

AN EMPIRICAL STUDY OF THE RELATIONSHIPS AMONG SERVANT LEADERSHIP,
PROCEDURAL JUSTICE CLIMATE, TRUST IN LEADERS, ORGANIZATIONAL
CITIZENSHIP BEHAVIOR, AND SERVICE QUALITY IN THE CHINESE HOTEL
INDUSTRY

A Dissertation

by

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ABSTRACT

The purposes of this study were to confirm servant leadership as a higher-order factor construct with 6 factors and 24 items, and to examine the relationships and mediating effects among servant leadership, procedural justice culture (PJC), trust in leaders, customer-oriented organizational citizenship behavior (OCB), and employees' service quality in the Chinese hotel industry. Data were collected in two rounds from hotels in all parts of China. The CFA result showed servant leadership can be treated as a higher-order construct to be used to measure servant leadership behaviors in the Chinese hotel industry. SEM results demonstrated that servant leadership was not significantly directly correlated to customer-oriented OCB. However, the indirect relationship between these two variables was significant. PJC had mediating effect on the relationship between servant leadership and customer-oriented OCB. Additionally, a statistically significant correlation was found between servant leadership and trust in leaders, and trust in leaders was also significantly associated with customer-oriented OCB. Further, it was found that customer-oriented OCB and service quality were strongly related, while there was no significant correlation between servant leadership and service quality.

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Contributors

This work was supervised by a dissertation committee consisting of Dr. Larry Dooley, Dr. Michael Beyerlein, and Dr. Judy Sandlin of the Department of Department of Educational Administration and Human Resource Development, and Dr. Jennifer Strong of the Department of Department of Agricultural Leadership, Education, and Communications.

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CHAPTER I

INTRODUCTION

Leadership matters (Bennis, 2007). Undoubtedly, leadership plays a substantial role in an organization, whether this organization is business, government, or non-profit. Leaders shape institutional strategies, determine corporate culture and values, and initiate organizational change. Given the profound impact leaders exert on employees, customers, communities, and other shareholders, it is not surprising, then, that success and performance are determined by the effective and efficient leadership for most organizations (Barrow, 1977). However, contemporary organizations have been eroded by a prevalence of public malfeasance, corporate misconduct, and business malfunctioning (Brown & Mitchell, 2010). Systemic problems such as bullying leadership, abuse of power, unethical practices, and toxic emotions led numerous professionals and scholars to suspect that traditional autocratic modes of leadership no longer guarantee long term financial and social benefits for the organizations (Sendjaya, Sarros, & Santora, 2008). Consequently, both leadership scholars and professionals have been calling for a new leadership paradigm which would replace the old leadership practices and emphasize trust, moral compass, and social responsibility to secure success and profit in organizations (van Dierendonck & Nuijten, 2011). These calls have been logically and timely echoed by an electrified academic interest in conducting value-laden leadership studies under the terms of transformational leadership, authentic leadership, spiritual leadership, and servant leadership (Sendjaya, Sarros, & Santora, 2008).

Leadership is especially critical in the hospitality sector (Babakus, Yavas, Karatepe, & Avci, 2003). It is generally acknowledged that the function of the hotel sector is to create service excellence and to provide “hospitality” to customers. However, employment in this industry has

been traditionally considered labor intensive and both physically and psychologically demanding due to low wages, heavy workload, monotonous routines, irregular work shifts, and role ambiguity and conflict (Burke, Koyuncu, Fiksenbaum, & Tekin, 2013; Davidson, Timo, & Wang, 2010; Tiyce, Hing, Cairncross, & Breen, 2013). Recent research concluded that workplace stress experienced by hotel employees is a significant contributor to burnout, depression and anxiety, emotional exhaustion, and psychological distress (Belkic, Landsbergis, Schnall, & Baker, 2004; LaMontagne et al., 2007; Shani & Pizam, 2009). All these physical and psychological strains, in turn, can lead to decreased employee satisfaction, reduced morale, increased conflicts, lowered service quality, and eventually ending up with productivity and profitability plummeting (Tiyce, Hing, Cairncross, & Breen, 2013). Under this circumstance, hotel industry needs leaders who are expected to provide care and support to their employees (Ling, Liu, & Wu, 2017).

Servant leadership requires those in managerial positions to care for and empower their followers, involve their subordinates in decision making, encourage teamwork and community, display integrity, humility, and ethical behavior, and enhance the personal growth of employees (Spears, 2005). It could be argued this new leadership approach suits well with the working nature of the hotel industry, and therefore, as Brownell (2010) suggested, it holds promise for the hotel industry. This premise can explain why many famous hotel businesses such as 7-Eleven, Chick-Fil-A, Darden Restaurants (Red Lobster, Olive Garden...), YUM Brands (KFC, Pizza Hut, Taco Bell & more) adopt servant leadership principles in their business philosophies. It is also worth noting that hotel chains such as the Ritz-Carlton, Starwood, and White Swan in China have also joined this new leadership practice campaign (Ling, Lin, & Wu, 2016).

This Western-developed leadership paradigm may also equally be applicable in the Chinese culture. Hirschy, Gomez, Patterson, and Winston (2014) asserted that “servant leadership is a global style of leadership positioned to meet the unique challenges facing leaders in diverse cross-cultural communities” (p. 97). A large body of literature suggested that servant leadership as philosophies and practices can be transferred to other cultures. A case in point is a study conducted by Han, Kakabadse, and Kakabadse (2009) who argued that the Western concept of servant leadership holds the comparable meaning in the Chinese context. The assumption undergirding this argument, as the above authors proposed, is that the ideas of servant leadership fit well with the teachings of Confucianism and Taoism, which still have a tremendous impact on Chinese culture. In Taoism, leaders are encouraged to “maintain a low profile, to lead by example, and to empower people through ownership of the task to do the work” (Winston & Ryan, 2008, p. 218), while in Confucianism leaders should possess “love, altruism, kindness, charity, compassion, goodness, perfect virtue, true selfhood, etc.” (Yuan, 2002, p. 109). This conclusion was also confirmed by quite a few studies conducted in the context of Chinese public sector (Liu, Hu, & Cheng, 2015; Miao, Newman, Schwarz, & Xu, 2014; Schwarz, Newman, Cooper, & Eva, 2016), hotel industry (Huang, Li, Qiu, Yim, Fewdirick, & Wan, 2016; Ling, Lin, & Wu, 2016; Ling, Liu, & Wu, 2017), and others (Newman, Schwarz, Cooper, & Sendjaya, 2017; Sun & Wang, 2009). This study aimed to investigate how servant leadership affects its outcome variables (latent variable will be interchangeably used with construct in this study) in the Chinese culture, especially in the Chinese hotel industry.

Problem Statement

The associations of servant leadership with its outcome variables have drawn significant attention in the leadership literature (Brown & Bryant 2015). There are large bodies of recent

studies that endeavored to disclose the relationships among servant leadership, service quality, organizational citizenship behavior (OCB), trust, and procedural justice culture (PJC) (Chiniara & Bentein, 2018; Gotsis & Grimani, 2016; Koyuncu et al., 2014; Kwak & Kim, 2015; Ling et al., 2016; Ozyilmaz & Cicek, 2015; Shim et al., 2016; Walumbwa et al., 2010). For example, it was reported that PJC partially mediates the effect of servant leadership on global OCB (Walumbwa et al. 2010), servant leadership is positively related to service quality and this positive relationship was mediated by the hotel employees' OCB (Kwak & Kim, 2015). In the Chinese context, employee service-oriented behaviors were documented to mediate the effect of servant leadership on employee service quality (Ling et al., 2016).

These studies undoubtedly yielded significant value in examining the relationships and mediating effects among servant leadership and OCB or service quality. However, little research in the leadership literature has systematically studied how the nomological network works among servant leadership, PJC, trust, customer-oriented OCB, and service quality as a whole in the Chinese hotel industry. It is still fuzzy how servant leadership affects PJC and trust, which in turn, influence customer-oriented OCB, which impacts customer service. The intricacies embedded in the mechanisms have not yet been fully understood. In addition, the mechanism through which servant leadership is associated with customer-oriented OCB and service quality is more complicated than originally thought. There should be multiple variables playing mediating roles between them. For example, due to the increasing diversity of Chinese workforce and participative management practice, trust and justice climate have increasingly become an important work value in the Chinese workplace (Hon & Lu, 2010; Wong et al., 2006). Thus, it should be promising to determine whether PJC mediates the effects on the relationship between servant leadership and customer-oriented OCB or service quality in the context of

Chinese hotels. However, organizational behavior research has rarely focused on using PJC and trust as mediators to examine the relationships between servant leadership and these two outcome variables. Examining servant leadership-PJC-customer-oriented OCB service quality link can add more insights to advance our understanding of the nomological network of servant leadership in relation to its outcomes and mediators in the context of Chinese hotels.

Purpose of the Study

The purposes of this study were (a) to confirm the 6 factor-24-item Servant Leadership Scale (SLS) developed by Qiu and Dooley (2019); (b) to investigate the relationships among servant leadership, PJC, trust in leaders, customer-oriented OCB, and employees' service quality in the context of Chinese hotel industry; and (c) to especially examine the mediating effect of PJC between servant leadership and customer-oriented OCB. There was only one exogenous variable in this study: servant leadership. All other four variables were endogenous variables: PJC, trust in leaders, customer-oriented OCB, and service quality. More clearly, this study measured all these variables as perceived by the leader' followers in the hotel industry in China. Demographic variables in this study consist of gender, age, education level, work type, and tenure. The research question was: What is the mechanism through which servant leadership impacts service quality?

Research Hypotheses

On the basis of the above purposes of the study and the research questions, the following hypotheses are proposed:

Hypothesis 1a. There is a statistically significant correlation between servant leadership and customer-oriented OCB in the hotel sector in China.

Hypothesis 1b. PJC has a mediating effect on the relationship between servant leadership and customer-oriented OCB in the hotel sector in China.

Hypothesis 2. There is a statistically significant correlation between servant leadership and trust in leaders in the hotel sector in China.

Hypothesis 3. There is a statistically significant correlation between trust in leaders and customer-oriented OCB in the hotel sector in China.

Hypothesis 4. There is a statistically significant correlation between servant leadership and service quality in the hotel sector in China

Hypothesis 5. There is a statistically significant correlation between customer-oriented OCB and service quality in the hotel sector in China.

Hypothesis 6. There is a statistically significant correlation between PJC and trust in leaders in the hotel sector in China.

Definition of Key Terms

Definitions of the key terms of the study were provided in this section. Key terms include servant leadership, PJC, trust in leaders, customer-oriented OCB, and service quality. It is important to note that these key terms are theoretically grounded in psychology, organizational behavior, sociology, and management science. All of these terms have been utilized as constructs to investigate the corresponding social phenomena across various research fields. For the purposes of this study, these key terms were defined as follows.

Servant Leadership

The servant leadership is servant first...It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead. The difference manifests itself in the care taken by the servant—first to make sure that other

people's highest priority needs are being served. The best test is: Do those served grow as persons: do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants? (Greenleaf, 1970, p. 4).

