and will then provide more organizational citizenship behavior (OCB).

*Hypothesis 6: Frontline employee work engagement is positively related to employee's a) sportsmanship, b) civic virtue, c) consciousness, and d) altruism of OCB.*

Churchill, Ford, and Walker (1974) conceptualize job satisfaction as those characteristics pertaining to the job and work environment “which salespeople find rewarding, fulfilling, and satisfying, or frustrating and unsatisfying” (p. 255). In this study, job satisfaction represents an overall state pertaining to the personal selling position (Netemeyer et al. 1997).

The driving force behind the popularity of employee work engagement is that it has positive consequences for organizations (Saks 2006). Kahn (1992) proposed that work engagement leads to both individual outcomes (i.e. quality of people's work and their own experiences of doing that work), as well as organizational-level outcomes (i.e. the growth and productivity of organizations).

Furthermore, the Maslach et al. (2001) model treats engagement as a mediating variable for the relationship between the six work conditions (workload, control, reward,

community, fairness and values) and various work outcomes like burnout, withdrawal, lower performance, and job satisfaction.

There are a number of reasons to expect engagement to be related to work outcomes. For starters, the experience of work engagement has been described as a fulfilling, positive work-related experience and state of mind (Schaufeli and Bakker 2004). Work engagement has been found to be related to good health and positive work affect (Sonnentag 2003). These positive experiences and emotions are likely to result in employee job satisfaction.

*Hypothesis 7: Frontline employee work engagement is positively related to employee job satisfaction.*

The JD-R model assumes that job demands and job resources may evoke two different, albeit related processes: (1) an energetic (strain) process and (2) a motivational process (Schaufeli and Bakker 2004). The motivational process links job resources with organizational commitment through work engagement (Hakanen et al. 2006). Job resources may play either an intrinsic motivational role because they foster employee growth, learning, and development, or they may play an extrinsic motivational role because they are instrumental in achieving work goals. According to self-determination theory (Deci, Vallerand, Pelletier, and Ryan 1991), any social context that satisfies the basic human needs of autonomy (job control), competence, and relatedness (social support) enhances well-being and increases commitment (see also Hackman and Oldham 1980).

As triggers of the motivational process, job resources are assumed to increase work engagement which, in turn, is associated with positive outcomes such as organizational commitment (Schaufeli and Bakker 2004). The level of job resources has been found to relate positively to the level of work engagement (Bakker et al. 2007; Hakanen, Bakker, and Demerouti 2005). Furthermore, there is evidence of a mediating role of work engagement between job resources and positive motivational outcomes, indicated by low turnover intention (Schaufeli and Bakker 2004), organizational commitment (Hakanen, Bakker, and Schaufeli 2006), and personal initiative and work-unit innovativeness (Hakanen, Perhoniemi, and Toppinen-Tanner 2008).

Work engagement is a concept relevant for employee well-being and work behavior for several reasons. One of these reasons is that work engagement is positively related to organizational commitment (Demerouti, Bakker, Nachreiner, and Schaufeli 2001) and is expected to affect employee performance (Kahn 1990). Thus I can predict following:

*Hypothesis 8: Frontline employee work engagement is positively related to employee organizational commitment.*

The proposed model and hypotheses presented in this chapter provide a number of potential contributions to both the marketing literature and sales practitioners. Regarding the marketing literature, this model addresses a gap in the literature by examining how PCP influences employee job performance through employee work engagement. Specifically, I focus on a dynamic characteristic of customer participation based on the level of appropriateness. Depending on the level, customer participation can be

interpreted differently by employees. When they regard it as appropriate, customer participation can be viewed as a job resource. If employees perceive customer participation as inappropriate, they regard it as a job demand.

I also introduce two unique resources of the salesperson to the literature, employee CO and employee-customer fit, and examine CO and frontline employee-customer fit as predictors based on a motivational process and as moderators based on a strain (energetic) process.

The model presented in this chapter also has several managerial implications. First, it provides guidance into the impact of dynamic characteristics of customer participation on employee work engagement. It also directs organizations to be aware of the powerful influence of work engagement on frontline employee job performance. Finally, by understanding the different roles of CO and frontline employee-customer fit, supervisors have a practical basis through which they can potentially enhance performance.

Chapter 3 presents the research methodology I used, and the methods used for data collection and analysis.

## CHAPTER III

### RESEARCH METHODOLOGY

The purpose of this chapter is to describe the quantitative research methods that are used in this dissertation to test the hypothesized relationships in the preceding chapter. The chapter begins with a discussion of the research method, sample, and sampling method chosen for this study. The chapter then presents the measures for the constructs and other measures used in the study, and follows with a discussion of the survey instrument. Finally, the chapter provides the plan of analysis.

#### **3.1 Research Method and Design**

To test the hypotheses developed in chapter two, a field survey was conducted. The ability to test the hypotheses and stated objectives requires selecting a research design that allows input of frontline employees who experience customer participation, from self-reported customer orientation (CO), and perceive fit with their customers.

The survey method was used for a number of reasons. First, it affords the respondents anonymity, as completed survey instruments are void of respondent identification.

Second, the survey method provides an efficient use of limited time and resources. Third,

it enables the respondents the flexibility to complete this survey as his/her time allows. Several studies that were conducted with salespeople measured some of the same variables examined in this dissertation using a survey method showed adequate reliability and validity and used sample sizes in the same range as used in this dissertation. Given the benefits of using the survey method documented by studies focusing on the target population the survey method is an appropriate choice for this dissertation.

### **3.2 Sample**

The sample for this study consists of frontline employees in firms in the banking and insurance industries. The choice of these types of organizations was dictated by the fact that they have large numbers of salespeople with diverse backgrounds at multiple levels in these industries. In addition, literacy rates are generally much higher in these areas than any other sectors, which facilitate the use of questionnaires.

Especially, customer participation is also more salient and offers greater value creation opportunities for service providers and customers in professional (e.g., financial, legal, medical) services that feature high credence qualities, high degrees of frontline and customization, and high interdependence between customers and service providers for cocreating favorable outcomes (Auh et al. 2007; Sharma and Patterson 2000). Chan, Yim and Lam (2010) also focus on professional financial services (e.g., financial institution) as an appropriate context in which to assess the desirability of customer participation. Therefore, the target population for the survey of this study was comprised of customer contact employees, who lived in Korea.

A number of organizations from each of these sectors in KOREA were randomly selected to ensure variability. Human resource managers and in some instances, chief executive officers (CEOs) were contacted for approval of the study. Since this study invited managers of banks and insurance companies to help with the survey administration, their suggestions regarding the number of questionnaires to distribute in their firms were considered to encourage their participation in this study. After discussing with the directors in the banks and insurance industries, a total of seven hundred fifty surveys were distributed to frontline employees (FLEs) on site, during one month.

A two-stage sampling strategy was used in this study. The first step was to randomly select seven insurance companies and four banks from regions of South Korea. In this stage, twelve cities were randomly selected.

The second step, a convenience sampling strategy was adopted to choose participants from the selected banks and insurance companies. I contacted managers of banks and insurance companies in the selected cities and asked them to participate in this survey. Managers from sixty branches who were willing to participate in the survey provided appointment schedules for survey administration. Early each morning, prior to business hours, bank and insurance employees have a planning meeting. At this meeting, I addressed the employees to request participation. I read the statement on the “information sheet” and asked for their cooperation. I gave them a copy of the “information sheet” along with the questionnaire. The completed survey was delivered directly to the respondents. I stayed and collected completed questionnaires and expressed appreciation for their support. I provided respondents an opportunity to participate in a lottery for one of ten -\$50 gift cards as a reward.

### **3.3 Measures**

The measurement scales used in this dissertation for the primary constructs in the model are measurement scales that have been used and verified in previous research. This section provides a discussion of each of the measures and includes information about the source of the scale as well as any adaptation of the scale employed. Items for the scales used in the dissertation are presented in figures throughout the section. A sample survey is provided in the appendices that details the scale items used in this dissertation.

The survey instrument was initially designed in English and then translated into Korean. In order to minimize any translation biases, the translated versions of the questionnaire were evaluated by several judges. The Korean version was also judged by both native Korean speakers who had spoken knowledge of English and native English speakers who had spoken knowledge of Korean. It was checked for accuracy in line with the conventional back-translation process. Before questionnaires were distributed, IRB approved this survey administration and questionnaire.

#### **3.3.1 Customer Participation**

In this dissertation, PCP is defined as frontline employee's subjective evaluation of the extent to which customers provide resources in the form of time and/or effort, information, and co-production for product and service consumption. Hubbert (1995) identified activities that correspond to three levels of customer participation: low level of customer participation (customer presence required during service delivery), moderate level of customer participation (customer inputs required for service creation), and high level of customer participation (customer co-creates the service product). Based on the



above concept, Claycomb et al. (2001) developed a nine-item scale to measure customer participation, where three dimensions of customer participation were examined: attendance, information provision, and co-production.

Based on the Claycomb et al. (2001) research, I used 11 items to measure employee PCP. Two items were added to better represent the characteristics of customer attendance, which is a sub-dimension of customer participation. Attendance refers to the consumption frequency of customers within a certain period of time in the past, and is measured by the number of times in a month a customer visited a bank or insurance branch. Information provision refers to the extent of offering information and innovative suggestions to the service organization. This is measured by an index of five items. Co-production refers to the extent to which customers assist service organizations in creating the service. This is measured by an index of three items examining the extent to which customers put forth a great deal of effort to help the insurance or bank service during the interaction with employees.

Claycomb et al. (2001) evaluated customer participation items using a five point scales from “Strongly disagree” to “Strongly agree.” They used scores of three dimensions of customer participation to classify respondents into one of four levels of participation. As the overall score goes up, it reflects higher levels of customer participation. To measure frontline employee PCP, Hsieh and Yen (2004) asked service providers to indicate their agreement with each item, using a five-point Likert scale ranging from “Strongly disagree” to “Strongly agree.” Higher scores reflect a greater degree of service provider's PCP.

**Figure 4**

**Customer Participation Items**

---

*Attendance (9-point, never-always)*

1. Customers interact with you.
2. Customers have direct contact with you.
3. Customers engage you directly.

*Information Provision (9-point, never-always)*

4. Customers share information with you.
5. Customers voice their concerns when they are unsatisfied with the service.
6. Customers make suggestions aimed at improving the overall quality of service.
7. Customers offer you feedback about your service.
8. Customers ask you for suggestions while making their purchase decisions.

*Co-Production (9-point, never-always)*

9. Customers assist you during the service delivery process.
  10. Customers interact with you during the service delivery process.
  11. Customers are involved in the service delivery process.
- 

However, these studies did not consider and reflect both the positive and negative side of customer participation simultaneously, especially with respect to excessive levels of participation, in the measurement anchors. It should be noted here that, while my primary interest lies in the PCP-work engagement relationship beyond the appropriate level of the continuum (as it is what happens to work engagement as customer participation is perceived irrelevant when it is above the required level), I include the immoderate condition to allow me to fully test the theorized inverted-U relationship between PCP and work engagement. Frontline employees note their agreement with each item using a nine-point Likert scale ranging from “Not at all” to “Too much.” Some

modifications to the wording were required based on the characteristics of the banking and insurance service industry.

### 3.3.2 Work Engagement

Work engagement describes positive affective-motivational experiences of vigor, dedication, and absorption at work (Bakker and Demerouti 2008; Schaufeli and Bakker 2004). Vigor is associated with high levels of energy, resilience, and personal investment at work; dedication refers to feelings of pride, meaningfulness, challenge and enthusiasm about the work; and, absorption describes being fully immersed in the work and losing the sense of time while working.

Based on the above-mentioned definitions, a self-report questionnaire—the Utrecht Work Engagement Scale (UWES)—has been developed that includes the three dimensions of work engagement: vigor, dedication, and absorption. Originally, the UWES included 24 items, but after psychometric evaluation, 7 unsound items were eliminated so that three scales, totaling 17 items, remained (Schaufeli et al. 2002b): Vigor (VI, 6 items), Dedication (DE, 5 items), and Absorption (AB, 6 items).

For this dissertation, I adopted a measurement scale from Schaufeli, Bakker, and Salanova's research (2006). Work engagement was measured by the Utrecht Engagement Scale with nine items (UWES-9; Schaufeli, Bakker, and Salanova 2006). The scale has three dimensions, comprising vigor (3 items; e.g., "At my work, I feel bursting with energy"), dedication (3 items; e.g., "My job inspires me"), and absorption (3 items; e.g., "I am immersed in my work").

**Figure 5**

**Work Engagement Items**

---

Vigor (*7-point, never-always*)

1. At my work, I feel bursting with energy.
2. At my job, I feel strong and vigorous.
3. When I get up in the morning, I feel like going to work.

Dedication (*7-point, never-always*)

4. I am enthusiastic about my job.
5. My job inspires me.
6. I am proud of the work that I do.

Absorption (*7-point, never-always*)

7. I feel happy when I am working intensely.
  8. I am immersed in my work.
  9. I get carried away when I am working.
- 

Responses were given on a 7-point scale from 1 (never) to 7 (every day). Using data collected in 10 different countries (N = 14,521), Schaufeli, Bakker, and Salanova (2006) found that the original 17-item Utrecht Work Engagement Scale (UWES) can be shortened to 9 items (UWES-9). The factorial validity of the UWES-9 was demonstrated using confirmatory factor analyses, and the three scale scores have good internal consistency and test-retest reliability (Schaufeli, Bakker, and Salanova 2006). The construct validity of the short version (vs. the 17-item scale) of the UWES has proven to be better with a sample of young Finnish managers, as well as with other Finnish occupational groups (Hyvönen, Feldt, Salmela-Aro, Kinnunen, and Mäkikangas 2009). The internal consistencies (Cronbach's alpha) for the total sample were, for the total

scale, .91 (Hyvönen et al. 2009), and for vigor, dedication, and absorption, .81, .87 and .81, respectively (Hyvönen et al. 2009).

### 3.3.3 Customer Orientation

In this dissertation, I treat CO as a personality trait. I define CO as “employee tendency or predisposition to meet customer needs in an on the job context” based on Brown and colleagues’ research (2002). To measure frontline employee CO, I employed the measure used by Grizzle et al. (2009) that came from Brown et al (2002). Brown and colleagues (2002) conceptualize CO as a surface trait that has a need dimension and an enjoyment dimension.

I also use two sub-dimensions to measure frontline employee CO. This measure includes two dimensions, a needs facet (e.g., “I try to help customers achieve their goals”) and an enjoyment facet (e.g., “I find it easy to smile at each of my customers”), each with six items assessed on 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). In this conceptualization, the first facet reflects the degree to which the individual has the ability to focus on customer need satisfaction and second reflects the enjoyment received from such a focus.

After running a principle component factor analysis with oblique rotation of 12 items, Brown and colleagues (2002) found a two factor solution, with all items loading on the appropriate factor, no significant cross-loading and a relatively strong interfactor correlation of .57. The Needs and Enjoyment dimensions each also exhibited acceptable

levels of internal consistency reliability (.80 and .83, respectively) in the Grizzle et al. research (2009).

**Figure 6**

**Customer Orientation Items**

---

*Need (7-point, never-always)*

1. I try to help customers achieve their goals.
2. I achieve my own goals by satisfying customers.
3. I take a problem-solving approach with my customers.
4. I am able to answer a customer's questions correctly.
5. I get customers to talk about their service needs with me.
6. I keep the best interests of the customer in mind.

*Enjoyment (7-point, never-always)*

7. I find it easy to smile at each of my customers.
  8. I enjoy remembering my customers' names.
  9. It comes naturally for me to have empathy for my customers.
  10. I enjoy responding quickly to my customers' requests.
  11. I get satisfaction from making my customers happy.
  12. I really enjoy serving my customers.
- 

3.3.4 Person-Customer Fit

Even though, much person-environment fit research has been conducted, no research emphasizes how the psychological compatibility between salesperson and customer influences the salesperson's outcomes and customers' perceptions.

For this dissertation, I suggest the concept of frontline employee-customer fit. Frontline employee-customer fit can be defined as "an interpersonal congruence between

frontline employees and customers and focuses on the interpersonal compatibility between employees and their customers during the interaction among them.” For example, salespeople with high employee-customer fit are likely to accept a customer’s values and goals as legitimate and to exert extra effort on the customer’s behalf.

**Figure 7**

**Frontline Employee-Customer Fit Items**

---

Frontline employee-customer fit (*7-point, strongly disagree-strongly agree*)

1. Business with my customers is one of the best parts of this job.
  2. I get along well with the customers I work with on a day-to-day basis.
  3. There is not much conflict between me and my customers.
  4. I try to care about the goals of my customers as much as mine.
  5. There is a good fit between my customers’ interests and mine.
- 

One important distinction in the fit literature is between objective fit and perceived (or subjective) forms of fit. Objective fit involves gathering separate information about the person and the organization, then assessing their congruence (Cable and Parsons 2001; O’Reilly, Chatman, and Caldwell 1991). In contrast, perceived fit involves asking people directly whether or not they believe they are a good fit with an organization and its members (Cable and DeRue 2002; Lauver and Kristof-Brown 2001). Edwards, Cable, Williamson, Lambert, and Shipp (2006) refer to this approach as a molar approach to assessing perceived fit, which focuses on perceptions of the match or the similarity, as opposed to focusing on perceptions of the discrepancy or on perceptions of the environment and person separately. Recent meta-analytic investigations have referred to this conceptualization of fit as subjective fit (Hoffman and Woehr 2006) or perceived fit

(Kristof-Brown et al. 2005). In addition, larger effect sizes tend to be found for perceived fit rather than objective fit, and Kristof-Brown et al. (2005) suggest that objective congruence between a person and an organization must first be filtered through that person's perceptions. Thus in my research, I use the Cable and DeRue (2002) subjective fit (perceived fit) scale to measure salesperson's perceived congruency with their customers.

### 3.3.5 Organizational Citizenship Behavior

For this dissertation, I define organizational citizenship behavior (OCB) as the noncompulsive, helpful and constructive behavior that is directed to the organization or to its members based on Donovan and colleagues' (2004) research. Although OCBs are not a part of general job requirements (Organ 1988), they can affect supervisors' evaluations of employees (MacKenzie, Podsakoff, and Fetter 1993).

In a personal selling context, OCBs are viewed as discretionary behaviors on the part of the salesperson that directly promote the effective functioning of an organization, without necessarily influencing a salesperson's objective sales productivity (MacKenzie, Podsakoff, and Fetter 1993, p. 172). Sales-related OCBs are categorized as encompassing four types: sportsmanship, civic virtue, consciousness, and altruism (MacKenzie, Podsakoff, and Fetter 1993; Podsakoff and MacKenzie 1994).

Sportsmanship is viewed as a "willingness on the part of the frontline employee to tolerate less than ideal circumstances without complaining ... railing against real or



imagined slights, and making federal cases out of small potatoes” (MacKenzie, Podsakoff, and Fetter 1993, p. 71; Organ 1988, p. 11).

**Figure 8**

**Organizational Citizenship Behavior Items**

---

*Sportsmanship (7-point, never-as often as possible)*

1. Consume a lot of time complaining about trivial matters.
2. Tend to make “mountains out of molehills” (make problems bigger than they are).
3. Always focus on what’s wrong with my situation, rather than the positive side of it.

*Civic virtue (7-point, never-as often as possible)*

4. “Keep up” with developments in the company.
5. Attend functions that are not required but that help the company image.
6. Risk disapproval in order to express my belief about what’s best for the company.

*Consciousness (7-point, never-as often as possible)*

7. Consciously follow company regulations and procedures.
8. Turn in budget, sales projection, expense report, etc. earlier than is required.
9. Return phone calls and respond to other messages and requests for information promptly.

*Altruism (7-point, never-as often as possible)*

10. Help orient new agents even though it is not required.
  11. Always ready to help or lend a helping hand to those around me.
  12. Willingly give my time to others.
- 

Civic virtue reflects behaviors in which a salesperson responsibly engages that show concern for the company and employee initiative in recommending how the firm can improve operations. Consciousness is viewed as behaviors above and beyond the role requirements of the organization-working long days, being prompt in returning calls, not bending company rules, and entertaining only when it is in the company's best interest.

Altruism also is viewed as a discretionary behavior that involves helping others within the organization with company tasks (e.g., helping new salespeople get oriented and sharing selling strategies) (MacKenzie, Podsakoff, and Fetter 1993).

To measure salesperson's OCB, I adopted the measurement scale from Netemeyer and colleagues' research (1997). This scale is self-report. Although most studies utilize manager-ratings of OCBs (e.g., MacKenzie, Podsakoff, and Fetter 1993), self-report measures have been used in assessing sales-related performance and have been consistent with manager assessments (Churchill, Ford, Hartley and Walker 1985; Dubinsky et al. 1986; Oliver and Anderson 1994).

I use 3 items (each) to assess the dimensions of sportsmanship, civic virtue, consciousness, and altruism. The respondents evaluated each item on a seven point scale ranging from "Never" to "As often as possible."

### 3.3.6 Job Satisfaction

Job satisfaction is conceptualized as both affect- and cognitive-based, with definitions ranging from a "positive emotional state resulting from the appraisal of one's job or job experiences" (Lock 1976, p. 1300), to "all characteristics of the job itself and the work environment which salespeople find rewarding, fulfilling, and satisfying, or frustrating and unsatisfying" (Churchill, Ford, and Walker 1974, p. 255).

Because it helps address the long-term viability of a sales force, salesperson job satisfaction is the most widely researched in studies of sales (Baldauf, Cravens, and

Piercy 2005). Job satisfaction is seen here as “a global, summary attitude reflecting an employee’s satisfaction with his/her job” (Evans, Landry, Li and Zou 2007). It has been demonstrated to have important relationships with a number of job outcome variables, such as intention to leave, stress, turnover, and performance (Childers, Dubinsky, and Skinner 1990).

