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JaeMin Cha

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EFFECTS OF PERCEIVED SERVICE CLIMATE AND SERVICE ROLE AMBIGUITY ON FRONTLINE EMPLOYEES' SERVICE ORIENTATION IN FOODSERVICE ESTABLISHMENTS

By

JaeMin Cha

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ABSTRACT

EFFECTS OF PERCEIVED SERVICE CLIMATE AND
SERVICE ROLE AMBIGUITY
ON FRONTLINE EMPLOYEES' SERVICE ORIENTATION
IN FOODSERVICE ESTABLISHMENTS

By

JaeMin Cha

This present study investigated direct and indirect factors influencing service-oriented organizational citizenship behaviors among frontline employees in the context of foodservice establishments. In particular, a model was developed to test for the indirect effect of service climate, as perceived by frontline employees, on their service-oriented organizational citizenship behaviors. Two variables - service commitment toward customers and service role ambiguity - were expected to mediate the relationship between service climate and service-oriented organizational citizenship behaviors. Service role ambiguity was proposed as a partial mediator that expected to have both direct and indirect effect on the outcome variable. A field survey was conducted among 452 frontline employees, working in 31 different foodservice establishments. The proposed model was specified as the individual-level analysis. A series of confirmatory factor analyses was performed to check the construct validity of the measurement model. From these analyses, a second-order four-factor model of service climate was found to fit the data best. The conscious job-dedication dimension, representing one of two service-oriented organizational citizenship behaviors, had to be deleted, since it presented a cross-loading problem with the other two domains of the service orientation (helping coworkers and service commitment toward customers). Overall, the proposed path model was partially supported, in that three of five hypothesized relationships were

supported. The findings indicated that two links – between service climate and service role ambiguity, and between service role ambiguity and service oriented organizational citizenship behaviors – were statistically *in*significant. The revised model, deleting the two non-significant paths, fit the data better than the initially proposed model, χ^2 (622) = 1236.99, $p < .01$, ($\chi^2/df = 1.99$, CFI = .93, NNFI = .92, RMSEA = .047). The revised model showed that effects of perceived service climate and service role ambiguity, on service-oriented organizational citizenship behavior, were fully mediated by service commitment toward customers. Both theoretical and practical implications, as well as suggests directions for future research, are discussed.

DEDICATION

This dissertation is dedicated to my parents JoonSang Cha and ChoonJa Kwak for their lifetime commitment and unconditional love. It also is dedicated to my husband, SeungHyun Kim, for his true spiritual companionship and support, and to our beloved daughter, SeoHee Kim, for making me smile and feel joyful.

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Above all, I offer my humble thanks to God for these countless privileges and my success. Thank You, Lord. Thank you, all.

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CHAPTER 1

INTRODUCTION

Chapter Overview

This first chapter presents both the practical and the theoretical background information, rationale and objectives of the dissertation. This chapter discusses the critical roles of frontline employees in foodservice establishments. The concept of service climate is introduced as a way to motivate and influence frontline employees' service-oriented attitudes and behaviors. It discusses the study's rationale and objectives. Finally, this chapter presents conceptual definitions of constructs in the measurement and path models.

Practical Background

Foodservice Establishments as Part of the U.S. Economy

The CIA's *World Factbook* (2004) indicates that the contribution of the service sector to the USA gross domestic product (GDP) reached 80%. Services are provided in almost every sector of the economy, including "retailing, wholesaling, transportation, telecommunication, finances, health, education, tourism, hospitality, and leisure (Reisinger, 2001, p.2)." Among all these service sectors, the foodservice industry, which is part of hospitality, is known as a fast growing and influential contributor to the American economy. The most recent study conducted by the National Restaurant Association (2005) demonstrates how the foodservice industry significantly impacts the national economy and people's daily lives. According to the National Restaurant

Association (2005), this industry segment employs an estimated 12.2 million people, making it the nation's largest non-government employer. More than four of ten adults have worked in this industry segment at some time during their lives and 27% of adults had their first job experience in a foodservice establishment. The National Restaurant Association (2005) forecasts that the amount spent on meals eaten outside the home would reach $476 billion from the nation's 900,000 foodservice establishments in 2005. This establishes the restaurant industry share of the food dollar as 46.7%. These foodservice establishments include eating places, drinking places, managed (contract) services, hotel/motel restaurants, retail, vending, recreation, and others according to their own categories (NRA, 2005). Along with rapid growth in this industry segment, competition among foodservice establishments is extremely high. In this increasingly competitive economy, operators and managers of foodservice establishments strive to improve and deliver service excellence to their customers.

Services in Foodservice Establishments

Shames and Glover (1989) defined *service* as one's attempt to fulfill the perceived needs of another within a particular social environment. Van Dierdonck, Gemmel, and Van Looy (1998) refer to service as "an activity or series of activities of more or less intangible nature that normally, but not necessarily, occur in interactions between customers and service employees and/or physical resources or goods and/or systems of the service provider, which are provided as solutions to customer problems." Both definitions of service imply interaction involved between two parties – namely between customers and employees – in a work context. The level of personal interaction between service providers and customers can vary, depending on the segments, the occasions, and

characteristics of the service industry. Mills and Margulies (1980) differentiated this level of interactive nature of service work into the three categories of maintenance-interactive, task-interactive, and personal-interactive. Customers in a maintenance-interactive situation know what they want to and how to solve it (Mills & Margulies, 1980; Mills, 1986). Maintenance interaction is most likely to occur in fast-food establishments. Most foodservice establishments that are not fast-food establishments on the other hand, belong to personal-interactive service work, because of intense interaction between customers and service providers. In this personal-interactive situation, customers may not know exactly what they want, so they often rely on the expertise and recommendations offered by the service providers (Mills, 1986). Consequently, quality of service delivered to customers is critical to becoming and/or remaining a successful service organization (Lytle, Hom, & Mokwa, 1998). Thus, increasing attention has been given to the role, attitude, and performance of service employees in general. For example, Susskind, Borchgrevink, Brymer, and Kacmar (2000) observed that attitude and behaviors of frontline employees in foodservice establishments determine the quality level of customer service. In foodservice establishments, there is direct interaction and contact between customers and frontline employees. Moreover, frontline employees' behaviors likely have a direct impact on customer evaluations of delivered service. The following section of this chapter defines frontline employees and their roles in foodservice establishments.

Roles of Frontline Employees in Foodservice Establishments

Frontline employees in foodservice establishments are also called customer-contact employees. As the name implies, these employees are those who mainly make contact with customers in the workplace. Positions such as servers, server assistants, hosts and hostesses, and bartenders are main examples of frontline employees in foodservice establishments. In the literature, frontline employees are also called boundary spanners of the organization (cf., Bitner, Bernard, & Tetreault, 1990; Boles & Babin, 1996). As boundary spanners, frontline employees of foodservice establishments have unique positions and play important roles for the establishments. To the public, frontline employees act as representatives of the establishments; consequently, they play crucial roles in reflecting the image of the foodservice establishments (Chung & Schneider, 2002; Schneider & Bowen, 1993). Furthermore, frontline employees in foodservice establishments are positioned to ascertain customers' needs, wants, and suggestions for service delivery, and consequently share this information with internal operations (Stamper & Dyne, 2003). Zeithaml, Parasuraman, and Berry (1990) suggest that frontline employees can serve as a "strategic link" between the external environment and internal operations. Thus, management and operators in foodservice establishments rely heavily on frontline employees to satisfy and delight customers.

Theoretical Background

Although frontline employees are those who create "moments of true" (Carlzon, 1989), management also play a vital role in delivering quality service. This current study argues that management's role in serving customers lies in the development of *service-oriented* frontline employees. Previous studies of service orientation have not explicitly distinguished between different aspects of service orientation. This current study differentiates three research domains of service orientation: dispositional, attitudinal and behavioral service orientations. Frontline employees' innate or dispositional characteristics are most unlikely to be changed. When human resource managers discuss the hiring of service-oriented employees, they are most likely referring to hiring employees who have positive innate or dispositional service orientation characteristics. Management in foodservice establishments, on the other hand, can indirectly manage and influence service-oriented attitudes and behaviors of frontline employees. A question thus arising is: What can management do to motivate frontline employees to have, and improve, service-oriented attitudes and behaviors? Motivation, in this context, means to entice employees to move in a direction and manner that meet the organization's goals (Vroom, 1964). Management in foodservice establishments needs to find ways to motivate their frontline employees to exhibit service commitment toward customers through positive attitudinal service orientation and display of service-oriented organizational citizenship behaviors. Schneider and Reichers (1983) argued that the organizational climate construct provides a useful alternative to motivational explanations of employee behaviors in the work context. They defined organizational climate as how members perceive events, practices, procedures and types of behaviors

valued, expected, supported and rewarded in an organization. Furthermore, past research suggested that management commitment to service quality is a critical determinant of employee behaviors in creating service excellence (Babakus, Yavas, Karatepe, & Avci, 2003; Hartline & Ferrell, 1996). A way of showing management's total commitment to service quality is to create a work environment emphasizing and valuing service quality, which is called *service climate*. Service climate derives from organizational climate. Schneider and his colleagues (c.f. Schneider & Bowen, 1985; Schneider & Bowen, 1995; Schneider, Parkington, & Buxton, 1980; Schneider, White, & Paul, 1998) were the first researchers to study service climate as a way of management's showing commitment to service quality to their own employees. Service climate is defined as the employee perceptions of the policies, practices, and procedures and the behaviors that get rewarded, supported, and expected with regard to customer service and customer service quality (Schneider and Bowen, 1993). Schneider and White (2004, p. 100) explained this to be "a pattern across policies, procedures, and rewarded behaviors to which employees attach the meaning: service quality is important here." That is, these kinds of policies, practices, and procedures reflecting the importance of service quality would send the message to employees that service quality is important to the organization.

Rationale of Study

This research builds on previous research examining the importance of service climate, as perceived by frontline employees on important individual and organizational outcome variables. First, since this proposed study is most interested in predicting frontline employees' service-related attitudes and behaviors, it is most appropriate to examine the climate for service, rather than a global concept of organizational climate.

Second, Poole (1985) warns that climate dimensions may not be applicable across a range of organizations. Studies of service climate have mostly been done in bank settings, led by Schneider and his colleagues. This current study attempts to develop pertinent components of service climate, applied to the context of foodservice establishments. These identified components are service vision, service training, supervisor support, and reward and recognition. Third, as explained above, previous studies did not differentiate service orientation from dispositional, attitudinal, and behavioral characteristics conceptually. Relevant service orientation definitions need to be clarified conceptually and operationally. In particular, extra-role service behaviors, specifically service-oriented organizational citizenship behaviors, are emphasized as an outcome variable. This recognizes both the customers' needs, through conscious job dedication, and the coworkers' needs, through helping behaviors. In the proposed theoretical model, it is posited that employee perceptions of service climate directly influence service commitment toward customers, representing attitudinal service orientation. The attitudinal service orientation is in turn posited to influence service-oriented organizational citizenship behaviors. Fourth, this current study investigated the roles of affective mediating variables on the relationship between service climate and service-oriented organizational citizenship behaviors. Schneider and his colleagues (Schneider & Bowen, 1985; Schneider et al., 1980; Schneider et al., 1998) have contributed what is called, *linkage research*, in that service climate experienced by employees is related directly to the service quality experienced by customers. Although this current study did not measure customer evaluations of their experience of service quality, this current study

attempted to explore a possible mediating process between service climate and employees' service-oriented organizational citizenship behaviors.

Study Objectives

In sum, the first objective of this dissertation was to explicate two fuzzy terms – service climate and service orientation, so as to present clear conceptual and operational definitions that are theoretically meaningful yet specific to foodservice establishments. After determining the factor structures of these two critical constructs, the direct and indirect factors influencing service-oriented organizational citizenship behaviors among frontline employees in the context of foodservice establishments were investigated. That is, the current study proposed and tested a theoretical model that examines the effect of service climate, as perceived by frontline employees, on their service-oriented organizational citizenship behaviors, by emphasizing two mediating variables: service role ambiguity, and employee commitment toward customer service (service-oriented attitudes toward customers).

Definitions of Terms for Main constructs

Service climate. Service climate is defined as the employee perceptions of the policies, practices, and procedures and the behaviors that get rewarded, supported, and expected with regard to customer service and customer service quality (Schneider & Bowen, 1985; Schneider, Wheeler, & Cox, 1992). Service climate is composed of four dimensions. Service vision represents clear service goals and objectives that emphasize importance of service excellent and service quality, articulated by the management of the foodservice establishment (Butcher, 1994; Johnson, 1996; Lytle et al., 1998). Service training is defined as the foodservice establishment's ongoing efforts to improve

employees' skills dealing with service activities and interactions with customers (Johnson, 1996; Schneider & Bowen, 1985). Supervisor support refers to the extent to which that supervisor at the foodservice establishment offers employee service-work related assistance in their service performance during work (Susskind, Kacmar, & Borchgrevink, 2003). Reward and recognition is defined as rewarding and recognizing employees' service excellence and celebrating it by the management of foodservice establishment (Johnson, 1996).

Dispositional service orientation. Dispositional service orientation is defined as the frontline employee's tendency or predisposition to provide supervisor service through a genuine desire and enjoyment to satisfy customers' needs (Brown, Mowen, Donavan, & Licata, 2002).

Service commitment toward customers. Service commitment toward customers represents the attitudinal service orientation, and is proposed as a mediator to examine relationship between service climate perceived by frontline employees and service-oriented organizational citizenship behaviors. Service commitment toward customers is defined as the frontline employees' level of commitment to provide excellent service to customers, indicating frontline employees' desire and feelings toward improving service quality for customers (Susskind et al., 2003).

Service role ambiguity. Service role ambiguity is proposed as a partial mediator, influencing directly and indirectly on service-oriented organizational citizenship behaviors. It is defined as a service employee's feelings of uncertainty about aspects of his or her service job activities and role, including priorities and expectations while interacting with customers (Babin & Boles, 1996).

Service-oriented organizational citizenship behavior. Service-oriented organizational citizenship behavior is defined as extra-role service performance that demonstrates discretionary behaviors to promote effective function of foodservice establishments (Bettencourt, Gwinner, & Meuter, 2001; Stamper & Van Dyne, 2001; Stamper & Van Dyne, 2003). Service-oriented organizational citizenship behavior is composed of two dimensions. Helping coworkers refers to frontline employees' helping and cooperating with other co-workers regarding service-related duties that are not necessarily part of their described job duties. Conscious job-dedication toward customers is defined as delivering extra care and special attention to customers without losing customers focus, even in busy situations (Conway, 1999; Van Scotter & Motowidlo, 1996; Van Scotter & Motowidlo, 2000).

Chapter Summary

Frontline employees are identified as valuable sources of strategic differentiation and competitive advantages for delivering quality service to customers. This chapter discussed the practical and theoretical background that led to the directions of this current study. This chapter discussed the problems of service orientation not being differentiated from dispositional, attitudinal, and behavioral service orientation. This chapter also emphasized that the mediating variables - service role ambiguity and service commitment toward customers - are necessary to explain the relationship between service climate perceived by frontline employees, and service-oriented organizational citizenship behaviors.

CHAPTER 2

LITERATURE REVIEW

Chapter Overview

This chapter discusses conceptual and methodological issues of constructs in the proposed model, and explains the justification for specifying service climate as an individual attribute rather than an organizational attribute. To explicate the concept of service orientation, this study argues that the construct of service orientation (SO) needs to be viewed differently from the three separate domains of innate SO, service commitment toward customers, and service-oriented citizenship behaviors, representing dispositional SO, attitudinal SO, and behavioral SO, respectively. Furthermore, this chapter describes the highlights of the proposed model and hypothesized relationships among service climate, service commitment toward customers, service role ambiguity, and service-oriented citizenship behaviors.

Service Climate

Lewin, Lippitt and White (1939) first developed the root of organizational climate, namely "social climate." They conducted an experiment demonstrating how social environment or contextual variables affect human behaviors in groups. For several decades, organizational researchers have examined the central role of climate in influencing the attitudes and behaviors of employees. Organizational climate is often criticized as an unclear concept despite its long history as a research domain (Schneider, Bowen, Ehrhart, & Holcombe, 2000). The conceptual ambiguity may be attributed to

climate comprising both the work environment and members' interpretations of their work environment (Parker, Baltes, Young, Huff, Altmann, Lacost, & Roberts, 2003). The literature review of organizational climate in general, and service climate specifically identifies three main controversies that need clarification to set this study's boundaries (i.e., Gupta, 1998; James & James, 1989; Schneider et al., 2000; Schneider & White, 2004):

1. Strategic focus: Is there any specific climate more important than others in predicting frontline employees' service-related outcomes?
2. Level of theory: Is service climate an individual-level variable or organizational-level variable?
3. Dimensions of service climate: What dimensions does service climate comprise in the context of foodservice establishments?

Three identified issues – strategic focus, level of theory, and dimensions of service climate – are discussed in the following section.

Strategic Focus

To distinguish between generic and specific concepts of an organizational climate construct is an important issue, since such distinction clarifies research goals and boundaries. Schneider and his colleagues (Schneider & Bowen, 1985; Schneider, Parkington, & Buxton, 1980; Schneider, White, & Paul; 1998) advocated the idea that climate research has to focus on a *climate for something*. They argued that strategically focused climate measures demonstrate stronger relationship with specific organizational outcomes than does an omnibus global measure of climate (Schneider, Wheeler, & Cox, 1992). Schneider et al. (2000, p. 26) further emphasized that "... unless the climate that

is conceptualized and measured is tied to the specific something of interest, the relationship between the climate measurement and random variable criteria of interest will be modest at best." Schneider and his colleagues mainly studied climate for service as the specific focus of organizational climate, yet their arguments have been supported for climate for safety (Larsson, 2005; Zohar, 2000; Zohar & Luria, 2004), climate for innovation (Abbey & Dickson, 1983), and climate for empowerment (Seibert, Silver, & Randolph, 2004). In this study, it is most appropriate to examine service climate, rather than a generic concept of organizational climate, in predicting frontline employees' service role ambiguity, service-related attitude, and behaviors.