In this study, servant leadership was measured as employees' perception of their managers' servant leadership behaviors in the workplace. It was identified as the antecedent construct that may affect other constructs in this study.

Procedural Justice Climate

Procedural Justice Climate (PJC) was conceptualized as perception of how a work group is treated as a whole (Naumann & Bennett, 2000). It is a climate in which team members are treated fairly with dignity, propriety, and respect by their leaders that implement organization's procedures or determine their performances (Greenberg, 1990). In this study, PJC was assessed to reflect the employees' perception of their treatment by their immediate managers.

Trust in Leaders

Trust in Leaders refers to the willingness of followers to be vulnerable to the actions of their leaders based on the expectation that the leaders would perform a particular action important to the followers (Mayer, Davis, & Schoorman, 1995). In this study, trust in leaders may also serve as a mediator between the two relationships, e.g. (a) relationship between PJC and customer-oriented OCB, (b) relationship between servant leadership and customer-oriented OCB, and (c) relationship between PJC and service quality. But all these mediating effects were not hypothesized nor tested.

Customer-Oriented Organizational Citizenship Behavior

Organizational Citizenship Behavior (OCB) sometimes is also referred as extra-role behavior. This study focused on Customer-Oriented OCB. It was defined as an employees'

voluntary commitment towards customers within an organization that goes above and beyond job description, and is performed by the employee as a result of personal choice (Organ, 1988). In this study, Customer-oriented OCB was one of the factors that may be affected by servant leadership, trust in leaders, and PJC, and also may affect service quality.

Service Quality

Service quality is an achievement in customer service, and it is conceptualized as a comparison of perceived expectations with perceived performance regarding the service provided (Parasuraman, Zeithaml, & Berry, 1985). In this study, service quality was an outcome variable that may be influenced by servant leadership, customer-oriented OCB.

Summary

In this Chapter, the basic information for the study was provided. Given the mechanisms through which servant leadership is associated with OCB and service quality are still ambiguous and the importance of PJC and trust in leaders in organizations, a quantitative study was needed to help elucidate the full or partial mediating effect on OCB and service quality in the Chinese hotel sector. The purposes of this study were: (a) to confirm the 6 factor-24-item SLS scale developed by Qiu and Dooley (2019); (b) to investigate the relationships among servant leadership, PJC, trust in leaders, customer-oriented OCB, and employees' service quality in the context of the Chinese hotel industry; and (c) to especially examine the mediating effect of PJC between servant leadership and customer-oriented OCB. For these purposes, a number of hypotheses were formulated. This study contributed to leadership literature by examining the relationships among various servant-leadership related variables and mediating effect in the Chinese hotel sector. Practically, this study helped hotel industry to inculcate servant leadership mentality in its leaders to develop a justice culture and to increase employees' trust in their

leaders, thus boosting the OCB and service quality. Definitions of the key terms in this study were presented. The next chapter focused on literature review regarding the fundamental guiding theories and some main variables.

CHAPTER II

REVIEW OF LITERATURE

In this chapter, a summary of theory and research related to this study was presented. The first section of this chapter focused on how literature was identified and analyzed. In the second section, the review of the theoretical background of this study was provided. The next section dealt with the literature review that supports the research hypotheses. Finally, a hypothesized conceptual model for this study was proposed.

Literature Search

The purpose of this literature review was to provide a comprehensive overview of prior studies in the field of servant leadership to summarize, analyze, and synthesize the scholarly literature. To review the related literature, extensive search was conducted through search engines on electronic databases, including EBSCO, ProQuest, Sage, Science Direct, and Emerald. The keywords for the literature review included servant leadership, PJC, trust in leaders, customer-oriented OCB, and service quality. Peer-reviewed articles, books, research conference proceedings, and other scholarly publications were all included. Considering the relatively short history of servant leadership research, no search period was set in order to yield as many scholarly publications as possible.

Theoretical Framework

In the human resource development (HRD) field, there are some theories that can possibly guide this research, such as organization development theories and learning & development theories. However, this study aimed to examine the relationships and mediating effect among servant leadership, PJC, trust in leaders, customer-oriented OCB, and service quality. For this purpose, it would be better to narrow down to the leadership field. As such,

servant leadership theory, leader-member exchange theory, and transformational leadership theory are most relevant to frame this work. In the following sections, these theories would be reviewed and broached in terms of their key variables, the links among these variables, and explanations of the relationships. As servant leadership was the most important construct in this study, it was highlighted in greater detail.

Servant Leadership Theory

Beginning with the work of Robert K. Greenleaf in the 1970s, servant leadership study has slowly evolved from theoretical and conceptual discussions, to model development, and finally to initial empirical research (Irving, 2010). Actually, since Farling et al.'s (1999) call for empirical studies, three streams of research have emerged: (a) a conceptual stream, (b) a measurement stream, and (c) a model development stream (Parris & Peachey, 2013). In describing the development of servant leadership, it is necessary to first introduce Robert K. Greenleaf as he was the founder of servant leadership theory. Next, Characteristics of servant leadership, models of the servant leadership, and empirical studies validating servant leadership theory will be broached.

Robert K. Greenleaf

The term “servant leadership” was first introduced by Robert K. Greenleaf (1970) in his book entitled *The Servant as Leader*. He worked at AT&T for 40 years during which he researched management, development, and education. After retirement, Greenleaf founded the Center for Applied Ethics in 1964 (later in 1985 changed its name to the Greenleaf Center for Servant Leadership) and began to serve as an influential consultant to a number of organizations such as MIT, the American Foundation for Management Research, The Ford Foundation, and Lilly Endowment, Inc. All along, he had become increasingly suspicious that the power-

centered authoritarian leadership style so prominent in U.S. institutions was not working and he was captivated by the idea of a servant actually being the leader. He was attempting to explore how to solve management and leadership problems and to apply the idea of servant leadership to an organizational level in business, education, foundations, and churches.

Servant Leadership

The idea of this seminal book *The Servant as Leader*, as Greenleaf (1970) admitted, stemmed from his reading Hermann Hesse's *Journal to the East*. In *Journal to the East*, Hesse told a story about a servant named Leo accompanying a band of men on a mythical journey to the East. The pilgrim's ultimate destination was the East, where they expected to find spiritual renewal. Leo usually did menial chores for the group and also sustained the band with his spirit and song to entertain and inspire them. At the outset of the trip, everything went well. But the harmony turned into open conflict soon after Leo one day disappeared. Each traveler found the rest of the group intolerable. They finally abandoned the journey and headed off in their own directions. After many years' wandering, one of the groups (the narrator of this story) found Leo and was taken to a place where the narrator discovered that Leo was the head of that place, a guiding spirit, a great and noble leader. Leo was in fact the leader all of the time, but he was considered a servant.

In *The Servant as Leader*, Greenleaf referred to servant leaders as those who put the needs of others as the first priority. Even more so, servant leaders serve in a way that they prioritize the needs of their employees above their own, assist followers in recognizing their full potential, and empower their followers to get the job done (Liden, Panaccio, Meuser, Hu, & Wayne, 2014). As Greenleaf (1970) described,

The servant leader is servant first...It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead...the difference manifests itself in the care taken by the servant-first to make sure that other persons' highest priority needs are being served. (p. 4)

In Greenleaf's view, leadership was bestowed upon a person who was by nature a servant. It was something given, or assumed, that could be taken away. But servant nature was not bestowed, nor assumed. The ideal of servant leadership is to make those being touched by the efforts of servant leader become healthier, stronger, more autonomous, and more disposed to serve others. Although servant leaders act primarily as stewards of their employees, they also work to serve the wider society by demonstrating their unlimited liability for specific community-related groups and by inspiring others to work together toward a common goal (Miao, Newman, Schwarz, & Xu, 2014; Searle & Barbuto, 2011). These include followers, customers, business owners, communities, and many other stakeholders.

In the book *The Servant as Leader*, Greenleaf provided a conceptual examination of servant leadership but elliptically discussed limited servant leader traits that would help people understand what qualities a person should possess to be an effective servant leader. The traits he discussed included listening and understanding, language and imagination, withdrawal-finding one's optimum, acceptance and empathy, know the unknowable-beyond conscious rationality, foresight, awareness and perception, persuasion, one action at a time, conceptualizing, healing and serving, community building, and others. These traits look unorganized, disconnected, and therefore are difficult to grasp for professionals and even for scholars. This is probably the primary reason why servant leadership had drawn little attention among the professionals and academia for a long time after its birth.

It was two decades later that Graham (1991) began to attempt to analyze the assumptions underlying servant-leadership in organizations and to identify its salient characteristics: humility, spiritual insight, relational power, vision and practice, emulation of leaders' service orientation, autonomy and moral development of followers, and enhancement of common goods. The underlying assumptions include recognition of (a) the inherent fallibility of humankind, (b) the tendency of high level positions to encourage narcissism in their occupants, and (c) the tendency of habituated subordination in low level positions to lead to docility and loss of critical thinking capacity. Graham (1991) further described three examples from workplace settings to distinguish the difference between transformational leadership and servant leadership by focusing on encouragement of intellectual and skill development and enhancement of moral reasoning capacity. As he argued,

Transformational leaders encourage followers to develop their skills so that they might eventually demonstrate initiative in working for the leader's goals. Servant leadership takes a further step because it encourages in followers not only intellectual and skill development, but enhanced moral reasoning capacity as well. Followers become autonomous moral agents, i.e., they are not bound within the context of the leader's goals. (Graham, 1991, p. 116)

The above quote obviously highlighted the moral element as a distinguishing component of servant leadership. However, Graham (1991) only compared charismatic and servant leadership in terms of several descriptive criteria and listed a number of qualities that are central to the development of servant leadership. It was Larry C. Spears (1995) who first identified and articulated a set of 10 important characteristics of the servant leader based on the works of Greenleaf: (a) listening: servant leaders seek to listen receptively to what is being said; (b) empathy: servant leaders strive to understand and empathize with others; (c) healing: servant

leader recognize the opportunity to help make whole those with whom they come in contact; (d) awareness: awareness includes understanding oneself and the impact one has on others; (e) persuasion: persuasion is clear communication that convinces others to change, instead of using positional authority to force compliance; (f) conceptualization: conceptualization refers to an individual's ability to be a visionary for an organization, providing a clear sense of its goals and direction; (g) foresight: an ability that help servant leaders to understand the lessons from the past, the realities of the present, and to know the future; (h) stewardship: taking responsibility for the leadership role entrusted to the leader; (i) commitment to the growth of people: servant leaders are committed to the growth of every employee with the organization; and (j) building community: servant leaders foster and make contribution to the development of community.