Salesperson’s job satisfaction is measured using scale used by Netemeyer, Boles, McKee and McMurrian (1997). All three items are rated on seven-point scales. Two of the items are “strongly disagree” (1) to “strongly agree” (7) scales, and the other item is a “very dissatisfied” (1) to “very satisfied” (7) scale.

**Figure 9**

**Salesperson Job Satisfaction Items**

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Job satisfaction (*7-point, strongly disagree-strongly agree*)

1. I feel fairly well satisfied with my present line of work.
2. I feel a great sense of satisfaction from my line of work.

*(7-point, very dissatisfied-very satisfied)*

3. All things considered, how satisfied are you with your present line of work?
- 

**3.3.7 Organizational Commitment**

Commitment also is viewed as critical in the literature of organizational and buyer behavior (Morgan and Hunt 1994). Organizational commitment - one type of relationship commitment that is critical to the firm in its internal relationships- is among the oldest (Becker 1960) and most studied (Reichers 1985) variables in organizational behavior theory. In the relationship marketing context, commitment is seen as central because it

not only leads to such important outcomes as decreased turnover (Porter, Steers, Mowday, and Boulian 1974), higher motivation (Farrell and Rusbult 1981), and increased organizational citizenship behaviors (Williams and Anderson 1991), but it also results from such things that can be influenced by the firm as recruiting and training practices (Caldwell, Chatman, and O'Reilly 1990), job equity (Williams and Hazer 1986), and organizational support (Eisenberger, Fasolo, and Davis-LaMastro 1990).

In this dissertation I define organizational commitment as the strength of a salesperson's enduring desire to maintain a valued relationship with an organization based on Palmatier et al. (2006) research. To assess an employee's organizational commitment, I use three items adapted and revised from Palmatier and colleagues (2006) research.

### **Figure 10**

#### **Organizational Commitment Items**

---

Organizational Commitment (*7-point, strongly disagree-strongly agree*)

1. I am willing to go the extra mile to work with my company.
  2. I have a desire to maintain this relationship.
  3. I view the relationship with my company as a long-term partnership.
- 

#### 3.3.8 Background Variables

In addition to the measures listed above, I also collected data on the background variables:

- Total Pay
- Education
- Length of Time with Firm

- Length of Time in Industry
- Length of Time with Current Supervisor
- Gender

### **3.4 Data Analysis and Hypotheses Testing**

The data analysis of this study was organized into five stages, using descriptive and inferential statistics techniques. Data were coded and analyzed by using the Statistical Packages for Social Sciences (version 16.0, SPSS Inc., Chicago, IL) and LISREL version 8.54. The data were ruled out if the participants indicated an inappropriate age or incomplete information.

#### 3.4.1 Stage I – Descriptive Analysis

The first stage of the data analysis used means, standard deviations, the techniques of frequency, and percentages to present the respondent's frequency and experience of sales job as well as their demographic profile.

#### 3.4.2 Stage II – Exploratory Factor Analysis

The second stage of the data analysis was an exploratory factor analysis (EFA) to identify the factor structure for measuring FLE perceived customer participation, work engagement, customer orientation, organizational citizenship behavior, and check the validity and the reliability of the scale. The decision to consider a factor as significant is

identified by a factor loading greater than 0.5 and an eigenvalue equal to or greater than 1. Cronbach's alpha coefficient was used to test the reliability of the scale.

### 3.4.3 Stage III – Confirmatory Factor Analysis

Confirmatory factor analysis is a kind of multivariate statistical method in which the primary purpose is to confirm the underlying structure in a data matrix. The third part of the data analysis employed a confirmatory factor analysis (CFA) to confirm the factor structure for measuring all constructs used in my research framework, and check the validity and reliability of the measurement scales.

The adequacy of the measurement model was evaluated based on criteria of overall fit with data, content validity, unidimensionality, multidimensionality for second-order factor, convergent validity, discriminant validity, and construct reliability.

Confirmatory factor analysis allows manifest variables to be free to load on specific factors. The model is then evaluated by statistical means to determine the adequacy of its goodness of fit to the data (Byrne 1998). Specifically, the researcher can determine whether or not a pattern of correlations for a set of observations is consistent with a specific theoretical formulation.

In this study, the goodness of fit testing was conducted by using several criteria, including chi-square test, root mean square error of approximation (RMSEA), Tucker-Lewis index (TLI/NNFI), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), parsimony normed fit index (PNFI), and comparative fit index (CFI). This

confirmatory factor analysis was conducted using LISREL 8.54, the most appropriate analytic tool for CFA (Hair, Anderson, Tatham, and Black 1998).

#### 3.4.4 Stage IV – Structural Equation Modeling (SEM)

To test hypothesis 1, 2, 3, 6, 7, and 8, the fourth part of the data analysis identified the structural relationships between the PCP, frontline employee's work engagement and employee's job performance (OCB, job satisfaction and organizational commitment) in the banking and insurance industries. The proposed model was path analyzed via the Maximum Likelihood estimator of LISREL 8.54 by using the variance-covariance matrix of the measured variables as input. This path analysis technique enables estimating simultaneously multiple regression equations in a single framework. All direct and indirect relationships in the model were estimated simultaneously. Thus, the method allows all the interrelationships among the variables to be assessed in the same decision context. In order to test the fitness level of the model, the goodness-of-fit measures was included in the analysis.

#### 3.4.5 Stage V – Moderated Regression Approach

To test my hypotheses regarding the interactions between job demands (inappropriate customer participation) and job resources (employee's CO and PCF, hypotheses 4 and 5), I used the moderated regression approach suggested by Baron and Kenney (1986).

## CHAPTER IV

### RESEARCH FINDING

Results of the data analysis are presented in this chapter. First, characteristics of the sample and descriptive analysis for each construct are presented. Second, the results of the reliability testing are reported to assure the quality of survey scales and data. Third, results of confirmatory factor analysis are presented to verify the underlying structure of the frontline employees' psychological process when they experience customer participation. Fourth, construct reliability, various validity tests, and unidimensionality tests are conducted. Fifth, results of model estimation are discussed, followed by detailed results of hypothesis tests using SEM and hierarchical moderated regression. Finally, a discussion of the major findings from this study is presented.

The purpose of this study is to investigate the frontline employees' perceptions of customer participation and their behavioral responses in the bank and insurance sectors. The specific objectives of this study are to:

- 1) Identify dynamic characteristic of perceived customer participation and its effect on employees' emotional and behavioral responses for better understanding of frontline employee's psychological process



- 2) Propose an effective scale for measuring frontline employee's both positive and negative perception of customer participation and suggests an inverted U-shaped relationship between perceived customer participation and work engagement
- 3) Identify moderating role of customer orientation as a specific job resources that is unique to customer contact employees as shown in the research model
- 4) Propose new scale to measure the degree of employee perceived fit with customers (PCF) and identify moderating role of PCF as a distinctive environmental resource that is also unique to customer contact employees
- 5) Identify whether a high level of work engagement will increase employee job satisfaction, organizational commitment and organizational citizenship behavior (OCB).

## **4.1 Descriptive Analysis Results**

### 4.1.1 Response Rate

Seven hundred fifty surveys were distributed to seven hundred fifty frontline employees (N=750) of the sixty branches in Korean bank and insurance industries. Of this, four hundred fifty surveys were distributed to frontline employees in banks and three hundred surveys were distributed to customer contact employees in insurance companies. As shown in Table 1, a total of 543 questionnaires were collected. This yielded a 72.4% raw response rate. Among the 543 employees, 6 of them were internal employees who have no contact with customers, and 19 employees did not fill out the questionnaires

completely. This result yielded 518 usable questionnaires which resulted in a 69.07% adjusted response rate. Among the 518 usable questionnaires, 325 (62.74%) questionnaires were collected from bank employees, 193 (37.25%) questionnaires were collected from insurance employees.

**Table 1**

**Response Rate**

Descriptions	Number and Percentage
(A) Sample size	750
(B) Surveys returned	543
(C) Raw response rate <sup>1</sup>	72.4 %
(D) Unqualified respondents	6
(E) Incomplete questionnaires	19
(F) Number of unusable surveys <sup>2</sup>	25
(G) Percent number unuseable <sup>3</sup>	4.6%
(H) Net number usable <sup>4</sup>	518
(I) Adjusted (Net) response rate <sup>5</sup>	69.07%
(J) Number and percent of rating of bank employees <sup>6</sup>	325 (62.74%)
(K) Number and percent of rating of insurance employees <sup>7</sup>	193 (37.25%)

Note: 1: B/A, 2: D+E, 3: F/B, 4: B-F, 5: H/A, 6: J/H, and 7: K/H

4.1.2 Demographic Profile of Respondents

The demographic characteristics of the respondents are shown in Table 2. Among the 518 respondents investigated, there were more female respondents (67.2%) than male respondents (32.8%).

**Table 2****Demographic Profile of Respondents (N=462)**

Gender	Number	%
Male	170	32.8
Female	348	67.2
Total	518	100
<b>Age</b>		
Less than 25	13	2.5
25~39	245	47.3
40~55	222	42.9
More than 56	38	7.3
<b>Education</b>		
High school degree	170	32.8
College degree	73	14.1
University degree	251	48.5
Master degree	15	2.9
Etc	9	1.7
<b>Years in current company</b>		
Less than 8 years	292	56.4
8 year 1month~16 year	124	23.9
16 year 1month ~ 24 year	85	16.4
More than 24 year	17	3.3
<b>Years in current business</b>		
Less than 8 years	313	60.4
8 year 1month~16 year	130	25.1
16 year 1month ~ 24 year	48	9.3
More than 24 year	27	5.2

Note: The percentages in this table are based on the total usable sample (518).

About 2.5% of the respondents were less than 25 years old, 47.3% of them were between 25 and 39 years old, 42.9% of them were between 40 and 55 years old, and 7.3% of the respondents were more than 56 years old.

The most frequent level of education reported by the frontline employees was university degree, which accounted for almost 48.5% of the respondents. The second most frequent level of education was high school degree (32.8%), followed by college degree (14.1%).

The sample had worked for their current company for 7 years 8 months on average and their current business for 8 years 6 months on average.

#### **4.2 Reliability Test**

A reliability test was used to assess the consistency in measurement of the results. As Hair, Anderson, Tatham, and Black (1998) suggest Cronbach's Alpha coefficient, which is the most popular index of the reliability for a multi-item scale. It was used to assess the internal homogeneity existing among the item scales in this study. The coefficient alpha estimates for the multi-item scales used in this study are presented in Table 3.

Reliability coefficients (Cronbach's Alpha) were computed for the items that reflected each construct. The reliability test results for the eleven PCP attributes showed that all of eleven items are significantly intercorrelated. The reliability coefficient for customer satisfaction was 0.895. The reliability test results for the nine work engagement elements showed that all items were significantly inter-correlated. The reliability coefficient for work engagement was 0.942. The reliability coefficients for the CO and PCF were 0.944, and 0.806, respectively.

In addition, a reliability test was run for the constructs of frontline employee's organizational citizenship behavior, job satisfaction, and organizational commitment.

The reliability test results for the twelve organizational citizenship behavior items showed an acceptable level of reliability ( $\alpha=.765$ ). However, to increase our understanding on each sub-dimension of OCB, I decided to split this second factor construct into 4 sub-dimensions. The reliability test results for the three sportsmanship attributes showed that one item was not significantly intercorrelated: (OCBS3) I always focus on what's wrong with my situation, rather than the positive side of it (reverse item). The reliability coefficient for sportsmanship was 0.735. The reliability test results for the three employee's civic virtue items showed that all of three items are significantly intercorrelated. The reliability coefficient for customer satisfaction was 0.789. The reliability test results for the three employee's consciousness items showed that all of three items are significantly intercorrelated. The reliability coefficient for customer satisfaction was 0.748. Finally, the reliability test result for the three elements representing altruism showed that one items (OCBA1) was not significantly inter-correlated. The reliability coefficient for altruism was 0.858.

The reliability test results for the three job satisfaction elements showed that all items were significantly inter-correlated. The reliability coefficient for work engagement was 0.948. Finally, the reliability test results for the three elements representing organizational commitment showed that all three items were significantly inter-correlated. The reliability coefficient for organizational commitment was 0.921.

**Table 3****The Reliability Coefficients for Constructs**

Factor (Construct)	Number of Case	Number of Items	Cronbach's Alpha
Perceived Customer Participation	518	11	
<i>Attendance</i>	518	3	.737
<i>Information provision</i>	518	5	.803
<i>Coproduction</i>	518	3	.843
Squared Perceived Customer Participation	518	11	
<i>Squared attendance</i>	518	3	.746
<i>Squared information provision</i>	518	5	.806
<i>Squared coproduction</i>	518	3	.858
Customer Orientation	518	12	
<i>Need</i>	518	6	.902
<i>Enjoyment</i>	518	6	.907
Perceived Fit with Customer	518	5	.818
Work Engagement	518	9	
<i>Vigor</i>	518	3	.804
<i>Dedication</i>	518	3	.888
<i>Absorption</i>	518	3	.879
Organizational Citizenship Behavior	518	12	
<i>Sportsmanship</i>	518	3	.735
<i>Civic virtue</i>	518	3	.789
<i>Consciousness</i>	518	3	.748
<i>Altruism</i>	518	3	.858
Job Satisfaction	518	3	.948
Organizational Commitment	518	3	.921

As Table 3 shows, all alpha coefficients for the data exceed the minimum standard for reliability of 0.7 recommended by Nunnally (1967) for basic research. Thus, the

results indicate that these multiple measures are highly reliable for measuring each construct.

### 4.3 Exploratory Factor Analysis

TABLE 4

SUMMARY OF EXPLORATORY FACTOR ANALYSIS

Factor (Construct)	EV	PV	CV	Component Variable	Factor Loading
Customer Orientation	6.891	15.661	15.661	CO_Enjoy 3	.748
				CO_Enjoy 4	.741
				CO_Enjoy 5	.737
				CO_Enjoy 2	.719
				CO_Need 4	.701
				CO_Enjoy 1	.689
				CO_Need 1	.689
				CO_Need 6	.674
				CO_Need 3	.670
				CO_Need 5	.639
				CO_Enjoy 2	.611
				Work Engagement	6.458
WE_Dedi 2	.778				
WE_Abs 2	.775				
WE_Abs 3	.739				
WE_Vig 2	.732				
WE_Dedi 3	.729				
WE_Vig 3	.709				
WE_Vig 1	.703				
OCB_Altruism and Consciousness	4.018	9.132	39.471	OCB_AI 2	.786
				OCB_AI1	.778
				OCB_AI 3	.752

				OCB_Cons 2	.639
				OCB_Cons 1	.591
				OCB_Cons 3	.558
PCP_Attendance	3.133	7.120	46.591	PCP_Attend 2	.796
				PCP_Attend 1	.690
				PCP_Attend 3	.574
PCP_Info Provision	2.933	6.666	53.257	PCP_Info 3	.842
				PCP_Info 4	.812
				PCP_Info 1	.630
				PCP_Info 5	.579
OCB_Sportsmanship	2.084	4.735	57.992	OCB_Sports 1	.819
				OCB_Sports 2	.796
				OCB_Sports 3	.739
OCB_Civic Virtue	1.974	4.486	62.479	OCB_CV 3	.774
				OCB_CV 2	.725
				OCB_CV 1	.517
PCP_Co-Production	1.692	3.846	66.325	PCP_CP3	.629
				PCP_CP2	.617

Note: 1. EV is eigen value, PV is percent of variance and CV is cumulative variance.

2. \* Variables are deleted in further analysis

A total of 518 usable survey responses were analyzed in this section. Factor analysis was used to condense the information contained in these attributes and to confirm the notion that distinct dimensions existed for FLEs. To assess the validity and reliability of multi-dimensional constructs, factor analysis and reliability testing were used. Forty-four items for multidimensional constructs were factor analyzed. Utilizing the DATA REDUCTION function of the Statistical Package for Social Sciences (SPSS, 2001), an exploratory factor analysis (EFA) was performed on all 44 FLE's perception and behavioral responses to determine possible underlying factors. Initially, a Spearman rank-order, inter-item correlation matrix was calculated for these items.



To test the appropriateness of factor analysis, two statistics were used to test if the factor analysis was suitable for this study. First the Kaiser-Meyer-Olkin (KMO) overall measure of sampling adequacy (MSA) was calculated as 0.931 which is meritorious (Kaiser, 1974). Since the KMO was above 0.80, the variables are interrelated and they share common factors. In addition, the communalities range from 0.525 to 0.804 with an average value above 0.694, suggesting that the variance of the original values were fairly explained by the common factors. Then Barlett's Test of Sphericity was conducted, yielding a significant Chi-Square value in order to test the significance of the correlation matrix ( $\chi^2=12369.121$ ,  $df=946$ ,  $Sig = .000$ ). Both tests indicated that factor analysis was appropriate for this study (Hair, Anderson, Tatham, and Black, 1998).

After the viability of the factor analysis was determined, a Principal Component Analysis (PCA) with a varimax rotation was completed. The varimax, rather than quartimax rotation, was adopted, because the investigators expected to find several dimensions of equal importance in the data. Items with a factor loading of 0.50 or higher were clustered together to form constructs and all factors with eigenvalues greater than 1 were retained. This procedure may help to decrease multicollinearity or error variance correlations among indicators in the confirmatory factor analysis of the measurement model. Such errors should be avoided as much as possible in structural equation modeling procedures (Bollen, 1989).

As a result of this procedure, three items regarding the "customer's assistance" (PCP\_CP 1), "customers' voice their concern" (PCP\_Info 2), and "employee's enjoyment on serving" were removed (CO\_Enjoy 6). A clean structure with relatively higher loadings on the appropriate factors was derived. Most variables loaded heavily on one

factor, reflecting a minimal overlap among factors and showing that all factors were independently structured. As shown in Table 4, eight stable factors with eigenvalues greater than one, and explaining 66.3% of the variance, were derived from the analysis.

The contents of the eight factor dimensions were analyzed and named as follows: customer orientation, work engagement, helping behavior (OCB), attendance (PCP), information provision (PCP), sportsmanship (OCB), civic virtue (OCB), and co-production (PCP) (see Table 4). The customer orientation factor had the highest eigenvalue (6.891), and represented 15.661% of the explained variance. The second highest eigenvalue was work engagement. This value of 6.458 represented 14.678% of the explained variance in the sample. The helping behavior (OCB altruism and OCB consciousness) factor had the third highest eigenvalue (4.018), and represented 9.132% of the explained variance. The fourth highest eigenvalue was attendance. This value of 3.133 represented 7.120% of the explained variance in the sample. The information provision factor had the fifth highest eigenvalue (2.933), and represented 6.666% of the explained variance. The sportsmanship factor had the sixth highest eigenvalue (2.084), and represented 4.735% of the explained variance. The civic virtue factor had the seventh highest eigenvalue (1.974), and represented 4.486% of the explained variance. The last factor was co-production. Its eigenvalue value of 1.692 represented 3.846% of the explained variance in the sample. The total variance explained by the eight factors was 66.325%.

As shown in the table 4, except CO\_Need 6, 11 items of customer orientation were loaded on one factor. 9 items of work engagement were loaded on one factor too. According to the previous research, these customer orientation and work engagement

constructs are multi-dimensional. However, the results showed that both construct are unidimensional constructs.

The helping behavior factor included 6 attributes related to the altruism and consciousness. For the altruism aspect, three attributes included in this factor were “following regulations”, “turn in report in advances”, and “respond promptly.” Three attributes regarding consciousness were “helping new agents”, “helping those around me”, and “giving my time to others”

For the attendance aspect, three attributes included were “interaction with customers”, “direct contact with customers”, and “direct engagement.” The information provision factor included four attributes which were customers “sharing information”, “making suggestion”, “offering feedbacks”, and “asking information.” The sportsmanship factor included the three following attributes: “employee’s complaining”, “making problem bigger”, and “focusing on negative side.” The civic virtue factor included three attributes which were “keep up with development”, “focus on helping the company image”, and “taking risk for improvement for company.” For the co-production aspect, two attributes included were “customer’s interaction with employee”, and “involvement in service delivery.”