Level of Theory for Service Climate

To understand the level of theory for service climate, the concept of psychological climate needs first to be introduced. Generally, psychological climate refers to how organizational environments are perceived and interpreted by members within the organization (James, James, & Ashe, 1990; James & Jones, 1974; Rousseau, 1988). When studying psychological climate, researchers emphasized employees' different perceptions and interpretations of work environments, acknowledging that psychological climate is a property of the individual and that individual-level is the appropriate level of theory, measurement, and analysis (James & Jones, 1974; Schneider et al., 2000). To clarify the conceptual and operational boundary, James and Jones (1974) pioneered the distinguishing of psychological climate (individual attribute) from organizational climate (organizational attribute) by identifying three approaches: 1) multiple measurement-organizational attribute approach arguing that climate is an "organizational attribute or main effects measurable by a variety of methods" (p. 1096); 2) perceptual measurement-

organizational attribute approach, representing climate "as a set of perceptual variables, which are still seen as organizational main effects" (p. 1097); and 3) perceptual measurement-individual attribute approach, regarding climate "as perceptual and as an individual attribute" (p. 1097). James and Jones (1974) recognized that climate can be regarded as either an organizational or an individual attribute, from individual perceptional measurements. Described simply, psychological climate is the individuals' perceptions of their environments, and organizational climate is the combination of all those individuals' perceptions.

Glick (1985, p. 602), however, argued that "aggregating psychological climate to make inferences about organizational climate results in the fallacy of the wrong level because the unit of analysis (aggregate) is inconsistent with the unit of theory (individual)." Although Glick (1985) challenged the generating of collective or organizational climate by aggregating psychological climate perceptions, previous studies supported that employee perceptions can be aggregated to represent the organizational attribute, when aggregation makes conceptual sense and the frame of reference for the perceptions is at the appropriate level (cf. Borucki & Burke, 1999; Johnson, 1996; Kozlowski & Hattrup, 1992; Schneider et al., 2000). Besides the theoretical justification, a certain degree of within-organizational agreement measuring the degree of shared perception should be met (James, 1982; James, Demaree, & Wolf, 1993). For example, if service climate is studied at the organizational level, this indicates that an objective service climate exists in an organization and is perceived similarly by all organizational members.

This current study specifies service climate as an individual attribute, acknowledging that each frontline employee at a foodservice establishment may differ in how he or she interprets and perceives the service climate of the organization. This study further argues that these different perceptions of service climate are likely to influence the service-related attitude and behaviors differently among the frontline employees. Schneider and Bartlett (1970, p. 150) observed that "what is psychologically important to the individual must be how the individual employee perceives his or her work environment, not how others might choose to describe it." Furthermore, James and Jones (1990) and Brown and Leigh (1996) argued that perceptions of work context take on personal meaning for individual employees via their evaluation, in which the individual interprets a cognitive representation of the features of the environment. Put simply, when members interpret the features, events, and routines of the work environment, there may be variance across employees in how each evaluate these features, events, and routines (Kopelman, Brief, & Guzzo, 1990; Rentsch, 1990). These arguments justify specifying climate as an individual attribute in this study, rather than as an organizational attribute.

Dimensions of Service Climate

Another important issue for organizational climate in general and service climate specifically, is the identification of relevant components of organizational climate (or service climate). The number of dimensions labeled relevant to climate has proliferated (Ostroff, Kinicki, & Tamkins, 2003). In this proliferation, different authors have reported varying dimensions of service climate. For example, empirical studies have shown one- (e.g., Andrews & Rogelberg, 2001), two- (e.g., Babakus, Yavas, Karatepe, & Avci, 2003; Hartline & Ferrell, 1996), five- (e.g., Kopelman, Brief, & Guzzo, 1990), eight- (e.g.,

Johnson, 1996), and ten- (e.g., Lytle, Hom, & Mokwa, 1998) dimensions of service climate. It should be stressed that, given varying events and routines in different work contexts, different sets of dimensions have differential importance within different industries (Schneider et al., 2000). Most service climate research has been conducted in bank settings or sales departments. It is necessary to identify key elements of service climate applicable to a chosen setting, in this example, foodservice establishments. The literature reviews of service climate and organizational climate, combined with results from semi-structured interviews, suggest four key dimensions of service climate relevant to the context of foodservice establishments: service vision; supervisor support; service training; and recognition and reward system.

Service vision. The construct of service vision represents clear service goals and objectives that emphasize the importance of service excellence and service quality, as articulated by the management of the organization (Butcher, 1994; Johnson, 1996; Lytle et al., 1998). This dimension is similar to the dimension of goal emphasis and service strategy represented by Kopelman et al. (1990) and Johnson (1996) respectively.

Supervisor support. Supervisor support is identified as an important component of service climate in the context of foodservice establishments. It refers to the extent to which that supervisor offers employee service-work related assistance in their service performance during work (Susskind, Kacmar, & Borchgrevink, 2003). Supervisor support is one of the most common dimensions for service climate or organizational climate, as identified by many previous researchers (Carless, 2004).

Service training. Researchers identified training (or service training) as one of service climate dimensions (c.f., Johnson, 1996; Kopelman et al., 1990; Schneider &

Bowen, 1985). Johnson (1996) defined service training as "...providing sufficient training on products and services offered, employees' specific roles in delivering excellent service, the day-to-day things they can do to deliver excellent service, and how to deal with angry customers." Service training in this study is defined as the organization's ongoing efforts to improve employees' skills dealing with service activities and interactions with customers.

Reward and recognition. Rewarding and recognizing frontline employees for their service excellence was considered an important managerial policy and practice that creates service climate (Butcher, 1994). Reward and recognition is defined as rewarding and recognizing employees' service excellence, and celebrating it (Johnson, 1996).

Second-order or first-order four-factor of service climate. Besides viewing service climate as a first-order four factor model, comprising service vision, supervisor support, service training, and rewards and recognition, it seems reasonable to consider overall service climate as a common high-order factor. For example, previous research (Borucki & Burke, 1999; Burke, Borucki, & Hurley, 1992; James & James, 1989) emphasized overall service climate by testing for a higher-order factor structure of service climate, i.e., the extent to which employees believe that service is emphasized, valued, and supported within the organization. Overall, the literature is inconsistent in defining dimensions of relevant service climate, and fails to establish whether service climate should be conceptualized as a higher-order construct or a multi-dimensional first-order construct. This study seeks to find the factor structure best capturing the construct of service climate. Thus, the following research question is given:

Research Question 1: which of two, 1) higher-order or 2) first-order four-factor best represents the factor structure of service climate?

Service Role Ambiguity

In this current study, service-role ambiguity is expected to mediate the relationship between service climate and service-oriented organizational citizenship behaviors. At the same time, service role ambiguity is expected to have both direct and indirect effect on service-oriented organizational citizenship behaviors. In short, the construct role ambiguity acts as a partial mediator on the relationship between service climate and service-oriented organizational citizenship behaviors among frontline employees.

Role Ambiguity and Conflicts

Role is defined as "the summation of the requirements with which the system confronts the individual member" (Katz & Kahn, 1978, p. 186). Job-related role stress comprises two major components: role conflicts and role ambiguity (Shephard & Fine, 1994; Tubre & Collins, 2000). Role ambiguity refers to feelings of uncertainty, in that an individual does not have clear direction about the expectations of his or her role in the job or organization (Rizzo, House, & Lirtzman, 1970), while role conflicts involve the incompatibility of job demands facing individuals (Ilgen & Hollenbeck, 1991). Organizational researchers reported that both role ambiguity and role conflict are negatively related to important job outcomes such as organizational commitment, job satisfaction, and job performance among employees (c.f., Boles & Babin, 1996; Johlke & Duhan, 2001; Rizzo, House, & Lirtzman, 1970; Sawyer, 1992). Although Tracy and

Johnson (1981) argued that role conflict and role ambiguity scales measured one underlying construct, recent empirical studies supported that each of them independently contributes to job-related outcome variables. For example, Yousef (2000) found that role conflict and role ambiguity independently and negatively affect job satisfaction, cognitive attitudes, and behavioral tendency attitudes toward organizational change.

Defining Service Role Ambiguity for Frontline Employees

The conceptual definition of role ambiguity broadly refers to uncertainty about expectations of supervisor/s and/or other managers, promotion, ethical situations or customers (Johlke & Duhan, 2001; Singh, Verbeke & Rhoads, 1996; Yousef, 2000), yet this study limits role ambiguity to frontline employees' service roles interacting with, and serving, customers. Thus, this study defines service role ambiguity as a service employee's feelings of uncertainty about aspects of his or her service job activities and role, including priorities and expectations while interacting with customers (Boles & Babin, 1996). That is, the conceptual definition of service-role ambiguity refers to the affective construct representing uncertain feelings about their expectations of service to customers. Frontline employees need to have clear role information or direction from management about how to perform well in the internal environment.

In particular, frontline employees are prone to perceive higher levels of role ambiguity and role conflicts, than are others (Johlke & Duhan, 2001). This may be because frontline employees are required to concurrently please both customers' needs and managements' job demands, and may experience uncertain expectations about their service roles from the management and/or organization they work for, and of customers.

Although it is important to understand frontline employees' role conflict and its effect on other variables, this current study does not focus on frontline employees' role conflicts, identifying discrepancies in customer demands and management expectations (or own expectations) (Cook, Hepworth, Wall, & Warr, 1981; Ilgen & Hollenbeck, 1991). Instead, this study proposes that the service climate, perceived by frontline employees, is a major antecedent of their experienced service-role ambiguity.

Service Orientation

Researchers strive to identify factors influencing service-oriented employees, because service-oriented employees positively influence customer satisfaction and organizational performance (cf., Cran, 1994; Dale & Wooler, 1991; Dienhart, Gregorie, & Downey, 1991; Hartline, Maxham, & Mckee, 2000; Kelly, 1992; Kim, McChon, & Miller, 2003; Susskind et al., 2003). Understanding predictors and/or consequences of service-oriented employees is valuable in the service-based organization, yet the construct of service orientation is somewhat inconsistently defined and operationalized from one study to another. These inconsistencies have created confusion about the construct itself, and a clear conceptual definition and theoretical boundaries are needed. The following section discusses limitations of past empirical studies and provides the rationale and distinct conceptual definitions of separate domains of service orientation, representing dispositional, attitudinal and behavioral aspects.

Confusion of Service Orientation Construct

First, there is confusion in distinguishing between a service-oriented organization and service-oriented employees. For example, several researchers (e.g.,

Bowen, Siehl, & Schneider, 1989; Lytle et al., 1998; Schneider et al., 1992; Webster, 1993) use the term *service-oriented organization*, which is almost identical to the construct of service climate. These researchers have focused on the organizational level in inquiring to what extent an organization is service oriented in terms of internal design characteristics. When researchers use the term service-oriented organization rather than service climate, they tend to think of an organizational predisposition, namely, a natural organizational preference for service excellence (Lytle et al., 1998). The problem is not that researchers name their construct differently despite similar contents, but rather the confusion that arises from researchers mixing these two different levels - service-oriented employees and service-oriented organization – into one broad construct of service-orientation. For example, several previous studies (e.g., Dienhart et al., 1991; Groves, 1992; Kim et al., 2003) have attempted to measure frontline restaurant employees' service orientation. Specifically, Dienhart et al. (1991) proposed three dimensions of service orientation among frontline employees, such as organizational support, customer focus, and service under pressure. Based on Dienhart et al.'s (1991) and Groves' work, Kim et al. (2003) proposed four dimensions of service orientation of frontline employees such as organizational support, customer focus, service under pressure, and prior customer relationship. These three or four dimensions are mixed to represent both the organizational (e.g., organizational support) and individual (e.g., customer focus, service under pressure, and prior customer relationship) service orientation, although they called it *employee* service orientation. Kim et al. (2003, p. 70) defined organizational support as "management's encouragement of service, training, design of service systems, and organizational procedures for ease of service delivery." In fact, a conceptual and

operational definition of organizational support as part of their employee service orientation scales is consistent with those of service climate, discussed earlier.

Regarding the discussion of service-oriented employees (or individual characteristics of service orientation), Hogan, Hogan, and Busch (1984) were the first researchers to introduce the term service orientation. Their definition of service orientation was "...disposition to be helpful, thoughtful, considerable, and cooperative" (p.165) and ".... a set of attitudes and behaviors that affects the staff of any organization and its customers" (p. 167). Hogan et al.'s (1984) conceptual definition includes three aspects of service orientation such as 1) innate (dispositional) service-orientation, 2) service-oriented attitude, and 3) service-oriented behaviors. However, their measurement seems to comprise a blend of certain sets of desirable personality characteristics only. A review of the service orientation literature reveals a research gap, in that these three aspects – dispositional, attitudinal, and behavioral service orientation – have not been differentiated explicitly, when the researchers use the term service-oriented employees. Innate service orientation (pre-dispositional service orientation), service-oriented attitude (service commitment toward customers), and service-oriented behavior (service-oriented organizational citizenship performance) should be separate from each other in terms of their conceptual definitions, as described below.

Innate or dispositional Service Orientation

An ability to identify and select service-oriented employees has become a critical issue for the service organization's success. When human resource managers address the importance of *selecting* service-oriented employees, they refer to these innate service-oriented characteristics, which individuals possess to one degree or another. Innate or

dispositional service orientation is defined as an individual's tendency or predisposition to provide superior service through a genuine desire and enjoyment to satisfy customers' needs (Brown, Mowen, Donavan, & Licata, 2002). Past research clearly showed that certain individuals have more of a service orientation than others (Hogan et al., 1984; Sanchez & Fraser, 1993; Shewchuk & O'Conner; 1995). For example, in the context of foodservice establishments, pre-dispositional service orientation is considered an innate trait of frontline employees, in that certain frontline employees naturally have more service-oriented traits than do others. When Hogan et al. (1984) pioneered investigating the concept of dispositional service orientation, they argued that the concept of dispositional service orientation could be examined using personality measures. In fact, their Service Orientation Index (SOI) was derived from the Hogan Personality Inventory (HPI), and the SOI was a composite of three personality elements: adjustment, sociability, and likeability. On the other hand, Donavan (1999) argued that pre-dispositional service orientation should be treated as a separate construct rather than mixing it with certain dimensions of personality. Furthermore, Brown et al. (2002) supported Donavan's notion by examining the effect of personality on the individual's pre-dispositional service orientation. Dispositional service-orientation needs to be differentiated from the individual's service-oriented attitude and behaviors, as explained below.

Service-Oriented Attitude

Besides dispositional service-orientation, service orientation also has been used in the literature to refer to an employee's affective commitment toward customers, representing attitudinal service orientation. In general, affective commitment is defined as

"the employee's emotional attachment to, identification with, and involvement in the organization." (Meyer & Allen, 1991, p. 67). This current study, in particular, has focused on examining frontline employees' affective commitment regarding their service-related jobs. Based on the definition of service orientation by Susskind et al. (2003), this study defines frontline employees' service-oriented attitude as frontline employees' level of commitment to provide excellent service to customers, namely service commitment toward customers. This definition does not imply innate or dispositional characteristics, nor particular service-oriented behaviors, but rather captures employees' affective attitudinal beliefs or feelings of how important service quality is, for their customers. In short, in this dissertation, service commitment toward customers represents frontline employees' affective desire and feelings to improve service quality for customers. This study argues that service commitment toward customers is a determinant of service-oriented organizational citizenship behaviors.

Service-Oriented Organizational Citizenship Behaviors

Beside dispositional and attitudinal service orientation, a separate domain of service orientation is individual service-oriented behaviors, representing an individual's behavioral service performance. Recent research increasingly has used the term *service-oriented organizational citizenship behaviors* (SOCB) of frontline employees (e.g., Bettencourt, Gwinner, & Meuter, 2001; Bienstock, DeMoranville, & Smith, 2003; Chebat & Kollias, 2000; Donavan, Brown, & Moven, 2004; Stamper & Van Dyne, 2001; Stamper & Van Dyne, 2003). Service-oriented organizational citizenship behaviors are rooted in the general concepts of organizational citizenship behavior. Organ (1988, p. 4) defined organizational citizenship behaviors as "individual behavior that is discretionary,

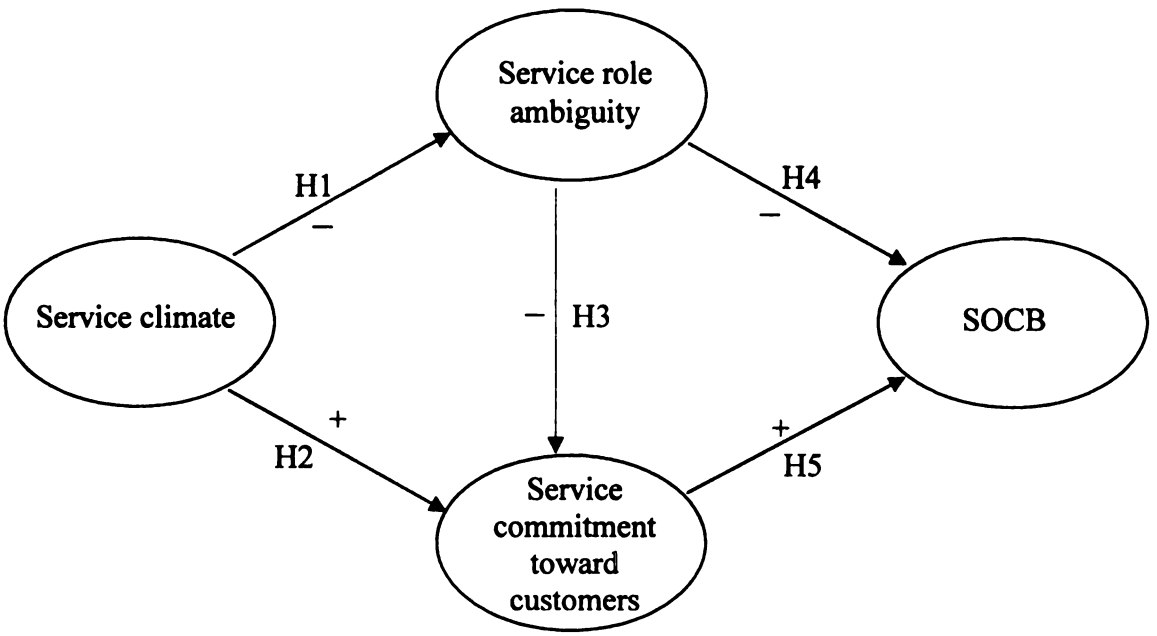
not directly or explicitly recognized by the formal reward system and that in the aggregate promotes the effective functioning of the organization." Podsakoff et al. (2000) observed that more than 30 different forms of organizational citizenship behaviors have been identified. Among these more than 30, however, the five dimensions proposed by Organ (1988), are the best known; these five are altruism, sportsmanship, conscientiousness, courtesy, and civic virtue.