These characteristics are essential to the development of servant leaders. Although not exhaustive, this work provided the closest representation of an articulated framework for what characterizes servant leadership and therefore helped set the stage for systematic empirical research on this topic (Barbuto & Wheeler, 2006). Another categorization of the attributes of servant leadership was provided by Russell and Stone (2002) when they put forward a hypothetical construct model of servant. They identified 20 distinguishable attributes associated with servant leadership from the literature and classified them into two categories: functional attributes and accompanying attributes. While the functional attributes are operative qualities, characteristics, and distinctive features belonging to leaders and observed through specific leader behaviors in the workplace, the accompanying attributes appear to supplement and augment the former and therefore are prerequisites to effective servant leadership. The functional attributes consist of vision, honesty, integrity, trust, service, modeling, pioneering, appreciation of others, empowerment. The work of identification of servant leadership's characteristics has never

stopped. Most recently, Focht and Ponton (2015) conducted a Delphi study with some scholars, resulting in a set of 12 primary characteristics of servant leadership: valuing people, humility, listening, trust, caring, integrity, service, empowering, serving others' needs before their own, collaboration, love/unconditional love, and learning.

All of the above research made substantial contributions to leadership literature and set a stage upon which to continue to advance the knowledge on servant leadership. However, much of the early servant leadership research was anecdotal and conceptual (Sendjaya & Sarros, 2002). Servant leadership gained little academic attention of academic researchers until the early 2000s (Liden, Panaccio, Meuser, Hu, & Wayne, 2014). The empirical examination has been hindered by a lack of theoretical underpinnings and no suitable measure (Barbuto & Wheeler, 2006). As a viable construct, it still remains an elusive and under-developed phenomenon. For these reasons, Brown & Bryant (2015) made a call for the advancement of servant leadership theory through construct consensus, empirical evidence, and multilevel theoretical development. "More empirical research of servant leadership is needed at multiple levels of analysis in order to increase construct clarity" (Brown & Bryant, 2015, p. 18). As a first step, psychometrically sound and valid instruments are needed to measure the construct of servant leadership. This is a very important step for the evolution of servant leadership theory from conceptual stage to empirical study. But first, I would like to present some servant leadership models before proceeding to discuss its empirical studies.

Servant Leadership Models

In the literature on the servant leadership study, four models were found depicting the relationships among dependent and independent, moderating and mediating variables. All these models help us better understand the full process of servant leadership and lay a foundation for

further research to validate the theory. The first model for servant leadership (Figure 1) found in the literature was provided by Russell and Stone (2002). At that time, servant leadership was espoused as a valid model for modern organizational leadership. However, servant leadership theory was undefined and not yet supported by sufficient empirical studies. In this model, the dependent variables are 9 functional attributes of servant leadership while the values, core beliefs, and principles are the independent variables. Value was highlighted as an independent variable affecting servant leadership here. The accompanying attributes are moderating variables and affect the level and intensity of the functional attributes. In turn, servant leadership also serves as an independent variable affecting the subsequent organizational performance as the dependent variable. In addition, organizational culture and employee attitudes act as mediating variables influencing the effectiveness of servant leadership and have a governing effect upon organizational performance.

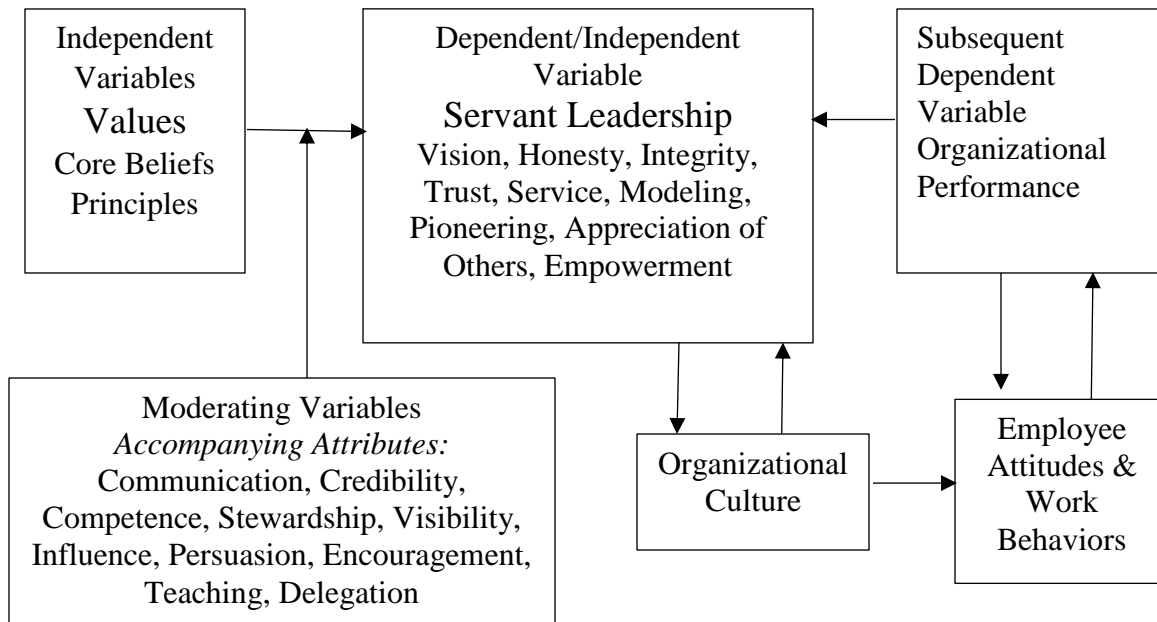


Figure 1. Servant Leadership Model 1. Adapted from Russell and Stone (2002).

The second one was developed by van Dierendonck (2011) as presented in Figure 2. The model emphasizes the importance of motivation to lead with a need to serve as the cornerstone of servant leadership. It also acknowledges the personal characteristics and the cultural aspects together with the motivation as antecedents of servant leadership. The resulting characteristics influence both the individual leader–follower relationship and the general psychological environment within a team or organization, which in turn are expected to affect the followers in terms of self-actualization, positive job attitudes and increased performance, increased team effectiveness, and sustainability and corporate social responsibility (CSR). The model adds a feedback loop from the follower back to leader behavior to acknowledge the reciprocal nature between leader and follower (van Dierendonck, 2011).

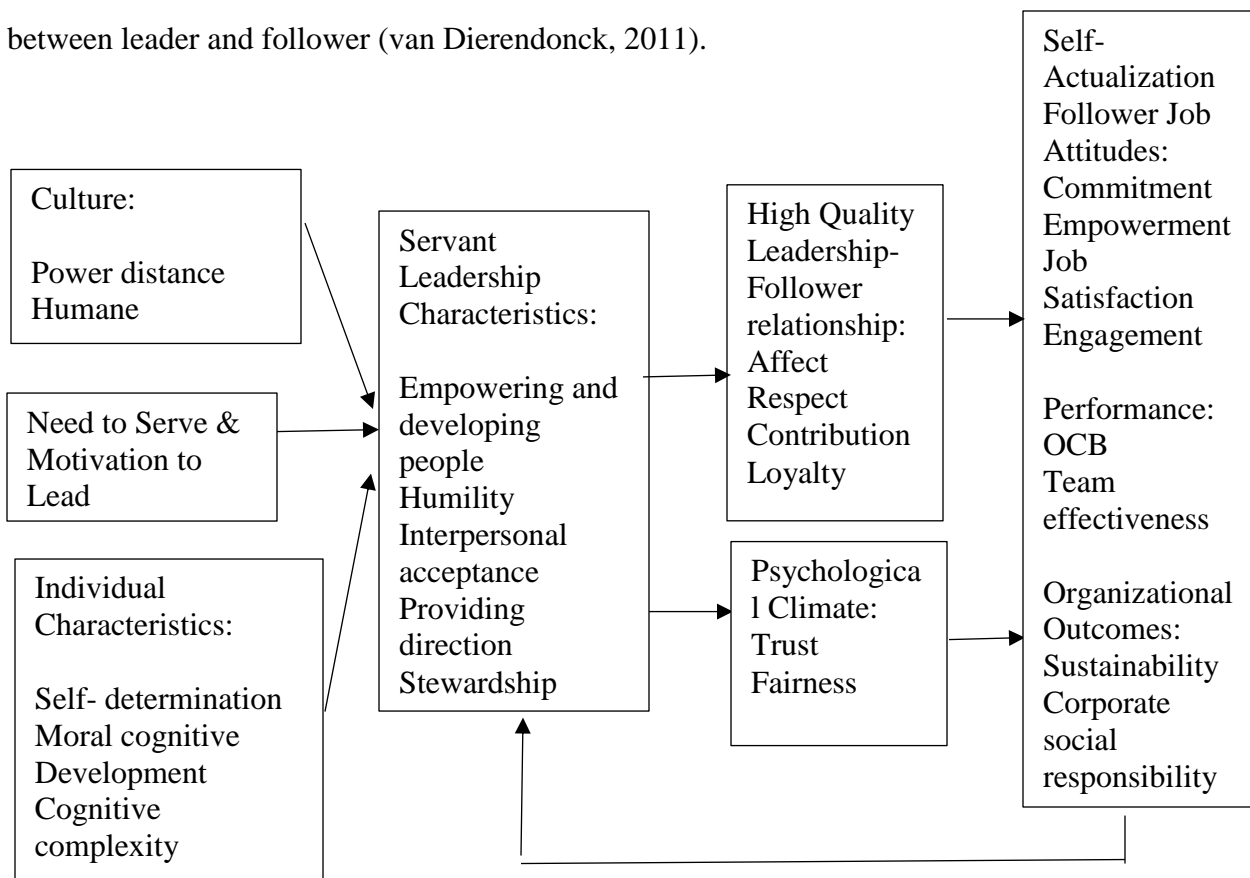


Figure 2. Servant Leadership Model 2 Adapted from van Dierendonck (2011)

As can be seen from the above two models, there exists a large amount of complexity in the interrelatedness among various variables. A more concise and simpler model was provided by Northouse (2013) who intended to clarify the phenomenon of servant leadership and to help understand its complexities (Figure 3). It can be clearly seen that this model has three main components: antecedent conditions, servant leadership behaviors, and leadership outcomes.

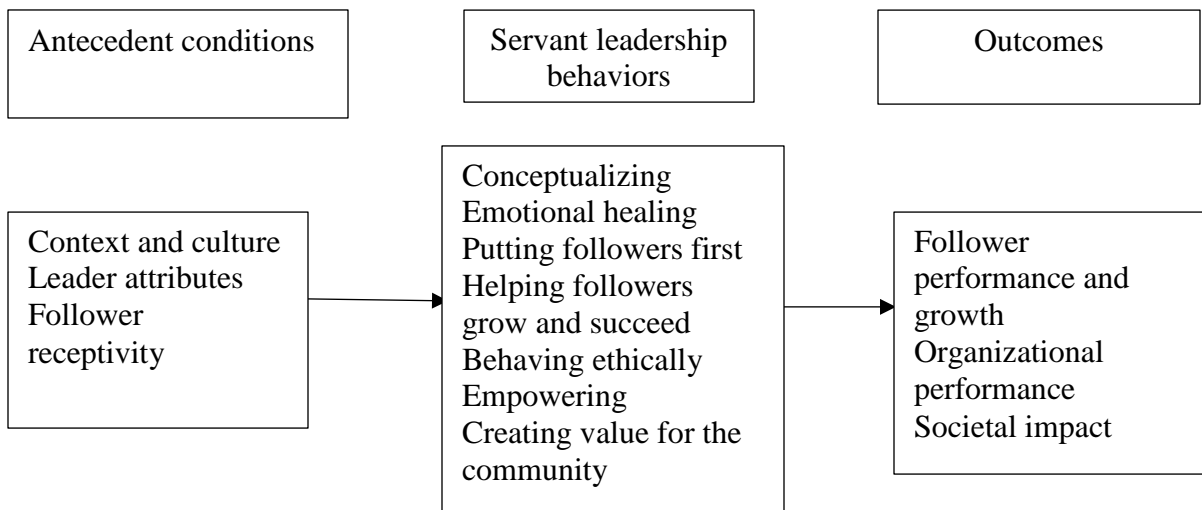


Figure 3. Servant Leadership Model 3. Adapted from Northouse (2013).