#### 4.4 Confirmatory Factor Analysis

**Table 5**  
**Standardized Measurement Coefficients and**  
***t*-Values Resulting from CFA**

Construct/ <i>Subdimension</i>	Item	Standardized loading	t-value
<b>Customer Participation</b>			
<i>Attendance</i>	PCPA1	0.83	20.14
	PCPA2	0.71	16.93
<i>Information Provision</i>	PCPIP1	0.72	17.80
	PCPIP4	0.63	14.88
	PCPIP5	0.69	16.85
<i>Coproduction</i>	PCPCP2	0.83	20.98
	PCPCP3	0.74	18.19
<b>Customer Orientation</b>			
<i>Need</i>	CON1	0.80	21.81
	CON2	0.73	18.90
	CON3	0.74	19.46
	CON4	0.73	19.12
	CON5	0.80	21.65
	CON6	0.84	23.42
<i>Enjoyment</i>	COE1	0.81	22.02
	COE3	0.81	22.13
	COE4	0.85	23.56
	COE5	0.76	20.03
	PCF1	0.82	22.01
<b>Perceived Fit with Customer</b>			
	PCF2	0.91	26.24
	PCF4	0.82	22.05
<b>Work Engagement</b>			
<i>Vigor</i>	VG2	0.78	20.11
	VG3	0.77	20.03
<i>Dedication</i>	DEDI1	0.87	24.77
	DEDI2	0.86	24.31
	DEDI3	0.82	22.56
<i>Absorption</i>	ABS1	0.82	22.00
	ABS2	0.78	20.52
<b>OCB</b>			
<i>Sportsmanship</i>	OCBS1	0.67	14.25
	OCBS2	0.93	18.74
<i>Civic Virtue</i>	OCBCV1	0.75	18.81
	OCBCV2	0.84	21.75

		OCBCV3	0.66	15.74
	<i>Consciousness</i>	OCBC1	0.78	19.27
		OCBC2	0.73	17.89
		OCBC3	0.65	15.27
	<i>Altruism</i>	OCBA1	0.74	18.96
		OCBA2	0.89	24.63
		OCBA3	0.84	22.74
Job Satisfaction		JS1	0.88	25.35
		JS2	0.98	30.43
		JS3	0.93	27.87
Organizational Commitment		OC1	0.88	24.81
		OC2	0.91	26.38
		OC3	0.89	25.69

To access the measurement properties of the survey instrument, a confirmatory factor analysis was conducted to test the adequacy of the measurement model. The proposed measurement model was estimated by using LISREL 8.54. The adequacy of the measurement model was evaluated based on criteria of overall fit with data, content validity, unidimensional analysis, convergent validity, discriminant validity, and reliability.

According to Anderson and Gerbing (1988), confirmatory measurement models should be evaluated and re-specified before measurement and structural equation models are examined simultaneously. Thus, before testing the measurement model, each construct in the model was analyzed. Items that had a low factor loading less than 0.50 were dropped from the analysis. Information derived from the previous exploratory factor analysis, reliability test, and confirmatory factory factor analysis of the model constructs led me to conclude that the eleven items VG1, ABS3, OCBS3, PCPA3, PCPIP2, PCPIP3, PCPCP1, COE2, COE6, PCF3, AND PCF5 may be inappropriate for use. Most of these

items were indicators newly developed by me for the proposed research model. Therefore, it is possible for these items to have lower factor loadings or high measurement error and thus lower the constructs' empirical reliability. As a consequence, I re-specified the model with these eleven items deleted.

The final fifteen-factor model was then tested with the remaining 44 items. Table 5 shows the measurement properties of all fifteen constructs. All the factor loadings were fairly high and significant at an alpha level of 0.01.

Using LIREL 8.54, a maximum likelihood confirmatory factor analysis was undertaken to analyze a ten-factor model and to assess the overall fit of the ten-factor model. The ten-factor model is composed of PCP, work engagement, CO, PCF, sportsmanship, civic virtue, consciousness, altruism, job satisfaction and organizational commitment.

For assessing the goodness-of-fit, chi-square analysis, root mean square of approximation error (REMSA), comparative fit index (CFI), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), and parsimony normed fit index (PNFI) were performed. The results showed that the chi-squared value for the model is 2835.12 for a degree of freedom of 797 ( $p < 0.01$ ). The root mean squared error of approximation (REMSA) is 0.070, the comparative fit index (CFI) is 0.97, and the normed fit index (NFI) is 0.96. All statistics support the overall measurement quality.

These goodness-of-fit indices were selected because Monte Carlo simulations by Hu and Bentler (1999) have shown that using a combination of indices such as CFI and RMSEA achieves a good balance between Type I and Type II error rates when assessing model fit.

According to their simulations, a CFI greater than or equal to .95 and an RMSEA less than or equal to .06 are indicative of a good fitting model and these requirements were met by the hypothesized confirmatory factor model.

#### **4.5 Constructs Reliability and Validity Tests**

For assessing the extent to which the measure was free from systematic error, tests of content validity, unidimensionality, reliability, convergent validity, and discriminant validity were implemented to assess the goodness of the measure.

##### 4.5.1 Content Validity

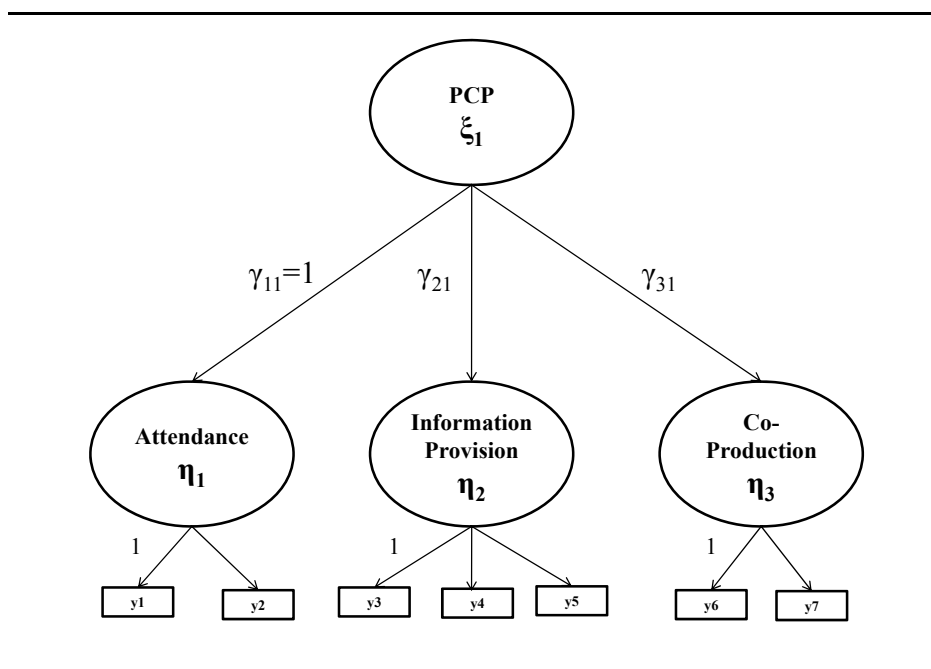
Content validity ensures that the measure includes an adequate and representative set of items describing the concept. The lists of attributes used to measure frontline employee PCP, work engagement, CO, PCF, organizational citizenship behavior, job satisfaction, and organizational commitment were selected after (1) an extensive literature review and (2) a pilot test and asking respondents to evaluate the appropriateness of the measuring instruments. It was evident that these research procedures ensured the high content validity of the measurement instrument.

#### 4.5.2 Dimensionality Test

A scale has to be unidimensional in order to have reliability and construct validity (Gerbing and Anderson 1988). Multidimensional constructs, which aids with content validity, are acceptable as long as the scales are unidimensional. When the items of a scale estimate one factor then the scale is unidimensional. Thus I tested dimensionality for multi-dimensional constructs (PCP, CO, work engagement, and organizational citizenship behavior) used in this study. An example of the second-order factor structure for PCP is shown in Figure 11. All of the other constructs have similar structures.

**Figure 11**

#### **Second Order Factor Structure of Perceived Customer Participation**





**Table 6**

**Results of Dimensionality Test for Multidimensional Constructs**

<b>Construct</b>	<b># of Factor</b>	<b>Result</b>	<b><math>\chi^2</math> and DF</b>	<b><math>\chi^2</math> Difference</b>	<b>Conclusion</b>
Perceived Customer Participation	1-factor Solution	RMSEA = 0.18 NFI = 0.92 CFI = 0.92 GFI = 0.88	242.77 (14)		
	3-factor Solution	RMSEA = 0.16 NFI = 0.94 CFI = 0.95 GFI = 0.92	154.44 (11)	88.33 (3) p < .01	<i>3-factor solution is more appropriate</i>
Work Engagement	1-factor Solution	RMSEA = .14 NFI = 0.97 CFI = 0.97 GFI = 0.92	148.76 (14)		
	3-factor solution	RMSEA = 0.15 NFI = 0.97 CFI = 0.97 GFI = 0.93	142.29 (11)	6.47 (3) p < .01	<i>3-factor solution is more appropriate</i>
Customer Orientation	1-factor solution	RMSEA = 0.12 NFI = 0.97 CFI = 0.97 GFI = 0.90	302.18 (35)		
	2-factor solution	RMSEA = 0.12 NFI = 0.97 CFI = 0.97 GFI = 0.90	276.30 (34)	25.88 (1) p < .01	<i>2-factor solution is more appropriate</i>
Organizational Citizenship Behavior	1-factor solution	RMSEA = 0.41 NFI = 0.45 CFI = 0.46 GFI = 0.42	3932.47 (44)		
	3-factor solution	RMSEA = 0.12 NFI = 0.92 CFI = 0.93 GFI = 0.89	334.68 (41)	3597.79 (3)	
	4-factor solution	RMSEA = 0.096 NFI = 0.95 CFI = 0.96 GFI = 0.93	220.07 (38)	114.61 (3) p < .01	<i>4-factor solution is more appropriate</i>

Shown in the Table 6, the three-factor solution for PCP is most appropriate.

Compared to the one-factor solution, the three-factor solution shows a significant  $\chi^2$

Difference. For work engagement, one-factor and three-factor solutions have significant

differences. The three-factor structure also represents better fit index. Thus the three-factor structure is more appropriate for work engagement. The results show that a two-factor structure is more suitable for customer orientation. Last, the 4-factor structure represents better results for organizational citizenship behavior than results of one-factor and three factor structure which are suggested in the exploratory analysis (EFA). Thus, in the structure model, I suggest and analyze OCB as a 4-factor structure.

**Table 7**

**Results of Second-Order Factor Analysis**

<b>Construct</b>	<b>Relation</b>	<b>Estimation</b>	<b>Model Fit</b>	<b>Conclusion</b>
PCP	PCP → ATT	0.807**	NFI = .945, CFI = .949, and GFI = .921	Three sub-dimensions are appropriately reflect 2 <sup>nd</sup> order factor (PCP).
	PCP → INFO	0.989**		
	PCP → COPRO	0.917**		
WE	WE → VIG	0.994**	NFI = .970, CFI = .972, and GFI = .926	Three sub-dimensions are appropriately reflect 2 <sup>nd</sup> order factor (WE)
	WE → DEDI	0.982**		
	WE → ABSOR	0.971**		
CO	CO → NEED	0.784**	NFI = .966, CFI = .970, and GFI = .895	Two sub-dimensions are appropriately reflect 2 <sup>nd</sup> order factor (CO)
	CO → ENJOY	0.940**		
OCB	OCB → SPORT	0.527**	NFI = .931, CFI = .941, and GFI = .906	Four sub-dimensions are appropriately reflect 2 <sup>nd</sup> order factor (OCB)
	OCB → CIVIC	0.645**		
	OCB → CONS	0.814**		
	OCB → ALTRU	0.711**		

Note: 1. PCP (Perceived customer participation), CO (Customer Orientation), WE (Work Engagement), OCB (Organizational Citizenship Behavior), ATT (Attendance), INFO (Information Provision), COPRO (Coproduction), VIG(Vigor), DEDI (Dedication), ABSO(Absorption), ENJOY (Enjoyment), SPORT(Sportsmanship), CIVIC (Civic Virtue), CONS (Consciousness), ALTRU (Altruism)

2. Estimations are standardized gamma coefficients.

3. \*\* p<.01, and \* p<.05.

To calculate the relationships between first order factors and second order factor, I fixed 1<sup>st</sup> measurement item of each first order factor as reference variable and relationship between 1<sup>st</sup> first-order factor and second-order factor as 1. Otherwise, I fixed

the variance of second order factor as 1. Then I can get the estimations for all relationships between second-order factor and first-order factor.

As shown in Table 7, all of sub-dimension has significant relationship with higher order factor. For example, attendance, information provision, and absorption, which are subdimensions of perceived customer participation (PCP), have positive relationship with higher order factor, PCP. Thus, these three sub-dimensions reflect PCP appropriately. As the Dwyer and Oh research (1988) suggests, a second-order construct can be used to combine several related constructs into a higher-order construct using structural equation analysis. In this study, I analyze multidimensional constructs as second order factor level except OCB. I can get more understanding on the effect of work engagement on employee's behavioral responses by analyzing OCB at sub-dimension level

#### 4.5.3 Reliability of the Constructs

Reliability is the degree of dependability, consistency, or stability of a scale (Gatewood and Field 1990). Unidimensionality does not provide a direct assessment of construct reliability. The reliability is assessed in terms of Cronbach's Alpha. The reliability coefficients shown in Table 8 are all greater than 0.70, which indicates that the scales are reliable.

#### 4.5.4 Convergent Validity

**Table 8**

**Assessment of Reliability and Convergent Validity**

<i>Construct</i>	<i>No. of items</i>	<i>Reliability</i>	<i>Convergent Validity</i>
		Cronbach's $\alpha$	Bentler-Bonett $\Delta$
Customer Participation	7	.858	.92
<i>Attendance</i>	2	.743	
<i>Info Provision</i>	3	.726	
<i>Coproduction</i>	2	.757	
Work Engagement	8	.931	.97
<i>Vigor</i>	2	.736	
<i>Dedication</i>	3	.888	
<i>Absorption</i>	3	.786	
Customer Orientation	10	.938	.97
<i>Need</i>	6	.952	
<i>Enjoyment</i>	4	.879	
OCB	11	.858	.95
<i>Sportsmanship</i>	2	.755	
<i>Altruism</i>	3	.863	
<i>Consciousness</i>	3	.896	
<i>Civic virtue</i>	3	.921	
Perceived Fit with Customer	3	.879	.97
Job Satisfaction	3	.948	.97
Org Commitment	3	.921	.97

Convergent validity is the extent to which different approaches to measurement of a construct yield the same results. The most commonly used way to assess convergent validity is to consider each item in the scale as a different approach to measure the construct. Convergent validity is checked using the Bentler-Bonett coefficient ( $\Delta$ ) (Bentler and Bonett 1980). The Bentler-Bonett coefficient ( $\Delta$ ) is the ratio of the

difference between the chi-square value of the null measurement model and the chi-square value of the specified measurement model to the chi-square value of the null model. As shown in Table 8, the Bentler-Bonett coefficients ( $\Delta$ ) for all seven constructs are greater than 0.90, meaning that strong convergent validity of scale was demonstrated.

#### 4.5.5 Discriminant Validity

**Table 9**

**Comparison between AVE and Square of Correlation**

<i>Target Construct</i>	1st Square of the Correlation	2nd Square of the Correlation	<i>AVE</i>	<i>Discriminant Validity</i>
<i>PCP</i>	.102 ( <i>CO</i> )	.072( <i>OCBA</i> )	0.547	Obtained
<i>WE</i>	.518 ( <i>JS</i> )	.504 ( <i>CO</i> )	0.661	Obtained
<i>CO</i>	.372 ( <i>OCBC</i> )	.348 ( <i>OCBA</i> )	0.607	Obtained
<i>PCF</i>	.372 ( <i>OC</i> )	.348 ( <i>OCBA</i> )	0.723	Obtained
<i>OCBS</i>	.048 ( <i>OC</i> )	.040 ( <i>OCBCV</i> )	0.659	Obtained
<i>OCBCV</i>	.409 ( <i>OCBC</i> )	.336 ( <i>OC</i> )	0.571	Obtained
<i>OCBC</i>	.608 ( <i>OCBA</i> )	.409 ( <i>OCBCV</i> )	0.520	<i>Not obtained</i>
<i>OCBA</i>	.608 ( <i>OCBC</i> )	.336 ( <i>OCBCV</i> )	0.682	Obtained
<i>JS</i>	.518 ( <i>WE</i> )	.291 ( <i>OCBCV</i> )	0.866	Obtained
<i>OC</i>	.532 ( <i>JS</i> )	.476 ( <i>WE</i> )	0.796	Obtained

Note: 1. Correlated constructs are in parentheses.

2. Square of Correlation coefficients is the completely standardized estimates from the Phi matrix of CFA

Discriminant validity is the degree to which measures of different scales of the survey instrument are unique from each other. Discriminant validity exists when the proportion of variance extracted in each construct (AVE) exceeds the square of the coefficient representing its correlation with other constructs (Fornell and Larcker 1981).

As shown in Table 10, correlation coefficients are estimated from LISREL 8.54 and all were significant at the .01 level. In addition, all AVE exceed .50, showing construct validity. The results of the confirmatory factor analysis provided support for the reliable measurement of the model, which enabled me to go ahead and test the hypotheses of this study.

I chose the two constructs that have the highest correlation coefficients with the target construct. Except consciousness of OCB constructs, AVEs of other constructs are higher than the highest correlation coefficients. Thus discriminant validities of these constructs are obtained.

AVE of consciousness shows lower value than the highest correlation coefficients (ave of ocbe = .502 < .608). Thus discriminant validity for this sub-dimension is not obtained. However, as shown in the dimensionality test results, 4-factor solution shows better result than 3-factor solution. Based on this, I use four-factor of organizational citizenship behavior for further analysis.

**Table 10****Measure Correlations, Squared Multiple Correlations and CR**

<i>Measures</i>	<i>PCP</i>	<i>WE</i>	<i>CO</i>	<i>PCF</i>	<i>OCBS</i>	<i>OCBCV</i>	<i>OCBC</i>	<i>OCBA</i>	<i>JS</i>	<i>OC</i>	<i>SMC</i>	<i>CR</i>
Perceived Customer Participation ( <i>PCP</i> )	1.00										0.546	0.855
Work Engagement ( <i>WE</i> )	0.24	1.00									0.662	0.931
Customer Orientation ( <i>CO</i> )	0.32	0.71	1.00								0.608	0.939
Perceived Fit with Customer ( <i>PCF</i> )	0.19	0.64	0.32	1.00							0.723	0.886
OCB Sportsmanship ( <i>OCBS</i> )	0.01	0.09	0.26	0.32	1.00						0.660	0.790
OCB Civic Virtue ( <i>OCBCV</i> )	0.18	0.60	0.53	0.47	0.20	1.00					0.573	0.798
OCB Consciousness ( <i>OCBC</i> )	0.22	0.53	0.61	0.58	0.06	0.64	1.00				0.520	0.764
OCB Altruism ( <i>OCBA</i> )	0.27	0.49	0.59	0.59	0.05	0.58	0.78	1.00			0.683	0.865
Job Satisfaction ( <i>JS</i> )	0.21	0.72	0.50	0.47	0.00	0.54	0.44	0.40	1.00		0.866	0.951
Organizational Commitment ( <i>OC</i> )	0.17	0.69	0.56	0.61	0.22	0.58	0.54	0.49	0.73	1.00	0.796	0.921

Note: 1. Correlation coefficient is in the matrix.

2. Correlation coefficients are the completely standardized estimates from the Phi matrix of CFA.

3. SMC is squared multiple correlation coefficient.

4. CR is composite reliability.

#### 4.6 Structural Equation Modeling

Structural equation modeling (SEM) was performed to test the hypothesized model using LISREL 8.54. SEM is known as latent variable analysis or causal modeling as it provides parameter estimates of the direct and indirect links between observed variables. Boxes represent manifest or measured variables, whereas circles indicate latent or unobserved variables.

The model's exogenous variables ( $\xi_n$ ) were measured by X variables. There are seven indicators used for the construct of perceived customer participation ( $\xi_1$ ); ten indicators used for the construct of customer orientation ( $\xi_2$ ); three indicators used for the perceived fit with customer ( $\xi_3$ ). Similarly, the model's endogenous variables ( $\eta_n$ ) were measured by Y variables. Seven indicators measured the construct of employee work engagement ( $\eta_1$ ), two indicators measured the construct of sportsmanship ( $\eta_2$ ), three indicators measured the construct of civic virtue ( $\eta_3$ ), three indicators measured the construct of consciousness ( $\eta_4$ ), and three indicators measured the construct of altruism ( $\eta_5$ ). Three indicators measured the construct of employee job satisfaction ( $\eta_6$ ), and three indicators measured the construct of organizational commitment ( $\eta_7$ ).

The  $\gamma_n$  parameters indicate the size and direction of the causal influence from  $\xi_n$  to work engagement ( $\eta_1$ ). Also, the  $\beta_n$  parameters indicate the size and direction of the causal influence from work engagement ( $\eta_1$ ) to sportsmanship ( $\eta_2$ ), civic virtue ( $\eta_3$ ), consciousness ( $\eta_4$ ), altruism ( $\eta_5$ ), job satisfaction ( $\eta_6$ ), and organizational commitment ( $\eta_7$ ). The hypothesized model resulted in a good fit with  $\chi^2=4772.10$ ,  $p=.00$ ,  $df=1208$ ,



CFI = .95, REMSA=.0082, NFI=0.93, and IFI=0.95. All the model-fit indices exceeded their respective common acceptance levels, indicating that the overall model fit the data.

#### 4.7 Hypotheses and Paths Testing: Part 1

The statistical significance of all the structural parameter estimates was examined to determine the validity of the hypothesized paths. Table 11 lists the structural parameter estimates and the hypothesis testing results.