Two dimensions of SOCB. Borman and Motowidlo (1993) noted that citizenship performance is more appropriate for certain types of organization than for others. For example, Stamper and Dyne (2003) emphasized that service-oriented organizational citizenship performance is particularly important for frontline employees in service-based organizations, given unpredictable customers' demands. Based on the work of Van Scotter and Motowidlo (1996) and Conway (1999), two dimensions of service-oriented citizenship performance are presented in this study: helping co-workers (interpersonal facilitation), and conscious job-dedication dimensions. The concepts of helping coworkers and conscious job-dedication are similar to Organ's (1988) altruism and conscientiousness. For example, Organ (1988, p. 96) defined altruism as "voluntary actions that help another person with a work problem... instructing a new hire on how to use new equipment," and defined consciousness as "a pattern of going well beyond minimally required levels of attendance, punctuality, conserving resources, and related matters of internal maintenance." In this study, helping coworkers refers to employees' helping and cooperating with other co-workers regarding service-related duties that are not necessarily part of their described job duties. Conscious job-dedication dimension is defined as delivering extra care and special attention to customers without losing

customer focus, even in busy situations. Put simply, the helping-coworkers dimension represents frontline employees' behavioral service orientation toward their coworkers, while conscious job-dedication toward customers represents frontline employees' behavioral service orientation toward customers.

Conceptual Model

The model presented in Figure 2-1 posits that frontline employee perceptions of service climate negatively influence their perceived service role ambiguity, and positively influence their service commitment toward customers. The perceived service role ambiguity has a negative influence on service commitment toward customers. Consequently, both perceived service role ambiguity and service commitment toward customers directly influence their service-oriented organizational citizenship behaviors.



* SOCB: Service-oriented organizational citizenship behaviors

Figure 2-1
Conceptual Model

Highlights of The Model

Previous studies have shown that employees' perceptions of service climate are directly related to outcome variables such as customers' satisfaction, job performance, and organizational profits (c.f., Benoy, 1996; Johnson, 1996; Schneider & Bowen, 1985; Schneider et al., 1980; Schneider et al., 1998). In particular, *linkage studies* (Schneider et al., 1998) examining the *direct* relationship between employee perception of service climate and customer perception of service quality, has been extremely popular in the studies of service climate and service outcomes. Ostroff et al. (2003), however, were concerned that the organizational climate (service climate in this example) needs to identify the mediating linkages between climate and outcome variables.

In contrast to the direct model examining the relationship between service climate and outcome variables, the proposed model posited in Figure 2-1 emphasizes two mediating variables to investigate the relationship between service climate and service-oriented organizational citizenship behaviors among frontline employees. The proposed model (Figure 2-1) posits that frontline employee perception of service climate does not directly affect service-oriented organizational citizenship, but indirectly affects this outcome variable. Two identified mediating variables are service-oriented attitude (service commitment toward customers) and service role ambiguity, in which the latter is a partial mediator.

Mediating Model. The causal orders of the proposed model are generally consistent with Bagozzi's (1992) attitudinal model. According to Bagozzi (1992), the cognitive appraisal or evaluation of events is likely to influence affective responses. Generally, affective responses play mediating roles between cognitive appraisal and

behaviors. In the proposed theoretical framework, two affective responses - perceived service role ambiguity and service commitment towards customers - are proposed as factors directly influencing service-oriented organizational citizenship performance. Schmit and Allscheid (1995), using Bagozzi's attitudinal model (1992) also found empirical support that service climate positively influences employees' affective responses and, in turn, performance. In particular, Kopelman et al. (1990) suggested that expected influence of climate perceptions on behaviors would be mediated by cognitive and affective states, which is consistent with Bagozzi's (1992) attitudinal model and that of Schmit and Allscheid (1995). Kopelman et al. (1990), however, did not test their propositions empirically. A recent meta analysis by Carr, Schmidt, Ford, & Deshon (2003) empirically tested the mediation model of climate, as suggested by Kopelman et al. (1990), and supported Kopelman et al.'s mediation model. More recently, Babakus et al. (2003) proposed and tested a model that examines the effect of management commitment to service quality, on employees' affective and performance outcomes, using Bagozzi's attitudinal model. Barbakus et al.'s study (2003) found that frontline employees' affective commitment and job satisfaction mediate the relationship between perception of management commitment to service quality, and their perceptions of service recovery performance. All these theoretical and empirical findings support the hypothesized relationships among service climate, service role ambiguity, service commitment, and service performance, in the proposed model. The following, in particular, reviews the specific paths, with reference to these two mediators.

Hypothesized Relationships

As the conceptual model (Figure 2-1) posits, five main hypotheses are proposed:

H1: A frontline employee's perceived service climate negatively influences his or her perceived service role ambiguity.

H2: A frontline employee's perceived service climate positively influences his or her service-oriented attitude (service commitment toward customers).

H3: A frontline employee's perceived role ambiguity negatively influences his or her service commitment toward customers (service-oriented attitude).

H4: A frontline employee's perceived service role ambiguity negatively influences his or her service-oriented organizational citizenship behaviors

H5: A frontline employee's service-oriented attitude influences positively his or her service-oriented organizational citizenship behaviors.

Cognitive Appraisals. Employee perceptions of service climate, manifested by service vision, supervisor supports, service training, and reward and recognition, are considered individuals' cognitive appraisals of things happening in that particular organization. Interpretations of service climate have differing meanings to each individual in the organization, because members' perceptions of the features, events, and routines in the work context are likely to differ, depending on their cognitive appraisals (Carless, 2004; James & McIntyre, 1996; Thomas & Velthouse, 1990). This current study proposes that perception of service climate (cognitive appraisals of organizational practices, procedures, and policies emphasizing and valuing service quality) expects to influence, directly, service role ambiguity and service commitment toward customers, in

which service role ambiguity also directly influences service commitment toward customers.

Mediator: service role ambiguity. Individuals accomplish work in organizations by engaging in roles expected of them by other individuals within the organization (Katz and Kahn, 1978). In the current study, if frontline employees perceive/evaluate that the organization's routines, practices, events, and policies (i.e., service vision, service training, supervisor support, and reward and recognition) value and expect service quality, frontline employees consequently perceive their service role clarity (i.e., the opposite of service role ambiguity), meaning that they know exactly what their service roles should be and are expected to be (*H1*). That is, four identified elements of service climate – service vision, supervisor support, service training, and reward and recognition – all convey messages to members of the organization about what service roles are expected, valued, and expected in a particular organization. When employees perceive their service role clarity (ambiguity), this will influence their service commitment toward customers positively (negatively). Several previous studies have produced empirical findings that perceptions of organizational environments (service climate in this example) influence the level of role ambiguity, and that this in turn impacts employees' attitudinal- (service commitment toward customers in this example; *H3*) and behavioral- outcomes (service-oriented organizational citizenship behaviors in this example; *H4*).

Mediator: service commitment toward customers. This current study proposes that -perception of service climate (employees' cognitive appraisal of events in work context) influences his or her service commitment toward customers. This hypothesized relationship is supported by previous empirical studies examining the effect of

management commitment to service quality, on employees' service commitment toward customers (c.f., Barbakus et al., 2003; Hartline & Ferrell, 1996; Reardon & Enis, 1990). These empirical studies have supported that management commitment to service quality influences affective outcomes such as job satisfaction and employee commitment to customers. An important question is how the management commitment to service quality in their studies relates to the service climate in this current study. Barbakus et al. (2003) defined management commitment to service quality as "employees' appraisal of an organization's commitment to nurture, develop, support, and reward its employees to achieve service excellence." They further explained that potential indicators of management commitment to service quality include recruitment and selection of frontline employees, training, technical support, rewards, and so on. Their definitions of management commitment to service quality also emphasize employees' cognitive appraisal of routine events in the organization, which is consistent with the way service climate has been conceptualized in the current study. Thus, it is reasonable to expect that employees' perceived service climate positively influences service commitment toward customers (*H2*). Service commitment toward customers (affective state), consequently expects to influence frontline employees' service-oriented citizenship behaviors (*H5*). When Babakus et al. (2003) proposed and tested a model examining the effect of management commitment to service quality on employees' affective and performance outcomes, they found that frontline employees' affective commitment and job satisfaction mediate the relationship between perception of management commitment to service quality and their perceptions of service recovery performance.

Chapter Summary

This chapter explained why the climate for service, rather than organizational climate, needed to be studied to explore service-related attitudinal and behavioral outcomes in this present study. This chapter provided the justification for specifying the service climate as an individual attribute, rather than as an organizational attribute. Four dimensions of service climate – service training, supervisor supports, service vision, reward and recognition – were identified as key elements of organizational practices, procedures, and policies that emphasize quality of service in the context of foodservice establishments. This chapter explained a proposed model that the effect of service climate on service-oriented organizational citizenship behavior is mediated by service commitment toward customers and service role ambiguity. In particular, this chapter emphasized that attitudinal service orientation (i.e., service commitment toward customers) needs to be differentiated from behavioral service orientation (i.e., service-oriented organizational citizenship behavior). Two dimensions of service-oriented organizational citizenship behavior (outcome variable) were discussed.

CHAPTER 3

METHOD

Chapter Overview

This chapter provides a discussion of data collection and procedures for three stages: interviews, pretest, and main study. It describes sample characteristics, representing 452 frontline employees working in 31 different foodservice establishments. This chapter explains how measurement items for all constructs were developed initially and modified for testing further analyses. It also outlines the techniques of the structural equation model in terms of selecting estimation method and criteria of evaluating the model fit. Finally, this chapter discusses the steps of evaluating both measurement and path models.

Data Collection and Procedures

Stage 1: Interviews

In exploring the concepts and dimensions of service climate and service orientation during Spring 2004, semi-structured interviews (see Appendix A) were conducted with ten students from *The* School of Hospitality Business at Michigan State University. An email was sent to a list of Hospitality Business students at MSU encouraging them to participate in this study. Participation in the study was completely voluntary. Extra-credits or financial incentives were not given to those ten subjects. All subjects had experience working in table-service foodservice establishments. Three had worked in one restaurant and seven had worked in many. The main purpose of the

interviews was to explore whether there may be unique or additional dimensions of service climate and service orientation in the context of foodservice establishments, based on the literature of service climate and service orientation generally, in other industries.

Stage 2: Pretest

After generating a pool of items, this researcher recruited nine judges[1] to evaluate, in April 2005, items from an initial pool to assess face/content validity. These nine judges were students of *The* School of Hospitality Business at Michigan State University, who have experience in serving at foodservice establishments. This researcher sent an invitation email to a list of students in one of the courses offered by *The* School of Hospitality Business at MSU. A researcher compensated each subject with $20 cash for the time spent, ranging from 45-60 minutes.

This researcher met individually with each of the nine judges to have him or her evaluate content and face validity of the construct. Each received a folder including 1) a sheet including conceptual definitions of dimensions of each construct in the theoretical model, and 2) a sheet including actual measurement items planned to be used in the questionnaire for the subjects (see Appendix B). The judges were asked to evaluate how well each item in the questionnaire reflected the relevant construct, based on the given conceptual definition in the separate sheet. They used a seven-point Likert-type scale, ranging from very unclearly representative (1) to very clearly representative (7). To be included in the main study, the average value for each item is recommended to be higher than 5 (DeVellis, 2003). At the end of the session, the researcher encouraged the subject to comment verbally regarding uncertain and unclear items on the questionnaire. The collected feedback and answers from this pretest were used to refine the survey

[1] These nine judges were not from those ten subjects who participated in the pilot test.

instrument for the main study by eliminating uncertain or inappropriate statements in the questionnaire.

Stage 3: Main Study

Participants for the main study were 487 frontline employees from 31 different foodservice establishments with an average participation of 15 employees (ranging from 4 to 45 employees) from each establishment. Frontline employees are defined as those persons as having direct contact with customers in foodservice establishments (e.g., servers, bartenders, and hostesses), including family-owned restaurants, chain restaurants, banquet foodservice department or restaurants in hotels, etc. Those employed in fast-food restaurants were excluded from the target sample, since employees in that setting have only minimal contact with customers. Those who hold supervisory positions also were ineligible to participate in this study. Of 487 collected surveys, 35 responses were deleted due to incomplete responses as well as illegibility. Therefore, the final number of subjects used for SEM analysis was $N = 452$. The majority of the participants were female (66.5%), with an average age of 25.5 years ($SD = 7.6$). The majority of participants (85%) were white (Caucasian). Fifty-three point seven percent of participants were part time, and 46.3% full-time, frontline employees. Participants had working experience averaging 25.2 months at the foodservice establishment where the data were collected. Regarding their job types, the majority of participants were servers (75.7%), followed by those who served multiple or rotated positions (13.7%), hostess (6.3%), and bartender (4.2%). The largest percentage of participants had an earned two-year (associate) degree or four-year degree in progress (54.7%), followed by 34.5% who

had high-school degree or less (23.7%), and by 17.6 % who had an earned baccalaureate (four-year) degree (17.6%).

Table 3-1
Profile of Respondents (N = 452)

Demographic Info	Descriptions	
Gender	Male	33.5 %
	Female	66.5 %
Age	Under 20	13.0 %
	20-24	48.8 %
	25-30	17.2 %
	Over 30	21.0 %
	Average (*SD*)	25.5 years (7.6)
Education	High school or less	23.7%
	Some college or associate degree	42.9%
	Four-year degree in progress	11.8%
	Baccalaureate (four-year) degree	17.6%
	Graduate degree	4%
Ethnic background	White / Caucasian	85.0%
	Black / African American	5.1%
	Mexican American	1.6%
	Hispanic / Spanish American	1.3%
	American Indian / Native American	.7%
	Asian / Pacific Islander	2.7%
	Other	3.6%
Current Work status	Part-time	53.7%
	Full-time	46.3%
Weekly working time	Average (*SD*)	30.7 hours (8.9)
Employment status	Temporary / Seasonal	25.6%
	Permanent / Long-term	74.4%
Job position	Server	75.7%
	Multiple positions	13.8%
	Hostess	6.3%
	Bartender	4.2%
Work experience at current establishment	Average (*SD*)	25.2 months (28.2)
Total work experience at food establishments	Average (*SD*)	69.2 months (63.6)

To recruit participating foodservice establishments, this researcher sent initial letter packets to 78 alumni of *The* School of Hospitality Business, and contacts of MSU's School of Hospitality Business faculty who hold senior management positions (Chief Executive Officer, President, Director of Human Resources, Foodservice Director) at particular organizations. Each letter packet included a copy of the questionnaire, a supporting letter from the dissertation advisor or the director of *The* School of Hospitality Business, and a cover letter explaining the purpose of study and other essential points (see Appendix C). This researcher followed up with emails, phone calls, and personal visits when appropriate, to increase participation by foodservice establishment personnel. In exchange for their participation, this researcher promised that the senior management referred to above would receive summary results regarding their own establishments, together with the results of total aggregated sample in this dissertation. Five participants (frontline employees) would be selected, randomly, to win $ 100 cash each. Once access to the foodservice establishments was obtained, the survey packets (including actual questionnaire attached with consent form, drawing card, and drop boxes) were mailed or delivered (depending on the locations of foodservice establishments) to designated managers. Whenever possible, this researcher delivered the survey packets directly to the designated managers, rather than mailing them, to speed the process. This researcher delivered in each instance a quantity of survey packets matching the numbers of frontline employees at that particular operation, together with two separate drop-boxes. The researcher asked the designated managers to post the study announcement on their employee café or rest area notice board/s and to place, immediately proximate to such announcement, the actual survey packets. Frontline employees were asked to complete

the survey and to submit it, sealed in the provided envelope, into a drop-box labeled "Survey collection." To prevent any possibility of linking an individual's response with his or her identity, those frontline employees were asked to place drawing cards containing their contact information into the separate drawing box labeled "Drawing collection." The incentive information was clear in the consent form (see Appendix D) and in the announced study note, that each of five respondents would be selected randomly to win a cash prize of $100. This researcher revisited each operation to fetch the two survey boxes within three weeks. For those foodservice establishments to which survey packets were mailed, the procedures were essentially similar (completed surveys sealed in provided envelopes, separate submission of drawing cards, and provision of two separate large envelopes, one collecting actual surveys and another collecting the drawing cards), excepting the inclusion of pre-paid return mailbox.

Measurements

The initial pool of items was modified based on the pretest procedure, described earlier. The proposed model included eight latent constructs, consisting of four dimensions of service climate, service role ambiguity, service commitment toward customers (service-oriented attitude toward customers), and two dimensions of service-oriented organizational citizenship behavior (conscious job-dedication toward customers and helping co-workers). All items measuring constructs in the proposed theoretical model were assessed with a 5-point Likert-type scale, ranging from strongly disagree (1) to strongly agree (5).