The last framework in existing literature was depicted by Liden, Panaccio, Meuser, Hu, and Wayne (2014). In this model, they identified individual characteristics of leaders and followers that are conducive to servant leadership, as well as the mediating mechanisms through which servant leader behaviors lead to attitudinal and behavioral outcomes. Also, it can be clearly seen that four components in this model: antecedents, servant leader behavior, intermediate processes, and outcomes. Antecedents include the leader's desire to serve others, emotional intelligence, moral maturity, prosocial identity, core self-evaluation, and low narcissism, leader servant leadership potential, leader awareness of follower (proactive personality, core self-evaluation, and servant leader prototype), and follower's servant leader

prototype. Servant leadership behaviors consist of conceptual skills, emotional healing, putting followers first, help followers grow and succeed, behaving ethically, empowerment, and creating value for the community. Intermediate process incorporates leader-follower mutual trust, follower prosocial/moral identity, core self-evaluation, empowerment, autonomous motivation, and commitment to supervisors. The outcome includes followers' increased servant leadership behavior, organizational commitment, OCB, creativity, performance, and engagement.

Servant Leadership Measures

Another advancement of servant leadership is manifested by a multitude of empirical studies validating it as a theory. The early works of Greenleaf (1970) and Spears (1995) have laid a foundation for later scholars interested in the studies on servant leadership to develop instrument scales to measure servant leadership. There were a number of researchers who attempted to create and validate measures for this purpose during the long and painstaking journey. Probably earliest empirical model in this regard was the Organizational Leadership Assessment (OLA) developed by Laub (1999), followed by the Revised Servant Leadership Profile (RSLP) (Wong & Page, 2003), a fourteen-item scale developed by Ehrhart (2004), and Servant Leadership Questionnaire (SLQ) (Barbuto & Wheeler, 2006). Sendjaya, Sarros and Santora (2008) summarized 5 the earliest measures of servant leadership while Green, Rodriguez, Wheeler, & Baggerly-Hinojosa (2015) provided a review of 6 more recent instruments that measure this construct and summarized 84 statistical results from 20 quantitative, peer-reviewed studies. A more detailed synthesis of these instruments was offered by van Dierendonck (2011) as he incorporated samples, methodologies, and the Cronbach Alpha values in a comparison table. Despite all of these authors exposed us to a number of instruments based on empirical evidence, the work is anything but exhaustive. Since this study deals with the

development and validation of a measure of servant leadership in the Chinese service industry, here I make a summary of 12 measures including Chinese servant leadership instruments as shown in Table 1. Some of the contents in this table are adapted from the work of Sendjaya, Sarros and Santora (2008).

Table 1

Summary of Twelve Measures of Servant Leadership

Name of the measure	Number of items	Number of factors	Name of factors	Content validation	Statistical analysis methods	Reliability α and validity test
Organizational Leadership Assessment (OLA) (Laub, 1999)	60	6	<ul style="list-style-type: none"> • Values people; • Develops people; • Builds Community; • Displays authenticity; • Provides leadership; • Shares leadership 	Yes, through expert panel	Factor analysis	Reliability α , but no validity test
Revised Servant Leadership Profile (RSLP) (Wong and Page, 2003)	97	10	<ul style="list-style-type: none"> • Leading • Servanthood • Visioning • Developing others • Team-building • Empowering others • Shared decision making • Integrity • Abuse of power • Egotistic pride 	Yes, through literature review and personal experience	Factor analysis	N/A
Servant Leadership Questionnaire (SLQ) (Barbuto & Wheeler, 2006)	23	5	<ul style="list-style-type: none"> • Altruistic calling • Emotional healing • Wisdom • Persuasive mapping • Organizational stewardship 	Yes, through literature review and expert panel	EFA and CFA	Reliability α , convergent validity, discriminant validity, and criterion-related validity

Table 1 Continued

Name of the measure	Number of items	Number of factors	Name of factors	Content validation	Statistical analysis methods	Reliability α and validity test
Servant Shepherd Leadership Scale (SSLS) (Whittington et al., 2005)	30	4	<ul style="list-style-type: none"> • Other-centredness • Facilitative Environment • Self-sacrifice • Affirmation 	N/A	Factor analysis	N/A
Servant Leadership Behavior Scale (SLBS),(Sendjaya, Sarros, & Santora, 2008)	35	6	<ul style="list-style-type: none"> • Voluntary Subordination • Authentic Self • Covenantal Relationship • Responsible Morality • Transcendental Spirituality • Transforming Influence 	Yes, through literature review, semi-structured interviews, and expert panel	EFA and CFA	Reliability α , content validity
28-item Servant Leadership Measure (SL-28)(Liden, Wayne, Zhao, & Henderson, 2008)	28	7	<ul style="list-style-type: none"> • Emotional healing • Creating value for the community • Conceptual skills • Empowering • Helping subordinates grow and succeed • Putting subordinates first • Behaving ethically 	Yes, through literature review and expert panel	EFA, CFA, and HLM	Reliability α , convergent Validity and criterion-related validity
15-item Servant Leadership Scale (Sun & Wang, 2009)	15	5	<ul style="list-style-type: none"> • Altruistic calling • Emotional healing • Wisdom • Persuasive mapping • Community stewardship 	Based on SLQ	EFA and CFA	Reliability α , factor validity, convergent validity, divergent validity, and predictive validity

Table 1 Continued

Name of the measure	Number of items	Number of factors	Name of factors	Content validation	Statistical analysis methods	Reliability α and validity test
Servant Leadership Survey (SLS) (Van Dierendonck & Nuijten, 2011)	30	8	<ul style="list-style-type: none"> • Empowerment • Standing back • Accountability • Forgiveness • Courage • Authenticity • Humility • Stewardship 	Yes, through literature review	EFA and CFA	Reliability α , content validity, convergent validity, divergent validity, and criterion-related validity
7-item Servant Leadership Measure (SL-7)(Liden et al., 2016)	7	7	<ul style="list-style-type: none"> • Emotional healing • Creating value for the community • Conceptual skills • Empowering • Helping subordinates grow and succeed • Putting subordinates first • Behaving ethically 	Based on SL-28	CFA	Reliability α , convergent validity and criterion-related validity
Servant Leadership Scales (Ling, Lin, & Wu, 2016)	24 (Top-level leadership) 28 (Middle-level leadership)	6 (Top-level leadership) 7 (Middle-level leadership)	<p>Top-level leadership:</p> <ul style="list-style-type: none"> • Visioning • Pioneering • Visiting the front-line • Taking social responsibility • Self-sacrificing • Behaving ethically <p>Middle-level leadership:</p> <ul style="list-style-type: none"> • Self-sacrificing • Behaving ethically • Respecting employees • Caring about employees • Helping employees develop • Empowering • Sociability 	Yes, through literature review and expert panel	EFA and CFA	Reliability α , convergent validity, divergent validity

Table 1 Continued

Name of the measure	Number of items	Number of factors	Name of factors	Content validation	Statistical analysis methods	Reliability α and validity test
Short form of the Servant Leadership Behavior Scale (SLBS-6) (Sendjaya, Eva, Butar, Robin, & Castles, 2017)	6	6	<ul style="list-style-type: none"> • Voluntary Subordination • Authentic Self • Covenantal Relationship • Responsible Morality • Transcendental Spirituality • Transforming Influence 	Yes, through literature review	EFA and CFA	Reliability α , convergent validity and criterion-related validity
Servant Leadership Measure (Qiu, & Dooley, 2019)	24	6	<ul style="list-style-type: none"> • Integrity • Self-sacrifice • Building community • Empowering people • Emotional healing • Visioning 	Yes, through literature review and expert panel	EFA, CFA, and IRT	Reliability α , convergent validity, divergent validity, and criterion-related validity

Among all these attempts listed in the table, the most noticeable are measures developed by Liden, Wayne, Zhao, & Henderson, 2008), van Dierendonck and Nuijten (2011), and Qiu and Dooley (2019). van Dierendonck (2011) commented the first two measures as the two of the then available measures which show a stable factor structure across multiple samples, cover (most of) the terrain described by the key servant leadership characteristics, and meet adequate psychometric standards. Later research showed these two measures were used more widely. For example, using a composite sample consisting of 5201 participants from 8 European countries, van Dierendonck et al. (2017) recently tested and confirmed the cross-cultural equivalence of the Servant Leadership Survey (SLS). Using a composite sample (n = 3072), Sendjaya, Eva, Butar, Robin, and Castles (2017) also validated a 6-item short form of the original 35-item Servant

Leadership Behavior Scale (SLBS). It can be argued that Qiu and Dooley's (2019) SLS scale is also a psychometric sound and valid measure for servant leadership for the Chinese hotel industry. Compared to all other scales, their servant leadership measures used more statistical analysis methods, especially IRT which can help to keep more useful item information in the scale. Further, convergent validity, divergent validity, and criterion-related validity of the construct were tested in their study.

Servant leadership, as a theory in leadership domain, has "a set of interrelated concepts, definitions, and propositions that explain or predict events and situations by specifying relationships among variables" (Kerlinger, 1986, p.9). Indeed, there are many empirical studies examining the relationships among variables related to servant leadership, including the antecedents, mediating and moderating variables, and consequences. No matter what relationships were investigated, the cornerstone construct is servant leadership. These empirical studies all used certain servant leadership scale mentioned above to measure servant leadership behaviors.

Servant Leadership Studies Conducted in China

A content analysis of servant leadership studies performed by Yigit and Bozkurt (2017) revealed scholars in Chinese institutions published 8 articles about servant leadership. Although they did not include the articles that were written by non-Chinese first authors using Chinese samples, the number "8" obviously illustrates that there is little attention paid to Chinese servant leadership research. Even though all are counted, the number is still small. During the recent two years, great progress has been made in studying servant leadership in China. A more recent systematic review was conducted by Eva, Robin, Sendjaya, van Dierendonck, and Liden (2019)

who revealed there are 25 empirical studies conducted in China on the topic of servant leadership. Needless to say, to a certain extent, most of these works have advanced an understanding of the effects of servant leadership in the Chinese culture.