**Table 11**

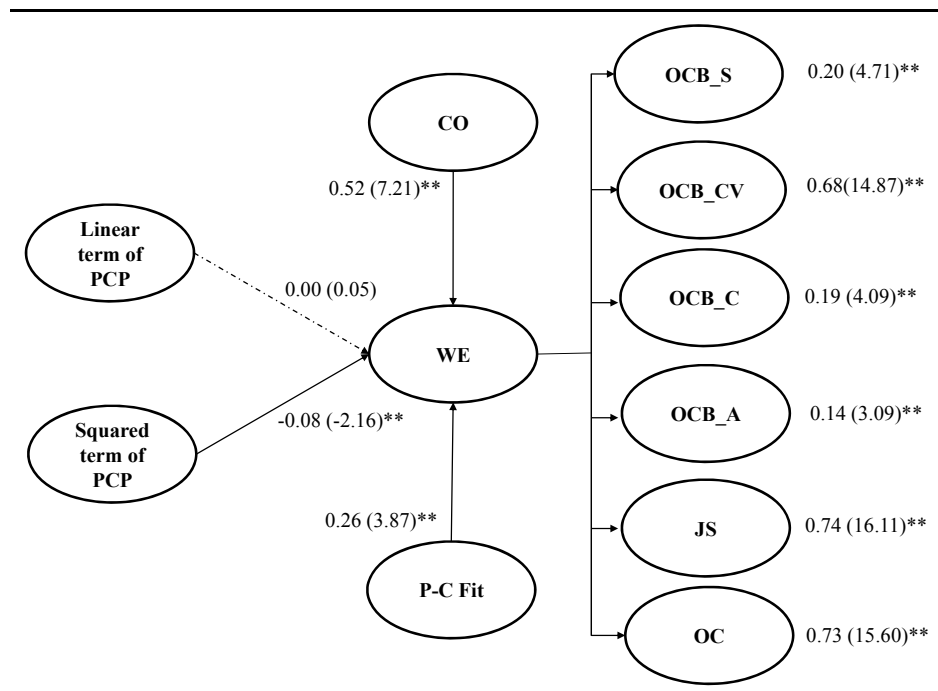
**Structural Parameter Estimates for Hypothesized Model**

Casual Path	Hypothesis	Standardized Coefficient	t-Value	Assessment (p < .05)
PCP <sup>2</sup> → WE	H1 (-)	-0.08	-2.34	Significant
CO → WE	H2 (+)	0.52	7.66	Significant
PCF → WE	H3 (+)	0.26	3.94	Significant
WE → OCB_S	H6a (+)	0.20	4.72	Significant
WE → OCB_CV	H6b (+)	0.68	14.87	Significant
WE → OCB_C	H6c (+)	0.19	4.09	Significant
WE → OCB_A	H6d (+)	0.14	3.09	Significant
WE → JS	H7 (+)	0.74	16.10	Significant
WE → OC	H8 (+)	0.73	15.60	Significant

Note: 1. PCP (Perceived Customer Participation), CO (Customer Orientation), PCF (Perceived Fit with Customer), WE (Work Engagement), OCB\_S (OCB Sportsmanship), OCB\_CV (OCB Civic Virtue), OCB\_C (OCB Consciousness), OCB\_A (OCB Altruism), JS (Job Satisfaction), and OC (Organizational Commitment).

4.7.1 Results of Testing Hypotheses 1

**Figure 12**  
**Comparison between Linear and Curvilinear effect**



Note: 1. \*\*  $p < .01$ , and \*  $p < .05$ ; Solid line: significant relationship; Dashed line: non-significant relationship.

Hypotheses 1 predict an inverted U-shaped relationship between the frontline employee PCP ( $\xi_1$ ) toward employee work engagement ( $\eta_1$ ). The analytical results supported Hypotheses 1.

First, to justify the curvilinear relationship between PCP and work engagement, the linear term and squared term of customer participation are included in the same model. As shown in the Figure 12, the results show that the linear term of customer participation has no significant effect on employee work engagement ( $t=0.05$ ,  $p > .1$ ), but the squared

term of customer participation shows a negative relationship with work engagement ( $t=-2.16, p<.01$ ),

Thus I can conclude that the relationship between PCP and work engagement is not a linear but a curvilinear relationship, specifically, the negative sign of this link represents an inverted U-shaped relationship between customer participation and work engagement.

H1 was supported ( $t=-2.34, p<.01$ ), meaning that only an appropriate level of customer participation was considered as a type of job resource in predicting employee work engagement. However, an inappropriate level of customer participation (either very little or too much) can be regarded as a job demand and negatively related with work engagement.

This result was consistent with the JD-R explanations. The JD-R model posits that various job demands may lead to resource loss, such as health problems and reduction of employee energy resources in the form of burnout. On the other hand, job resources may increase employee well-being and motivation at work (Bakker and Demerouti 2007; Demerouti et al. 2001).

#### 4.7.2 Results of Testing Hypotheses 2 and 3

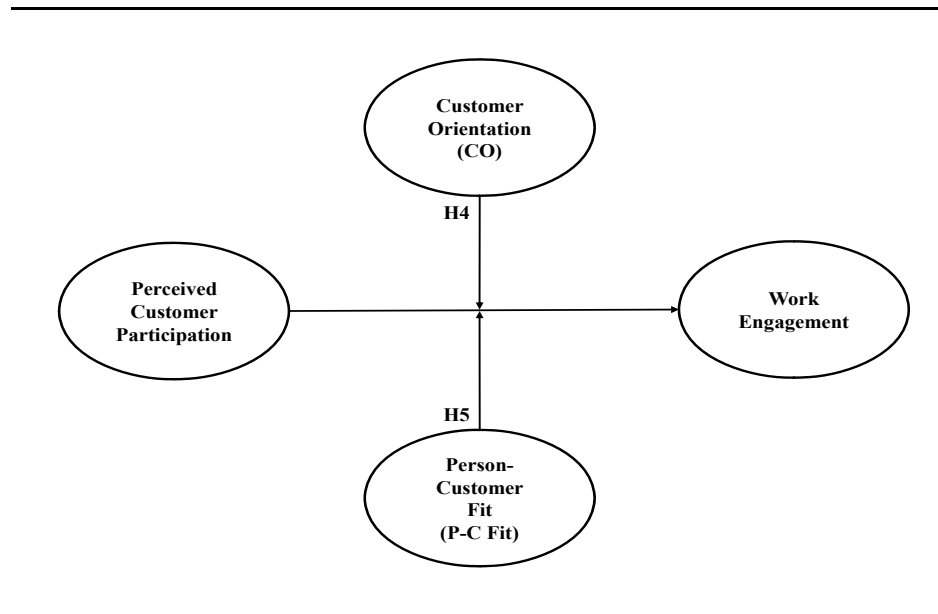
Hypotheses 2 and 3 predict a positive relationship between the two exogenous variables (CO and PCF) toward work engagement. The analytical results supported Hypotheses 2 and 3.

H2 was supported ( $t=7.66$ ,  $p<.01$ ), meaning that customer orientation ( $\xi_2$ ) was considered a job resource factor in predicting frontline employee work engagement ( $\eta_1$ ). This result was consistent with the previous findings (De Jonge and Dormann 2006; Babakus et al. 2009) that CO serves as a stress coping resource in the JD-R model.

In addition, the results indicate that work engagement ( $\eta_1$ ) was positively predicted by employee perceived fit with the customer ( $\xi_3$ ) as well, which leads to the acceptance of H3 ( $t=3.94$ ,  $p<.01$ ). This result was also consistent with the findings of Hobfoll (1989) and Schaufeli, Bakker and Rhenen (2009).

## 4.8 Hierarchical Moderated Regression

**Figure 13**  
**Moderated Effects of CO and PCF**



### 4.8.1 Results of Testing for Hypothesis 4

Hypothesis 4 and 5 in this study are tested using weighted OLS-based hierarchical regression. Each second-order construct (PCP, WE and CO) is composed as a weighted summated index of the items that constitute the construct based on CFA. To calculate weighted summated index, I averaged  $\lambda(x)$  and  $\lambda(y)$  based on each sub dimension and multiplied with average sum per subdimension.

The squared term for PCP is entered in Model 2, followed by CO in Model 3. The interaction term between the squared term for PCP and CO is placed in Model 5.

Notice that the signs of the regression coefficients for the squared term represent the direction of curvature produced by the PCP effect on work engagement. In other words, the regression-coefficient estimate of the quadratic terms for PCP is the key to whether a relationship is U- or inverted U-shaped. The coefficient of the interaction terms associated with the coefficient of the squared term describes how the nonlinear relationship between PCP and work engagement are moderated by CO and PCF. To reduce or eliminate the bias resulting from multicollinearity, this study followed a straightforward procedure suggested by Friedrich (1982). One first standardizes the criterion (work engagement) and the regressors (PCP, CO, and PCF) and then forms the cross product terms and the quadratic term. The following Tables (Table 12, 13, 14, and 15) present moderated regression analysis results. The variance inflation factors (VIF) for all coefficient estimates in Model 5 are below the cutoff of 10 (Mason and Perrault 1991), indicating that multicollinearity does not contaminate the results.

Table 12 shows the moderating effect of CO on the link between PCP squared and work engagement. The addition of the PCP quadratic terms (Model 2) to the main effects model (Model 1) increases the R-square by about 0.6 %. The addition of the interaction terms (Model 3) to Model 5 increases the R-square by 1.8 %. The F-values for the two incremental R-squared values achieves a statistical significance at the 1-percent level.

The results (Model 2 and 5) show that the estimates for the customer participation squared term is negative, as expected in the literature. A negative coefficient estimate is observed in the squared term of PCP ( $-.048, p < 0.05$ ), indicating that there is a curvilinear relationship between customer participation and work engagement.

**Table 12**

**Moderated Effect of Customer Orientation**

Variable	Model1	Model2	Model3	Model4	Model5	VIF
PCP	.204 (4.681)**	.192 (4.355)**	.022 (.620)	.035 (.993)	.021 (.597)	1.149
PCP <sup>2</sup>		-.082 (-1.871)	-.043 (-1.242)	-.068 (-1.928)*	-.048 (-1.994)*	1.148
CO			.636 (17.954)**	.624 (17.659)**	.558 (12.327)**	1.824
PCP X CO				.110 (3.141)**	.109 (3.127)**	1.079
PCP <sup>2</sup> X CO				.	.108 (2.292)*	1.965
R <sup>2</sup>	.042	.048	.420	.432	.438	
Adjusted R <sup>2</sup>	.040	.045	.417	.427	.432	
F-vale	21.915**	12.763**	121.397**	95.123**	77.795**	

Note: 1. \*\* p < 0.01, \* p < 0.05.

2. Estimates are standardized coefficients

3. T-values are in parentheses.

4.8.2 Aiken and West Test for Hypothesis 4

As a further aid to interpretation, the nature of the interaction was examined using the procedure suggested by Aiken and West (1991) in Table 13. This procedure tests for the significance of regression-coefficient estimates for the PCP squared variable at one standard deviation above and below the mean of the CO moderator. A nonsignificant negative relationship was found between customer participation squared and work engagement (-.207, p > 0.1) at a low level of CO. At a high level of CO, the relationship between customer participation squared and work engagement was positive and significant (0.223, p < 0.05).

**Table 13**

**Aiken and West Test for Customer Orientation**

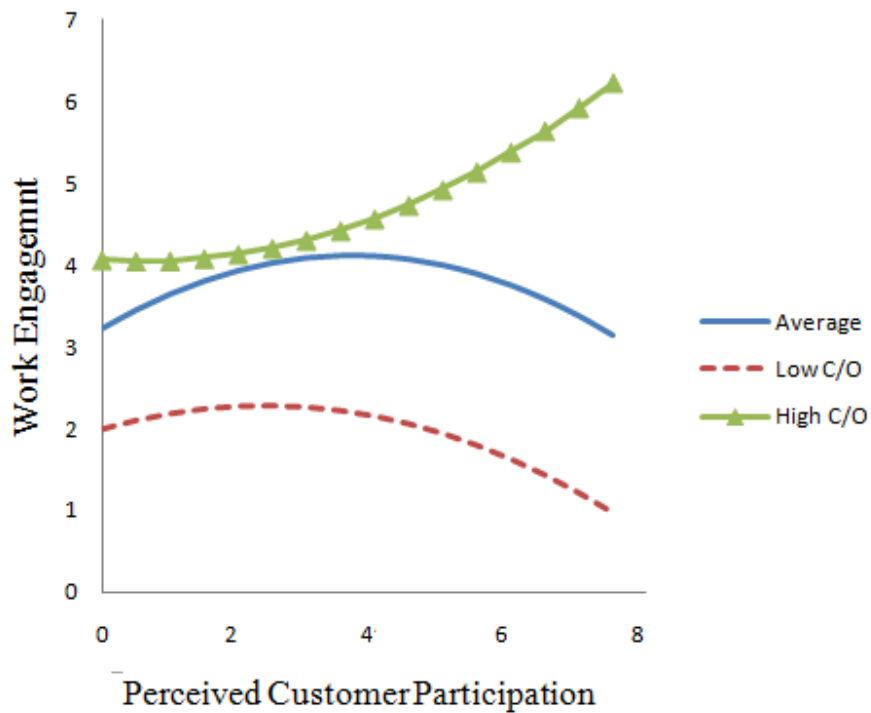
Model	R <sup>2</sup>	Adjusted R <sup>2</sup>	F-value	Beta	Sig
Overall	.013	.011	6.80	-.114 (-2.608)**	.009
Low CO	.043	.030	3.482	-.207 (-1.866)	.066
High CO	.050	.039	4.665	.223 (2.160)*	.033

Note: 1. \*\* p < 0.01, \* p < 0.05.

2. T-values are in parentheses.

**Figure 14**

**Slope Analysis for different levels of Customer Orientation**



Note: 1. Dashed line: non-significant relationship.



#### 4.8.3 Results of Testing for Hypothesis 5

Table 14 displays the extent to which PCF moderates the effects of the squared terms for PCP on work engagement. The results of Model 5 show that the coefficient estimates for the PCP squared terms is negative and significant (-.075,  $P < .05$ ), as expected in the literature.

After taking the PCF moderating effect into account, the results in Model 5 show that the coefficient estimate for the interaction term between the PCP squared term and PCF is positive and significant (.127,  $P < .01$ ). Thus the results suggest that high PCF strengthens the curvilinear relationship between customer participation and work engagement, supporting H5.

**Table 14**

#### Moderated Effect of Perceived Fit with Customer

Variable	Model1	Model2	Model3	Model4	Model5	VIF
PCP	.197 (4.565)**	.184 (4.228)**	.108 (3.011)**	.120 (3.345)**	.119 (3.340)**	1.060
PCP <sup>2</sup>		-.086 (-1.979)**	-.039 (-1.099)	-.047 (-2.436)**	-0.75 (-2.344)**	1.148
PCF			.577 (16.232)**	.561 (15.670)**	.483 (10.484)**	1.771
PCP X PCF				.093 (2.611)**	.086 (2.407)**	1.055
PCP <sup>2</sup> X PCF					.127 (2.664)**	1.907
<i>R</i> <sup>2</sup>	.039	.046	.370	.378	.387	
Adjusted <i>R</i> <sup>2</sup>	.037	.042	.366	.373	.381	
<i>F</i> -vale	20.838**	12.437**	100.351**	77.821**	64.418**	

Note: 1. \*\*  $p < 0.01$ , \*  $p < 0.05$ .

2. Estimates are standardized coefficients

3. T-values are in parentheses.

#### 4.8.4 Aiken and West Test for Hypothesis 5

**Table 15**

**Aiken and West Test for Perceived Fit with Customer**

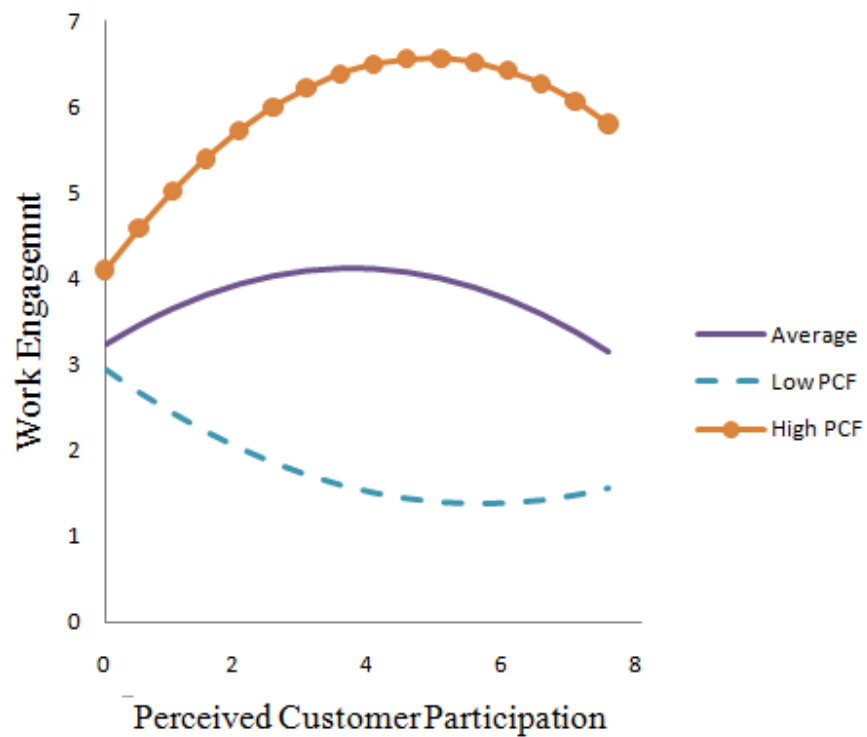
Model	R <sup>2</sup>	Adjusted R <sup>2</sup>	F-value	Beta	Sig
Overall	.013	.011	6.80	-.114 (-2.608)**	.009
Low PCF	.024	.009	1.592	.156 (1.262)	.212
High PCF	.092	.082	9.392	-.303 (-3.065)**	.003

Note: 1. \*\* p < 0.01, \* p < 0.05.

2. T-values are in parentheses.

**Figure 14**

**Slope Analysis for different levels of Perceived Fit with Customer**



Note: 1. Dashed line: non-significant relationship.

Table 15 displays the extent to which employee perceived fit with customer (PCF) moderates the effects of the squared terms for customer participation squared on work engagement. The nature of the interaction was examined using Aiken and West's (1991) procedure. At a high level of PCF (high level of PCF), a negative and significant relationship was found between customer participation squared and work engagement ( $-0.303$ ,  $p < 0.05$ ). At a low level of PCF, the relationship between customer participation perception and work engagement was not significant ( $0.156$ ,  $p > 0.1$ ).

## **4.9 Hypotheses and Paths Testing: Part 2**

### 4.9.1 Testing Hypothesis 6

In this part, effects of work engagement on frontline employee behavioral and emotional responses are examined. The finding of this study support H6a, indicating that the effect of work engagement ( $\eta_1$ ) on employee sportsmanship ( $\eta_2$ ) is positively significant ( $t=4.72$ ,  $p<.01$ ). Furthermore, H6b, with a significant coefficient ( $t=14.87$ ,  $p<.01$ ), predicts a positive relationship between work engagement ( $\eta_1$ ) and civic virtue ( $\eta_3$ ), suggesting that when an employee perceived a high work engagement, he/she would be more likely to responsibly engage in behaviors that shows concern for the company and employee initiative in recommending how the firm can improve operations.

For employee consciousness, H6c was supported ( $t=4.09$ ,  $p<.01$ ) and predicts that, as employees perceive a positive work-related state of mind (work engagement,  $\eta_1$ ), behaviors above and beyond the role requirements of the organization-working long days ( $\eta_4$ ) will also increase.

H6d is also supported ( $t=3.09, p<.01$ ), indicating that the effect of employee work engagement ( $\eta 1$ ) on employee altruism ( $\eta 5$ ) is significant. Thus, when an employee perceives high work engagement, his/her discretionary behavior that involves helping others within the organization with company tasks would positively increase.

#### 4.9.2 Testing Hypothesis 7 and 8

The results of this study suggest that the effect of work engagement ( $\eta 1$ ) on employee job satisfaction ( $\eta 6$ ) is significant ( $t=16.10, p<.01$ ), which leads to the support of H7. Thus employees who engage more in his/her work is more satisfied with his/her job.

Moreover, H8 is supported ( $t=15.60, p<.01$ ), indicating that the effect of employee work engagement ( $\eta 1$ ) on organizational commitment ( $\eta 7$ ) is significant. Thus, when employees perceive more work engagement, their commitment toward the organization would positively increase.

These findings are consistent with previous research that work engagement helps employees derive benefits from stressful work (Britt, Adler, and Bartone 2001), and positively relates to organizational commitment (Demerouti, Bakker, Nachreiner, and Schaufeli 2001).

## CHAPTER V

### DISCUSSION

In the first section of this chapter, the study findings are summarized through the dynamic characteristics of PCP, psychological process of customer participation perception and the emotional and behavioral responses of PCP among frontline employees in bank and insurance services.

The implications of the research findings to existing theories are discussed in the second section. The third section of this chapter discussed applications of the study's findings in the service operation. Discussion of the limitations of the present study and suggestions for future study directions are presented in the final section of this chapter.

#### **5.1 Conclusions**

The subject of customer participation in service production and delivery has received considerable attention over the past 20 years. While on the one hand the wealth of research into this topic has favored the development of numerous analytic perspectives, it has also brought to light the active role of customers, who are no longer simply present but rather participate in service co-production.

Customer participation is provided during the interaction between customers and customer-contact employees. Thus, frontline employees are beneficiaries of customer participation and may work as mediators who connect customer co-creating efforts to positive organizational outcomes. In spite of the importance of the frontline employee's role, previous research has focused on the positive results of customer participation from the customers' and companies' sides while the study of the effect of customer participation on employee attitude and behavior is limited (Bendapudi and Leone 2003; Marzocchi and Zammit 2006).

Furthermore, previous research has shown inconsistent finding for the effect of customer participation from the employee's perspective. For example, Yoon et al. (2004) suggest that, from the contact employees' perspective, customer participation in a dyadic interaction encounter is an important human factor that can influence employees' work efforts and emotional states such as job satisfaction. Thus, customer participation can be the signal of a relationship investment for a long-term relationship.

On the other hand, Hsieh, Yen and Chin (2004) explain that customer participation is difficult to manage and represents a source of uncertainty for service providers (Argote 1982; Bowen and Jones 1986) and it increases employee perceived work load and job stress. Thus, from the employee's perspective, previous research has shown inconsistent findings on the effect of customer participation on employee's perceptions.