Service Climate

Four dimensions of service climate (i.e., service vision, supervisor support, service training, and reward and recognition) were measured with 30 items in total. This present study also explored whether service climate has a higher-order factor representing overall service climate or a specific first four-factor model of service climate. The items were developed and modified from several service climate scales (e.g., Burke, Borucki, & Hurley, 1992; Johnson, 1996; Lytle, Hom, & Mowka, 1998; Schneider, Wheeler, & Cox, 1992) as well as the findings of semi-structured interviews and a pre-test. All items reflected the foodservice establishment's internal functions (e.g., policies, practices, and procedures), emphasizing quality of service. A sample item for each construct is as follows: "management makes every effort to ensure that service quality is the top priority of this foodservice establishment" (service vision); "my supervisor regularly spends time on the floor to support me to facilitate service activities" (supervisor support); "this foodservice establishment offers extensive customer service training before my initial contact with customers" (service training); "wowing customers contributes to my potential recognition" (reward and recognition).

Service Role Ambiguity

The construct of service role ambiguity was assessed by six items modified from Rizzo, House, & Lirtzman's (1970) role ambiguity scale. King and King (1990) criticized Rizzo et al. (1970)'s scale as having a lack of correspondence between items and the specific content domains. The original Rizzo et al.'s (1970) items were modified to improve clarity of measurement items that can be applicable to the context of

foodservice management. A sample item is "I feel uncertain about how to solve customer complaints, if they occur."

Service Commitment Toward Customers

Service commitment toward customers represents attitudinal service orientation toward customers. Service commitment toward customers measures employees' affective beliefs about the importance of customer service. The construct of service commitment toward customers was measured with seven items. The scale of service orientation used in Butcher (1994) and Susskind, Kacmar, and Borchgrevink (2003) were used, since these scales captured the attitudinal concept of service orientation. A sample item is "I feel that the needs of our customers always come first."

Dispositional Service Orientation

The service orientation scale of Hogan, Hogan, and Busch (1984) has been criticized as lacking in discriminant validity (Rosse, Miller, & Barnes, 1991), since this measurement was based on general personality scales. In this study, the construct of dispositional service orientation measured the extent to which an individual naturally enjoys meeting the needs of customers. Twelve items of dispositional service orientation were developed from both previous research (Brown, Mowen, Donavan, & Licata, 2002; Donavan, Brown, & Mowen, 2004) and the pre-test. A sample item is "I have a natural tendency to enjoy providing friendly service to customers."

Service-Oriented Organizational Citizenship Behavior

Two dimensions of the service-oriented organizational citizenship behaviors – conscious job-dedication toward customers (behavioral service orientation toward customers) and helping co-workers (behavioral service orientation toward co-workers)

were measured via self-report from frontline employees, with eight and six items respectively. Both dimensions measure the extent to which frontline employees' discretionary service roles interact with their customers (conscious job dedication toward customers) and co-workers (helping dimension) to improve and maximize quality service. An example of conscious job-dedication toward customers is "I follow customer service guidelines with extreme care." An example of helping co-workers is "I help other servers' service activities that are not assigned to me in busy situations."

Other Variables

Job tenure, job status (part-time *vs.* full-time), average number of hours worked weekly, and demographic characteristics (gender, educational level, ethnic background) were asked about, to obtain background information about participants.

Statistical Analyses

Data Screening

Before proceeding with evaluating the measurement model and the path model, the data were screened for missing data, normality, and linearity. Tabachnick and Fidell (2001) observed that failure to meet assumptions such as normality and linearity may not invalidate the analysis, but rather may weaken the validity of the results.

Overview of Structural Equation Modeling (SEM)

This study followed the two-step approach advocated by Anderson and Gerbing (1988) in testing structural equation model using AMOS 5.0 structural equation program. That is, a measurement model was estimated and refined first, prior to testing the estimation of the structural model and hypotheses.

Sample size for SEM. SEM analysis requires larger samples to produce reliable parameters. Smaller sample size is most likely to increase the likelihood of specification errors, and produce biased goodness of fit indices (Kline, 1998). The rule of thumb calculating the required sample size to run SEM is that the ratio of free parameters to participants should be 1:5 (Bentler, 1995). Kline (1998), on the other hand, observed that sample size of 200 is considered to be ample to run SEM. The obtained sample size for this current study ($N = 452$) met both suggested criteria.

Estimation method. The maximum likelihood (ML) estimation procedure was used as an estimation procedure in SEM analyses. The ML estimation allows all model parameters to be estimated at the same time (Kline, 1998), and this estimation method performs reasonably well "under a variety of less-than-optimal analytic conditions" such as small sample size and violation of normal distribution (Hoyle & Panter, 1995, p. 163).

Assessment of model fit. A chi-square statistic is commonly used to evaluate model fit, but this statistic is known to be too sensitive to sample size (Kline, 1998). A number of fit indices have been developed, particularly over the past two decades, to evaluate structural equation models (Bollen & Long, 1993; Bryne, 2001; Hu & Bentler, 1999). In this study, multiple indices were used in assessing the model fit, following recommendations by Bollen (1989) and Hu and Bentler (1999). More specifically, the chi-square statistics adjusted by the degrees of free (χ^2/df), the comparative fit index (CFI; Bentler, 1990), the nonnormed fit index (NNFI; Bentler & Bonnett, 1980; Tucker & Lewis, 1973), and the room mean square error of approximation (RMSEA; Nevitt & Hancock, 2000) were used to evaluate the appropriateness of model fit. These fit indices have been shown to be good measures under various conditions of model

misspecification, sample size, and estimation methods (Fan, Thompson, & Wang, 1999). χ^2/df less than 3 is considered a good fit. For CFI and NNFI, values range from 0 to 1.0, are considered good. The value of less than .10 for RMSEA indicates good fit. Both modification indices provided by AMOS output and the standardized residual matrix were examined to modify the models. Furthermore, χ^2 difference test was used to compare and evaluate the competing and alternative models.

Measurement model. Before testing a full measurement model, a series of confirmatory factor analyses was conducted to evaluate whether higher-order of service climate or specific four first-order factor would show better fit of model (research question 1). Second, the factor structure of service orientation, dispositional service orientation, attitudinal service orientation toward customers, labeled as service commitment toward customers, and behavioral service orientation labeled as service oriented organizational citizenship performance) was evaluated (research question 2). After these two tests were completed, a full measurement model, based on retained items from these CFAs was evaluated to assess internal consistency as well as parallelism. Items with large standardized residuals and low reliability (based on Squared Multiple Correlation, provided by Amos output) were dropped to improve the model fit to the data. In addition to the model fit test, the reliability (calculated by Cronbach's Alphas) was assessed. A Cronbach's Alpha greater than 0.70 is considered acceptable, according to Nunnally (1978). Furthermore, construct validity of the measurement was assessed.

Path model (hybrid model). Once the appropriate measurement model was obtained after revising it and testing against the competing measurement model, a full structural model was tested. In assessing the path model, the hypothesized relationships

(both magnitudes and directions) were examined. The initial path model was modified and revised by removing non-significant paths. One advantage to using SEM is that it allows for testing potential alternative models in order to determine which provides best fit for the data. Other competing models were compared against the revised path model, based on chi-square difference statistics and other fit indices such as CFI (comparative fit index), NNFI (non-normed fit index), and RMSEA (root mean square error of approximation).

Chapter Summary

This chapter explained three stages of data collection and procedures. Semi-structured interviews (stage 1) were conducted to explore the dimensions of constructs (e.g., service climate and service orientation) relevant to the context of foodservice establishments. Pre-test (stage 2) involved evaluating content and face validity for the measurement models. Data collection from the field survey (stage 3) resulted in 452 usable responses from frontline employees working in 31 different foodservice establishments. This chapter discussed the criteria considered good fit to the data for both measurement and path models, and how the revised and/or alternative models need to be compared to select the better-fit model than others.

CHAPTER 4

RESULTS

Chapter Overview

This chapter describes the findings of data analyses for both measurement models and structural path models. Both measurement and structural models are considered to evaluate construct validity. Following the steps suggested by Anderson and Gerbing (1988) and the Mulaik and Millsap (2000) procedures, the estimations of appropriate measurement models are explained first, and then the evaluations of structural models, including hypotheses testing are explained next. This chapter further identifies the best fitting and most parsimonious models (both measurement and structural paths). The initial proposed models and other competing or revising models are compared, guided by the overall goodness-of-fit indices and a chi-square difference tests (Bollen, 1989).

Preliminary Analyses

The skewness and kurtosis for each item was examined to determine if the data meet the normality assumption for the maximum likelihood estimation method. The values for univariate skewness and kurtosis ranged from –1.5 to 1.4 and from -.7 to 2.5 respectively. All these values for univariate skewness and kurtosis were within acceptable range (-3 to 3 for skewness and -8 to 8 for kurtosis), according to Kline (1998). The scatterplots indicated unclear patterns of linearity for two hypothesized relationships between service climate and service role ambiguity, and service role ambiguity and SOBC[2]-helping coworkers.

[2] SOBC: service oriented organizational citizenship behaviors

Testing Measurement Models

The first step in SEM was to determine the appropriate measurement model for the data. Thus, a confirmatory factor analysis (CFA) was conducted to assess the psychometric properties of the measurement models. Prior to testing a full measurement model, analyzing all latent constructs together, a series of CFAs were performed separately for the constructs of service climate (higher order vs. first-order), service orientation (dispositional, attitudinal, and behavioral service orientation), and service role ambiguity. When an initial model required improvement in fit, modification procedures were conducted, guided by theoretical and empirical considerations.

Factor Structure of Service Climate

Model specifications and procedures. As discussed in Chapter 2, the literature is inconsistent in defining dimensions of service climate and whether service climate should be conceptualized as a higher-order construct or multidimensional first-order construct. Accordingly, the goodness of fit of service climate was tested in comparison with alternative and competing models. First, a one-factor model of service climate, with all items loadings into one factor, was estimated. Second, an initial first four-factor of service climate, comprising four latent variables - service vision, supervisor support, service training, and reward and recognition - was tested. Third, the initial first four-factor of service climate was modified to improve in fit, guided by standardized residual matrix, modification index, and the size of factor loadings. Fourth, based on the modified items from the revised first-order four-factor model, the second-order factor of service climate was tested and evaluated.

Overall fit indices for service climate. Table 4-1 shows the comparisons of overall fit indices for alternative measurement models of service climate. According to overall fit indices, a one-factor model did not produce a good fit with the data, χ^2 (405, N = 452) = 2196.55, $p < .001$, (χ^2/df = 5.4, CFI = .78, NNFI = .76, RMSEA = .10). An initial four-factor model, on the other hand, was a significantly better fit than the one factor-model, $\Delta\chi^2$ (6, N = 452) = 1040.18, $p < .001$ (χ^2/df = 2.7, CFI = .93, NNFI = .93, RMSEA = .06), yet the standardized residual matrix and modification indices showed that the initial four-factor is required for improvement in model fit. After deleting six items in total, a revised four-factor model showed a significant improvement in fit, $\Delta\chi^2$ (175, N = 452) = 548.77, $p < .001$ (χ^2/df = 2.7, CFI = .93, NNFI = .93, RMSEA = .06). Next, the second-order four-factor model was tested, with the remaining 24 items. The second-order four-factor model showed further significant improvement in fit, $\Delta\chi^2$ (19, N = 452) = 102.73, $p < .001$ (χ^2/df = 2.5, CFI = .95, NNFI = .94, RMSEA = .06), compared to the revised first-order four-factor of the service climate.

Table 4-1
Overall Fit Indices for Alternative Models of the Service Climate (N = 452)

Model	χ^2	*df*	χ^2/df	$\Delta\chi^2$	Δdf	CFI	NNFI	RMSEA
One factor	2197	405	5.4	-	-	.78	.76	.10
First-order four-factor	1156	399	3.0	1040***	6	.91	.90	.07
Revised first-order four-factor	608	224	2.7	549***	175	.93	.93	.06
Revised second-order four- factor	505	205	2.5	103***	19	.95	.94	.06

Note: CFI = comparative fit index; NNFI = non-normed fit index; RMSEA = root mean square error of approximation; *** $p < .001$

Final measurement model of service climate. Figure 4-1 posits the factor structure of higher-order service climate. Overall, results of the CFA for the service climate indicate that a second-order four-factor structure for the service climate represents a substantively best fit to the data, compared to all alternative models. Table 4-2 shows the items corresponding to the four-factor of service climate and their standardized factor loadings. All standardized factor loadings for sub-dimensional of service climate were significant at $p < .001$. The standardized Cronbach's coefficient alpha scores for service vision, service training, supervisor support, and rewards and recognitions were $\alpha = .83$, $\alpha = .90$, $\alpha = .86$ and $\alpha = .87$ respectively.

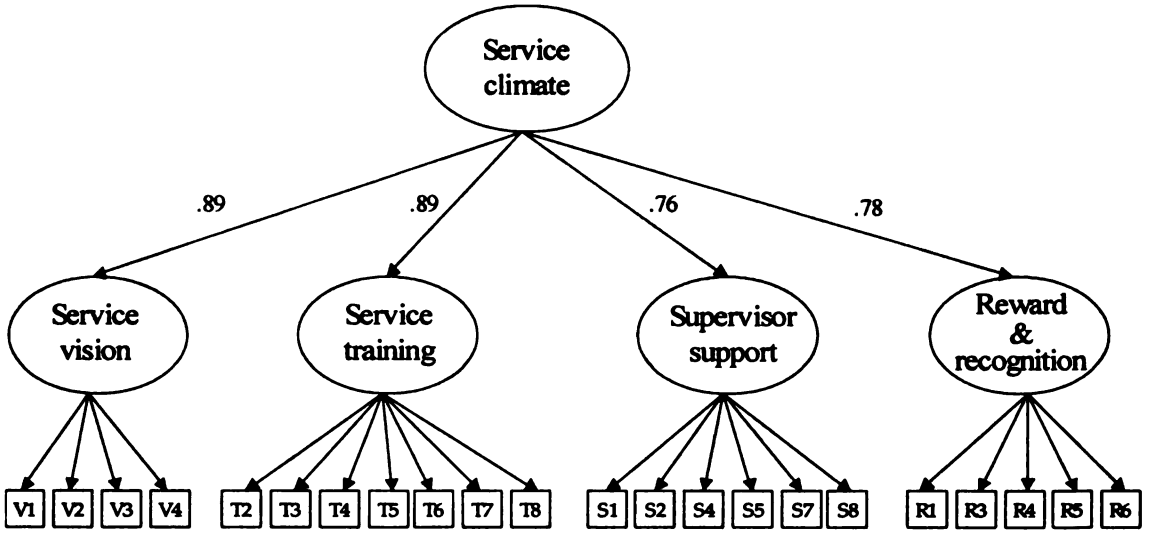


Figure 4-1
The Second-Order Four-Factor Measurement Model of Service Climate

Table 4-2
Standardized Factor Loadings for Revised Second-Order Four-Factor Model of Service Climate ($N = 452$)

Items	Factor loadings ***	C.R.
Service Vision (V)		
V3 Management constantly communicates the importance and value of service quality.	0.80	14.1
V4 Management makes every effort to ensure that service quality is the top priority of this foodservice establishment.	0.78	14.0
V2 Management makes clear that the goal of pleasing customers is an important part of my job in this foodservice establishment.	0.69	13.1
V1 Management emphasizes that customer satisfaction is the number one priority of this foodservice establishment.	0.67	-
Service Training (T)		
T6 Service training is emphasized in this foodservice establishment.	0.85	17.8
T3 This foodservice establishment spends much time and effort in training me in delivering high quality service.	0.84	17.3
T2 This foodservice establishment offers extensive customer service training before my initial contact with customers.	0.75	15.4
T5 Service training is part of the routine in this foodservice establishment.	0.75	15.6
T4 This foodservice establishment trains me to have competent food and beverage knowledge about the menu.	0.72	15.0
T8 The procedure of service training is clearly understandable to me.	0.72	-
T7 This foodservice establishment trains me on how to solve customer complaints.	0.65	13.3
Supervisor Support (S)		
S2 My supervisor supports me so that I can perform my service duties well.	0.76	15.7
S8 Management supports my service activities to serve customers best.	0.76	15.2
S1 I find my supervisor very helpful in my performance of customer service duties.	0.73	-
S5 My supervisor provides me with important work-related information and advice that makes my job easier.	0.72	14.6
S4 My supervisor regularly spends time on the floor to support me to facilitate service activities.	0.71	14.4
S7 I can receive assistance from supervisors when performing my service duties.	0.69	14.0
Reward and Recognition (R)		
R4 I will be rewarded if I deal effectively with customer problems.	0.81	18.8
R6 "Wowing" customers contributes to my potential recognition.	0.81	-
R5 This foodservice establishment celebrates top service accomplishments.	0.80	18.5
R3 The reward system is linked to my service performance.	0.69	15.4
R1 If I improve the level of service offered to customers, the supervisor recognizes my service performance.	0.53	11.2

*** Factor loadings were all significant at $p < .001$

Factor Structure of Service Orientation

Model specifications and procedures. Previous studies have not explicitly proposed and tested the dimensions of service orientation from dispositional, attitudinal and behavioral concepts.[3] In this study, dispositional service orientation (dispositional SO) was not included as one of the latent constructs in the proposed model (Figure 2-1), but the measurement items for this construct were included in the questionnaire, so as to check the measurement validity of the concept of service orientation. First, a one-factor model of service orientation, specified with all items loading onto a single factor, was tested. Second, an initial first four-factor of the service orientation, comprising four latent constructs - dispositional service orientation, service commitment toward customers, conscious job dedication toward customers, and helping co-workers was estimated to compare the model fit with the one-factor model. Third, an initial first four-factor was revised to improve an overall fit of the model to the data.