In retrospect, the groundbreaking empirical study in China was conducted by Sun and Wang (2009) who first verified the construct of servant leadership and validated the SLQ measure developed by Barbuto and Wheeler (2006) and published their research report in a peer-reviewed English journal. They suggested that SLQ could be used for servant leadership studies as an effective instrument in the Chinese context, some items needed to be revised though. But the sample size in this study was relatively small and research respondents were mostly recruited from the profit organizations. Presumably, these were the reasons why few researchers used Sun and Wang's (2009) scale, even though these servant leadership-related studies were conducted using the Chinese sample.

Ehrhart's (2004) 14-item scale was largely utilized to measure servant leadership behaviors in the public sectors (Liu, Hu, & Cheng, 2015; Miao, Newman, Schwarz, & Xu, 2014; Schwarz, Newman, Cooper, & Eva, 2016; Zhou & Miao, 2014). As for the service industry, different instruments were used in China. Wu, Tse, Fu, Kwan, and Liu (2013) used Ehrhart's (2004) scale to examine the link between servant leadership and hotel employees' customer-oriented OCB, selecting 304 supervisor–follower pairs in 19 hotels in China. Their study provided evidence for arguments that servant leadership matters in the Chinese hotel industry. Huang, Li, Qiu, Yim, and Wan (2016) also used Ehrhart's (2004) scale to examine the influence of chief executive officer (CEO)'s servant leadership on firm performance in the hotel industry. They found CEO's servant leadership positively influenced firm performance via the service climate in the hotel industry in China. Liden and his associates' (2015) 7-item shortened Servant

Leadership Measure (SL-7) was employed by Zhao, Liu, and Gao (2016) to reveal the identification-based mechanisms through which servant leadership affects desired outcomes (OCB and turnover intention) in the service industry in China. In contrast, Ling, Lin, and Wu (2016) developed their own measure of servant leadership and tested a trickle-down effect regarding how servant leadership flows from top-to middle-level leaders in 9 Chinese, star-level hotels, resulting in front-line employees' service-oriented behaviors and service quality. One year later, Ling, Liu, and Wu (2017) adopted the same scale as developed by Ling, Lin, and Wu (2016) to compare the effectiveness of servant versus authentic leadership in hotels by examining relationships with group-level trust and individual-level work outcomes, and their influencing mechanisms through trust climate.

Among the widely used measures of servant leadership, most of them have not been culturally-validated in China. Only Barbuto and Wheeler (2006)'s SLQ underwent a rigorous validation by Chinese scholars. However, the sample used in the validation study was comparatively small. Moreover, only when it is revised can this instrument be used in the Chinese context. Ling, Lin, and Wu's (2016) servant leadership measures were self-developed. But they used two scales, one for measuring top-level leaders, the other for middle level.

The Leader–Member Exchange (LMX) Theory

Gouldner (1960) and Blau (1964) posited that people tend to reciprocate favors when others act in the way that they feel would benefit their interests. This social exchange process involves a series of interdependent interactions (Emerson, 1976) which “have the potential to generate high-quality relationships” (Cropanzano & Mitchell, 2005, p. 875) under certain circumstances, such as trusting, loyal, and mutual commitments. Sociologist Robert K. Merton (1969) applied some tenets of social exchange theory to leadership and observed that leadership

is essentially a social exchange process, those who lead in general involve in some sort of social transaction with those who follow. He acknowledged that “Leaders assist their associates in achieving personal and social goals. In exchange, they receive the basic coin of effective leadership: trust and respect. You need not to be loved to be an effective leader, but you must be respected” (p. 2616). For him, different types of leaders have different degrees of influence on their employees. Going further, Kuhnert and Lewis (1987) considered high quality leader–follower transactions as an interpersonal bond that “relies on the exchange of non-concrete rewards to maintain followers’ performance” (p. 649).

LMX Leadership Theory, based on social exchange theory, focuses specifically on the dyadic relationship between leaders and their subordinates (Graen & Uhl-Bien, 1995). This approach posits that leaders develop different kinds of relationships with various groups of followers, and the quality of these leader–member exchange relationships affects leader and follower attitudes and behaviors (Deluga, 1998). Compared to servant leadership theory, LMX Theory is the widely researched and heavily-cited leadership theory over the past three decades and will likely remain so for the years to come (Barling, 2014).

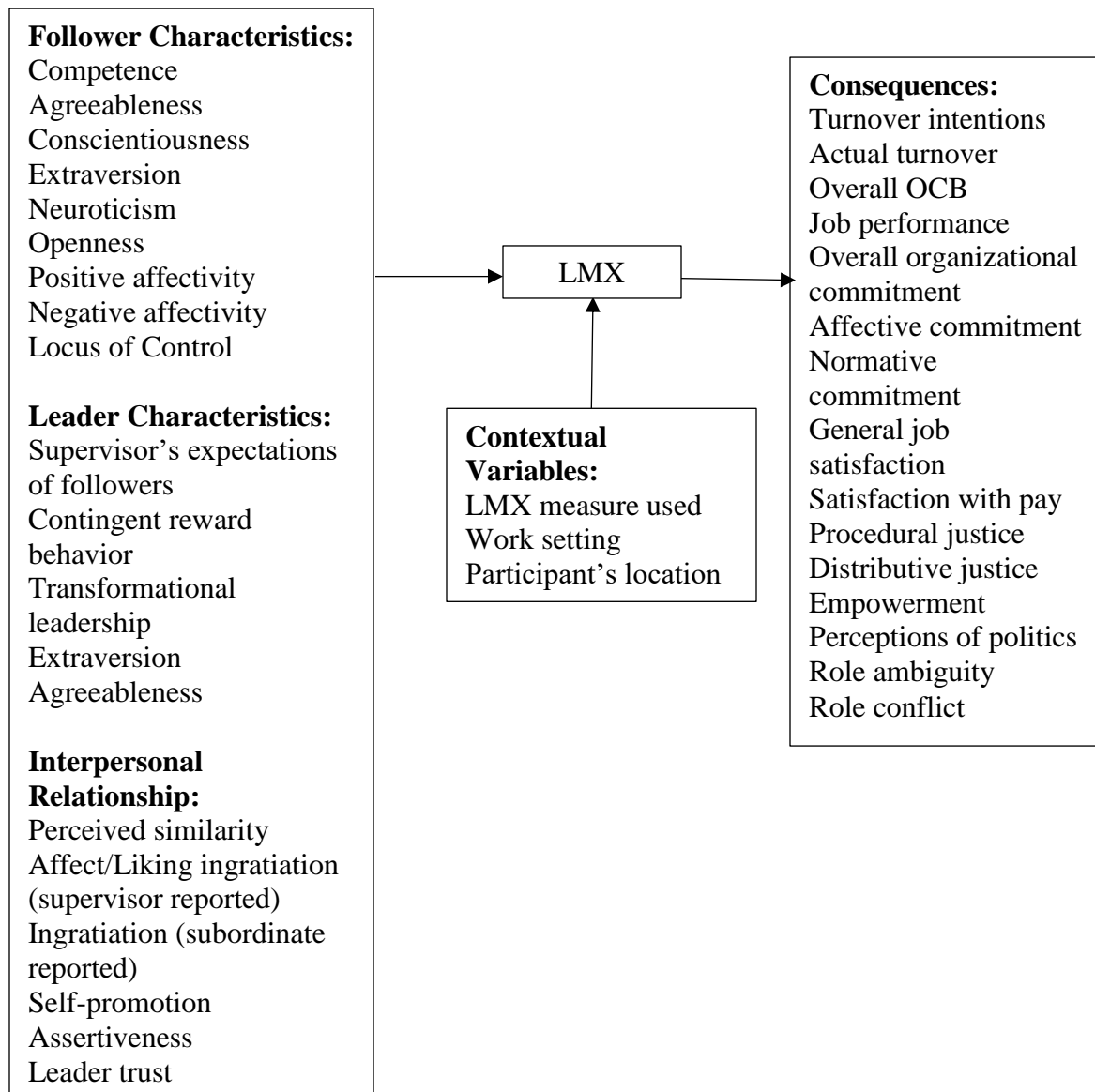


Figure 4 LMX Model. Adapted from Dulebohn, Bommer, Liden, Brouer, & Ferris (2012)

Dulebohn, Bommer, Liden, Brouer, and Ferris (2012) offered a model to capture the LMX leadership phenomenon (Figure 4). This model incorporates antecedents and consequences, putting LMX in the middle as mediating variables. Follower characteristics, leader characteristics, and interpersonal relationship are identified under the antecedents (independent variables) category. In consequences (dependent variables) category, there are

variables such as turnover intentions, overall OCB, affective commitment, job satisfaction, PJC, and many others.

The relationships among the above variables are summarized as follows. According to Dulebohn, et al (2012), in the follower characteristics category, competence, agreeableness, conscientiousness, extraversion, locus of control, and positive affectivity are all positively correlated with LMX. Negative affectivity and neuroticism are negatively correlated with LMX. All of the listed leader characteristics are positively correlated with LMX. With the exception of assertiveness, all of the interpersonal relationship variable correlated positively with LMX. Of consequences category, follower perceptions of LMX are positively related to the behavior outcomes of job performance and OCBs and the attitudinal outcomes of satisfaction with supervision, job satisfaction, and organizational commitment. Conversely, follower perceptions of LMX are negatively related to the behavior outcome of actual turnover, turnover intentions, and the role states of role ambiguity and role conflict (Dulebohn, et al., 2012).

LMX also acts as a key mediator between some antecedents (positive affectivity and contingent rewards) and some outcomes (turnover intentions, overall OCB, job performance, overall organizational commitment, job satisfaction, satisfaction with supervisor, PJC, and distributive justice) in LMX leadership theory. Moreover, contextual variables are presented to exert moderating influences on the relationships between antecedents and LMX. For example, when individuality in culture factor was low, the relationship between trust and LMX was weaker than when individuality was high.

Due to too many independent and dependent variables in this theory, the number of possible relationships between them would be extremely large. It is almost impossible to explain all these associations, mediating and moderating effects. All independent variables in leader

characteristics category correlate positively with LMX. That is to say that the quality of LMX relationships is influenced by leaders' use of contingent reward behavior, transformational leadership, and their expectations of follower success. Contingent reward behavior involves providing feedback, rewards, and recognition for accomplishments, and often entails leader clarification of task requirements. Transformational leadership involves behaviors such as articulating and modeling an appealing vision and encouraging the acceptance of group goals (Graen & Uhl-Bien, 1995; Liden, Wayne, Zhao, & Henderson, 2008) (it will be discussed as a guiding theory later). When leaders use these behaviors, they are willing to put extra effort into the relationship with followers and to care about them. According to Cialdini (2006), people reciprocate the kind of treatment they have received from another. Therefore, followers are most likely encouraged to reciprocate by providing leaders with good relationships and OCBs. Leaders' expectations of follower success may further enhance these effects, as high expectations may represent a self-fulfilling prophecy that serves to enhance follower self-efficacy, thus improving work behaviors (Dvir, Eden, & Banjo, 1995; Eden, 1984; McNatt, 2000).