Therefore, the purpose of this study is to investigate the effect of customer participation on employee emotional and behavioral consequences and underlying

psychological processes. To fill the significant gap in the literature, this study focused on the following research objectives.

1. When do frontline employees evaluate customer participation as a positive resource or a negative job demand?
2. What are the unique resources from a frontline employees' perspective?
3. To what extent do frontline employee's unique resources (CO, frontline employee-customer fit) impact the relationship between customer participation and employee's work engagement?
4. What are the emotional and behavioral consequences of perceived customer participation?

## **5.2 Summary of Finding**

This study accomplished all of the objectives listed above. To accomplish these objectives, hypotheses were formed to test each of the relationships. All measures except PCF in the study were identified from previous research. These were subjected to reliability testing prior to hypothesis testing and support for each of measures was found. After deleting poorly loaded items, the perceived fit with customer (PCF) construct showed acceptable levels of reliability, convergent and discriminant validity. This minimized the likelihood of misinterpretation of the hypothesis testing due to invalid or unreliable measures.

The first objective was a better understanding of the dynamic characteristics of customer participation from the employee's perspective. Hypothesis 1 suggested that an

inappropriate level of customer participation can be regarded as a job demand and negatively relate to employee work engagement and an appropriate level of customer participation can be a signal of the customer's support and increased employee work engagement.

The results show that the squared terms of customer participation has a significant and negative effect on work engagement (inverted U-shape) and provides more variance for explaining work engagement when the squared term is added to the liner term of customer participation. Thus work engagement is maximized when PCP falls into the middle of the continuum. If consumers provide the proper level of customer participation to employees, employee work engagement is enhanced. As a result, findings of this research support the curvilinear relationship between customer participation perception and work engagement.

The second objective was to examine the effects of CO and PCF on work engagement as a unique type of job resource for frontline employees. Hypothesis 2 suggested that increased CO has a positive effect on a salesperson's level of work engagement. Hypothesis 3 suggested that the increased employee PCF has a positive effect on an employee's level of work engagement. Both of these findings are consistent with the motivational process of the JD-R model that job resources foster engagement and concomitant organizational commitment (Schaufeli and Bakker 2004). All of these findings indicate that frontline employees who have higher levels of CO and perception of the fit with customers will have higher levels of work engagement.



I also examined the moderating role of CO and perceived fit with customer (PCF) in the link between PCP and work engagement. Hypothesis 4 examined the potential moderating role of CO in the curvilinear relationship between customer participation and work engagement. The study suggests that at low levels of CO, there is a non-significant negative relationship between PCP and work engagement. In this study, the relationship between PCP and work engagement is a curvilinear relationship thus the relationship should be negative. However, at high levels of CO, the relationship between PCP and work engagement is a significant positive relationship as shown in Table 13. This finding suggests that frontline employees who have high levels of customer orientation may regard an excessive level of PCP as a positive job resource. This finding means that customer oriented employees are more tolerant of unnecessary customer participation. Compared to other cases, the high CO case explains the largest variance in predicting work engagement. This result has important implications for both researchers and managers that are discussed later in this chapter.

Hypothesis 5 examined the potential moderating role of frontline employee's perceived fit with customers (PCF) on the relationship between PCP and work engagement. Results showed that the relationship between PCP and work engagement is positively moderated by PCF. The findings also provide that at lower levels of PCF, the relationship between PCP and work engagement is not significant. However, at higher levels of PCF, the relationship between PCP and work engagement is significant and negative as suggested in this study. Furthermore, compared to the overall level of PCF, a high level of PCF showed a steeper effect of PCP on work engagement. This finding

suggests that employee's PCF can have positive effects when dealing with the PCP/work engagement relationship.

The final goal of this study is to identify the emotional and behavioral responses of perceived customer participation (PCP). Hypothesis 6 suggested that increased frontline employee work engagement has a positive effect on employee organizational citizenship behavior which is consist with sportsmanship, civic virtue, consciousness, and altruism. For better understanding, I analyzed data at the sub-dimension levels. The results showed that frontline employees who have higher levels of work engagement are generally more tolerant with less ideal circumstances and show more concern for the company and employee initiative. I also found that employees who have higher work engagement provide more discretionary behavior for the organization and others in the organization.

The results from hypothesis 7 focusing on the relationship between work engagement and employee job satisfaction provide an expected picture. The findings confirm previous researchers' suggestions (Saks 2006; Schaufeli and Bakker 2004; Sonnentag 2003). As employee work engagement increases, his/her job satisfaction also increases. Thus, PCP has indirect effects on employee job satisfaction trough work engagement.

Finally, hypothesis 8 suggested that increased work engagement has positive effects on employee organizational commitment. This result is consistent with Hakanen, Bakker, and Schaufeli's research (2006). They provided the evidence of a mediating role

of work engagement between job resources and positive motivational outcomes, indicated by organizational commitment (Hakanen et al. 2006).

While in the framework of the research model I propose a number of variables and relationships that might influence frontline employee performance, the study might have excluded other relevant variables or potential relationships from the tested model. For example, job satisfaction and organizational commitment are the most frequently cited predictors of employee organizational citizenship behavior. If I include the links between job satisfaction and OCB or organizational commitment and OCB, it will increase the goodness of fit index for the overall model. However, the goal of this research is identification of internal and external benefits of employee perceived customer participation instead of relationships among dependent variables.

In summary, the dissertation finds supports for all of the proposed theoretical arguments related to PCP, work engagement, CO, PCF, and employee's emotional and behavioral responses.

## **5.3 Implication**

Based on the findings of this study, there are implications for researchers and managers. This section is divided into two parts, theoretical implications and managerial implications. Theoretical implications focus on the relevance of the study in the academic field.

For managers, the section on managerial implications discusses the relevance of the findings to the practice of service management and marketing, and makes recommendations for managerial actions.

### 5.3.1 Theoretical Implications

From a theoretical perspective, the present study:

1. Extends and links existing research in the areas of customer participation, work engagement, customer orientation, perceived fit with customer, organizational citizenship behavior, job satisfaction, and organizational commitment using the job resource and demand model as a theoretical base.
2. Empirically identifies the curvilinear effect of perceived customer participation on work engagement and explains the reason for inconsistent findings of previous research.
3. Introduces and operationalizes the new construct perceived fit with customer

4. Suggests customer orientation and perceived fit with customer as unique job resources for frontline employees and examines these constructs as predictors based on a motivational process and as moderators based on a strain (energetic) process.
5. Empirically examines the conceptualized relationships in the theoretical model and supports the internal and external benefits of perceived customer participation.

This study extends previous research by suggesting the effect of PCP on frontline employee as a curvilinear effect. The study found a significant inverted U-shaped relationship between customer participation and work engagement which are important findings for service marketing. This study was also the first to use the JD-R model in the area of service employee management. This study was also the first to suggest the concept of PCF. Further refinement and examination of the PCF scale is necessary, and this study provides several interesting findings to develop through further research.

Results indicate that PCP, CO and PCF can be viewed as job resources, and the JD-R model provides a theoretical base in further studying the dynamic effects of customer participation on frontline employees.

This study introduces a revised scale to measure the level of employee PCP. Previous studies did not consider and reflect both the positive and negative side of customer participation simultaneously, especially with respect to excessive levels of participation, in the measurement anchors.

The large sample size and high response rate (72.4%) provide a thorough examination of the conceptualized relationships. This study empirically examined work engagement as a possible mediating variable in the relationship between customer participation and employees' emotional and behavioral responses.

### 5.3.2 Managerial Implications

From a managerial perspective, the present study provides guidance for service and sales managers looking to manage appropriate levels of customer participation. From a practitioner standpoint, examining the curvilinear relationships of customer participation and work engagement is of great importance given the benefits and costs associated with managing customer participation. This study suggests that FLEs perceived customer participation does not necessarily enhance economic benefits of productivity gains by using customers as substitutes for portions of employee labor. Only the appropriate level of perceived customer participation is positively related with productivity through enhancing employee work engagement. Low and excessive levels of perceived customer participation reduce work engagement and it may decrease firm productivity. Thus, managers should reduce the negative effect of perceived customer participation on work engagement by increasing FLE's understanding on customer participation. As explained previously, customer participation is customer's voluntary and valuable behavior and it can be a signal of customer involvement. Thus, if managers can improve their employees' attitude regarding customer involvement, then it may

expand the scope of employee's perception of customer participation as a job resource, which increases FLE's work engagement.

Another finding with managerial relevance involves the direct and buffering effects of frontline employee's CO on the relationship between PCP and employee's work engagement. Much past research suggests that CO is important for sales and service employees. This study indicates that employees who have low levels of CO are more vulnerable to job demands (low and excessive level of customer participation). On the other hand, frontline employees who have high levels of CO are more tolerant of demanding works like excessive levels of customer participation. General employees regarded higher levels of customer participation as workload, however, frontline employees who have more CO showed more tolerant attitudes toward unnecessary and excessive levels of customer participation and regarded it as a job resource. Thus, by monitoring and managing CO levels, managers can reduce the detrimental effects of inappropriate perceived customer participation.

Results indicate that frontline employees who worked with more suitable customers are also tolerant of demanding customer participation. From the manager's perspective, managing employee's PCF is not easy to control because they are not able to organize perceptions of employees and customers simultaneous. However, if managers have general information about the customers that they target, they can recruit and place employees who fit better with their customers. It will increase the positive effect and decrease the negative effect of customer participation leading to higher performances.

Finally, this study suggests the internal and external benefit of frontline employee work engagement. As shown in the results, work engagement is the driver of frontline employees' organization and customer focused behavior. Considering the positive results of work engagement, perhaps most obvious is the suggestion that work engaged workers should be placed in high-customer-contact positions to magnify not only internal benefits but also external profit. Of greater concern, perhaps, is the placement of a worker who has a lower work engagement in a high-contact position.

#### **5.4 Limitation and Future Research**

First, this study is limited by its cross-sectional approach. The measuring method of the survey was based on the participant's experience. Although the methodology is well established, participants answering the questions based responses on their memory which may bias the results. Future research should attempt to conduct a longitudinal study where the differences in the relationships can be studied at various points in time providing greater support for causality.

This research did not examine the impact of employee's regulatory focus, or manager's goal orientation on the relationship between customer participation and work engagement. For example, how do frontline employee's prevention and promotion focus influence the link between customer participation and work engagement? Can different managers' goal orientations impact the relationship between customer participation and work engagement?



The study's focus is also limited to two specific industries (bank and insurance). Although, I found that there is no significant difference between these two industries, I cannot completely rule out the possibility that the results may differ across other industries. Future research should be directed to look at these relationships across various sectors of the economy.

Finally, as many customer contact employees take on an increasingly global presence, this study is limited as all respondents work and live within South Korea. Future research should examine these relationships in a multi-national context. Distinct difference may exist between a US sample and the Korean sample used in this study, that when examined could provide guidance to managers of international sales forces.

## REFERENCES

- Adkins, Bryan and David Caldwell (2004), "Firm or subgroup culture: where does fitting in matter most?" *Journal of Organizational Behavior*, 25 (8), 969–978.
- Adkins Cheryl L., Craig J. Russell, and James D. Werbel (1994), "Judgments of fit in the selection process: The role of work value congruence," *Personnel Psychology*, 47 (3), 605–623.
- , Elizabeth C. Ravlin, and Bruce M. Meglino (1996), "Value congruence between co-workers and its relationship to work outcomes," *Group and Organization Management*, 21, 439–460.
- Aiken, Leona S. and Stephen G. West (1991), *Multiple Regression: Testing and Interpreting Interactions*, Newbury Park, CA: Sage.
- Anderson, James C. and David W. Gerbing (1988), "Structural equation modeling in practice: a review and recommended two-step approach," *Psychological Bulletin*, 103 (3), 411–423.
- Antonioni, David and Heejun Park (2001), "The effects of personality similarity on peer ratings of contextual work behaviors," *Personnel Psychology*, 54 (2), 331–360.
- Argote, Linda (1982), "Input uncertainty and organizational coordination in hospital emergency units," *Administrative Science Quarterly*, 27 (3), 420–434.
- Argyris, Chris (1960), *Understanding organizational behavior*. Homewood, IL: Dorsey.

Babakus Emin, Ugur Yavas, and Nicholas J. Aashill (2009), "The role of customer orientation as a moderator of the job demand–burnout–performance relationships: A surface–level trait perspective," *Journal of Retailing*, 85 (4), 480–492.

Bakker, Arnold B. and Evangelia Demerouti (2007), "The job demands–resources model: State of the art," *Journal of Managerial Psychology*, 22 (3), 309–328.

----- and ----- (2008), "Towards a model of work engagement," *Career Development Internal*, 13 (3), 209–223.

-----, -----, Elpine De Boer, and Wilmar B. Schaufeli, (2003), "Job demands and job resources as predictors of absence duration and frequency," *Journal of Vocational Behavior*, 62 (2), 341–356.

-----, -----, Taris, W. Toon, Wilmar B. Schaufeli, and Paul J. G. Schreurs (2003), "A multi–group analysis of the job demands–resources model in four home care organizations," *International Journal of Stress Management*, 10, 16–38.

-----, -----, and Verbeke Willem (2004), "Using the job demands–resources model to predict burnout and performance," *Human Resource Management*, 43 (1), 83–104.

-----, Jari J. Hakanen, Evangelia Demerouti, and Despoina Xanthopoulou (2007), "Job resources boost work engagement, particularly when job demands are high," *Journal of Educational Psychology*, 99 (2), 274–284.

----- and Wilmar B. Schaufeli (2008), "Positive organizational behavior: Engaged employees in flourishing organizations," *Journal of Organizational Behavior*, 29 (2), 147–154.

Baldauf, Artur, David W. Cravens, and Nigel F. Piercy (2005), "Sales management control research–synthesis and an agenda for future research," *Journal of Personal Selling and Sales Management*, 25 (1), 7–26.

Baron, Reuben M. and David A. Kenney (1986), "The moderator–mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations," *Journal of Personality and Social Psychology*, 51 (6), 1173–1182.

- Bartel, Caroline A. (2001), "Social comparisons in boundary-spanning work: Effects of community outreach on members' organizational identity and identification," *Administrative Science Quarterly*, 46, 379–413.
- Bateman, Thomas S. and Dennis W. Organ (1983), "Job satisfaction and the good soldier: The relationship between affect and employee 'citizenship,'" *Academy of Management Journal*, 26 (4), 587–595.
- Bateson, J. E. G. (1985), "Self-service consumer: An exploratory study," *Journal of Retailing*, 61 (3), 49–76.
- Becker, Howard S. (1960), "Notes on the concept of commitment," *American Journal of Sociology*, 66, 32–42.
- Becker, Tomas E. (1992), "Foci and bases of commitment: Are they distinctions worth making?" *Academy of Management Journal*, 35 (1), 232–244.
- Bendapudi, Neeli and Robert P. Leone (2003), "Psychological implications of customer participation in co-production," *Journal of Marketing*, 67 (January), 14–28.
- Bentler, P. M., and Douglas G. Bonett, (1980), "Significant tests and goodness of fit in the analysis of covariance structure," *Psychological Bulletin*, 88 (3), 588–606.
- Boles, James S., Barry J. Babin, Thomas G. Brashear, and Charles Brooks (2001), "An examination of the relationships between retail work environments, salesperson selling orientation–customer orientation and job performance," *Journal of Marketing Theory and Practice*, 9 (Summer), 1–13.
- Bowen, David E. and Gareth R. Jones (1986), "Transaction cost analysis of service organization–customer exchange," *Academy of Management Review*, 11 (2), 428–441.
- Bowen, John and Robert C. Ford (2002), "Managing service organizations: does having a 'thing' make a difference?" *Journal of Management*, 28 (3), 447–469.
- Bretz, Robert D. (1993), "Recruiter perceptions of applicant fit: Implications for individual career preparation and job search behavior," *Journal of Vocational Behavior*, 43 (3), 310–327.

- Britt, Thomas W., Amy B. Adler, and Paul T. Bartone (2001), "Deriving benefits from stressful events: The role of engagement in meaningful work and hardiness," *Journal of Occupational Health Psychology*, 6 (1), 53–63.
- Brown, Steven P., William L. Cron, and John W. Slocum Jr. (1997), "Effects of goal-directed emotions on salesperson volitions, behavior, and performance: a longitudinal study," *Journal of Marketing*, 61 (1), 39–50.
- Brown, Tom J., John C. Mowen, Todd D. Donovan, and Jane W. Licata (2002), "The customer orientation of service workers: Personality trait determinants and effects on self- and supervisor performance ratings," *Journal of Marketing Research*, 39 (February), 110–19.
- Burisch, Matthias (2002), "A longitudinal study of burnout: The relative importance of dispositions and experiences," *Work and Stress*, 16 (1), 1–17.
- Byrne, Barbara M. (1998), *Structural equation modeling with LISREL, PRELIS, and SIMPLIS: Basic concepts, applications and programming*. Mahwah, NJ: Erlbaum.
- Cable, Daniel M. and Charles K. Parsons (2001), "Socialization tactics and person-organization fit," *Personnel Psychology*, 54 (1), 1–23.
- and Scott D. DeRue (2002), "The convergent and discriminant validity of subjective fit perceptions," *Journal of Applied Psychology*, 87 (5), 875–884.
- and Timothy A. Judge (1997), "Interviewers' perceptions of person-organization fit and organizational selection decisions," *Journal of Applied Psychology*, 82 (4), 546–561
- Caldwell, David F., Jennifer A. Chatman, and Charles A. O'Reilly (1990), "Building organizational commitment: A multifirm study," *Journal of Occupational Psychology*, 63 (3), 245–61.
- Chan, Kimmy Wa, Chi Kin (Bennett) Yim, Simon S. K. Lam (2010), "Is customer participation in value creation a double-edged sword? Evidence from professional financial services across cultures," *Journal of Marketing*, 74 (3), 48–64.
- Chase, Richard B. (1978), "Where does a customer fit in a service operation?" *Harvard Business Review*, 56 (6), 137–142.

- and David A. Tansik (1983), "The customer contact model for organization design," *Management Science*, 29 (9), 1037–1050.
- Childers, Terry L., Alan J. Dubinsky, and Steven J. Skinner (1990), "Leadership substitutes as moderators of sales supervisory behavior," *Journal of Business Research*, 21 (4), 363–382.
- Churchill, Gilbert A. Jr., Neil M. Ford, and Orville C. Walker Jr. (1974), "Measuring the job satisfaction of industrial salespeople," *Journal of Marketing Research*, 11 (August), 254–260.
- , -----, Steven W. Hartley, and Orville C. Walker (1985), "The determinants of salesperson performance: A meta-analysis," *Journal of Marketing Research*, 22 (May), 103–118.
- Claycomb, C., Cynthia A. Lengnick–Hall, and Lawrence W. Inks (2001), "The customer as a productive resource: A pilot study and strategic implications," *Journal of Business Strategies*, 18 (1), 47–69.
- Dabholkar, Pratibha A. (1990), How to improve perceived service quality by improving customer participation. In B. J. Dunlap (Ed.), *Developments in marketing science* (pp. 483–487).
- and Richard P. Bagozzi (2002), "An attitudinal model of technology–based self–service: Moderating effects of consumer traits and situational factors," *Journal of the Academy of Marketing Science*, 30 (3), 184–201.
- Danet, Branda (1981), Client–organizational relationships. In P.C. Nystrom and W.H. Starbuck (eds), *Handbook of Organizational Design*, New York: Oxford University Press, pp.382–428.
- Deci, Edward L., Robert J. Vallerand, Luc G. Pelletier, and Richard M. Ryan (1991), "Motivation and education: The self–determination perspective" *Educational Psychologist*, 26 (3/4), 325–346.
- De Jonge, Jan and Christian Dormann (2006), "Stressors, resources and strain at work: A longitudinal test of the triple match principle," *Journal of Applied Psychology*, 91 (5), 1359–1374.

- Demerouti, Evangelia and Arnold B. Bakker (2006), "Employee well-being and job performance: where we stand and where we should go," in Houdmont, J. and McIntyre, S. (Eds), *Occupational Health Psychology: European Perspectives on Research, Education and Practice*, Vol. 1, ISMAI Publications, Maia.
- , -----, Nachreiner, F., and Wilmar B. Schaufeli (2001), "The job demands-resources model of burnout," *Journal of Applied Psychology*, 86 (3), 499-512.
- Donavan, Todd D., Tom J. Brown, and John C. Mowen (2004), "Internal benefit of service-worker customer orientation: Job satisfaction, commitment and organizational citizenship behavior," *Journal of Marketing*, 68 (January), 128-146.
- Dong, Beibei, Kenneth R. Evans, and Shaoming Zou (2008), "The effects of customer participation in co-created service recovery," *Journal of the Academy of Marketing Science*, 36 (1), 123-137.
- Dubinsky, Alan J., Roy D. Howell, Thomas N. Ingram, and Danny N. Bellenger (1986), "Salesforce socialization," *Journal of Marketing*, 50 (4), 192-207.
- Dwyer, Robert F. and Sejo Oh (1988), "Output sector munificence effects on the internal political economy of marketing channels," *Journal of Marketing Research*, 24 (4), 347-358.
- Edwards, Jeffrey R., Daniel M. Cable, Ian O. Williamson, Lisa Schurer Lambert, and Abbie J. Shipp (2006), "The Phenomenology of fit: Linking the person and environment to the subjective experience of person-environment fit," *Journal of Applied psychology*, 91 (4), 802-827.
- Eisenberger, Robert, Peter Fasolo, and Valerie Davis-LaMastro (1990), "Perceived organizational support and employee diligence, commitment, and innovation," *Journal of Applied Psychology*, 75 (1), 51-59.
- Ennew, Christine T. and Martin R. Binks (1999), "Impact of participative service relationships on quality, satisfaction and retention: an exploratory study," *Journal of Business Research*, 46 (2), 121-132.
- Erdogan, B. and Talya N. Bauer (2005), "Enhancing career benefits of employee proactive personality: the role of fit with jobs and organizations," *Personnel Psychology*, 58 (4), 859-891.