Overall fit indices for service orientation. All fit indices suggested a poor fit of the one-factor model of service orientation to the data, as expected, χ^2 (409, N = 452) = 2213.44, $p < .001$, (χ^2/df = 4.47, CFI = .78, NNFI = .76, RMSEA = .09). An initial first-order four-factor of service orientation also did not fit well with the data, χ^2 (489, N = 452) = 1356.38, $p < .001$, (χ^2/df = 2.77, CFI = .88, NNFI = .87, RMSEA = .0.06. Although the RMSEA was within recommended range, the other indices were not. Furthermore, examining correlations between some pairs of factors showed evidence of lacking discriminant validity. For example, the observed correlations between conscious

[3] As discussed in the literature review (Chapter 2), the construct of service commitment toward customers represents an attitudinal service orientation toward customers. Service-oriented organizational citizenship behaviors were proposed to consist of two separate dimensions such as helping coworkers and conscious job dedication toward customers, which represent behavioral service orientation.

job dedication toward customers and service commitment toward customers, and between conscious job dedication toward customers and helping co-workers were $r = .95$ and $r = .85$ respectively, when all of the original items were used for the estimation. Although the correlation between conscious job dedication toward customers (behavioral SO) and service commitment toward customers (attitudinal SO) was extremely high, the items from these two factors were not combined, due to the lack of theoretical justifications. The examination of modification indices suggested that the model had too many correlated errors and cross-loadings of the items, which required revising the initial four-factor of service orientation.

Testing two revised-models of service orientation. The following two revised models of service orientation (revised first-order four-factor *vs.* revised first-order three-factor) were estimated to compare the model fit. First, the revised first-order four-factor model composed a five-item dispositional SO, a six-item service commitment toward customers (attitudinal SO), a four-item conscious job dedication toward customers (behavioral SO), and a five-item helping coworkers (behavioral SO). The revised first-order four-factor model of service orientation reflects the deletions of some measurement items, guided by the standardized residual matrix and modification indices when estimating the initial four-factor model. This revised four-factor model showed a good fit of the data, χ^2 (146) = 302.13, $p < .001$, ($\chi^2/df = 2.07$, CFI = .96, NNFI = .95, RMSEA = .049). When examining the correlation between each pair of factors, the correction coefficients for two pairs – between conscious job dedication toward customers and service commitment toward customers ($r = .834$) and between conscious job dedication toward customers and helping co-workers ($r = .836$) were still high. Although none of

these confidence intervals approach 1, the magnitudes of these correlation coefficients seem large. Next, another revised three-factor model of service orientation reflects three latent constructs, comprising a five-item dispositional SO, a six-item service commitment toward customers, and a five-item helping co-workers. This alternative model of service orientation was exactly similar to the revised four-factor model of service orientation, except that the construct of conscious job-dedication toward customers was deleted. The option of estimating the alternative model of service orientation, with a deletion of conscious job-dedication toward customers was made, due to 1) this construct having extremely high correlations with other two constructs, and 2) the reliability of this construct being low (α = .65). Three-factor of service orientation showed excellent fit to the data, χ^2 (129) = 240.68, p < .001, (χ^2/df = 1.87, CFI = .97, NNFI = .96, RMSEA = .044). The values of overall goodness-of-fit indices for the revised three-factor of service orientation were slightly higher than those for the revised four-factor of service orientation. To examine if the revised three-factor model significantly improved over the revised four-factor of service orientation, a chi-square difference test (likelihood ratio test) was conducted (Bollen, 1989). As shown in Table 4-3, the revised three-factor of service orientation showed significant improvement in fit, compared to the revised four-factor of service orientation, $\Delta\chi^2$ (59, N = 452) = 139.03, p < .001 (χ^2/df = 1.88, CFI = .97, NNFI = .97, RMSEA = .04). That is, the deletion of conscious job dedication toward customers resulted in a significant increase in model fit for the three-factor, over the revised four-factor of service orientation.

Table 4-3
Overall Fit Indices for Alternative Models of Service Orientation ($N = 452$)

Model	χ^2	*df*	χ^2/df	$\Delta\chi^2$	Δdf	CFI	NNFI	RMSEA
One-factor	2214	495	4.47	-	-	.78	.76	.090
Initial four-factor	1356	489	2.77	877***	6	.89	.89	.063
Revised four-factor	302	146	2.07	1054***	343	.96	.95	.049
Revised three-factor	163	87	1.88	139***	59	.97	.97	.044

Note: CFI = comparative fit index; NNFI = non-normed fit index; RMSEA = root mean square error of approximation; *** $p < .001$

Final measurement model of service orientation. Overall, a series of CFA found that a revised three-factor of service orientation, comprising innate service orientation, service commitment toward customers, and helping coworkers (service-oriented organizational citizenship behaviors), had a substantively best fit to the data, compared to all alternative models. Innate service orientation, service commitment toward customers, and helping coworkers represent the dispositional, attitudinal and behavioral service orientation respectively. As Table 4-4 shows, all standardized factor loadings for the revised three-factor of service orientation are statistically significant at $p < .001$, ranging from .48 to .81, providing support for construct validity. Latent factor correlations for each of three pairs ranged from .58 to .82, evidencing further construct validity. Namely, when 95 percent confidence interval was calculated, none of the pairs included the value 1.00. The standardized coefficient alpha was employed to assess the reliability of each measurement model, and was found to be .87, and .85, and .74 for innate service orientation, service commitment toward customers, and SOCB-helping coworkers respectively. The standardized Cronbach's coefficient alpha for SOCB-helping coworkers ($\alpha = .74$) appeared lower than other scales, but was still an acceptable reliability coefficient, since it was greater than Nunnally's suggested value of .70.

Table 4-4
Standardized Factor Loadings for Revised Three-Factor Model of Service Orientation ($N = 452$)

Items	Factor loadings ***	C.R.
Dispositional Service Orientation (DS):		
I have a natural tendency to ...		
DS6 enjoy providing friendly service to customers.	0.80	15.3
DS9 enjoy delivering intended services on time to customers.	0.79	15.0
DS11 gain satisfaction by pleasing customers.	0.76	14.4
DS8 enjoy keeping customers informed.	0.74	14.4
DS4 achieve my own goals by satisfying customers' needs.	0.69	-
Service Commitment Toward Customers (SC)		
SC4 As an employee responsible for providing service, customers are very important to me.	0.81	17.0
SC5 I feel that the needs of our customers always come first.	0.75	-
SC3 I am willing to meet all requests made by my customers, if possible.	0.74	15.5
SC2 It is best to ensure that our customers receive the best possible service available.	0.69	14.3
SC1 When performing my job, the customer is most important to me.	0.63	13.1
Service-Oriented Organizational Citizenship Behavior – Helping Coworkers (HC)		
HC6 I always am ready to help other servers who are occupied in serving and interacting with customers.	0.76	-
HC4 I help other servers' service activities that are not assigned to me in busy situations.	0.64	12.1
HC1 I help other servers who have heavy service workloads.	0.61	11.6
HC3 I help new or inexperienced servers learn to perform service activities, even if management does not require this.	0.57	10.8
HC2 I help to take orders for another server's table, if he or she is too busy.	0.48	9.1

**Factor loadings were all significant at $p < .001$*

Factor Structure of Service Role Ambiguity

Model specifications and procedures. First, a single-factor model of service role ambiguity, indicated by six measured variables was estimated. Next, the initial one-factor model of service role ambiguity was modified, based on the standardized residual matrix, and modification indices.

Overall fit indices of service role ambiguity. Overall fit indices showed that a *prior* one-factor model of service role ambiguity had good fit data in general, χ^2 (9) = 34.71, $p < .01$, (χ^2/df = 3.85, CFI = .98, NNFI = .97, RMSEA = .08). However, (χ^2/df = 3.85 was larger than the recommended range (3), by Kline (1998). Furthermore, the modification indices and standardized residual matrix indicated one item of six needs to be deleted to improve the fit of model. That particular item had a problem of cross-loadings with another. Thus, another CFA was run, with the revised one-factor model of *service role ambiguity.* This five-item model of service role ambiguity showed an excellent fit to the data, χ^2 (5) = 13.45, $p < .01$, (χ^2/df = 2.69, CFI = .99, NNFI = .99, RMSEA = .06). As Table 4-5 indicates, chi-square difference test showed the five-item one-factor model had a significant improvement in fit, compared to the six-item one-factor model of service role ambiguity, $\Delta\chi^2$ (4, N = 452) = 21.26, $p < .001$.

Table 4-5
Overall Fit Indices for Alternative Models of Service Role Ambiguity (N = 452)

Model	χ^2	*df*	χ^2/df	$\Delta\chi^2$	Δdf	CFI	NNFI	RMSEA
Initial one-factor	35	9	3.85	-	-	.98	.97	0.08
Revised one-factor	14	5	2.69	22***	4	.99	.99	0.06

Note: CFI = comparative fit index; NNFI = non-normed fit index; RMSEA = root mean square error of approximation; *** $p < .001$

Final measurement model of service role ambiguity. Five of six items were retained to show a unidimensional solution as indicators for service role ambiguity. As Table 4-6 shows, all standardized factor loadings are statistically significant at $p < .001$, ranging from .66 to .78. The standardized Cronbach's coefficient alpha for service role ambiguity was (α = .85).

Table 4-6
Standardized Factor Loadings for Service Role Ambiguity ($N = 452$)

Items	Factor loadings*	C.R.
Service Role Ambiguity (RA)		
RA4 I feel uncertain about how to interact with customers.	.83	17.7
RA5 I feel uncertain about how to solve customer complaints, if they occur.	.82	17.5
RA6 I feel uncertain about how to approach some customers.	.78	16.7
RA3 I feel uncertain about how to identify customer needs.	.77	-
RA1 I feel uncertain about what service customers expect.	.66	14.1

**Factor loadings were all significant at $p < .001$*

A Full Measurement Model

Model specifications and procedures. As shown in Figure 4-2, the full measurement model consists of eight latent variables: higher-order service climate, which was indicated by four latent constructs comprising service vision, service training, supervisor support, and rewards and recognition; service commitment toward customers, indicated by five measured variables; service role ambiguity, which was indicated by five measured variables; and helping coworkers, which was indicated by five measured variables (Appendix E shows all initial measurement items.)

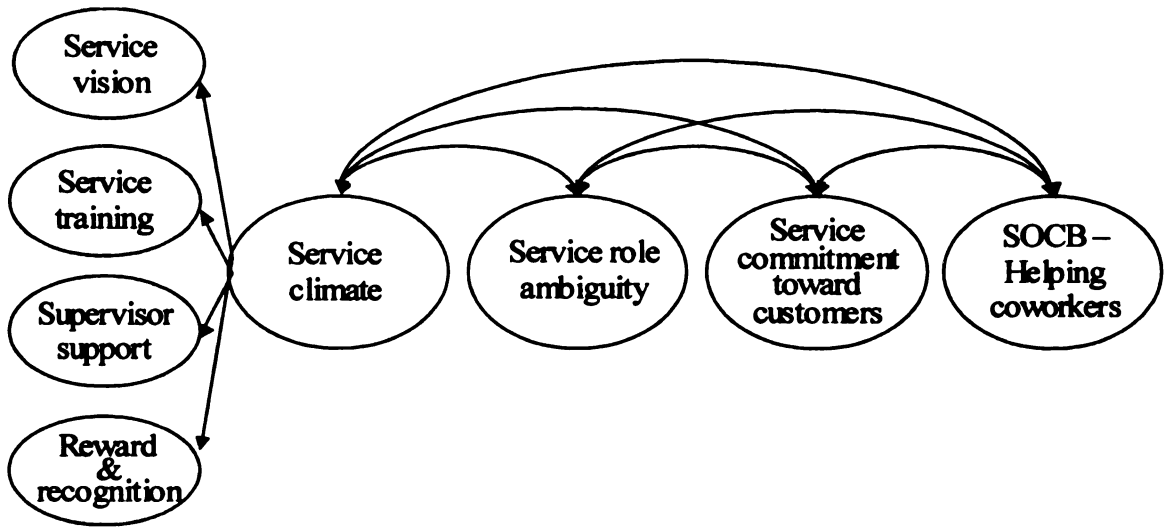


Figure 4-2
A Full Measurement Model of Theoretical Constructs

Overall fit indices of a full measurement model. The model fit indices presented in Table 4-7 revealed good fit to the data. All fit indices suggested a good fit of data, χ^2 (619) = 1225.9, $p < .01$, ($\chi^2/df = 1.99$, CFI = .93, NNFI = .92, RMSEA = .05).

Table 4-7
Overall Fit Indices for A Full Measurement Model ($N = 452$)

Model	χ^2	*Df*	χ^2/df	CFI	NNFI	RMSEA
Proposed structural model	1226	619	2.0	.93	.92	0.05

Note: CFI = comparative fit index; NNFI = non-normed fit index; RMSEA = root mean square error of approximation

Descriptive statistics. Mean, standard deviations, reliabilities, and inter-item correlation are presented in Table 4-8. Reliability scores range from $\alpha = .74$ to $\alpha = .90$. The indicators should have a Cronbach's alpha of .7 or higher to judge as reliable measures (Nunnally, 1978). All other scales demonstrated good reliability. Inspections of distribution for each scale revealed some degree of negatively skewed distribution, representing positive responses from many participants. The Maximum Likelihood estimation method employed in this is known to be less sensitive to the violation of normal distribution assumption, than are other estimation methods (Kline, 1998).

Table 4-8
Descriptive Statistics and Standardized Cronbach's constructs ($N = 452$)

Constructs	Number of items	*M*	*SD*	α	Inter-item correlation
Service climate					
Service vision	4	4.43	.59	.83	.55
Service training	7	4.07	.71	.90	.57
Service support	6	4.15	.61	.86	.51
Reward and recognition	5	3.72	.84	.87	.56
Service role ambiguity	5	2.06	.95	.88	.59
Service commitment toward customer	5	4.55	.47	.85	.52
Helping with coworkers (SOCB)[1]	5	4.27	.49	.74	.37

[1] SOCB: Service-oriented organizational citizenship behaviors

Convergent and discriminant validity. Taken together from all series of CFA explained above, the final measurement model (see Figure 4-1) provided supports for both convergent and discriminant validity. Kline (1998, pp. 197-198) described the concepts of convergent and discriminant validity as the evaluation of measures against one another: "a set of indicators presumed to measure the same construct shows convergent validity if their intercorrelations are at least moderate in magnitude. If the estimated correlations of the factors that underlie sets of indicators that are supposed to measure different constructs are not excessively high, then there is evidence for discriminant validity." Indicators specified to measure each of the latent constructs in a full measurement model all have relatively high loadings (statistically significant at $p < .05$), ranging from .48 to .83, which supports the evidence of convergent validity. As Table 4-9 shows, estimated correlations between the factors were not excessively high, and none of the pairs for the 95% confidence interval approached 1.00, providing support for the discriminant validity (Anderson & Gerbing, 1988).

Table 4-9
Intercorrelated Factors in Theoretical Model

	1	2	3	4
1. Service climate	1			
2. Service role ambiguity	-.09	1		
3. Service commitment toward customer	.52***	-.37***	1	
4. SOCB[1]: helping with coworkers	.50***	-.23**	.74***	1

[1] SOCB: service-oriented organizational citizenship behaviors; ** $p < .01$; *** $p < .001$

Testing Full Structural Model and Hypotheses

According to Muliak and James (1995), the measurement model must be empirically satisfactory before proceeding to hypotheses testing. In this study, the appropriate measurement model was determined by a series of confirmatory factor analyses. Thus, the next step was to test the full structural model, including both the appropriate measurement model and the hypothesized relationships among the latent constructs. To reach this goal, first the entire model fit of an initial conceptual model and hypothesized relationships were tested, guided by goodness-of-fit indices and critical ratios associated with path coefficients respectively. Next, the initial model was revised by deleting non-significant paths to produce a most parsimonious conceptual model. Finally, an alternative/competing model was compared to ensure the revised model was superior to the alternative model of the data.

Testing the Proposed Structural Model

Model specifications and procedures. Initially, an original conceptual model included two dimensions of service-oriented organizational citizenship behaviors, namely conscious job dedication toward customers and helping coworkers. Subsequent analyses of hypotheses testing and entire model fit did not include the construct of conscious job dedication toward customers, because this construct was found to cross-loaded severely with two other constructs, as explained above. Thus, the path model, displayed in Figure 4-3, reflects the effect of higher-order service climate on employees' service-oriented citizenship behaviors (SOCB) - helping coworkers - are mediated by both service role ambiguity (a partial mediator) and service commitment toward customers. This proposed model included two distinct concepts of service orientation (SO). More specifically, the

service commitment toward customers represents the attitudinal SO while the construct of SOCB-helping coworkers represents the behavioral SO.

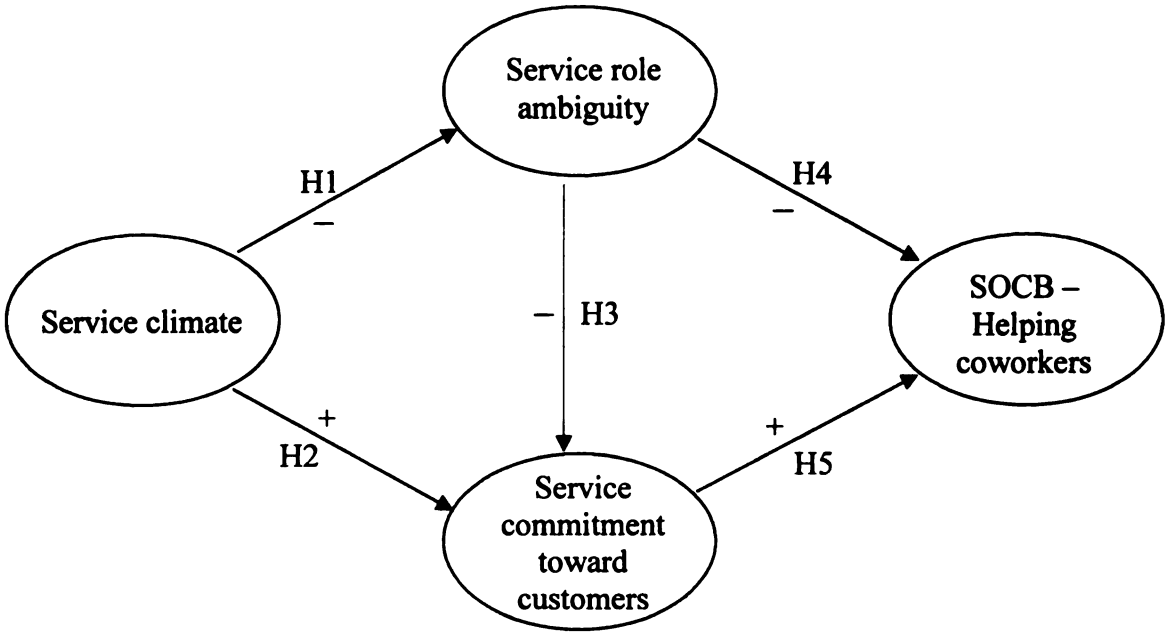


Figure 4-3
Proposed Structural Model (N=452)

Overall fit indices of the proposed model. The overall fit of the structural model was very reasonable, χ^2 (620) = 1232.91, $p < .01$, (χ^2/df = 1.99, CFI = .93, NNFI = .92, RMSEA = .05), as shown in Table 4-10.