Explanation for why LMX mediates these antecedent-outcome relationships can be found in relational leadership theorists who argue that the relationship developed between leaders and followers is vastly important to followers' outcomes (Brower, Schoorman, & Tan (2000). Leadership is relational in nature. Simply focusing on aspects of the leader, follower, or situation in isolation would be inadequate in explaining leadership outcomes (Dulebohn et al., 2012).

Transformational Leadership Theory

Three years after Greenleaf's (1970) seminal book *The Servant as Leader*, Downton (1973) coined the term of transformational leadership. However, it was Burns's (1978) book

Leadership that marked the emergence of transformational leadership as a new approach to leadership. Actually, the initial name of this novel leadership style was transforming leadership in this book studying political leaders. Unlike servant leadership, it has quickly grown in popularity and widely accepted in both theoretical and practical fields (Avolio, 1998; Northouse, 2013; Tichy & Devanna, 1986). As this leadership approach appears to overlap with servant leadership and share many characteristics (Liden, et al., 2008; Sendjaya et al., 2008; Stone, Russell, & Patterson, 2004), it is worthwhile to review and discuss its definition, dimension, effects on organizational outcomes, and both its similarities and distinctions with servant leadership.

Burns (1978) initially conceptualized transforming leadership as a process in which "leaders and followers help each other to advance to a higher level of morale and motivation" (p. 20). Transactional leadership was also introduced, which referred to a type of leadership focusing mainly on the exchange between leaders and followers, short-term goals, and self-interest. Later on, Bass (1985) further developed Burn's (1978) idea and extended from political concept to organizational contexts, and replaced the term with "transformational leadership". Transformational leaders raise followers' awareness about the importance and value of the goals, and set a role model to change the organization. Leaders convert the values of the followers, and articulate the organizations' vision and mission, and promote the goals of an organization, thus working towards the benefit of the team and the organization. They pay attention to followers' needs and motives and help them to achieve their goals, they are also concerned with the collective good (Northouse, 2013).

Bass (1997) argued that people who exhibit transformational leadership often direct and guide their followers through idealized influence, inspirational motivation, intellectual

stimulation and individualized consideration. Idealized influence is descriptive of leaders who act as exemplary figures for their followers to model. They share a vision and sense of mission with their followers, and due to their determination and conviction, their followers identify with them and want to emulate them (Northouse, 2013). Therefore, transformational leaders are often widely respected and trusted in and outside their organizations. Inspirational motivation describes the leaders who enhance the optimism and enthusiasm of followers. “The leader communicates with fluency and confidence using simple language and appealing symbols and metaphors” (Bass, 1997, p. 22). Intellectual stimulation represents the quality of leaders who encourage their followers to think creatively and innovatively solve the problems. They usually provoke followers to challenge their value systems and assumptions about the possibilities and abilities to do things. Under the guidance of transformational leaders, followers have a strong sense of purpose, trust in their leaders, possess self-efficacy, and are willing to exhibit OCB behaviors. Individualized consideration means that leaders pay individual attention to followers’ needs and concerns. They show empathy and support for their followers when needed. Transformational leaders often make each one in the organization feel valued and important and coach each individual to develop (Bass, 1997).

During the last few decades, numerous empirical studies have been conducted on transformational leadership and its outcome constructs, including follower attitudinal outcomes, organizational climate, OCBs, organizational performance, job satisfaction, supervisor satisfaction, and engagement (Hoch, Bommer, Dulebohn, & Wu, 2018). A large body of research has supported its positive associations with these outcome constructs (Schneider & George, 2011). As can be seen from the above literature review, servant leadership empirically shares some similarities with transformational leadership in that servant leadership also has the same

positive relationships with all these outcomes construct. Conceptually, servant leadership also has many parallels with transformational leadership. Both leaders need to “set an example for followers to emulate, inspire followers with enthusiasm and inspiration, and actively encourage followers to challenge the status quo and express divergent views” (Liden et al., 2008, p. 163). They pay individual attention to followers’ needs and concerns, and show empathy and support. They communicate clear vision to their followers, and the followers all understand their expectations and achieve organizational goals.

However, there are also distinctions between these two similar leadership approaches. Servant leader “goes beyond transformational leadership in selecting the needs of others as its highest priority” (Bass, 2000, p. 33). In contrast, transformational leaders “strive to align their own and others’ interests with the good of the group, organization or society” (Bass, 2000, p. 33). This argument was echoed by Stone, Russell, and Patterson (2004) who contended that “While transformational leaders and servant leaders both show concern for their followers, the overriding focus of the servant leader is upon service to their followers. The transformational leader has a greater concern for getting followers to engage in and support organizational objectives” (Stone, Russell, & Patterson, 2004, p. 354).

Variables and Hypotheses

Relationships among Servant Leadership, PJC, and OCB

PJC is one of four components of organizational justice, the other three being distributive justice, personal justice climate, and informational justice climate (Colquitt, 2001). While interrelated with other justice climates, PJC is unique in that it refers to employees’ perception of how a work group is treated as a whole (Naumann & Bennett, 2000). It deals with giving employees fair treatment in the workplace regarding outcome allocation decision. According to

Leventhal (1980), to be perceived as fair, a procedure should meet six rules: (a) consistency across people and across time, (b) bias suppression, (c) accurate information collected and used in making decisions, (d) correctability of flawed or inaccurate decisions, (e) conformity to personal or prevailing standards of ethics or morality, and (f) inclusion of all opinions of various groups.

Despite an abundance of research on OCB, comparatively much less studies existed examining the relationships between servant leadership and OCB in the servant leadership literature, especially involving PJC as a mediator (Bambale, 2014). The first empirical attempt in this regard was made by Ehrhart (2004) who collected data from employees of 249 grocery store departments and found that PJC partially mediates the relationship between servant-leadership and OCB. Another study by Neubert, Kacmar, Carlson, Chonko, and Roberts (2008) also confirmed the indirect significant association exists between servant leadership and OCB using a sample of 229 full time US workers. Almost at the same time, Liden et al. (2008) provided additional empirical evidence of the associations between servant leadership and OCB. They suggested that servant leadership as a multidimensional construct makes a unique contribution beyond transformational leadership and LMX, thus reinforcing the significant positive relationship existing between servant leadership and OCB.

Later, a study conducted by Walumbwa, Hartnell, and Oke (2010) tested the influence of servant leadership on group climates, employee attitudes, and OCB. Most notably, the results from this study demonstrated that commitment to the supervisor, self-efficacy, PJC, and service climate partially mediated the relationship between servant leadership and OCB. Their study lent further evidence for mediating effect of servant leadership on OCB. Although representing a significant contribution to the leadership literature, the findings of this study may not be relevant

to explain the relationship between servant leadership and OCB in other cultures (Bambale, 2014). Therefore, it was encouraged that similar cross-cultural comparative studies of the servant leadership need to be conducted to better understand how servant leadership influences specific climates and employee attitudes and behaviors in distinct cultures (Walumbwa, Hartnell, & Oke, 2010).

Moreover, in their study validating servant leadership, Van Dierendonck and Nuijten (2011) used a composite sample of 1571 participants from the Netherlands and UK to test servant leadership' criterion-related validity. Their findings revealed that servant leadership significantly predicts followers' OCB. Specifically, the empowerment of servant leadership shows moderately strong relationships with civic virtue and taking charge dimension of OCB. It was also demonstrated in this study that accountability was related to civic virtue. The relationship of humility with civic virtue, altruism, and taking charge also significantly positive. Furthermore, Hunter et al. (2013) surveyed 224 stores of a U.S. retail company, including 615 followers, and found that servant leadership was associated with task focused OCB at both the individual and group level. Equally important, service climate mediated the effects of servant leadership on follower helping behavior which represents OCB.

Based on the above literature, in this study it is expected that servant leadership will predict PJC and OCB, and that PJC will mediate the relationship between servant leadership and OCB in the hotel sector in China. These expectations are also in line with social learning theory (Bandura, 1977) and LMX theory. In an organization, employees learn mostly by modeling the attitudes, values, and behaviors of the leaders who can serve as role models. Since servant leaders behave morally and impartially and do good to society, most probably their followers will mimic their leaders and behavior accordingly (Wood & Bandura, 1989), leading to their

perceptions of leaders as justice and doing extra work above and beyond their designated roles. Furthermore, servant leaders respect and help to develop their followers. The positive exchange between leaders and followers enhances the supportive and helping relations that exist between employees and customers. As such, employees will reciprocate this positive exchange by going the extra mile and taking up tasks that go beyond their job descriptions to help their customers (Blau, 1964). Therefore, it is hypothesized that

Hypothesis 1a. There is a statistically significant correlation between servant leadership and customer-oriented OCB in the hotel sector in China.

Hypothesis 1b. PJC has a mediating effect on the relationship between servant leadership and customer-oriented OCB in the hotel sector in China.

Relationships among Servant Leadership, Trust in Leaders, and OCB

Due to the diversity and participative management, trust has increasingly become an important work value in the workplace between leaders and followers (Mayer, Davis, & Schoorman, 1995). Trust was found to be an integral part in constituting servant leadership (Farling, Stone, & Winston, 1999). Greenleaf (1977) even suggested that trust is at the root of servant leadership and decision-making. He went on to argue that “leaders do not elicit trust unless followers have confidence in [the leader’s] values and competence (including judgment) and unless [the leaders] have a sustaining spirit (ethos) that will support the tenacious pursuit of a goal” (p. 16). Paralleling this trend in the workplace, the variable of trust has also drawn much scholarly interest in applied psychology and related disciplines, particularly trust in leaders (Dirks & Ferrin, 2002).

From the perspective of LMX theory, trustworthy leaders are most likely to encourage subordinates to demonstrate OCB (Podsakoff & MacKenzie, 1997) as they focus on facilitating

followers' professional goals and provide supportive environments for such behaviors (Cropanzano & Mitchell, 2005). Importantly, employees who trust their leaders would reciprocate the fairness and trust that they receive by engaging in OCB (Organ, Podsakoff, & MacKenzie, 2006). In a meta-analysis study, Dirks and Ferrin (2002) found that trust in leaders is positively related to work-related outcomes such as job performance, OCB, turnover intention, organizational commitment, and job satisfaction. A more recent study by Rubin, Bommer, and Bachrach (2010) confirmed that trust in the leader is positively related to employee OCB with a correlation of 0.48.