- Evans, Kenneth R., Timothy D. Landry, Po-Chien Li, and Shaoming Zou (2007), "How sales controls affect job-related outcomes: the role of organizational sales-related psychological climate perceptions," *Journal of the Academy of Marketing Science*, 35 (3), 445–459.
- Farrell, D. and Caryl E. Rusbult (1981), "Exchange variables as predictors of job satisfaction, job commitment, and turnover: The impact of rewards, costs, alternatives, and investments," *Organizational Behavior and Human Performance*, 28 (1), 78–95.
- Fornell, C. and David F. Larcker (1981), "Evaluating structural equation models with unobservable variables and measurement error," *Journal of Marketing Research*, 18 (1), 39–50.
- Friedrich, Robert J. (1982), "In defense of multiplicative terms in multiple regression equations," *American Journal of Political Science*, 26 (4), 797–833.
- Gatewood, Robert D. and Herbert S. Feild (1990). *Human Resource Selection*. Chicago, IL: Dryden Press.
- Gerbing, David W. and James C. Anderson (1988), "An updated paradigm for scale development incorporating unidimensionality and its assessment," *Journal of Marketing Research*, 25 (2), 186–192.
- Gierveld, J. H. and Bakker A. B. (2005), *De invloed van de secretaresse [The influence of the secretary]*. Diemen, The Netherlands: Manpower.
- Goff, Brent G., James S. Boles, Danny N. Bellenger, and Carrie Stojack (1997), "The influence of salesperson selling behaviors on customer satisfaction with product," *Journal of Retailing*, 73 (Summer), 171–184.
- Grandey, Alicia A. and Russel Cropanzano (1999), "The conservation of resources model applied to work-family conflict and strain," *Journal of Vocation Behavior*, 54 (2), 350–370.
- Graves, Laura M. and Gary N. Powell (1995), "The effect of sex similarity on recruiters' evaluations of actual applicants: A test of the similarity-attraction paradigm," *Personnel Psychology*, 48 (1), 85–98.



- Griffeth, Rodger W., Horn W. Peter, and Stefan Gaertner (2001), "A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium," *Journal of Management*, 26 (3), 463–488.
- Grizzle, Jerry W., Alex R. Zablah, Tom J. Brown and John C. Mowen (2009), "Employee customer orientation in context: How the environment moderates the influence of customer orientation on performance outcomes," *Journal of Applied Psychology*, 94 (5), 1227–1242.
- Hackman, Richard J. and Greg R. Oldham (1980), *Work redesign*. Reading, Massachusetts, Addison–Wesley.
- Hair, Joseph R, Rolph E. Anderson, Ronald L. Tatham, and William C. Black (1998), *Multivariate Data Analysis*, 5th ed., Upper Saddle River, NJ: Prentice Hall.
- Hakanen, Jari J., Arnold B. Bakker, and Evangelia Demerouti (2005), "How dentists cope with their job demands and stay engaged: the moderating role of job resources," *European Journal of Oral Sciences*, 113 (6), 479–487.
- , -----, and Wilmar B. Schaufeli (2006), "Burnout and work engagement among teachers," *Journal of School Psychology*, 43 (6), 495–513.
- , Riku Perhoniemi, and Salla Toppinen–Tanner (2008), "Positive gain spirals at work: from job resources to work engagement, personal initiative and work–unit innovativeness," *Journal of Vocational Behavior*, 73 (1), 78–91.
- Halbesleben, Jonathon R. B., Jaron Harveyb and Mark C. Bolino (2009), "Too engaged? A conservation of resources view of the relationship between work engagement and work interference with family," *Journal of Applied Psychology*, 94 (6), 1452–1465.
- Hallberg, Ulrika E. and Wilmar B. Schaufeli (2006), "Same same" but different? Can work engagement be discriminated from job involvement and organizational commitment?" *European Psychologist*, 11 (2), 119–127.
- Hobfoll, Stevan E. (1989), "Conservation of resources: A new attempt at conceptualizing stress," *American Psychologist*, 44 (3), 513–524.

- (1998), *Stress, culture, and community: The psychology and philosophy of stress*. New York, NY, US: Plenum Press.
- (2001), "The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory," *Applied Psychology*, 50 (3), 337–370.
- (2002), "Social and psychological resources and adaptation," *Review of General Psychology*, 6 (4), 307–324.
- , Robert J. Johnson, Nicole Ennis, and Anita P. Jackson (2003), "Resource loss, resource gain, and emotional outcomes among inner city women," *Journal of Personality and Social Psychology*, 84 (3), 632–643.
- Hockey, G. and Robert J. (1997), "Compensatory control in the regulation of human performance under stress and high workload: A cognitive–energetical framework," *Biological Psychology*, 45 (1/3), 73–93.
- Hoffman, Brian J., and David J. Woehr (2006), "A quantitative review of the relationship between person–organization fit and behavioral outcomes," *Journal of Vocational Behavior*, 68 (3), 389–399.
- Holland, John L. (1985) *Making vocational choices: A theory of vocational personalities and work environments*, Prentice Hall, Englewood Cliffs, NJ.
- Hsieh An–Tien and Chang–Hua Yen (2004), "Participative customers as partial employees and service provider workload," *International Journal of Service Industry Management*, 15 (2), 187–199.
- , -----, and Ko–Chien Chin, (2004), "Participative customers as partial employees and service provider workload," *International Journal of Service Industry Management*, 15 (2), 187–199.
- Hu, Li-Tze and Peter M. Bentler, (1998), "Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification," *Psychological Methods*, 3 (4), 424–453.

- Hubbert, Amy R. (1995), "Customer co-creation of service outcomes: effects of locus of causality attributions," unpublished doctoral dissertation, Arizona State University, Tempe, AZ.
- Humphreys, Michael L., and Michael R. Williams (1996), "Exploring the relative effects of salesperson interpersonal process attributes and technical product attributes on customers' satisfaction," *Journal of Personal Selling and Sales Management*, 16 (Summer), 47-57.
- Hyvönen Katriina, Taru Feldta, Asko Tolvanena and Ulla Kinnunenb (2009), "Young managers' drive to thrive: A personal work goal approach to burnout and work engagement," *Journal of Vocational Behavior*, 75 (2), 183-196.
- Jelinek, Ronald and Michael Ahearne (2006), "The enemy within: Examining salesperson deviance and its determinants," *Journal of Personal Selling and Sales Management*, 26 (4), 327-344.
- Jones, Deborah E., and Allen Fletcher (1996), "Taking work home: A study of daily fluctuations in work stressors, effects on moods and impacts on marital partners," *Journal of Occupational and Organizational Psychology*, 69 (1) 89-106.
- Judge, Timothy A., and Ferald R. Ferris (1992), "The elusive criterion of fit in human resource staffing decisions," *Human Resource Planning*, 15 (4), 47-67.
- , Bono, E. Joyce, Amir Erez, and Edwin A. Locke (2005), "Core self-evaluations and job and life satisfaction: The role of self-concordance and goal attainment," *Journal of Applied Psychology*, 90 (2), 257-268.
- , Annelies E. M. Van Vianen, and Irene E. De Pater (2004), "Emotional stability, core self-evaluations, and job outcomes: A review of the evidence and an agenda for future research," *Human Performance*, 17 (3), 325-346.
- Kahn, Robert L. and Philippe Byosiere (1992). Stress in organizations. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol. 3, pp. 571-650). Palo Alto, CA: Consulting Psychologists Press.
- Kahn, William A. (1990), "Psychological conditions of personal engagement and disengagement at work," *Academy of Management Journal*, 33 (4), 692-724.

- (1992), "To be fully there: Psychological presence at work," *Human Relations*, 45, 321–349.
- Kelley, Scott W., James H. Donnelly, and Steven J. Skinner (1990), "Customer participation in service production and delivery," *Journal of Retailing*, 66 (Fall), 315–335.
- Kristof–Brown, Amy L. (1996), "Person–organization fit: an integrative review of its conceptualizations, measurement, and implications," *Personnel Psychology*, 49 (1), 1–49.
- , and Cynthia K. Stevens (2001), "Goal congruence in project teams: Does the fit between members' personal mastery and performance goals matter?" *Journal of Applied Psychology*, 86 (6), 1083–1095.
- , Jansen J. Karen, and Colbert E. Amy (2002), "A policy–capturing study of the simultaneous effects of fit with jobs, groups, and organizations," *Journal of Applied Psychology*, 87 (5), 985–993.
- , Ryan D. Zimmerman, and Erin C. Johnson (2005), "Consequences of individuals' fit at work: A meta–analysis of person–job, person–organization, person–group, and person–supervisor fit," *Personnel Psychology*, 58 (2), 281–342.
- Krishnan, Venkat R. (2002), "Transformational leadership and value system congruence," *International Journal of Value–Based Management*, 15 (1), 19–33.
- Lauver, Kristy J. and Amy Kristof–Brown (2001), "Distinguishing between Employees' Perceptions of Person–Job and Person–Organization Fit," *Journal of Vocational Behavior*, 59 (3), 454–470.
- Lazarus, Richard S. (1991) *Emotion and adaptation*, Oxford University Press, New York.
- Leithwood, Kenneth A., Teresa Menzies, Doris Jantzi, and Jennifer Leithwood (1999), *Teacher burnout: A critical challenge for leaders of restructuring schools*. In A. M. Huberman (Ed.), *Understanding and preventing teacher burnout: A sourcebook of international research and practice* (pp. 85–114). New York: Cambridge University Press.

- Lewin, K. (1951), in Cartwright, D. (Eds), *Field Theory in Social Science*, Harper and Brothers, New York, NY, .
- Locke, Edwin A. (1976), "The nature and causes of job satisfaction. In: M.D. Dunnette, Editor, *Handbook of industrial and organizational psychology*, Rand McNally, Chicago.
- Lovelock, Christopher H. and Robert F. Young (1979), "Look to customers to increase productivity," *Harvard Business Review*, 57 (3), 168–178.
- Luthans, Fred and Carolyn M. Youssef (2007), "Emerging positive organizational behavior," *Journal of Management*, 33 (3), 321–349.
- MacKenzie, Scott B., Philip M. Podsakoff, and Julie B. Paine (1999), "Do citizenship behaviors matter more for managers than salespeople," *Journal of the Academy of Marketing Science*, 27 (4), 396–410.
- , -----, and Richard Fetter (1993), "The impact of organizational citizenship behavior on evaluations of salesperson performance," *Journal of Marketing*, 57 (February), 70–80.
- Marzocchi Gian Luca and Alessandra Zammit (2006), "Self-scanning technologies in retail: Determinants of adoption," *The Service Industries Journal*, 26 (6), 651–669.
- Mason, Charlotte H. and William D. Perrault Jr. (1991), "Collinearity, power and interpretation of multiple regression," *Journal of Marketing Research*, 23 (3), 268–280.
- Maslach, Christina, Wilmar B. Schaufeli, and Michael P. Leiter (2001), "Job burnout," *Annual Review of Psychology*, 52, 397–422.
- and Michael P. Leiter (1997), *The Truth About Burnout*, Jossey Bass, San Francisco, CA.
- Mauno Sajja, Kinnunen Ulla, and Ruokolainen Mervi (2007), "Job demands and resources as antecedents of work engagement: A longitudinal study," *Journal of Vocational Behavior*, 70 (1), 149–171.

- Meijman, Theo F. and Mulder Gbertusijis (1998), Psychological aspects of workload. In P. J. D. Drenth, and H. Thierry (Eds.), *Handbook of work and organizational psychology*, Vol. 2: Work psychology (pp. 5–33). Hove: Psychology Press.
- Meuter, Matthew L. and Mary J. Bitner (1998), Self-service technologies: Extending service frameworks and identifying issues for research. In *American Marketing Association* (Eds.), *Marketing theory and applications* (pp. 12–19). Chicago: American Marketing Association.
- , -----, Amy L. Ostrom, and Stephen W. Brown (2005), “Choosing among alternative service delivery modes: An investigation of customer trial of self-service technologies,” *Journal of Marketing*, 69 (2), 61–83.
- Moore, Jo Ellen (2000), “Why is this Happening? A causal attribution approach to work exhaustion consequences,” *Academy of Management Review*, 25 (2), 335–49.
- Morgan, Robert M. and Shelby D. Hunt (1994), “The commitment–trust theory of relationship marketing,” *Journal of Marketing*, 58 (July), 20–38.
- Mills, Peter K., Richard B. Chase, and Newton Margulies (1983), “Motivating the client/employee system as a service production strategy,” *Academy of Management Review*, 8 (2), 301–310.
- and James H. Morris (1986), “Clients as “partial” employees of service organizations: Role development in client participation,” *Academy of Management Review*, 11 (4), 726–735.
- Mohr, Lois A. and Mary J. Bitner (1995), “Process factors in service delivery: what employee effort means to customers,” in Swartz, T.A., Bowen, D.E. and Brown, S.W. (Eds), *Advances in Services Marketing and Management*, 4, JAI Press, Greenwich, CT, pp. 91–117.
- Mowen, John C. (2000), *The 3M Model of Motivation and Personality: Theory and Empirical Applications to Consumer Behavior*. Norwell, MA: Kluwer Academic Press.
- Narver, John C. and Stanley F. Slater (1990), “The effect of market orientation on business profitability,” *Journal of Marketing*, 54 (4), 20–35.

- Netemeyer G. Richard, James S. Boles, Daryl O. McKee, and Robert McMurrian (1997), "An investigation into the antecedents of organizational citizenship behaviors in a personal selling context," *Journal of Marketing*, 61 (3), 85–98.
- Nunnally, Jum C. (1967). *Psychometric Theory*. New York, NY: McGraw-Hill Inc.
- Oliver, Richard L. and Erin Anderson (1994), "An empirical test of the consequences of behavior- and outcome-based sales control systems," *Journal of Marketing*, 58 (October), 53–67.
- O'Reilly, Charles A., Chatman J., and Caldwell F. David (1991), "People and organizational culture: A profile comparison approach to assessing person-organization fit," *Academy of Management Journal*, 34 (3), 487–516.
- Organ, Dennis W. (1988), *Organizational Citizenship Behavior: The Good Soldier Syndrome*, Lexington Books, Lexington, MA.
- Ostroff, C., Y. Shin and B. Feinberg (2002), Skill acquisition and person-environment fit. In: D.C. Feldman, Editor, *Work careers: A developmental perspective*, Jossey-Bass, San Francisco, pp. 63–90.
- Palmatier, Robert W, Rajiv P. Dant, Dhruv Grewal, and Kenneth R. Evans (2006), "Factors influencing the effectiveness of relationship marketing: A meta-analysis," *Journal of Marketing*, 70 (4), 136 –153.
- Payne, Adrian F., Kaj Storbacka, and Pennie Frow (2008), "Managing the co-creation of value," *Journal of the Academy of Marketing Science*, 36 (1), 83–96.
- Pervin, Lawrence A. and Oliver P. John (1997), *Personality Theory and Research*, 7th ed. New York: John Wiley & Sons.
- Piasentin Kelley A. and Derek S. Chapman, (2006), "Subjective person-organization fit: Bridging the gap between conceptualization and measurement," *Journal of Vocational Behavior*, 69 (2), 202–221.
- Podsakoff, Philip M. and Scott B. MacKenzie (1994), "Organizational citizenship behaviors and sales unit effectiveness," *Journal of Marketing Research*, 31 (August), 351–363.

- Porter, Lyman W., Richard M. Steers, Richard T. Mowday, and Paul V. Boulian (1974), "Organizational commitment, job satisfaction and turnover among psychiatric technicians," *Journal of Applied Psychology*, 59 (October), 603–609
- Prahalad, C. K., and Venkatram Ramaswamy (2000), "Co-opting customer competence," *Harvard Business Review*, 78 (1), 79–87.
- Rafaeli, A. (1989), "When clerks meet customers: A test of variables related to emotional expression on the job," *Journal of Applied Psychology*, 74, 385–393.
- Reichers, Arnon E. (1985), "A review and reconceptualization of organizational commitment," *Academy of Management Review*, 10 (3), 465–76.
- Rhoades, Linda and Robert Eisenberger (2002), "Perceived organizational support: a review of the literature," *Journal of Applied Psychology*, 87, 698–714.
- Riordan, Christina M. (2000), Relational demography within groups: Past developments, contradictions, and new directions. In Ferris GR (Ed.), *Research in personnel and human resource management* (Vol. 19, pp. 131–173). Stamford, CT: JAI Press.
- Rokeach, M. (1973), *The nature of human values*, Free Press.
- Rothbard, Nancy P. (2001), "Enriching or depleting? The dynamics of engagement in work and family roles," *Administrative Science Quarterly*, 46, 655–684.
- Rudow, B. (1999), Stress and burnout in the teaching profession: European studies, issues, and research perspectives. In R. Vandenberghe and A. M. Huberman (Eds.), *Understanding and preventing teacher burnout: A sourcebook of international research and practice* (pp. 38–58). New York: Cambridge University Press.
- Saks, Alan M. (2006), "Antecedents and consequences of employee engagement," *Journal of Managerial Psychology*, 21 (7), 600–619.
- Saxe, Robert and Barton A. Weitz (1982), "The SOCO Scale: A measure of the customer orientation of salespeople," *Journal of Marketing Research*, 19 (August), 343–351.



- Schaubroeck, John and Simon S. K. Lam (2002), "How similarity to peers and supervisor influences organizational advancement in different cultures," *Academy of Management Journal*, 45 (6), 1120–1136.
- Schaufeli, Wilmar B. and Arnold B. Bakker (2004), "Job demands, job resources, and their relationship with burnout and engagement," *Journal of Organizational Behavior*, 25 (3), 293–315.
- , -----, and Willem Van Rhenen (2009), "How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism," *Journal of Organizational Behavior*, 75 (6), 893–917.
- , -----, and Marisa Salanova (2006), "The measurement of work engagement with a short questionnaire: A cross-national study," *Educational and Psychological Measurement*, 66 (4), 701–716.
- , Isabel M. Martinez, Marques A. Pinto, Marisa Salanova, and Arnold B. Bakker (2002a), "Burnout and engagement in university students: A cross-national study," *Journal of Cross-Cultural Psychology*, 33 (5), 464–481.
- , Marisa Salanova, González-Romá, V. and Arnold B. Bakker (2002b), "The measurement of engagement and burnout: A confirmative analytic approach," *Journal of Happiness Studies*, 2002b, 3 (1), 71–92.
- Schneider, Benjamin (1987), "The people make the place," *Personnel Psychology*, 40 (3), 437–453.
- and David Bowen (1984), "New Service Design, Development and Implementation and the Employee," in *Developing New Services*, William R. George and Claudia E. Marshall, eds. Chicago: American Marketing Association, 82–101.
- Scroggins, Wesley A. (2007), "An examination of the additive versus convergent effects of employee perceptions of fit," *Journal of Applied Social Psychology*, 37 (7), 1649–1665.
- Sharma, Neeru and Paul G. Patterson (2000), "Switching costs, alternative attractiveness and experience as moderators of relationship commitment in consumer, professional services," *International Journal of Service Industry Management*, 11 (5), 470–90.

- Siegrist, J. (1996), "Adverse health effects of high effort–low reward conditions," *Journal of Occupational Health Psychology*, 1 (1), 27–41.
- Siguaw, Judy A., Gene Brown, and Robert Widing (1994), "The influence of the market orientation of the firm on sales force behavior and attitudes," *Journal of Marketing Research*, 31 (1), 106–116.
- Sonnentag, Sabine (2003), "Recovery, work engagement, and proactive behavior: A new look at the interface between nonwork and work," *Journal of Applied Psychology*, 88 (3), 518–528.
- Spokane Arnold R. (1985), "A review of research on person–environment congruence in Holland's theory of careers," *Journal of Vocational Behavior*, 26 (3), 306–343.
- Stock, Ruth M. and Wayne D. Hoyer (2005), "An attitude–behavior model of salespeople's customer orientation," *Journal of the Academy of Marketing Science*, 33 (4), 536–552.
- Swenson, Michael J. and Joel Herche (1994), "Social values and salesperson performance: an empirical examination," *Journal of the Academy of Marketing Science*, 22 (Summer), 283–289.
- Tinsley, Howard E. A. (2000), "The congruence myth: An analysis of the efficacy of the person–environment fit model," *Journal of Vocational Behavior*, 56 (2), 147–179.
- Tranberg, Maria, Steve Slane and Steven E. Ekeberg (1993), "The relation between interest congruence and satisfaction: A meta–analysis," *Journal of Vocational Behavior*, 42 (3), 253–264.
- Turban, Daniel B. and Thomas W. Dougherty (1994), "Role of protege personality in receipt of mentoring and career success," *Academy of Management Journal*, 37 (3), 688–702.
- Vargo, Stephen L. and Robert R. Lusch (2004), "Evolving to a new dominant logic for marketing," *Journal of Marketing*, 68 (January), 1–17.
- Vogel, Ryan M. and Daniel C. Feldman (2009), "Integrating the levels of person–environment fit: The roles of vocational fit and group fit," *Journal of Vocational Behavior*, 75 (1), 68–81.