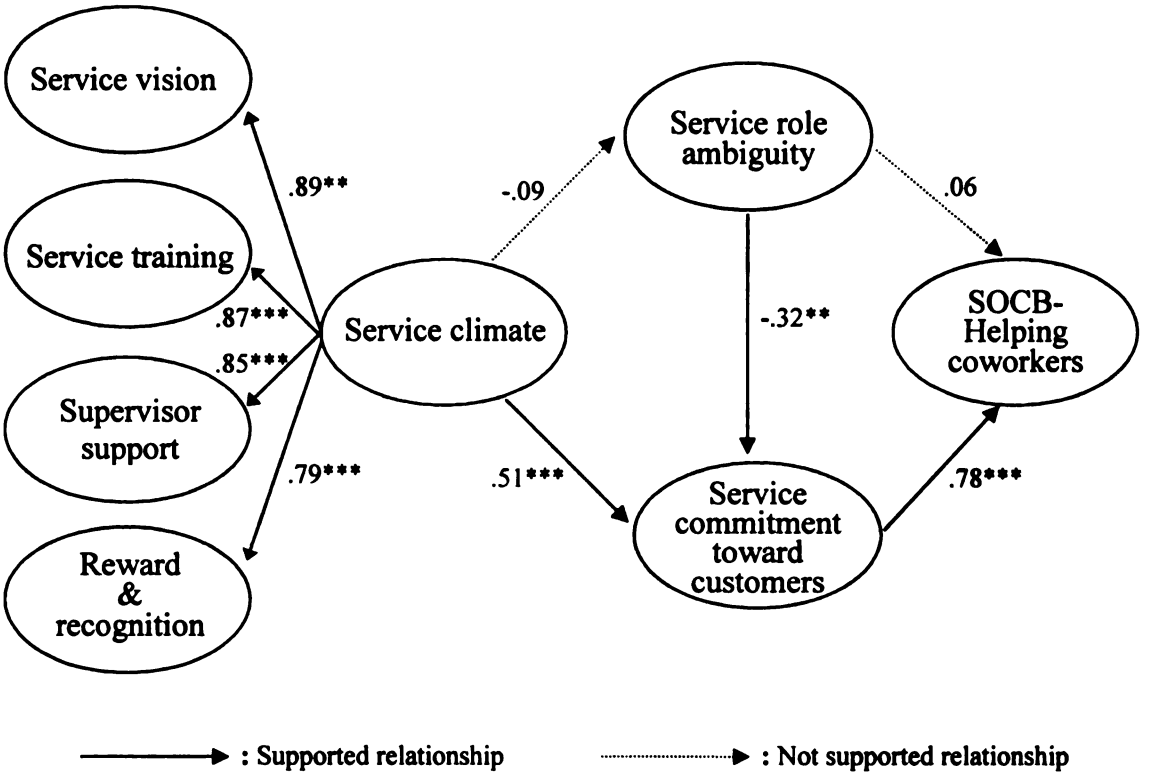
Table 4-10
Overall Fit Indices for the Proposed Structural Model (N = 452)

Model	χ^2	*df*	χ^2/df	CFI	NNFI	RMSEA
Proposed structural model	1233	620	2	.93	.92	0.05

Note: CFI = comparative fit index; NNFI = non-normed fit index; RMSEA = root mean square error of approximation

Path coefficients obtained in the test of the proposed structural model are presented in Figure 4-3. All values of fit indices were acceptable, namely, within recommended ranges, but a number of the path coefficients were not statistically significant.

According to squared multiple correlations, provided by Amos output, 39.5 percent of variance in service commitment toward customers among the frontline employees was explained by both the service climate and service role ambiguity, perceived by the frontline employees. Only 7% of variance in perceived service role ambiguity among the frontline employees was explained by the service climate, perceived by the frontline employees. Fifty-seven percent of variance in helping coworkers (service-oriented citizenship behaviors) was explained by all indirect and direct indicators in the model.



** $p < .01$; *** $p < .001$

Figure 4-4
Obtained Structural Model with Standardized Path Coefficients ($N = 452$)

Testing of Hypotheses for the Proposed Structural Model

Service climate → Service role ambiguity (H1). *H1* proposes that overall service climate, as perceived by frontline employees, influences negatively their perceived service role ambiguity. A weak, negative relationship between these latent variables was observed, but it was not statistically significant ($\beta = .09$, $t = -1.61$, $p > .05$). Thus, *H1* was not supported.

Service climate → Service commitment toward customers (H2). *H2* postulates that overall service climate, as perceived by frontline employees, influences positively their service commitment toward customers. As expected, the path between these two latent variables was strongly positive and significant ($\beta = .52$, $t = 9.1$, $p < .01$). Thus, *H2* was strongly supported.

Service role ambiguity → Service commitment toward customers (H3). H3 suggests that frontline employees' service role ambiguity influences negatively their service commitment toward customers. A strong, negative relationship between these two latent constructs was found; moreover, this relationship was statistically significant ($\beta = -.32$, $t = 6.5$, $p < .01$). Thus, *H3* was strongly supported as well.

Service role ambiguity → SOCB-Helping coworkers (H4). *H4* proposes that frontline employees' service role ambiguity influences negatively their service-oriented citizenship behaviors, conceptualized as helping coworkers. The standardized path coefficient from service role ambiguity and helping coworkers indicated empirically no relationship between these two latent variables ($\beta = .06$, $t = 1.09$, $p > .05$). Thus, *H4* was not supported.

Service commitment toward customers → SOCB-Helping coworkers (H5). Last, *H5* postulates that the frontline employees' service commitment toward customers influences positively their service-oriented organizational citizenship behaviors (helping coworkers). The standardized path coefficient between these two suggested a strong and positive relationship ($\beta = .78$, $t = 8.28$, $p < .01$).

Summary of hypotheses testing. A summary of the results relative to each hypothesis can be found in Table 4-12. Overall, three of the standardized path estimates were statistically significant, while two hypothesized relationships were not statistically significant at $p < .05$. Taken together from the test of entire model fit and hypotheses testing, the proposed model had partial support for model fit to the data.

Table 4-11
Standardized Path coefficients of Proposed Structural Model

Path	Path coefficient	t-value	Results
Service climate → Service role ambiguity (H1)	-.087	-1.6	Not supported
Service climate → Service commitment toward customers (H2)	.512	9.1***	Supported
Service role ambiguity → Service commitment toward customers (H3)	- .323	-6.5**	Supported
Service role ambiguity → SOCB[1]-Helping coworkers (H4)	.055	1.1	Not supported
Service commitment toward customers → SOCB[1]- Helping coworkers (H5)	.775	8.3***	Supported

[1] SOCB = service-oriented organizational citizenship behaviors; ** $p < .01$; *** $p < .001$

Indirect effects. In addition to direct effects (hypotheses testing), indirect relationships were estimated via structural equation modeling. In fact, an ability to estimate indirect effects is an advantage of using SEM, over the multiple regressions. Table 4-12 presents standardized direct, indirect, and total effects of all endogenous and exogenous variables. As expected, service climate was found to have significant direct

effect on service role ambiguity (β = .51), but insignificant indirect effect on service role ambiguity (β = .03). Most importantly, service climate showed significant indirect effect on service-oriented organizational citizenship behaviors, helping-coworkers (β = .41). Service role ambiguity was proposed to influence service-oriented organizational citizenship behaviors, helping-coworkers both directly and directly. As shown in Table 4-12, service role ambiguity's direct effect on service-oriented organizational citizenship behaviors-helping coworkers was trivial (β = .06), yet its indirect effect on service-oriented citizenship behaviors-helping coworkers was significant (β = -.250).

Table 4-12
Standardized Estimate for Direct, Indirect, and Total Effects

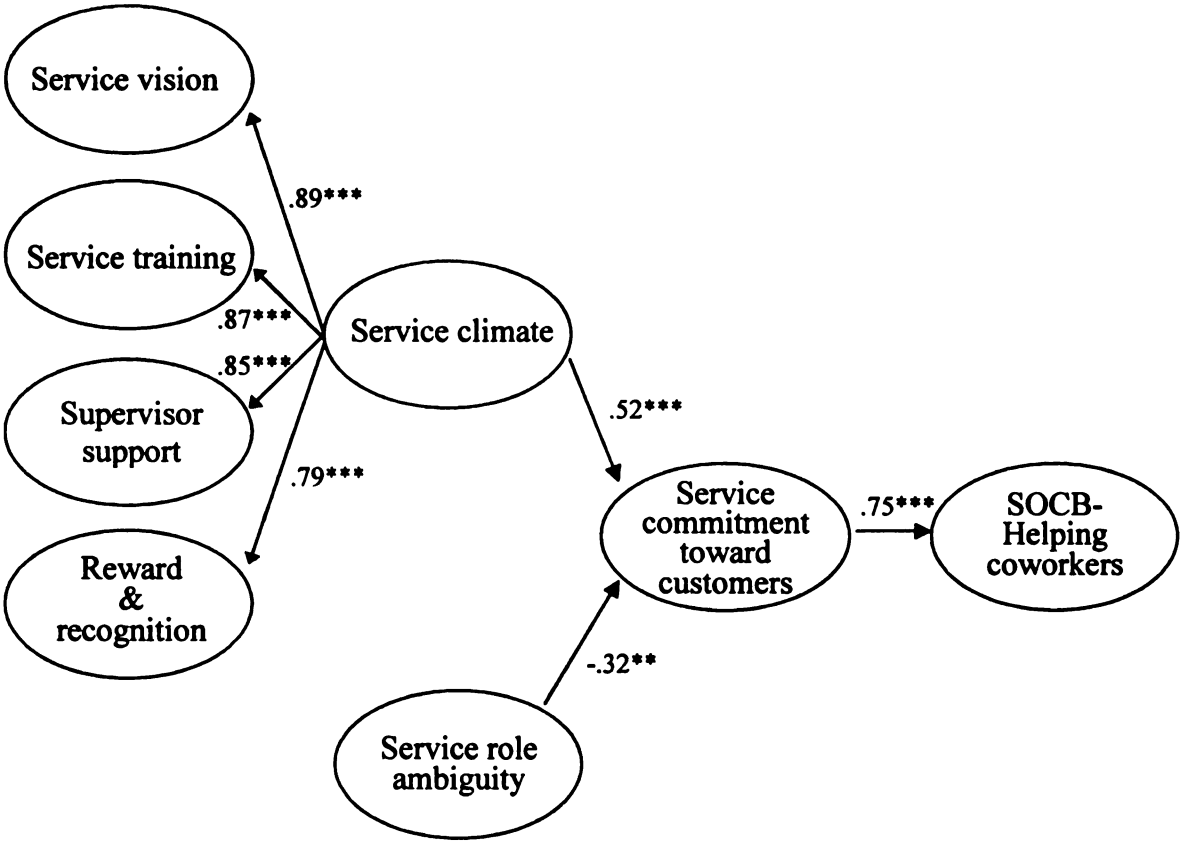
Exogenous variables	Endogenous variables	Direct effect	Indirect effect	Total effect
Service climate	Service role ambiguity	-.09	.00	-.09
	Service commitment toward customers	.51	.03	.54
	SOCB: helping coworkers	0	.41	.41
Service role ambiguity	Service commitment toward customer	-.32	.00	-.32
	SOCB*: helping coworkers	.06	-.25	-.19
Service commitment toward customer	SOCB[1]: helping coworkers	.78	.00	.78

[1] SOCB: Service-oriented organizational citizenship behaviors

Testing Revised Structural Model

Model specifications and procedures. After estimating the proposed structural model, the next step was to conduct model modification to achieve a better model fit to the data. Proposed structural model was found to have two non-significant path coefficients such as the link between service climate and service role ambiguity and the

link between service role ambiguity and SOCB-Helping coworkers. These non-significant paths were deleted, and then this revised structural model was compared to the proposed structural model in terms of the improvement in fit, and overall fit indices. An obtained revised structural model is depicted in Figure 4-5.



** $p < .01$; *** $p < .001$

Figure 4-5.
Revised Structural Model ($N = 452$)

Overall fit indices of revised structural model. All fit indicators showed good fit of the revised structural model to the data, χ^2 (622) = 1236.99, $p < .01$, ($\chi^2/df = 1.99$, CFI = .93, NNFI = .92, RMSEA = .047), as shown in Table 4-12. The chi-square difference test, comparing the proposed (more complex model) and revised structural models

(simpler model with dropping two paths), showed that the chi-square difference was not significant statistically, $\Delta\chi^2$ (2, N = 452) = 3.88, $p < .05$. Thus, a null hypothesis, indicating no significant difference in model fit between these two nested models, was not rejected. Put simply, the fit of the simpler model (revised structural model) is not significantly worse than for the more complex model (proposed structural model).

Table 4-13
Overall Fit Indices of Revised Structural Model (N = 452)

Model	χ^2	df	χ^2/df	$\Delta\chi^2$	Δdf	CFI	NNFI	RMSEA
Proposed structural model	1233	620	1.99	-	-	.93	.92	0.05
Revised Structural Model	1237	622	1.99	3.9*	2	.93	.92	0.05

Note: CFI = comparative fit index; NNFI = non-normed fit index; RMSEA = root mean square error of approximation; * $p > .05$

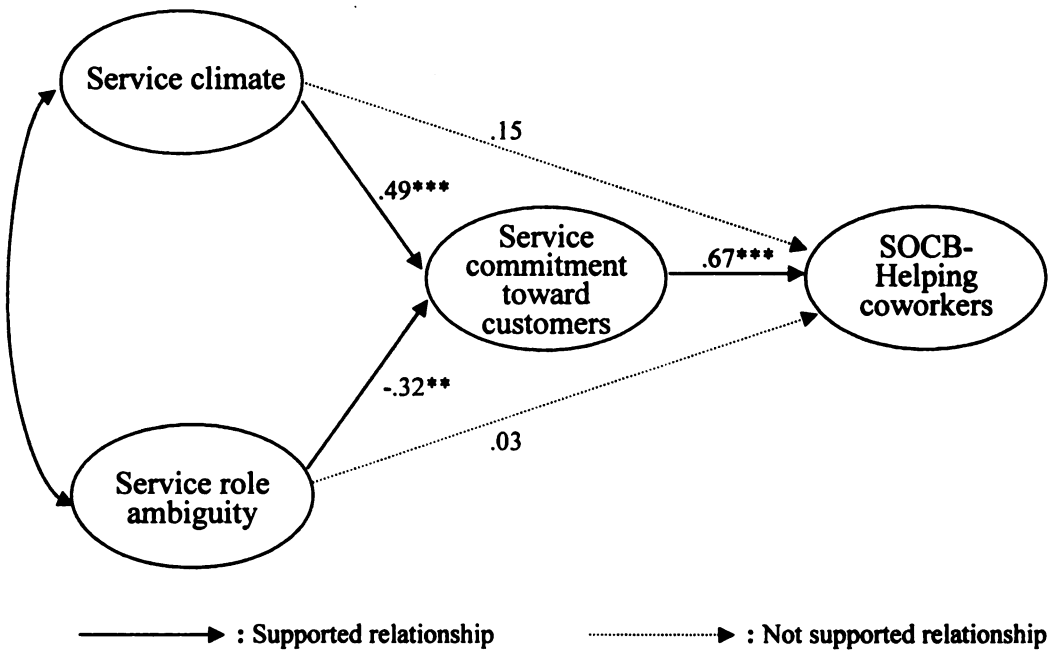
Squared multiple correlations show that 37.6% of variance in service commitment toward customers is explained by service climate and service role ambiguity, while 56% of variance in SOCB-helping coworkers is explained by service commitment toward customers. The deletion of two non-significant paths only resulted in the decrease of approximately 2 % and 1 % for service commitment toward customers and SOCB-helping coworkers respectively. Overall, the deletion of these two non-significant paths produced the more parsimonious model, compared to the proposed structural model.

Testing an Alternative Structural Model

Evidence for the validity of the theoretical model depends on the fact that the hypothesized model cannot be falsified (Burke, 1993). Thus, the last step of SEM was to ensure that the revised model (Figure 4-5) was superior to an alternative model or competing model of the data.

Model specification. The revised structural model was compared with a competing structural model. The revised model (Figure 4-5) posits that the effects of

perceived service climate and service role ambiguity on employees' service-oriented organizational citizenship behavior are mediated by employees' service commitment toward customers. The alternative model includes two additional direct paths: 1) between service climate and SOCB-helping coworkers, and 2) between role ambiguity and SOCB-helping coworkers in the model. Figure 4-6 shows obtained path coefficients for this alternative model.