As discussed above, trust is believed to be an integral component of servant leadership (Farling et al., 1995; Greenleaf, 1977). The study by Mayer et al. (1995) demonstrated that trust in the leader is a function of the leader's ability, benevolence, and integrity perceived by the followers. Servant leaders reveal themselves in the form of showing listening, empathy, healing, awareness, persuasion, conceptualization, stewardship, foresight, commitment to growth and building the community (Spears, 2004). It stands to reason that they are perceived as trustworthy, helpful, compassionate, ethical, and therefore gaining credibility and trust in return from their followers (Farling et al., 1999). In line with this assumption, scholars empirically examined that servant leadership behavior contributes to followers' trust in their leaders (Jaiswal & Dhar, 2015; Russell & Stone, 2002; Sendjaya & Pekerti, 2010). In particular, Joseph and Winston (2005) found that servant leadership highly positively correlates with trust in leaders. In the same vein, Ferch (2005) and Van Dierendonck (2011) acknowledged that servant leadership is closely linked to trust in leaders. However, the research results were not always consistent. A case in point is a study conducted in India by Kashyap and Rangnekar (2016) who found that although trust in leaders mediates servant leadership and intention to leave, the relationship between

servant leadership and trust in leaders is non-significant. The possible explanation is that in their model, there is a significant indirect effect of a mediating variable (i.e. employer brand perception) on the relationship between servant leadership and trust in leaders, leading to direct effect being non-significant. Based on the literature reviewed above, the following two research hypotheses are proposed.

Hypothesis 2. There is a statistically significant correlation between servant leadership and trust in leaders in the hotel sector in China.

Hypothesis 3. There is a statistically significant correlation between trust in leaders and customer-oriented OCB in the hotel sector in China.

Relationship between Servant Leadership and Service Quality

It can be argued that leaders' servant leadership behavior will boost employee service quality. Servant leaders share a vision and sense of mission with their followers. According to transformational leadership theory (Bass, 1997), due to servant leaders' determination and conviction, the followers identify with them and want to emulate them by providing excellent service to their customers in the hotel context. In the extant literature, little research was conducted in this regard. However, Koyuncu, Burke, Astakhova, Eren, and Cetin (2014) examined the relationship of service employees' perceptions of servant leadership in Turkey's hotels, and the results showed servant leadership and service quality are highly related to each other with servant leadership accounting for a 44% variance of service quality. Ling, Lin, and Wu (2016) also tested the relationship between middle level servant leadership and service quality when they examined the mediating effect of service-oriented behavior between these two constructs in Chinese hotels. They found a significant association with the correlation of 0.12

before the mediator is entered into the model. Following the same pattern, the following hypothesis is proposed:

Hypothesis 4. There is a statistically significant correlation between servant leadership and service quality in the hotel sector in China

Relationship between OCB and Service Quality

In organizations, OCB represents an employee' voluntary commitment that goes above and beyond job description. Podsakoff, Ahearne, & MacKenzie (1997) suggested that OCB can "lubricate the social machinery of the organization, reduce friction, and increase efficiency" (p. 263), thus boosting organizational performance. In the hotel industry, OCB behaviors accord particularly well with the nature of service delivered to customers. Intuitively and particularly, one can argue that customer-oriented OCB behavior can affect service quality. Bienstock, Moranville, and Smith (2003) provided a more in-depth analysis to explain why OCB would influence service quality perceived by customers. The first reason relates to OCB which, as non-mandated services delivered to customers, requires multiple non-mandated employee behaviors. The second reason is that in order to provide quality service, service providers are required to exhibit independent individual initiatives, while the last reason being that OCB can positively affect successful service delivery, resulting in customer's perceptions of service quality. This assumption is supported by empirical studies. Using a sample of 325 employees from 68 golf courses in Malaysia, Husin, Chelladurai and Musa (2012) tested a model wherein selected human resource (HR) practices influence OCB behaviors, which, in turn, affect perceived service quality. It was found that OCB is positively associated with service quality ($\beta = .716; p < .001$) in this study. In addition, Bell and Menguc's (2002) study indicated that OCB has a direct positive effect on service quality in the context of a retail insurance company in the USA. The same

significant relationship has been found between these two constructs in Iran (Ghorbani & Ghaempanah, 2014) and South Korea (Kwak & Kim, 2015). Given the relationship existing in different contexts, the following hypothesis is proposed:

Hypothesis 5. There is a statistically significant correlation between customer-oriented OCB and service quality in the hotel sector in China.

Relationship between PJC and Trust in Leaders

As previously discussed, PJC is considered to exist when employees perceive as fair the processes by which decisions about organizational outcomes are made (Cropanzano & Greenberg, 1997). In a meta-analysis study on organizational justice, Cohen-Charash and Spector (2001) found employees' perceptions of organization's justice are strongly associated with some important individual and organizational outcomes such as job performance, commitment, trust in leaders, citizenship behavior, job satisfaction, and turnover intentions. Unluckily, little research has been particularly dedicated to the topic of relationship between PJC and trust in leaders. However, there are a few studies dealing with the umbrella constructs, i.e. organizational justice and/or trust. For example, Kale (2013) surveyed 1872 university students in Turkey and found there is a high positive relationship between organizational justice and trust in both administrators and instructors. In addition, a positive relationship between PJC and trust was also found in the Hopkins and Weathington's (2006) study ($r = .59, p < .01$). The research most relevant to the current study was conducted by Wong, Ngo, and Wong (2006) who found PJC has a significant and positive effect on trust in supervisor in the Chinese company sample. Building on the evidence reviewed, it is hypothesized that:

Hypothesis 6. There is a statistically significant correlation between PJC and trust in leaders in the hotel sector in China.

Hypothesized Model

On the basis of servant leadership theory, LMX theory, and transformational theory, especially the literature review about the relationships among the constructs previously studied, a hypothesized conceptual model was formulated for this study (see Figure 5). In the model, the dependent variable, which is service quality, was positioned on the right side of this model. The independent variables are servant leadership, PJC, and trust in leaders, and customer-oriented OCB. Servant leadership is the only one exogenous variable in this study, while endogenous variables are PJC, trust in leaders, customer-oriented OCB, and service quality. Overall, it was posited that servant leadership is significantly related to all of the endogenous variables, that PJC predicts trust in leaders which in turn is significantly related to both customer-oriented OCB and service quality, and also that customer-oriented OCB predicts service quality.

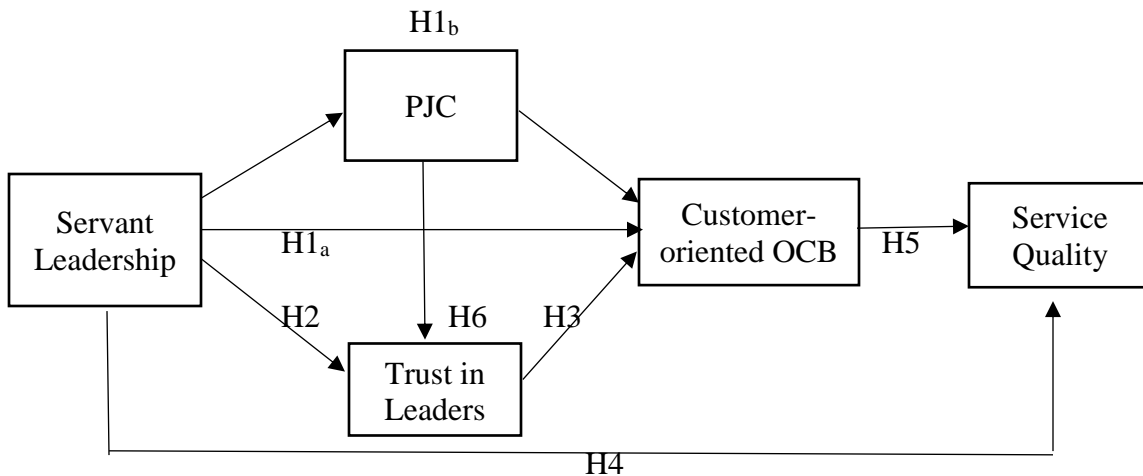


Figure 5 Conceptual Model

Summary

This chapter dealt with the three guiding theories and a review of literature on relationships among the five constructs used in this study: servant leadership, PJC, trust in

leaders, customer-oriented OCB, and service quality. Three theories, i.e. servant leadership theory, LMX theory, transformational leadership theory, which served as overarching theoretical frameworks for this study, were also discussed in detail. Based on the literature, a hypothesized model was proposed dictating the relationships among the five constructs: servant leadership predicts PJC, trust in leaders, customer-oriented OCB, and service quality; trust in leaders predicts customer-oriented OCB and service quality; PJC mediates the relationships between servant leadership and customer-oriented OCB. The next chapter focused on the methodology by which this hypothesized model was tested.

CHAPTER III

METHODOLOGY

This chapter discussed the research design and methodology utilized to examine the relationships among servant leadership and its consequence variables. For this purpose, the chapter began by presenting the research paradigm as an overarching guideline to inform this study. It was followed by the descriptions of the participants of this study. Then, the measures of the five constructs were presented. Finally, data collection procedures, statistical assumption checks, and data analysis methods were discussed.

Paradigm

A paradigm is a basic set of world-views or assumptions about the nature of reality that a researcher adopts in his/her research (Denzin & Lincoln, 2005). It was argued that this overall paradigm has significant influence on the research design and methods (Guba & Lincoln, 2005). In this study, positivist paradigm is particularly adopted as a guideline in the research. Positivists adopt realist ontology which holds the belief that there exists a reality *out there* (Guba, 1990). Although reality is objective and independent of human consciousness, it rests on order, rendering it to be able to be realized through experience and be perceived through the human senses (Sarantakos, 1993). The purpose of studying the social events and their relationships is to allow society to control social phenomena and to predict their occurrence. Committing to a realist ontology leads to positivists using a dual epistemology which requires that the researcher be detached from the topic under investigation (May, 1997). "Any interaction between researcher and what is researched is deemed to threaten the validity of the research and therefore research strategies must be followed to reduce or eliminate these threats" (Zahra & Ryan, 2005, p.10).

Methodologically, positivism is featured by the pre-eminent place accorded to empirical study in the production of knowledge (Hughes, 1980). As in natural science, social research employs laws, experiment, and observation. In order to describe the social reality operated by immutable laws and mechanisms, researchers begin with questions and/or hypotheses stated in propositional form, followed by empirical test to verify them. Typically, statistical analyses of quantified observations are used to provide the empirical evidence in order to generate knowledge (Kim, 2003).

In this study, the research subject consists of hotel companies in China that are profit organizations. Needless to say, they are all highly commercial in nature. Initial contacts with the high-level management of hotel companies justified the appropriateness of adopting a quantitative research method for this study. As previously discussed, positivist researchers use precise and objective measures to reveal the social phenomena. By adopting positivistic paradigm, the researcher can obtain several sets of quantitative data and perform various statistical analyses. Review of the prior literature reveals that most studies of servant leadership and other related constructs used this approach in the hotel industry (Huang, *et al*, 2016; Koyuncu, *et al*, 2014; Ling, *et al*, 2017; Wu, *et al*, 2017). In this way, the researcher could reveal the relationships among the constructs of interest germane to servant leadership.