Williams, Larry J. and Stella E. Anderson (1991), "Job satisfaction and organizational commitment as predictors of organizational citizenship behaviors and in-role behaviors," *Journal of Management*, 17 (3), 601–617.

----- and John T. Hazer (1986), "Antecedents and consequences of satisfaction and commitment in turnover models: A reanalysis using latent variable structural equation methods," *Journal of Applied Psychology*, 71 (2), 219-231.

Witt, Alan E. (1998), "Enhancing goal congruence: A solution to organizational politics," *Journal of Applied Psychology*, 83 (4), 666–674.

Wright, Thomas A. and Russell Cropanzano (1998), "Emotional exhaustion as a predictor of job performance and voluntary turnover," *Journal of Applied Psychology*, 83 (3), 486–493.

Xanthopoulou, D., Arnold B. Bakker, Evangelia Demerouti, and Wilmar B. Schaufeli (2007), "The role of personal resources in the job demands–resources model," *International Journal of Stress Management*, 14 (2), 121–141

Yoon, Mahn Hee, Jai Hyun Seo, and Tae Seog Yoon (2004), "Effects of contact employee supports on critical employee responses and customer service evaluation," *The Journal of Services Marketing*, 18(4/5), 395–412.

APPENDICES  
APPENDIX A

English Version of Study Instrument

I'm a Marketing PH.D student at Oklahoma State University and I need your assistance in completing this questionnaire for a research project. It should take about 15 minutes. Your participation is completely voluntary and you have the right to quit at any time. You can be assured that your responses will be reported only in aggregate and therefore cannot be traced. Only the researcher will have access to the data. Thank you!

**Please indicate to what degree your customers reflect each of the following:**

*Not at all*

*Too much*

Customers interact with you.	1	2	3	4	5	6	7	8	9
You have direct contact with customers.	1	2	3	4	5	6	7	8	9
Customers engage you directly.	1	2	3	4	5	6	7	8	9
Customers share information with you.	1	2	3	4	5	6	7	8	9
Customers voice their concerns when they are unsatisfied with the service.	1	2	3	4	5	6	7	8	9
Customers make suggestions aimed at improving the overall quality of service.	1	2	3	4	5	6	7	8	9
Customers offer you feedback about your service.	1	2	3	4	5	6	7	8	9
Customers ask you for suggestions while making their service decisions.	1	2	3	4	5	6	7	8	9
Customers assist you during the service delivery process.	1	2	3	4	5	6	7	8	9

Customers assist you during the service delivery process. 1 2 3 4 5 6 7 8 9

Customers interact with you during the service delivery process. 1 2 3 4 5 6 7 8 9

Customers are involved in the service delivery process. 1 2 3 4 5 6 7 8 9

**Please answer the following questions about your customers.** *Strongly Disagree* *Strongly Agree*

My customers usually explain the details of what they need. 1 2 3 4 5 6 7

My customers usually behave courteously to me. 1 2 3 4 5 6 7

**Please answer the following questions about your company.** *Strongly Disagree* *Strongly Agree*

My customers usually ask me whenever they have any questions. 1 2 3 4 5 6 7

My customers usually ask questions in a clear and easily understandable manner. 1 2 3 4 5 6 7

My customers usually listen to my explanations attentively. 1 2 3 4 5 6 7

My customers usually express appreciation or praise in regards to the services that I provided them. 1 2 3 4 5 6 7

My manager informs me about the sales activities I am expected to perform. 1 2 3 4 5 6 7

My manager monitors how I perform required sales activities. 1 2 3 4 5 6 7

**Please answer the following questions about your company.** *Strongly Disagree* *Strongly Agree*

My manager informs me on whether I meet his/her expectations on sales activities. 1 2 3 4 5 6 7

My manager readjusts my sales activities when necessary. 1 2 3 4 5 6 7

I would be recognized by my manager if I perform sales activities well.	1	2	3	4	5	6	7
My manager periodically evaluates the selling skills I use to accomplish a task (e.g., how I negotiate).	1	2	3	4	5	6	7
My manager provides guidance on ways to improve my selling skills and abilities.	1	2	3	4	5	6	7
My manager provides guidance on ways to improve my selling skills and abilities.	1	2	3	4	5	6	7
My manager assists me by illustrating why using a particular sales approach may be effective.	1	2	3	4	5	6	7
I would be commended if I improve my selling skills.	1	2	3	4	5	6	7
My manager tells me about the expected level of achievement on sales volume or market share targets.	1	2	3	4	5	6	7
My manager monitors my performance on achieving sales volume or market share targets.	1	2	3	4	5	6	7
I receive frequent feedback on whether I am meeting expected achievement on sales volume or market share targets.	1	2	3	4	5	6	7
My manager ensures that I am aware of the extent to which I attain sales volume or market share targets.	1	2	3	4	5	6	7
I would be recognized by my manager if I perform well on sales volume or market share targets.	1	2	3	4	5	6	7
<b>Please answer the following questions about your customers.</b>	<b>Strongly</b>						<b>Strongly</b>
	<b>Disagree</b>						<b>Agree</b>
My customers have often broken promises made to me.	1	2	3	4	5	6	7
My customers have not always lived up to their end of the bargain.	1	2	3	4	5	6	7

My customers have kept their promises to me.	1	2	3	4	5	6	7
My customers fulfill their obligations to me.	1	2	3	4	5	6	7
My customers meet the spirit of the contract in addition to specific terms.	1	2	3	4	5	6	7
<b>Please answer honestly the following questions about your thoughts.</b>	<i>Strongly Disagree</i>			<i>Strongly Agree</i>			
At my work, I feel bursting with energy.	1	2	3	4	5	6	7
At my job, I feel strong and vigorous.	1	2	3	4	5	6	7
When I get up in the morning, I feel like going to work.	1	2	3	4	5	6	7
I am enthusiastic about my job.	1	2	3	4	5	6	7
My job inspires me.	1	2	3	4	5	6	7
I am proud of the work that I do.	1	2	3	4	5	6	7
I feel happy when I am working intensely.	1	2	3	4	5	6	7
I am immersed in my work.	1	2	3	4	5	6	7
I get carried away when I am working.	1	2	3	4	5	6	7
Working with customers is really a strain for me.	1	2	3	4	5	6	7
I feel I am working too hard for my customers because they're too demanding.	1	2	3	4	5	6	7
Working with my sales manager directly puts heavy-duty stress on me.	1	2	3	4	5	6	7
I feel emotionally drained by the pressure my sales manager puts on me.	1	2	3	4	5	6	7
I feel I work too hard trying to satisfy nonsales employees of the company.	1	2	3	4	5	6	7

I feel burned out from trying to meet top management's expectations.	1	2	3	4	5	6	7
<b>Please answer honestly the following questions about your thoughts.</b>	<i>Strongly Disagree</i>			<i>Strongly Agree</i>			
I have an excessive workload.	1	2	3	4	5	6	7
There are not sufficient personnel to perform a required task.	1	2	3	4	5	6	7
My job places a great number of conflicting demands upon me.	1	2	3	4	5	6	7
I am required to attend too many meetings.	1	2	3	4	5	6	7
I have difficulty meeting performance standards.	1	2	3	4	5	6	7
I focus on following rules and regulations at work.	1	2	3	4	5	6	7
I focus on completing work tasks correctly.	1	2	3	4	5	6	7
I focus on doing my duty at work.	1	2	3	4	5	6	7
I focus on my work responsibilities.	1	2	3	4	5	6	7
I focus on fulfilling my work obligations.	1	2	3	4	5	6	7
I focus on the details of my work.	1	2	3	4	5	6	7
I focus on accomplishing a lot at work.	1	2	3	4	5	6	7
I focus on getting my work done no matter what.	1	2	3	4	5	6	7
<b>Please answer honestly the following questions about your thoughts.</b>	<i>Strongly Disagree</i>			<i>Strongly Agree</i>			
I focus on getting a lot of work finished in a short amount of time.	1	2	3	4	5	6	7
I focus on work activities that allow me to get ahead at work.	1	2	3	4	5	6	7



I focus on my work accomplishments.	1	2	3	4	5	6	7
I focus on how many job tasks I can complete.	1	2	3	4	5	6	7
I try to help customers achieve their goals.	1	2	3	4	5	6	7
I achieve my own goals by satisfying customers.	1	2	3	4	5	6	7
I take a problem-solving approach with my customers.	1	2	3	4	5	6	7
I am able to answer a customer's questions correctly.	1	2	3	4	5	6	7
I get customers to talk about their service needs with me.	1	2	3	4	5	6	7
I keep the best interests of the customer in mind.	1	2	3	4	5	6	7
I find it easy to smile at each of my customers.	1	2	3	4	5	6	7
I enjoy remembering my customers' names.	1	2	3	4	5	6	7
It comes naturally for me to have empathy for my customers.	1	2	3	4	5	6	7
I enjoy responding quickly to my customers' requests.	1	2	3	4	5	6	7
I get satisfaction from making my customers happy.	1	2	3	4	5	6	7
I really enjoy serving my customers.	1	2	3	4	5	6	7
I consider myself to be very customer-oriented.	1	2	3	4	5	6	7
I think that customer interaction contributes to my personal development in this company.	1	2	3	4	5	6	7
I enjoy interacting with customers.	1	2	3	4	5	6	7

Customer orientation is one of my personal goals.	1	2	3	4	5	6	7
Customer orientation is very important within my job.	1	2	3	4	5	6	7
I always have the customers' best interest in mind.	1	2	3	4	5	6	7
I identify strongly with the goals of my organization.	1	2	3	4	5	6	7
<b>Continue answer the following question.</b>							
	<i>Strongly</i>						<i>Strongly</i>
	<i>Disagree</i>						<i>Agree</i>
My personal goals and the goals of my organization are very similar.	1	2	3	4	5	6	7
I don't care about the goals of this organization as much as many of my co-workers do.	1	2	3	4	5	6	7
The things that I value in life are very similar to the things that my organization values.	1	2	3	4	5	6	7
My personal values match my organization's values and culture.	1	2	3	4	5	6	7
My organization's values and culture provide a good fit with the things that I value in life.	1	2	3	4	5	6	7
Business with my customers is one of the best parts of this job.	1	2	3	4	5	6	7
I get along well with the customers I work with on a day-to-day basis.	1	2	3	4	5	6	7
There is not much conflict between me and my customers.	1	2	3	4	5	6	7
I try to care about the goals of my customers as much as mine.	1	2	3	4	5	6	7
There is a good fit between my customers' interests and mine.	1	2	3	4	5	6	7

**Please evaluate the extent to which each statement accurately describes how you feel about your job.**

*Very Dissatisfied*

*Very Satisfied*

All things considered, how satisfied are you with your present line of work?

1 2 3 4 5 6 7

*Strongly Disagree*

*Strongly Agree*

I feel fairly well satisfied with my present line of work.

1 2 3 4 5 6 7

I feel a great sense of satisfaction from my line of work.

1 2 3 4 5 6 7

I am willing to go the extra mile to work with my company.

1 2 3 4 5 6 7

I have a desire to maintain this relationship.

1 2 3 4 5 6 7

I view the relationship with my company as a long-term partnership.

1 2 3 4 5 6 7

I try to actually experience the emotions I have to show to the customers.

1 2 3 4 5 6 7

I work hard to feel the emotions that I need to show to my customers.

1 2 3 4 5 6 7

I make a strong effort to actually feel the emotions that I need to display toward my customers.

1 2 3 4 5 6 7

I just pretend to have the emotions I need to display to my customers.

1 2 3 4 5 6 7

I put on a 'mask' in order to display the emotions my manager wants me to display.

1 2 3 4 5 6 7

I put on a 'show' or 'performance' when interacting with my customers.

1 2 3 4 5 6 7

**Please answer following questions about your behaviors.**

*Strongly Disagree*

*Strongly Agree*

I ask my supervisor how I am doing.

1 2 3 4 5 6 7

I ask my supervisor if I am meeting all my job requirements.	1	2	3	4	5	6	7
From watching my supervisor, I can tell how well I am performing my job.	1	2	3	4	5	6	7
From watching my supervisor's reaction to what I do, I can tell how well my supervisor thinks I am doing.	1	2	3	4	5	6	7
I regularly monitor my customers' satisfaction level.	1	2	3	4	5	6	7
I pay close attention to after-sales service.	1	2	3	4	5	6	7
I encourage informal feedback regarding my services.	1	2	3	4	5	6	7
I ask my customers to evaluate the quality of my work and service.	1	2	3	4	5	6	7
I make efforts to increase regular customers' loyalty.	1	2	3	4	5	6	7
I make various efforts to improve my tie with regular customers.	1	2	3	4	5	6	7
I really care about keeping regular customers.	1	2	3	4	5	6	7
<b>Please answer the following questions about your selling behavior.</b>	<b>Strongly Disagree</b>						<b>Strongly Agree</b>
I consume a lot of time complaining about trivial matters.	1	2	3	4	5	6	7
I tend to make "mountains out of molehills" (make problems bigger than they are).	1	2	3	4	5	6	7
I always focus on what's wrong with my situation, rather than the positive side of it.	1	2	3	4	5	6	7
I keep up with developments in the company.	1	2	3	4	5	6	7
I attend functions that are not required but that help the company image.	1	2	3	4	5	6	7
I risk disapproval in order to express my belief about what's best for the company.	1	2	3	4	5	6	7

I consciously follow company regulations and procedures.	1	2	3	4	5	6	7	
I turn in budget, sales projection, expense report, etc. earlier than is required.	1	2	3	4	5	6	7	
I return phone calls and respond to other messages and requests for information promptly.	1	2	3	4	5	6	7	
I help orient new agents even though it is not required.	1	2	3	4	5	6	7	
I always ready to help or lend a helping hand to those around me.	1	2	3	4	5	6	7	
I willingly give my time to others.	1	2	3	4	5	6	7	
<b>Please answer the following questions about your company</b>	<b><i>Strongly Disagree</i></b>							<b><i>Strongly Agree</i></b>
The organization values my contribution to its well-being.	1	2	3	4	5	6	7	
The organization strongly considers my goals and values.	1	2	3	4	5	6	7	
Help is available from the organization when I have a problem.	1	2	3	4	5	6	7	
The organization cares about my well-being.	1	2	3	4	5	6	7	
The organization is willing to help me when I need a special favor.	1	2	3	4	5	6	7	
The organization cares about my general satisfaction at work.	1	2	3	4	5	6	7	
<b>Please answer the following questions about your company</b>	<b><i>Strongly Disagree</i></b>							<b><i>Strongly Agree</i></b>
The organization cares about my opinions.	1	2	3	4	5	6	7	
The organization takes pride in my accomplishments at work.	1	2	3	4	5	6	7	

The organization tries to make my job as interesting as possible. 1 2 3 4 5 6 7

**Please answer the following questions about your jobs** *Strongly Disagree* *Strongly Agree*

I am certain I will have a job at this company a year from now. 1 2 3 4 5 6 7

I worry a great deal about company downsizing. 1 2 3 4 5 6 7

I often wonder about my job security. 1 2 3 4 5 6 7

My customers' level of involvement in the service delivery process is appropriate. 1 2 3 4 5 6 7

Customers participate an appropriate amount in the service delivery process 1 2 3 4 5 6 7

**Please provide the following background information. Please fill in the blank or circle your response**

1. Your gender? Male \_\_\_\_\_ Female \_\_\_\_\_

2. What is your age? Less than 25 \_\_\_\_\_  
 26-39 \_\_\_\_\_  
 40-55 \_\_\_\_\_  
 56 and Over \_\_\_\_\_

3. How long have you been working in your present job?  
Years \_\_\_\_\_ Months \_\_\_\_\_

4. Including your current job, how many years of full-time sales experience do you have?  
Years \_\_\_\_\_ Months \_\_\_\_\_

5. On average, how much of your annual compensation is?  
Fixed salary \_\_\_\_\_ %  
 Commission \_\_\_\_\_ %

Bonus Award	_____	%
Other? ( )	_____	%
Total	100	%

6. What is your job title?

\_\_\_\_\_

7. Please check your highest education level

High school	Some college	College degree
_____	_____	_____
Some grad school	Master Degree	Doctorate
	_____	_____

*If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-1676 or [irb@okstate.edu](mailto:irb@okstate.edu)*

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## APPENDIX B

### Korean Version of Study Instrument

여러분 안녕하세요. 저는 오클라호마 주립대학에서 마케팅을 연구하는 유재원입니다. 이번 리서치 프로젝트를 수행하기 위해서는 귀하의 도움이 절실히 필요합니다. 이 연구는 고객의 참여행동이 직원의 태도 및 행동에 미치는 영향에 관한 연구입니다. 이 연구는 직원들에 대한 이해를 고취하고자 하는데 목적을 두고 있습니다. 이 연구는 학문적인 목적만을 위한 것으로 설문지를 작성하는데 약 20 분의 시간이 소요됩니다. 설문지에 있는 각각의 질문을 읽고 귀하의 생각을 설문지에 표시하시면 됩니다.

귀하의 응답은 그룹수준에서 분석될 것이며, 연구자만이 자료에 접근할 수 있으며, 이외에는 접근이 불가능합니다. 귀하의 귀중한 참여를 다시 한번 부탁드립니다. 귀하께서 주시는 응답은 본 연구의 목적상 매우 중요합니다. 감사합니다.

조사자 유재원 ([jaewon@okstate.edu](mailto:jaewon@okstate.edu))

614-804-0304 (미국), 010-7263-4842 (한국).

**귀하의 고객에 대한 질문입니다. 다음의 질문에 대해 답하여 주시기 바랍니다.**

*전혀*

*너무 많이*

일반적으로 고객들은 나의 서비스 전달과정에 관여하는 편이다.	1	2	3	4	5	6	7	8	9
고객들은 나와 자주 교류하는 편이다.	1	2	3	4	5	6	7	8	9
고객들은 나와 직접적으로 접촉한다.	1	2	3	4	5	6	7	8	9
고객들은 우리 서비스를 이용하기 위해 직접적으로 참여하는 편이다.	1	2	3	4	5	6	7	8	9
고객들은 나와 정보를 공유하는 편이다.	1	2	3	4	5	6	7	8	9
고객들이 불만족 경험시 자신들의 불만을 표현하는 편이다.	1	2	3	4	5	6	7	8	9
고객들은 서비스 품질향상을 위해 의견이나 제안을 한다.	1	2	3	4	5	6	7	8	9
고객들은 우리회사 서비스에 대해 피드백을 제공한다.	1	2	3	4	5	6	7	8	9



우리 회사의 서비스를 이용하기 위해 고객들은 나에게 많은 것을 질문하다.	1	2	3	4	5	6	7	8	9
고객들은 서비스 이용을 위해 나에게 협조하는 편이다.	1	2	3	4	5	6	7	8	9
고객들은 서비스 이용을 위해 나와 교류를 한다.	1	2	3	4	5	6	7	8	9
우리 회사의 서비스를 이용하기 위해 고객들이 서비스 전달과정에 관여하는 편이다.	1	2	3	4	5	6	7	8	9
<b>다음은 귀하의 고객들에 대한 질문입니다.</b>	<u>전혀 동의하지 않는다.</u>								<u>매우 동의한다.</u>
나의 고객들은 대체적으로 자신들이 필요로 하는 것이 무엇인지 자세히 설명한다.	1	2	3	4	5	6	7		
고객들은 나에게 공손한 편이다.	1	2	3	4	5	6	7		
내 고객들은 의문사항이 있을때마다 나에게 물어본다	1	2	3	4	5	6	7		
내 고객들은 쉽고 명확하게 질문을 하는 편이다.	1	2	3	4	5	6	7		
<b>다음은 귀하의 고객들에 대한 질문입니다.</b>	<u>전혀 동의하지 않는다.</u>								<u>매우 동의한다.</u>
내 고객들은 나의 설명에 귀를 기울인다.	1	2	3	4	5	6	7		
내 고객들은 내가 제공하는 서비스에 대해 고마움을 표시한다.	1	2	3	4	5	6	7		
서비스 전달과정에 고객이 제시하는 관여정도는 적절하다.	1	2	3	4	5	6	7		
나의 고객들은 서비스 이용을 위해 적절한 정도로 참여를 한다.	1	2	3	4	5	6	7		
<b>다음은 귀하의 회사에 대한 질문입니다.</b>	<u>전혀 동의하지 않는다.</u>								<u>매우 동의한다.</u>
나의 상사는 자신의 기대에 맞게 내가 일한다면 나에게 그 사실을 알려준다.	1	2	3	4	5	6	7		

나의 상사는 내가 적절한 영업활동을 하고 있는지 모니터한다. 1 2 3 4 5 6 7

나의 상사는 내가 기대에 부응하는 영업/서비스 활동을 하면 나에게 이를 알려준다. 1 2 3 4 5 6 7

나의 상사가 필요하다고 판단하면 나의 영업/서비스 활동을 수정해준다. 1 2 3 4 5 6 7

내가 올바른 판매/서비스 활동을 하고 있다면 나의 상사는 이를 나에게 통지해준다. 1 2 3 4 5 6 7

나의 상사는 정기적으로 나의 영업/서비스 활동을 평가해준다. 1 2 3 4 5 6 7

나의 상사는 판매/서비스 기법이나 능력을 개선할 수 있는 가이드 라인을 제공한다. 1 2 3 4 5 6 7

나의 상사는 고객과의 의사소통 및 설명방법이 적절한지 평가해준다. 1 2 3 4 5 6 7

나의 상사는 특정 영업기법이 왜 유용한지 설명해 나를 도와준다. 1 2 3 4 5 6 7

만약 내가 나만의 영업기술을 개발한다면 나의 상사는 이를 칭찬하는 편이다. 1 2 3 4 5 6 7

나의 상사는 나에게 자신이 기대하는 매출량에 대해 언급한다. 1 2 3 4 5 6 7

나의 상사는 판매기대치를 달성하기 위해 내 성과를 모니터한다. 1 2 3 4 5 6 7

나는 내가 성과기대치를 어느정도 달성했는지 자주 피드백을 받는다. 1 2 3 4 5 6 7

나의 상사는 항상 내가 판매 기대치를 얼마나 달성했는지 알 수 있도록 주지시켜준다. 1 2 3 4 5 6 7

나의 상사가 생각하기에 좋은 성과를 달성했다면 이를 나에게 알려준다. 1 2 3 4 5 6 7

다음은 귀하의 고객들에 대한 질문입니다. 전혀 동의하지 않는다. 매우 동의한다.