** Significant at $p < .01$

Figure 4-6
Saturated Structural Model – Alternative Structural Model ($N = 452$)

Overall fit indices of competing structural model. Table 4-13 shows overall fit indices for alterative model and the chi-square difference test examining the incremental fit of the alternative model over the revised structural model. Overall, adding these two direct paths (more complex model) did not cause the model to have a better fit over the revised structural model (simpler model). The evidence suggests that the revised model

is more efficient - explaining the most variance with the least propositions, than the alternative model - with more paths. First, the overall fit indices are almost identical between the revised structural model and alternative model. Second, a significant chi-square difference test showed that adding these two additional direct paths results in a better fit for the more complex model (alternative model), than for the simpler (revised model) at $p < .05$. However, this chi-square difference test was not significant at $p < .01$. Again, the chi-square difference test is sensitive to sample size, like the chi-square test. This significant result at $p < .05$ may be attributed, simply, to the relatively large sample size ($N = 452$). Last, and most importantly, the direct path coefficients for 1) between service climate and SOCB-helping coworkers ($\beta = .15$), and 2) service role ambiguity and SOCB-helping coworkers ($\beta = .03$), were not statistically significant at $p < .05$. All together, these analyses indicate that alternative models do not offer a better fit to the data than the revised model.

Table 4-14
Overall Fit Indices of Alternative Structural Model ($N = 452$)

Model	χ^2	*df*	χ^2/df	$\Delta\chi^2$	Δdf	CFI	NNFI	RMSEA
Revised Structural Model	1237	622	2	-	-	.93	.92	0.05
Alternative Model	1229	620	2	8.0*	2	.93	.92	0.05

Note: CFI = comparative fit index; NNFI = non-normed fit index; RMSEA = root mean square error of approximation, * $p < .05$

Chapter Summary

This chapter summarized the findings of the proposed and modified structural equation model, comprising both measurement and structural models. The psychometric properties of the measurement model were assessed first, before estimating the structural model and testing the hypotheses. Three criteria (i.e. absolute, incremental, and parsimonious fit measures) as well as standardized residual matrix were used to evaluate the fit of model to the data. For the measurement model, a second-order four-factor model of service climate had best fit to data, compared to competing models. SOCB-conscious job dedication toward customers had to be deleted due to cross-loading problems with other related constructs in the model for subsequent analyses. The proposed model shows partial support for the data; three of five hypotheses were supported. The chi-square difference test was used to compare the proposed model with alternative models. The revised model, with deletion of non-significant paths showed the best fit of the data. The revised model posits that the effects of service climate and service role ambiguity, perceived by frontline employees on their service-oriented organizational citizenship behaviors (helping coworkers) is fully mediated by their service commitment toward customers.

CHAPTER 5

DISCUSSION AND CONCLUSION

Chapter Overview

This final chapter presents a summary of key results: 1) the factor structure of service climate and service orientation, 2) a mediating model predicting service-oriented organizational citizenship behavior, and 3) non-significant paths in the model. This chapter provides explanations for ambiguous and conflicting findings, based on current theoretical and empirical evidence. This study discusses both theoretical and practical implications and addresses some limitations as well as future research.

Summary of Key Findings

Factor Structures of Service Climate and Service Orientation

Findings of semi-structured interviews (stage 1) and pre-test (stage 2), together with the literature review, resulted in the development of the questionnaire. This present study recognized emerging evidence suggesting that a specific climate is predictive of a specific outcome. In this example, to predict frontline employees' service-related outcomes (e.g., service role ambiguity, service commitment toward customers, service-oriented organizational citizenship behavior), specific dimensions for service climate, applied to foodservice establishments, were identified. Thus, a series of confirmatory factory analyses were performed to test the construct validity of measurement models using Amos 5.0. The following explains the key findings of the measurement models.

Service climate. Service climate was proposed as the exogenous variable. Components of service climate were anticipated to differ across organizations, since the organizational events, practices, policies, and procedures that help shape climate differ across organizations. Given that the majority of studies for service climate have been conducted in bank settings, by Schneider and his colleagues (e.g., Schneider & Bowen, 1985; Schneider, Parkington, & Buxton, 1980; Schneider, Salvaggio, & Subirats, 2002; Schneider, Wheeler, & Cox, 1992; Schneider, White, & Paul, 1998), the dimensions of service climate in foodservice establishments were expected to differ from those found for banks. After conducting a series of confirmatory factor analyses, a second-order four-factor model of service climate was found to have the most parsimonious and best fit among all alternatives. The second-order four-factor model of service climate comprises four latent constructs: service vision, service training, supervisor support, reward and recognition. This higher-order model of service climate provides a parsimonious picture of how employee perceive *overall* service climate in a particular foodservice establishment.

Service orientation. This study addressed inconsistencies in the way the term "service-oriented employees" has been used in the literature. Accordingly, this study attempted to distinguish between four dimensions of service orientation – a unidimensional innate service orientation (SO), a unidimensional service commitment toward customers, and two dimensions of service-oriented organizational citizenship behavior (SOCB), namely helping coworkers and conscious job dedication toward customers. A series of confirmatory factor analyses showed that these concepts differ from each other in general; however, several items from SOCB-conscious job dedication

toward customers showed cross-loading problems on two other factors, namely service commitment toward customers and SOCB-helping coworkers. The factor correlation between SOCB-conscious job dedication toward customers and service commitment toward customers was very high (r = .95), when all initial items were used. Although the service commitment toward customers differs theoretically from the SOCB-conscious job dedication toward customers, both constructs capture service orientation *toward customers*. A likely explanation for the high correlation between the construct is twofold. First, both constructs were measured using frontline employee self-reports. Secondly the respondents may not have been able to empirically distinguish their own attitudinal SO (service commitment toward customers) from their own behavioral SO (SOCB-conscious job dedication). There was no theoretical rationale for combining the items from these two constructs. Instead, the construct of SOCB-conscious job dedication toward customers was deleted from subsequent analyses. The revised model of service orientation shows three dimensions of service orientation, reflective of dispositional SO, attitudinal SO (service commitment toward customers) and behavioral SO (SOCB-helping coworkers), respectively.

Mediating Model

The main objective of this study was to examine the direct and indirect effects of service climate, perceived by frontline employees, on their service-related attitudinal and behavioral outcomes, in the context of foodservice establishments. In particular, this study proposed two mediating variables to examine the relationship between service climate and service-oriented organizational citizenship behaviors. These two mediating variables were service role ambiguity and service commitment toward customers. As

posited in Figure 4-3, service commitment toward customers was expected to play a mediating role to link service climate and service-oriented organizational citizenship behaviors. Service role ambiguity was proposed as a partial mediator. Perceived service role ambiguity was expected to influence service-oriented organizational citizenship behaviors both directly and indirectly via service commitment toward customers. Findings from structural equation modeling, however, showed that service role ambiguity did not play the role of full- or partial- mediator. The revised and final model (see Figure 4-5) shows that service commitment toward customers (attitudinal service orientation) fully mediated the relationships between both endogenous variables (service climate and service role ambiguity) and service-oriented organizational citizenship behaviors. The revised model had a good fit to the data, χ^2 (622) = 1236.99, $p < .01$, (χ^2/df = 1.99, CFI = .93, NNFI = .92, RMSEA = .047). When this revised model was compared to the initial model (Figure 4-4) as well as to an alternative model (Figure 4-6), chi-square difference statistics showed evidence that the revised model had the best and most parsimonious fit to the data.

Non-significant Paths

Findings were generally consistent with the hypotheses that frontline employees' perceived service climate is an important factor in shaping employees' affective attitude (service commitment toward customers), and this consequently influenced service-oriented organizational citizenship behaviors. Initially five hypotheses were proposed in the initial path model (Figure 4-3; Figure 4-4). Only three of five hypotheses were supported. Two hypotheses linking service climate and service role ambiguity (*H1*) and service role ambiguity and service-oriented organizational citizenship behaviors (*H4*)

were not supported. More specifically, the link between service climate and service role ambiguity was identified as a negative (β = .09) and statistically insignificant. Path coefficients between service role ambiguity and service oriented organizational citizenship behaviors approached zero (β = .06), while a negative relationship was expected. Overall, the findings of this study showed that frontline employees' perceived service role ambiguity did not mediate the relationship between service climate and service-oriented organizational citizenship behaviors. Possible explanations for this finding follow.

Link between service climate and service role ambiguity (H1). The climate literature in general and the service climate literature specifically, suggest that the role ambiguity construct is one of the dimensions of organizational climate. This present study did not consider service role ambiguity as one of the dimensions for service climate in the context of foodservice establishments, but proposed service climate as antecedent to service role ambiguity, as perceived by frontline employees. The present study argued that perceptions of service climate would provide role information, and as such be negatively associated with frontline employees' service role ambiguity. It is possible that frontline employees establish their perception of service roles about their service job activities, including priorities and expectations while interacting with customers, from their previous and current working experiences. Frontline employees who have extensive work experience may have well-defined understandings of service roles, and current perceptions of service climate experience may have little influence on their perceived service role ambiguity. In comparing the respondents' length of employment at their current foodservice establishment to their total experiences as

service staff established that the majority of the sample has (averaged total working experience = 69.2 months) experience working in other foodservice establishments, prior to working at the current foodservice establishments.

Link between service role ambiguity and SOCB-helping coworkers (H4). The non-significant path between frontline employees' perceived role ambiguity and their service oriented organizational citizenship behaviors (*H4*) was inconsistent with other findings (Jaworski, Stathakopoulos, & Krishnan, 1993; Singh, 1993; Singh, Verveke, & Rhoads, 1996; Tubre & Collins, 2000), which showed a positive relationship between role ambiguity and job performance. Several *post-hoc* analyses[4] were conducted to find explanations for this obtained relationship. When examining the zero-order correlation between service role ambiguity and SOCB-helping coworkers, the obtained correlation was r = -.20 (p = .05) When controlling for service commitment toward customers to examine the relationship between service role ambiguity and SOCB-helping coworkers, the correlation (r = -.03) between the two was no longer statistically significant (p = .05). SEM analyses provided comprehensive analyses of indirect and direct effect of each endogenous variable (see Table 4-12). When examining the indirect effect of service role ambiguity on SOCB-helping coworkers, mediated by service commitment toward customers, the standardized coefficient (β = -.25) was statistically significant, while the direct relationship between these two (β = .06) was statistically insignificant. These empirical findings strongly support that service role ambiguity influences the service-

[4] The possibility of an interaction effect was investigated. Testing different patterns of relationship between service role ambiguity and SOCB-helping coworkers, depending on the level of working experience did not uncover any significant result. P studies showing that work experience is an important predictor for behavioral performance (Crant, 1995, Hunter and Hunter, 1984; Rowe, 1988) provided the impetus for this exploration.

oriented organization through the mediating variable, service commitment toward customers.

Implications

The findings of this current study have important implications for both academic researchers and practitioners in the field of service marketing, organizational behaviors, and hospitality business. The following describes both practical and theoretical implications for service climate, service role ambiguity and service orientation among frontline employees in the foodservice establishments.

Practical Implications

In many service organizations, including the foodservice industry, frontline employees are identified as a source of differentiation and competitive advantage critical to the success of service organizations. Previous studies showed that customer evaluation of service quality and/or customer satisfaction are influenced significantly by the attitudes and behaviors of these frontline employees who act as the organization's representatives (c.f., Bettencourt, Gwinner, & Meuter, 2001; Bitner, 1995; Parasuraman, Zeithaml, & Berry, 1988; Petrillose, Shaklin, & Downey, 1998). The intangibility of services often leads customers to evaluate their service quality experiences via their interactions with frontline restaurant employees (Zeithaml & Bitner, 1996). For example, the work of Stevens, Knutson and Patton (1995) established the important role frontline employees play in customer perceptions of service quality. It is essential for managers of foodservice establishments to recognize the important roles

frontline employees play, and to find ways to positively influence service-related outcome variables.

Managers of service businesses such as foodservice establishments have less opportunity than managers of manufacturing companies to directly control customer perceptions of quality. Yet this present study explains how managers of foodservice establishments can *indirectly* influence customer perceptions of quality via frontline employees' service-related attitudes and behaviors. That is, this present study provides a framework for motivating and improving service-oriented attitudes and behaviors among frontline employees in foodservice establishments, via of service climate. Four key components of service climate apply to foodservice establishments: service vision, service training, supervisor support, and reward and recognition. The frontline employees' perceptions of service climate depend on: 1) frontline employee perceptions of receiving training to improve their skills in dealing with customers, 2) frontline employee perceptions that management has a well-articulated service vision, articulating service goals and objectives for service excellence, 3) frontline employee perceptions that their supervisor supports them in their service-work, and 4) frontline employee perceptions that they are recognized and rewarded for service excellence.

Most importantly this study suggests that frontline employees' perceptions of service climate and service role ambiguity, influence frontline employees' service commitment toward customers and service-oriented organizational citizenship behavior. Perception of service climate results from the frontline employees' individual experiences, of the internal functions of the organization (Schneider & White, 2004). Frontline employees' cognitive evaluations of the emphasis, value and expected delivery of service

quality depends on frontline employees' experiences with the internal functions of the organizations as demonstrated in daily routines, events, and practices.

Theoretical Implication

This present study provides evidence of construct validity for service climate and service orientation. Service climate was found to have four dimensions, representing important organizational practices, policies, and events. This study establishes that frontline service employee service orientation consists of dispositional, attitudinal, and behavioral elements. Furthermore, the high correlation between service commitment toward customers and conscious job dedication toward customers offers the insight that employees may be unable to distinguish their own service-oriented attitude from their own service-oriented behaviors. Alternatively, it may be a problem of both being measured by self-report.[5]

Most importantly, this study supported the mediating model that affective attitudinal service orientation, called service commitment toward customers, mediates the relationships between effects of service climate and service role ambiguity, and service-oriented organizational citizenship behaviors. These findings differ from the majority of studies that found direct relationships between employees' perceived service climate and individual or organizational behavioral outcome variables. Schneider, White, and Paul (1998) called these types of studies, *linkage research*, in that the service climate experienced by employees was consistent with the experiences of the customers. This present research, however, attempted to distinguish attitudinal service orientation from behavioral service orientation among frontline employees, and argued that attitudinal service orientation plays an important affective mediator, examining the relationship

[5] The issue of self-report is discussed further in the section of limitation and future research.

between service climate and service-oriented organizational citizenship behavior. This finding is meaningful in the field of service climate. Ostroff, Kinicki, and Tamkins (2003) observed that one of the recently identified research gaps in climate research is research regarding the mediating linkages between climate and outcomes. The findings of this study are generally consistent with Baggozzi's attitudinal model (1992), Kopelman, Brief, and Guzzo's (1990), and Carr, Schmidt, Ford, & Deshon's (2003) mediation models. Although this current research was unable to obtain data from customers, still the finding that service climate and service role ambiguity influence the behavioral outcome variable through service commitment toward customers, could add to the mediating models discussed above.

Limitations and Future Research Directions

Although this present study contributes to the literature on service climate, service role ambiguity, and service orientation, four issues may limit such contribution, and future studies may be required. Those four issues are: 1) ignoring organizational membership in data analysis, 2) problems with common method variance and social desirability, 3) requiring further validation for service orientation and 4) generalizeability.

Level of Analysis – Ignoring Organizational Membership

All hypothesized relationships were proposed and tested at the employee-level (individual level), and the data were collected from 31 different foodservice establishments. The data analysis ignores the nested data structure. To explore the nested data, Hierarchical Linear Modeling analysis (Raudenbush & Bryk, 2001) a two-level one-way ANOVA model was examined on a post-hoc basis, to partition the total variance

into individual-level and organization-level variances for two variables – service climate and service-oriented organizational citizenship behaviors.[6] When the ICC (1) was calculated for service climate, it showed that 23 percent of the variances in the service climate can be explained by the between-group (organization) differences. This means that a significant proportion of total variance in responses to service climate is explained by the organizational membership, which the current study was unable to take into consideration when examining hypothesized relationships. Furthermore, when ICC (1) was calculated for the outcome variable, service-oriented organizational citizenship behaviors, it showed that 10 % of variances in the outcome variable were due to the between-group (organization) differences. These 10% may be considered to be trivial, yet, all taken together, future researchers may need to examine different possible models of levels of analysis.

The ICC (1) suggests that service climate can be conceptualized as an organizational attribute, rather than an individual attribute. Specifying service climate at the individual-level acknowledges that each member of the organization may differ in how he or she interprets and perceives organizational routines, practices, and policies (defined as climate). On the other hand, when service climate is defined as an organizational attribute, it indicates that an objective service climate exists in an organization and is perceived similarly by all organizational members. Although the literature supported specifying service climate as an individual attribute, there is also support for explaining how individual perceptions of service climate may emerge to become a shared perception of service climate as the organizational attribute. First,

[6] HLM's one-way ANOVA normally is conducted on the outcome variable. The reason ICC (1) was calculated for service climate (IV in this present study) was simply to inspect the extent to which total variance of service climate is explained by the between-group differences.

according to the attraction-selection-attrition cycle proposed by Schneider (1987), people are attracted to organizations based on their dispositional characteristics or personalities. The theory posits that people of similar type would be attracted to an organization of a particular sort, and would stay in that organization, arguing that employees within an organization are most likely to share a similar experience. Another approach, the theory of symbolic interaction, based on the original work of Mead (1934) explains that climate emerges from the interaction of members within a workgroup or organization. The emergence of climate can be seen as similar to the process of newcomer socialization or newcomers' sense-making process (Gupta, 1998). Thus, through social interaction and socialization process, the organization may facilitate creating the shared perceptional interpretation, because members of the organization learn from each other (Kozlowski & Hults, 1987).

Taken together, the emergence of service climate (specifying service climate as an organizational attribute), from individual perceptions of interpreting their work environments, seems another plausible explanation, which the current study initially did not incorporate. Accordingly, a cross-level model[7] that tests relationships among the organizational level-service climate, attitudinal mediators, and behavioral outcome variable, may need to be explored further, using a different sample. For example, Glisson and James (2002) examined the cross-level relationship that links team-level organizational climate to individual-level work attitudes and service quality. They found that work attitudes and behaviors at the individual level were explained by a function of climate at the group level.

[7] Cross-level occurs when relations among variables at one level are inferred from analyses performed at a different level (Mossoholder & Bedeian, 1983).

Common Method Variance and Social Desirability

Respondents may provide socially desirable responses rather than describe what they actually believe or do; this is known as social desirability (Crant, 1995). To minimize social desirability bias, strict confidentiality was ensured participants. Although, Moorman and Podsakoff (1992) argue that social desirability bias is not usually a threat when examining organizational perceptions, this study cannot completely rule out a social desirability response bias. For example, despite strict instructions that frontline employees' surveys will not be shared with their supervisors, frontline employees may have hesitated to respond honestly to the surveys items tapping their service-orientation. The potential for social desirability bias may have influenced findings of this study. A more important limitation of this study was that all data sources were self-report data from frontline employees, which may cause common method variance. Common method variance tends to inflate hypothesized correlations, due to the same source bias, rather than represent the true relationship (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Straub, Gefen, & Boudreau, 1999). For example, the obtained path coefficient for the link between service commitment toward customers and service-oriented organizational citizenship was .78. Care must be taken in interpreting this result, considering the potential of common method bias. To avoid biases from both social desirability and common method variance, future research measuring service-oriented organizational citizenship behavior of frontline employees should be collected from supervisors, coworkers, or customers.

Measurement Validation of Service Orientation

The outcome variable of this study is the frontline employees' service-oriented organizational citizenship behavior. Initially, two components of service-oriented organizational citizenship behavior were proposed, namely conscious job dedication toward customers and helping coworkers. These two dimensions were included in order to be consistent with the service-oriented organizational citizenship behavior literature (c.f., Brief & Motowidlo, 1986; George, 1991; Kelly & Hoffman, 1997; Stamper & Dyne, 2003). Consequential to CFAs, only one of the two dimensions of SOCB was retained: behavioral service-orientation toward customers, namely SOCB-helping coworkers was the only dimension testing hypotheses and evaluating the model fit. This implies a potential lack of content validity for the construct of service-oriented organizational citizenship behavior. Behavioral service orientation toward customers, namely, SOCB-conscious job dedication had to be deleted due to the severe cross-loading problem with the other two constructs. As explained above, if the service-oriented organizational citizenship behaviors is measured by a third person (customers, coworkers, or supervisor), it is expected that the distinction between attitudinal and behavioral service orientation may become clearer than the finding obtained from the self-report study such as this one.

Generalizability

Participants were self-selected, rather than randomly selected. This researcher was unable to obtain from participating restaurants an agreement to random selection of frontline employees. Surveys had to be delivered to the restaurant general manager, thus there was little control of data collection procedures. Furthermore, all data were

collected from foodservice establishments. There may be some possible systemic differences, depending on characteristics of organizations (e.g., independent restaurant, franchising restaurants, banquet operations in hotel, and contract foodservice establishment), but due to the small number of subjects, systemic analysis of this was not possible. It would also be informative to determine whether this study's findings would be obtained from other frontline employees working in different service organizations.

Conclusion

This present study proposed to examine the impact of perceived service climate perception on service-oriented organizational citizenship behavior, mediated by two affective states – 1) service commitment toward customers, and 2) service role ambiguity. The testing of both the measurement model and the structural model was done via a field survey of 452 frontline employees working in 31 different foodservice establishments. The *perception* of service climate among frontline employees was emphasized, in defining service climate, since individuals do not respond to work environment, but to their perceptions and interpretation their environments (Carr, Schmidt, Ford, & Deshon, 2003). The proposed model partially supported the data. The findings showed that service role ambiguity did not act as a mediator in the proposed model. The revised model indicated that service role ambiguity had an indirect effect on service-oriented organizational citizenship behaviors, through service commitment toward customers. Overall, the findings of this study added to the literature of service climate, service role ambiguity, and service orientation, and suggest it is necessary to differentiate the concept of attitudinal service orientation from behavioral service orientation. This study also

identified service role ambiguity as one of the important predictors of frontline employees' service-oriented attitude and behaviors.

Chapter Summary

This chapter showed key findings of the study that could contribute to the topics of service climate, service orientation, and service role ambiguity, especially in the context of the foodservice industry. Findings included: 1)a higher-order factor model of service climate; 2) differentiating dispositional, attitudinal and behavioral service orientation; 3) a mediating model, in which both service climate and service role ambiguity indirectly influence service-oriented organizational citizenship behaviors, emphasizing the mediating role of service commitment toward customers. This chapter also discussed the possibility of examining current individual-level framework as a cross-level framework for future study, using different data. This chapter further explained potential biases of social desirability and common method variance, due to the self-report method, and how this may be remedied in future study.

APPENDICES

Appendix A.

Semi-structured interview questions and protocol

Part I: Job experience in general

"Thank you for participating in my study. My name is Jaemin Cha. I am developing a dissertation proposal to study the relationship between the service climate in foodservice establishments, and employees' service-oriented attitudes and behaviors. In this interview, I mainly will ask about your motivation to deliver excellent service to customers.

The terms *service climate* and *service-oriented* may be unfamiliar to you, but my interview questions will make them clear. In fact, *your* experiences and discussions will help me define the *real* meaning of service climate and service-oriented attitudes or behaviors that occur in foodservice organizations. Your experiences and responses also will help me to develop my survey instrument.

Please read the consent form and sign it if you agree to participate in this study (give them time to read the consent form and verify with them that I can record). May I tape-record this interview? As the consent form says, your identity and that of organizations you work/ed for will not be revealed in any form. Only I have access to the recording (wait for the interviewee's answer). This interview will take not more than 40 minutes. If *you* have questions or concerns, please tell me. Also, if *my* questions are uncertain or unclear to you, please ask for clarification."

1. How long have you been working in any type of foodservice organizations (including part-time jobs during spring or fall semesters and summer internships)?
2. Please name the organizations you worked (or have been working) for and the employment period for each? (If names of organizations are unfamiliar to me, the researcher, ask interviewee to explain categories of restaurants such as fine-dining, casual, theme etc., or types of foods they serve).
3. What was your job position at each organization and what were your general job duties?

Appendix A.

Semi-structured interview questions and protocol (continued)

Part II: Service orientation

"Now, we move to the second part of interview. The second part of the interview addresses two issues: 1) customer service in general and 2) in particular, various aspects of *service orientation* in restaurant settings. In this part, I will ask your opinions/beliefs about customer service and your level of commitment toward customer service. I will ask you about your service practices that please your customers."

1. What does customer service mean to you?
2. Do you agree with the statement "the customers always are right?" Explain why.
3. Have you worked in restaurants where you build relationships with your repeat customers? (If participants are unclear about this question, I will ask immediately: Do customers remember your name when they come back? and/or Do you talk to your customers in a personal way when they come in)?
4. What makes you serve your customers best?
5. Who/what is your most important priority at work?
6. (If answers for questions 4 and 5 do not mention anything about their gratitude or gratuities): Do gratuities/tips influence your service performance?
7. How do you characterize your personality? Do you think your personality make differences when you serve your customers?
8. When do you most enjoy serving customers?
9. At peak and busy times at foodservice establishments, what happens to your attitude or level of commitment towards providing excellent service to customers?
10. Please give me service-related examples of going out of your way to provide excellent service to your customers.

Appendix A.

Semi-structured interview questions and protocol (continued)

Part III: Organizational Service Climate

"The last main part of this interview asks you not about yourself but about foodservice establishments' service atmosphere. To find out foodservice establishments' service atmospheres, I will ask you to describe procedures, practices and systems that address the importance of customer service in your restaurant. If you have worked for the foodservice establishments that belong to hotel organization, you will be asked to describe the general organizational service atmosphere."

1. What was and/or is the working atmosphere like in that/those foodservice establishment/s? Please tell me about this for each foodservice establishment you worked for. If you have worked for restaurants belonging to hotels, please describe the service atmosphere of your restaurant and of the hotel generally?
2. What kinds of training (and/or orientation) were you have given prior to serving customers?
3. Were *standards for service* explicitly discussed during orientation and training sessions?
4. Do you remember the foodservice establishment'/ organizations' missions? If so, what did the mission statement emphasize? If your foodservice establishments'/organizations' mission focus on service excellence toward customers, how were those messages taught?
5. Did your management evaluate your performance in any way? If yes, what criteria were applied?
6. How can you tell your management and foodservice establishments (organizations) truly are concerned about excellence of service?
7. What resources do management and foodservice establishments (organizations) offer for you to deliver the best service to customers?
8. What kinds of reward system were offered to you by management or foodservice establishments (organizations) in recognition of your high performance?
9. Are your service-related attitudes (passion for service) and your service performance influenced by your coworkers' and/or management's values toward service?
10. Who in your foodservice establishments/organizations discusses service excellence most?
11. Why is it important to create a service climate?
12. Who plays the most important role in creating a service climate at your foodservice establishments/organizations?
13. What obstacles prevent you from providing good service? Describe incidents when you could not deliver good service, despite wanting to.

Appendix B.

Pretest protocol

1. A researcher first introduces herself, and then explain to participants the purpose of this study.

2. Before participants start evaluating the survey instrument, the researcher asks each subject to read and sign the consent forms.

3. After participants sign the consent form, they will receive $20 cash.

4. The researcher distributes to the participants the sheet describing the conceptual definitions of
    1) dispositional service-orientation,
    2) service climate,
    3) service-commitment toward customers,
    4) service role ambiguity, and
    5) service-oriented organizational citizenship behavior.

5. Participants also received the scale (measurement items) of these constructs with the instruction of how to evaluate and judge the quality of scale.

6. Participants are asked to evaluate how well each item reflects the relevant domain of constructs based on the given conceptual definitions using a seven-point Likert scale, such as 1: very unclearly representative, 7: very clearly representative.

7. After participants finish the quantitative evaluation of scales, they are encouraged to comment verbally on uncertain and unclear items on the questionnaire, and the researcher makes notes of them.

Appendix C.

Recruiting letter

My name is JaeMin Cha. I am a doctoral candidate at Michigan State University. I am a 1998 graduate of the Master of Science Hospitality Business Program at MSU. Dr. Carl Borchgrevink at MSU HB School, chairman of my dissertation committee, has recommended that I contact you.

I am contacting you to ask an academic kindness. For my dissertation study I am asking selected foodservice establishments to permit me to collect data from their servers who interact with customers. In this regard, I would be most gracious if you permit me access to your servers at your restaurant to complete my questionnaire.

My dissertation work focuses on a) how your server perceptions of organizational or managerial practices, procedures, and policies can positively influence his or her service commitment toward customers, while b) decreasing their uncertainty about service roles. In particular, my study focuses on how to improve your server's performance. My intended study has the potential to help restaurant companies identify areas of organizational functioning to improve their service staff's service attitude and service performance.

Some aspects about which you may have questions:
1. Survey takes about **15 minutes** according to the pre-test.
2. I will not intrude on busy operations. I do not need to be present to administer the survey, and staff do not all have to take the survey on the same day.
3. The responses to this survey will remain **strictly anonymous**. Together with questionnaires, I will either mail or deliver two drop-boxes: one drop-box for collecting actual surveys; another drop-box for subjects' contact information. Thus, there is no way to link individual response and identity. Also, the name of your operation will not be in any part of the writing-up of the data.
4. Returning of an individual's contact information to the drop-box is completely voluntary; these cards are used for prize-drawing purposes only. Five participants will be selected, randomly, to **win $100 *cash each*.**
5. ***Most importantly***, of course, I will make **accessible to YOU** my findings regarding your data. I will analyze the data focusing on your company, and present a written summary of your restaurant's data compared to the sample at large for you.

I enclose the questionnaire herewith for your reference. I am ready to collect data the moment you grant permission.

THANK YOU SO MUCH, in advance, for your kind consideration. I look forward to your response. Email (chajaemi@msu.edu) is always the best way to reach me, but I am also available at (517) 862-1572 (cell); 417 Wildwood Drive, East Lansing MI 48823. If you indicate to me when it is best to reach you, I will call you to discuss this further.

My personal best wishes,

Jaemin Cha

Append D.

Consent Form for Main Study

Thank you for your participation in this study, titled "The Effect of Service Climate on Perceived Role Ambiguity, Service Commitment Toward Customers, and Service-Oriented Citizenship Performance." The main purpose of this project is to study the relationship between your perception of work environment and your actual service activity. This survey asks you for information about your experiences in your workplace environment, about your service attitude and performance, and about your relationship with co-workers and supervisors. This survey also asks you about your working experience in the restaurant industry and your general demographic information.

The survey takes about 15 minutes. Participation is completely voluntary but, of course, greatly appreciated. Your responses to this survey will remain strictly anonymous. There is no way to link your response and your identity. Also, your restaurant information will remain strictly confidential. The name of your restaurants will not be shown in any writing. Your data will be aggregated in a summary report. Your and your restaurant's privacy will be protected to the maximum extent allowable by law. Only the researchers listed below will be allowed access to the data. You may decline to answer certain questions or at any point may discontinue your participation.

Returning your contact information card to the drop-box is completely voluntary. These cards are used for prize-drawing purposes only. Five participants will be selected, randomly, to win $100 *each.* If you are one of those five, a $100 money order will be delivered at the end of August to the address you provide.

Please direct any questions about this study to Dr. C. Borchgrevink at email: carlb@msu.edu, phone: (517) 353- 9211, fax: (517) 432 -1170 or to Jaemin Cha at chajaemi@msu.edu . If you have questions or concerns about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact - anonymously, if you wish - Peter Vasilenko, PhD, Chair of the University Committee on Research Involving Human Subjects (UCRIHS), by phone: (517) 355-2180, fax: (517) 432-4503, e-mail: ucrihs@msu.edu , or regular mail: 202 Olds Hall, East Lansing, MI 48824.

By completing and returning the survey, you indicate your voluntary agreement to participate in this study.

(After completing the survey, please seal it in the envelope provided, and drop that envelope into the box labeled Survey Collection. Then, please fill out your contact information on the pink card, and drop this pink card into the other box labeled Drawing.)

Appendix E.

Original Full Measurement Scales ($N = 452$)
(* represents the deleted items for testing structural model)

Service Vision (V)

V1 Management emphasizes that customer satisfaction is the number one priority of this foodservice establishment.
V2 Management makes clear that the goal of pleasing customers is an important part of my job in this foodservice establishment.
V3 Management constantly communicates the importance and value of service quality.
V4 Management makes every effort to ensure that service quality is the top priority of this foodservice establishment.
*V5 Management sets definite quality standards for good customer service.
*V6 Management has clearly explained service excellence to me.
*V7 Management ensures that I pay attention to every small detail.

Service Training (T)

*T1 I have received continued training to provide good service in this restaurant.
T2 This foodservice establishment offers extensive customer service training before my initial contact with customers.
T3 This foodservice establishment spends much time and effort in training me in delivering high quality service.
T4 This foodservice establishment trains me to have competent food and beverage knowledge about the menu.
T5 Service training is part of the routine in this foodservice establishment.
T6 Service training is emphasized in this foodservice establishment.
T7 This foodservice establishment trains me on how to solve customer complaints.
T8 The procedure of service training is clearly understandable to me.

Supervisor Support (S)

S1 I find my supervisor very helpful in my performance of customer service duties.
S2 My supervisor supports me so that I can perform my service duties well.
*S3 My supervisor helps me to solve problems, when they arise during service.
S4 My supervisor regularly spends time on the floor to support me to facilitate service activities.
S5 My supervisor provides me with important work-related information and advice that makes my job easier.
*S6 I can count on my supervisor to do the right thing when serving customers.
S7 I can receive assistance from supervisors when performing my service duties.
S8 Management supports my service activities to serve customers best.

Appendix E.

Original Full Measurement Scales ($N = 452$) (continued)
(* represents the deleted items for testing structural model)

Reward and Recognition (R)

R1	If I improve the level of service offered to customers, the supervisor recognizes my service performance.
*R2	My excellence in customer service assists me to gain monetary reward in this restaurant.
R3	The reward system is linked to my service performance.
R4	I will be rewarded if I deal effectively with customer problems.
R5	This foodservice establishment celebrates top service accomplishments.
R6	"Wowing" customers contributes to my potential recognition.
*R7	My management recognizes me for delivering high quality service.

Dispositional Service Orientation (DS)

	I have a natural tendency to.....
*DS1	enjoy remembering customers' names.
*DS2	get customers to talk with me about their service needs.
*DS3	keep customers' best interests in mind.
DS4	achieve my own goals by satisfying customers' needs.
*DS5	enjoy nurturing customer relationships.
DS6	enjoy providing friendly service to customers.
*DS7	enjoy anticipating the service needs of customers
DS8	enjoy keeping customers informed.
DS9	enjoy delivering intended services on time to customers.
*DS10	enjoy responding quickly to customers' needs.
DS11	gain satisfaction by pleasing customers.
*DS12	take pleasure in getting customers to communicate their service need.

Service Commitment toward Customers (SC)

SC1	When performing my job, the customer is most important to me.
SC2	It is best to ensure that our customers receive the best possible service available.
SC3	I am willing to meet all requests made by my customers, if possible.
SC4	As an employee responsible for providing service, customers are very important to me.
SC5	I feel that the needs of our customers always come first.
*SC6	I am willing to do my best to help solve customer complaints.
*SC7	Every customer's problem is important to me.

Appendix E.

Original Full Measurement Scales ($N = 452$) (continued)
(* represents the deleted items for testing structural model)

Service-oriented Citizenship Behavior – Helping Coworkers (HC)

HC1	I help other servers who have heavy service workloads.
HC2	I help to take orders for another server's table, if he or she is too busy.
HC3	I help new or inexperienced servers learn to perform service activities, even if management does not require this.
HC4	I help other servers' service activities that are not assigned to me in busy situations.
*HC5	I willingly help other servers who have service-related problems.
HC6	I always am ready to help other servers who are occupied in serving and interacting with customers.

Service Role Ambiguity (RA)

RA1	I feel uncertain about what service customers expect.
*RA2	I feel uncertain about how to resolve service problems efficiently.
RA3	I feel uncertain about how to identify customer needs.
RA4	I feel uncertain about how to interact with customers.
RA5	I feel uncertain about how to solve customer complaints, if they occur.
RA6	I feel uncertain about how to approach some customers.

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