고객들은 나와 약속을 잘 지키지 않는 편이다. 1 2 3 4 5 6 7

고객들은 나와 약속을 항상 지키는 것은 아니다.	1	2	3	4	5	6	7	
고객들은 나와 약속을 잘 지키는 편이다.	1	2	3	4	5	6	7	
다음은 귀하의 고객들에 대한 질문입니다.	<i>전혀 동의하지 않는다.</i>			<i>매우 동의한다.</i>				
나의 고객들은 자신들이 해야 하는 부분을 잘 이행하는 편이다.	1	2	3	4	5	6	7	
나의 고객들은 계약기간뿐만 아니라 계약조건을 잘 이행하는 편이다.	1	2	3	4	5	6	7	
다음은 귀하의 개인적인 생각에 대한 질문입니다.	<i>전혀 동의하지 않는다.</i>			<i>매우 동의한다.</i>				
나는 나의 업무에 열중한다.	1	2	3	4	5	6	7	
업무시 나는 많은 에너지를 분출하는 편이다.	1	2	3	4	5	6	7	
업무 수행시 나는 활기차 있다.	1	2	3	4	5	6	7	
매일 아침마다 회사에 출근하는 것이 즐겁다.	1	2	3	4	5	6	7	
나는 나의 일에 대해 열정적이다.	1	2	3	4	5	6	7	
나의 일은 나에게 자극제 역할을 한다.	1	2	3	4	5	6	7	
나는 내가 하는 일을 자랑스럽게 생각한다.	1	2	3	4	5	6	7	
내가 열정적으로 일할 때 행복하다고 생각한다.	1	2	3	4	5	6	7	
나는 나의 일에 몰두하는 편이다.	1	2	3	4	5	6	7	
나는 일할 때 업무에 빠져드는 편이다.	1	2	3	4	5	6	7	
고객과 일할 때 나는 긴장감을 느낀다.	1	2	3	4	5	6	7	

때로는 고객의 요구가 지나쳐 내가 너무 많은 일을 한다고 생각한다.	1	2	3	4	5	6	7
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나의 상사와 함께 일하는 것은 나에게서는 직접적인 스트레스다.	1	2	3	4	5	6	7
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상사가 주는 압박감때문에 때론 진이 빠진다.	1	2	3	4	5	6	7
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회사내 다른 상급자들의 만족을 위해 너무 많은 노력을 한다고 느낀다.	1	2	3	4	5	6	7
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상급 관리자의 기대를 충족시키기 위해 때론 녹초가 되곤한다.	1	2	3	4	5	6	7
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다음은 귀하의 생각에 대한 질문입니다.

	<u>전혀 동의</u>	<u>매우</u>
	<u>하지않는다.</u>	<u>동의한다.</u>

나는 과도한 업무량을 처리한다.	1	2	3	4	5	6	7
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회사내 필수업무를 수행하는데 충분한 인력이 확보되지 않았다고 생각한다.	1	2	3	4	5	6	7
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나는 업무시 상반된 업무요청을 경험한 적이 있다.	1	2	3	4	5	6	7
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나는 너무 많은 회의에 참석해야 한다.	1	2	3	4	5	6	7
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나는 업무기준을 달성하는데 많은 어려움이 있다.	1	2	3	4	5	6	7
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나는 업무수행시 규정이나 규칙을 준수하는데 많은 중점을 둔다.	1	2	3	4	5	6	7
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다음은 귀하의 생각에 대한 질문입니다.

	<u>전혀 동의</u>	<u>매우</u>
	<u>하지않는다.</u>	<u>동의한다.</u>

나는 업무를 정확히 달성하는데 초점을 둔다.	1	2	3	4	5	6	7
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나의 내 의무를 다하는데 중점을 둔다.	1	2	3	4	5	6	7
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나는 나의 업무상 책임을 중요하게 생각한다.	1	2	3	4	5	6	7
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나는 나의 의무를 다하는데 중점을 둔다.	1	2	3	4	5	6	7
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나는 나의 업무 중 세부적인 사항까지 집중하는 편이다.	1	2	3	4	5	6	7
나는 많은 업무량을 달성하는데 중점을 둔다.	1	2	3	4	5	6	7
나는 어떤 어려움이 있더라도 나에게 주어진 일을 달성하는데 집중한다.	1	2	3	4	5	6	7
나는 가능한 빠른 시간내 많은 일을 달성하는데 중점을 둔다.	1	2	3	4	5	6	7
나는 나의 직업상 성공을 위해 업무에 중력한다.	1	2	3	4	5	6	7
나는 업무성취에 많은 중점을 둔다.	1	2	3	4	5	6	7
나는 얼마나 많은 업무를 달성하는가에 중점을 두는 편이다.	1	2	3	4	5	6	7
고객의 문제를 해결하는 것은 나에게 행복감을 준다.	1	2	3	4	5	6	7
나는 고객이 원하는 바를 얻을 수 있도록 도와준다.	1	2	3	4	5	6	7
나는 고객 만족을 통해 내가 원하는 목표를 달성할 수 있다고 생각한다.	1	2	3	4	5	6	7
나는 고객의 문제 발생시 이를 해결하고자 한다.	1	2	3	4	5	6	7
나는 고객들의 질문에 대해 정확한 답변을 제공할 수 있다.	1	2	3	4	5	6	7
나는 고객이 원하는 바가 무엇인지 파악하기 위해 고객들과 자주 의사소통한다.	1	2	3	4	5	6	7
나는 고객을 항상 고려하려 노력한다.	1	2	3	4	5	6	7
나는 나의 고객들에게 쉽게 웃음질 수 있다.	1	2	3	4	5	6	7
나는 고객들의 이름을 잘 기억하는 편이다.	1	2	3	4	5	6	7

고객들의 마음을 공감하는 것이 나에게  
자연스럽다. 1 2 3 4 5 6 7

고객들이 원하는 것은 즉시 해결해  
주려한다. 1 2 3 4 5 6 7

나는 고객들이 행복할 때 나의 직업에  
만족을 느낀다. 1 2 3 4 5 6 7

나는 고객들을 위해 일하는 것이 즐겁다. 1 2 3 4 5 6 7

나는 내자신이 매우 고객중심적이라  
생각한다. 1 2 3 4 5 6 7

다음은 귀하의 생각에 대한 질문입니다. 전혀 동의 매우  
하지 않는다. 동의한다.

고객과의 상호작용은 회사내 나의 발전을 위해  
매우 중요하다고 생각한다. 1 2 3 4 5 6 7

나는 고객들과의 교류가 즐겁다. 1 2 3 4 5 6 7

고객지향성은 나의 개인적 목표 중  
하나이다. 1 2 3 4 5 6 7

고객지향성은 나의 직무에 있어 매우 중요한  
의미이다. 1 2 3 4 5 6 7

나는 항상 고객을 최우선으로 생각하려  
한다. 1 2 3 4 5 6 7

다음의 질문에 대하여 답변해 주시기 전혀 동의 매우  
바랍니다. 하지 않는다. 동의한다.

우리회사의 목표는 나의 목표이기도 하다. 1 2 3 4 5 6 7

나의 개인적 목표와 회사의 목표는 매우 유사한  
편이다. 1 2 3 4 5 6 7

나는 주변 동료들 만큼 회사의 목표에 대해서  
신경쓰지는 않는 편이다. 1 2 3 4 5 6 7

나의 가치관과 회사의 가치관은 비슷한  
편이다. 1 2 3 4 5 6 7

나의 개인적 가치관과 회사의 가치관 및 문화는  
매우 잘 맞는 편이다. 1 2 3 4 5 6 7

우리 회사의 가치관이나 조직문화는 내가 생각하는 가치관에 적합한 편이다. 1 2 3 4 5 6 7

고객과 관계를 형성하는 것이 이 일의 가장 큰 장점이라 생각한다. 1 2 3 4 5 6 7

나는 매일 고객과 좋은 관계를 유지하려고 한다. 1 2 3 4 5 6 7

나와 고객들과 관계에 갈등이 많은 편은 아니다. 1 2 3 4 5 6 7

나는 고객이 무엇을 원하는가에 많은 관심을 가지려고 노력한다. 1 2 3 4 5 6 7

고객들이 관심사와 나의 관심사는 서로 잘 맞는 편이다. 1 2 3 4 5 6 7

귀하의 업무와 관련해 다음의 질문들에 대해 어떻게 느끼는지 응답해 주시기 바랍니다. 매우 불만족한다 매우 만족한다

모든 상황을 고려해 볼 때, 귀하는 현재 업무에 대하여 얼마나 만족하는가? 1 2 3 4 5 6 7

전혀 동의하지 않는다. 매우 동의한다.

나는 현재 업무에 대하여 상당히 만족하고 있다. 1 2 3 4 5 6 7

나는 현재 업무에 대하여 크게 만족감을 느낀다. 1 2 3 4 5 6 7

나는 나의 회사를 위해 더 많은 노력을 제공할 의지가 있다. 1 2 3 4 5 6 7

나는 회사와 좋은 관계를 유지하고 싶다. 1 2 3 4 5 6 7

나와 회사와의 관계는 장기적인 파트너로 볼 수 있다. 1 2 3 4 5 6 7

다음은 귀하의 업무상 행동에 대한 질문입니다. 전혀 동의하지 않는다. 매우 동의한다.

나는 고객을 진심으로 대하려고 노력한다. 1 2 3 4 5 6 7

나는 고객을 위한 마음을 가지려 많은 노력을 하는 편이다.	1	2	3	4	5	6	7
나는 진심으로 고객을 위해 많은 노력을 한다.	1	2	3	4	5	6	7
나는 고객에게 진심인 척한다.	1	2	3	4	5	6	7
나는 상사가 원하는 대로 고객응대시 가면을 쓰고 있다고 생각한다.	1	2	3	4	5	6	7
나는 고객 응대시 연기를 한다고 생각한다.	1	2	3	4	5	6	7
나는 상사에게 내가 어떻게 하고 있는가에 대해 물어보곤 한다.	1	2	3	4	5	6	7
나는 상사에게 직무상 모든 요건을 충족시키고 있는지 물어보곤 한다.	1	2	3	4	5	6	7
내 상사의 반응을 통해 나는 내가 얼마나 일을 잘하고 있는지 말 할 수 있다.	1	2	3	4	5	6	7
내 상사의 반응을 통해, 내가 얼마나 업무활동을 잘하는 지 알 수 있다.	1	2	3	4	5	6	7
나는 정기적으로 고객의 만족수준을 모니터하는 편이다.	1	2	3	4	5	6	7
나는 사후 애프터서비스에 많은 중점을 둔다.	1	2	3	4	5	6	7
나는 나의 업무활동에 대해 고객들의 개인적인 피드백도 환영하는 편이다.	1	2	3	4	5	6	7
나는 고객들에게 나의 업무활동이나 서비스 품질에 대하여 물어보고는 한다.	1	2	3	4	5	6	7
나는 고객들의 충성도를 높이기 위해 많은 노력을 한다.	1	2	3	4	5	6	7
나는 고객과의 관계를 개선하기 위해 다양한 노력을 제시하는 편이다.	1	2	3	4	5	6	7
나는 고객 유지에 많은 관심을 가지고 있다.	1	2	3	4	5	6	7



나는 일반적으로 회사의 이익을 위해 행동하는 편이다. 1 2 3 4 5 6 7

나는 회사 또는 부서에서 발생하는 사소한 문제에 대해 많이 불평하는 편이다. 1 2 3 4 5 6 7

나는 업무상 발생하는 문제들을 실제보다 과장해서 말하는 편이다. 1 2 3 4 5 6 7

나는 내가 처한 상황의 긍정적인 면보다는 문제가 있는 부분에 좀 더 관심을 갖는 편이다. 1 2 3 4 5 6 7

나는 회사의 발전을 위해 자기개발에 노력을 하는 편이다. 1 2 3 4 5 6 7

나는 업무외의 일이라도 회사의 이미지 제고에 도움이 되는 행사에 자발적으로 참여하는 편이다. 1 2 3 4 5 6 7

회사를 위해 최선이라고 믿을 때에는 위험을 무릅쓰고라도 반대를 한다. 1 2 3 4 5 6 7

**다음은 귀하의 업무상 행동에 대한 질문입니다.**

전혀 동의  
하지 않는다.

매우  
동의한다.

나는 회사의 절차나 규정을 성실하게 따르는 편이다. 1 2 3 4 5 6 7

나는 예산, 판매예상, 지출보고서 등을 기한 이전에 제출하는 편이다. 1 2 3 4 5 6 7

나는 우리회사에 오는 고객의 문의전화, 정보요청 등에 대해 신속하게 대응을 한다. 1 2 3 4 5 6 7

나는 신입사원이 들어오면 나의 일이 아니더라도 그가 적응할 수 있도록 도와주는 편이다. 1 2 3 4 5 6 7

나는 내 주위에 있는 사람들에게 항상 도움을 제공할 준비가 되어 있는편이다. 1 2 3 4 5 6 7

나는 내 동료들에게 시간을 기꺼이 제공할 의도가 있다. 1 2 3 4 5 6 7

**다음은 귀하의 회사에 대한 질문입니다.**

전혀 동의  
하지 않는다.

매우  
동의한다.

우리회사는 조직의 성공을 위해 나의 노력을 필요로 한다. 1 2 3 4 5 6 7

우리회사는 나의 개인적 목표나 가치관에 대해 많이 생각하는 편이다. 1 2 3 4 5 6 7

만약 나에게 문제가 발생한다면 회사에 도움을 요청할 수 있다. 1 2 3 4 5 6 7

우리회사는 나의 행복에 많은 관심을 가지고 있다. 1 2 3 4 5 6 7

만약 내가 필요하다면 우리회사는 나에게 도움을 줄 수 있다. 1 2 3 4 5 6 7

우리회사는 나의 직무만족에 많은 관심을 가지고 있다. 1 2 3 4 5 6 7

우리회사는 나의 의견에 대해 관심을 가지고 있다. 1 2 3 4 5 6 7

우리회사는 나의 업무성취에 자긍심을 가지고 있다. 1 2 3 4 5 6 7

우리회사는 내 업무를 가능한 단조롭지 않게 하려 노력한다. 1 2 3 4 5 6 7

**다음은 귀하의 업무에 대한 질문입니다.**

전혀 동의

매우

하지 않는다.

동의한다.

나는 일년 후에도 우리회사에서 지금 업무를 하고 있을 것이라 확신한다. 1 2 3 4 5 6 7

나는 우리회사의 규모축소에 대해 많은 걱정을 하고 있다. 1 2 3 4 5 6 7

나는 나의 직무 안정성에 대해 걱정하곤 한다. 1 2 3 4 5 6 7

**다음은 질문에 대하여 귀하의 생각을 표시해 주시기 바랍니다.**

전혀 동의

매우

하지 않는다.

동의한다

집단의 이익이 개인의 이익보다 더 중요하다. 1 2 3 4 5 6 7

집단의 성공이 개인의 성공보다 중요하다. 1 2 3 4 5 6 7

나는 조직의 구성원으로 인정받는 것이 매우 의미있는 일이라고 생각한다. 1 2 3 4 5 6 7

다음은 질문에 대하여 귀하의 생각을 표시해 주시기 바랍니다.

전혀 동의  
하지 않는다.

매우  
동의한다

직원이라면 조직의 목표를 개인의 목표보다 먼저 생각해야 한다.

1 2 3 4 5 6 7

상사들은 나의 개인적 목표보다는 조직에 대한 충성도를 더 강조한다.

1 2 3 4 5 6 7

조직의 성공을 위해 개인의 희생은 감수해야 한다고 생각한다.

1 2 3 4 5 6 7

다음은 귀하의 영업소에 대한 질문입니다.

전혀 동의  
하지 않는다.

매우  
동의한다

일반적으로 우리 영업소는 붐비는 편이 아니다.

1 2 3 4 5 6 7

우리 영업소를 이용하는 고객들이 너무 많다고 생각한다.

1 2 3 4 5 6 7

우리 영업소는 바쁜 편은 아니다.

1 2 3 4 5 6 7

다음은 인구통계학적 질문입니다. 빈칸을 채우시거나 해당사항에 0 표를 해주시기 바랍니다.

1. 성별? 남성 ( )  
          여성 ( )

2. 귀하의 연령은?  
25 세 이하 ( )  
26-39 세 사이 ( )  
40-55 세 사이 ( )  
56 세 이상 ( )

3. 귀하가 현직장에 종사한 총 년수는? \_\_\_\_\_ 년 \_\_\_\_\_ 개월

4. 귀하는 얼마동안 현업무에 종사했습니까? \_\_\_\_\_ 년 \_\_\_\_\_ 개월

5. 평균적으로 귀하의 연봉을 어떻게 구성되어 있습니까?

고정급 \_\_\_\_\_ %  
커미션 \_\_\_\_\_ %  
보너스 \_\_\_\_\_ %  
기타 ( ) \_\_\_\_\_ %  
총합 100 %

6. 귀하의 직책은?

7. 귀하의 최종학력을 표시해주세요

고졸 \_\_\_\_\_ 전문대 졸 \_\_\_\_\_ 4년제 대학교 졸

석사학위 \_\_\_\_\_ 박사학위 \_\_\_\_\_ 기타 (            )

8. 귀하의 영업소를 이용하는 고객의 수는 하루 평균 얼마입니까? (            ) 명

9. 귀하의 영업소에서 근무하는 직원의 수는 얼마입니까? (            ) 명

10. 귀하는 고정직입니까 계약직입니까? (            )

11. 귀하의 회사명, 지점명, 이름 및 이메일을 기입해주세요.

회사명 \_\_\_\_\_ 지점명 \_\_\_\_\_ 이름 \_\_\_\_\_ 이메일

감사합니다.

## Oklahoma State University Institutional Review Board

Date: Wednesday, June 09, 2010  
IRB Application No BU1018  
Proposal Title: Dynamic Characteristics of Customer Participation: Based on Job Demands and Resources Model

Reviewed and Processed as: Exempt

Status Recommended by Reviewer(s): Approved Protocol Expires: 6/8/2011

Principal Investigator(s):

Jaewon Yoo	Gary Frankwick
2005 S. Devin Lea St.	312 College of Business
Stillwater, OK 74074	Stillwater, OK 74078

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The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

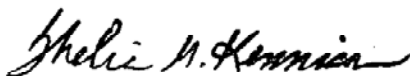
The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, [beth.mcternan@okstate.edu](mailto:beth.mcternan@okstate.edu)).

Sincerely,



Shelia Kennison, Chair  
Institutional Review Board

VITA

Jay Jaewon Yoo

Candidate for the Degree of

Doctor of Philosophy

Thesis: DYNAMIC CHARACTERISTICS OF CUSTOMER PARTICIPATION:  
BASED ON JOB DEMAND AND RESOURCE MODEL

Major Field: Marketing

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Business Administration at Oklahoma State University, Stillwater, Oklahoma in May, 2011.

2000-2004 Doctor of Business Administration, Hanyang University

1998-2000 Master of Business Administration, Hanyang University

1996-1998 Bachelor of Business Administration, Hankuk University of Foreign  
Studies

1990-1996 Bachelor of English Language and Literature, Kunkuk University

Experience:

2007-2011 Graduate Research Assistant, Oklahoma State University

Professional Memberships:

Member, American Marketing Association, 2007-Present

Member, Academy of Marketing Science, 2007-Present

Name: Jay Jaewon Yoo

Date of Degree: May, 2011

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: DYNAMIC CHARACTERISTICS OF CUSTOMER PARTICIPATION:  
BASED ON JOB DEMAND AND RESOURCE MODEL

Pages in Study: 158

Candidate for the Degree of Doctor of Philosophy

Major Field: Marketing

Scope and Method of Study: Based on a Job Demands-Resources (JD-R) model, this study advances and empirically tests a conceptual model proposing the relationship between perceived customer participation (PCP), frontline employee's work engagement and employee's job performance (job satisfaction, organizational commitment, and organizational citizenship behavior). This study suggests an inverted U-shaped relationship between perceived customer participation and work engagement. In this research, customer orientation (CO) and frontline employee-customer fit (PCF) are suggested as moderators. As a personal resource, CO has direct effect on work engagement. As an environment resource, PCF also show positive relationship with work engagement. Based on the JD-R model, CO and PCF enhance the positive relationship and buffer the negative relationship between frontline employee PCP and work engagement. Internal and external benefits of frontline employee's work engagement are also investigated.

Findings and Conclusions: The findings suggest the dynamic characteristics of customer participation and confirm the need for job demands-resources model as a background theory when one attempts to link frontline employee's perception about customer participation on his/her work engagement. Results also support the larger moderating effects of CO and frontline employee-customer fit in the inverted U-shaped relationship between employees' perceived participation and work engagement. Based on these findings, managerial and research implications are offered at the conclusion of the dissertation.

ADVISER'S APPROVAL: Gary L. Frankwick

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