Positivist paradigm is also proposed by Willis (2007) as having five major issues: the nature of reality, the purpose of research, the methods of research and types of data that are acceptable, the types of meaning achieved and the way meaning is derived from the data gathered, and the relationships between research and practice. These issues can be used to further support the justification of using positivist paradigm in this study. Firstly, the problems and hypotheses in this study for the hotel industry in China are meaningfully formulated in clear-cut

and unambiguous ways. This nature of reality means that the researcher is required to precisely and accurately describe the real situations in the hotel industry and provide well-defined methods and clear-cut solutions. Therefore, this research must be conducted in an objective, scientific manner to test the specific hypotheses. Secondly, this purpose of this study is to use a positivist approach to better understand the relationships among servant leadership and its outcome variables in the Chinese hotel sector. Thirdly, this positivist quantitative approach is chosen to provide some valuable solid data with special reference to leadership strategy to enable hotel management to display servant leadership behaviors in the workplaces.

Measures

To examine the conceptual model and the hypothesized relationships, five instruments were used to measure respective constructs of interest. They included measures of servant leadership, scales of PJC, trust in leaders, customer-oriented OCB, and employees' service quality. All constructs were measured using 5–point Likert scales ranging from 1= strongly disagree and 5= strongly agree.

Servant leadership. In this study, servant leadership was measured adopting Qiu and Dooley's (2019) 6-factor-24-item Servant Leadership Measure. The reason that this measure was used is that it is a psychometrically sound and valid measure for servant leadership. These authors tested content validity, convergent and divergent validity, and criterion-related validity. Compared to all other existing scales, this servant leadership measures used more statistical analysis methods, especially IRT which can help to keep more useful item information. There are 6 factors in this measure: integrity, self-sacrifice, building community, empowering people, emotional healing, and visioning. Some sample items are: "I would seek help from my manager

if I had a personal problem”, “My manager has a vision of the future”, and “My manager encourages me to make important work decisions”.

Procedural Justice Climate (PJC). PJC was measured using the 7-item scale developed by Colquitt (2001). Two sample items are “Have you been able to express your own views and feelings during those procedures?” and “Have those procedures upheld ethical and moral standards?”. The Cronbach alphas for this scale used in the selected studies were from 0.78 to 0.94 (Özduran & Tanova, 2017; Roberson & Williamson, 2012; Tse, Gu, Lam, & Lin, 2018).

Trust in Leaders. Trust in leaders was measured using 6 items selected from McAllister’s (1995) scale. Two of the sample items are “I can talk freely to my leader about the difficulties I am having at work and know that (s) he will want to listen” and “Other work associates of mine who must interact with my leader consider him/her to be trustworthy”. The Cronbach alpha for this scale used in one recent study were 0.90 (Mo & Shi, 2017).

Organizational Citizenship Behavior (OCB). Dimitriades’s (2007) 6-item scale was utilized to measure employees’ customer-oriented OCB. Two sample items are “I make innovative suggestions to improve customer service” and “I exchange ideas with colleagues on how to improve customer service”. The Cronbach alphas of an adapted version of this scale were reported to be 0.86 and 0.79 for two recent studies (Lyu, Zhu, Zhong, & Hu, 2013; Wu, et al., 2013).

Employees’ Service Quality. Employees’ service quality was measured by 5 items adapted from Ling, Lin and Wu (2016) as they took items from the Driver and Johnston’s (2001) soft attributes of service quality. Two sample items are “I am very concerned about the needs of the customer” and “I am very flexible to provide service to customers”. The Cronbach alpha for the scale in the above study was 0.92 in Ling, Lin and Wu’s (2016) study.

Sample Size

Sample size is a critical factor to make inferences about a population with regards to the constructs under investigation. Although theoretically the larger sample size makes the researcher surer to make inferences, the sample size is determined on the basis of the expense of data collection, confidence interval, and statistical power. This research utilizes structural equation modeling (SEM) technique to examine the relationships among the constructs under study. However, there is no consensus about the appropriate sample size for SEM. Some researchers recommended that the sample size should be larger than 200 (Kline, 2010), or 5- 10 cases per estimated parameter (Bentler & Chou, 1987), or 10 cases per variable (Nunnally, 1967). Wolf, Harrington, Clark, and Miller (2013) suggested to use a range of sample size from 30 to 460 cases, depending on statistical power, bias in the parameter estimates, and overall solution propriety. Another recommended sample size is at least five times as many cases as there are items to be analyzed (Hair, et al., 2010). In this study, there were 5 constructs and 51 items. According to the last criterion, a minimum of 255 valid questionnaires would be required. For the research purpose, in order to obtain more power, this study used more than 250 valid cases.

Participants and Data Collection

Data collection was carried out after the IRB approval for this research. To guarantee accuracy in meaning and cultural suitability of the instrument, forward and backward translations were performed for all scales by two visiting scholars who major in English Language Studies. Based on their feedbacks, necessary changes of the instrument were made. All surveys were administrated in Chinese. All other constructs were measured by using multi-item validated instruments in prior studies. The general managers or the human resources department managers

of the hotel companies were contacted to give survey permissions prior to the survey administration. Data for this study were obtained from frontline employees in Chinese hotels using both hard copy and online Wechat (a popular Chinese survey software) survey. With hard copy, the survey included a cover letter and questionnaires. With online survey, staff at the Human Resource Department of these hotels helped to distribute questionnaires or WeChat message containing a link to the survey questionnaires. Participation in these surveys was completely voluntary. Data confidentiality and anonymity were guaranteed.

Participants were all hotel frontline employees working at the front office, housekeeping department, and food and beverage department. It was believed that frontline employees are closest to serving the customers, therefore they know how to serve others and be served. Before collecting the official data, a pilot study was first administered. To measure servant leadership, employees were asked to rate one of their most recent immediate supervisors on five-point Likert scale. For other four constructs, employees were requested to rate their own perceptions of PJC in their hotels, the extent to which they trust their supervisors, their willingness to perform OCB towards the customers, and the quality of their service towards the customers.

Pilot study

Bourque and Fielder (1995) suggested that all questionnaires need to be pilot-tested. The purpose of the pilot study is to examine the feasibility of these instruments intended to be used in subsequent study before survey administration. On the basis of the recommendation by Viechtbauer, et al. (2015), 50 -60 participants were recruited to take part in the pilot study.

The pilot study was conducted in a polytechnic college in southern part of China. Eighty questionnaires were distributed to students in the college who had hotel working experiences. They were asked to check the questionnaires concerning the wording and layout. After they

completed the survey, questionnaires were collected. A total of 67 surveys were returned, of which 5 had missing responses, resulting in 62 valid cases. Demographic information of the pilot study was reported in Table 2. It can be seen from this table that most of the participants were female, earned less than 2000 RMB, were on internship and had less than 6 months hotel working experience. This is not surprising because all participants in the pilot study were college students. In addition, three teachers at the college and one human resources manager were invited to evaluate the questionnaires. On the basis of all the feedbacks, some modifications were subsequently made to make sure the questionnaires would be clear to study participants.

Table 2

Demographic Information of Pilot Study

Characteristics		N	%
Gender	Male	11	17.7
	Female	51	82.3
Age	16-24 years	59	95.2
	More than 24 Years	3	4.8
Monthly Income	Less than 2000 RMB	29	46.8
	2000-2999 RMB	14	22.6
	3000-3999 RMB	18	29.0
	4000-	1	1.6
Work Type	Full Time	25	40.3
	Part Time	37	59.7
Tenure in Hotel	Less than 6 months	33	53.2
	6 months-2 years	26	41.9
	2-4 years	2	3.2
	More than 4 years	1	1.6
Tenure at Current Hotel	Less than 6 months	42	67.7
	6 months-2 years	18	29.0
	2-4 years	2	3.2
	More than 4 years	0	0

First round data

The survey was conducted in the summer of 2018. There were two rounds of sampling, each for a separate study. The participants were all frontline employees working at hotels in

China. The purpose of the first round of data collection was to confirm a higher-order construct of Servant Leadership developed by Qiu and Dooley (2019) to see whether this model can be used in Chinese hotels. Only the Servant Leadership instrument was used in this round. As mentioned previously, servant leadership is a multidimensional construct, consisting of 6 factors: integrity, self-sacrifice, building community, empowering people, emotional healing, and visioning.

Data were collected by utilizing two distributing methods. First, a total of 200 hard copy questionnaires were distributed to employees of 6 high star-hotels in Central and southern part of China. Human resource (HR) managers at these hotels were asked to help distribute and collect the questionnaires. One hundred and thirteen responses were obtained with a response rate of 56.5% without missing data. Second, HR managers of 10 hotels in north, west, and east parts of China were asked to send the questionnaires to their respective employees through Wechat (the most popular social media software among Chinese people). Participants were asked to complete the survey in two weeks. One week after the survey was distributed, a reminder was sent to the potential participants. After two weeks, the survey was expired, and 201 responses were received with a response rate of 71.8%. This survey produced 192 valid data and 9 missing cases.

Altogether, 305 usable data were obtained in the first round of sampling. Among all the 305 frontline employees, 244 (80.0%) were female participants while there were only 61 (20%) male employees. Almost 60 % of the participants were in the age range 25 to 44. In terms of education, 51.8% of the respondents had graduated from middle school, 26.2% had a high school diploma, while 18% of them held associate degree. With respect to monthly income, 31.5% earned RMB 2000-2999 per month whereas 40.7% had monthly salary of RMB 4000-4999. A

vast majority of participants (94.1%) were full time employees. Demographic information of first round of data was reported in Table 3.

Table 3

Demographic Information of First Round Data

Characteristics		N	%
Gender	Male	61	80
	Female	244	20
Age	16-24 years	71	23.3
	35-44 years	86	28.2
	45-54 years	53	17.4
	More than 55 Years	7	2.3
Education	Middle School	158	51.8
	High School	80	26.2
	Community College	55	18.0
	Four-year College	12	3.9
Monthly Income	Less than 2000 RMB	8	2.6
	2000-2999 RMB	96	31.5
	3000-3999 RMB	124	40.7
	4000-4999 RMB	51	16.7
	5000-5999 RMB	6	2.0
	More than 6000 RMB	20	6.6
Work Type	Full Time	287	94.1
	Part Time	18	19.7
Tenure in Hotel	Less than 6 months	60	35.1
	6 months-2 years	107	19.3
	2-4 years	59	6.9
	4-6 years	21	19.0
	More than 6 years	58	19.7
Tenure at Current Hotel	Less than 6 months	96	31.5
	6 months-2 years	111	36.4
	2-4 years	46	15.1
	4-6 years	11	3.6
	More than 6 years	41	13.4

Second round data

Approximately two weeks after the first round of sampling, the second-round data collection was completed. The purpose of this data was to test the relationships among these five variables and mediating effect of PJC. All five instruments were distributed. HR managers of 20

hotels across all parts of China were contacted and requested to distribute the questionnaires via Wechat to their respective frontline employees. Six hundred and six hotel people were contacted. Again, Participants were asked to complete the survey in two weeks. A total of 451 hotel employees responded, of which 22 participants had missing values, resulting in 429 valid data. Among these 429 hotel participants, 319 (74.4%) were female employees, only 110 male participants provided valid data. As for age, 63.4% of the participants were in the range 25 to 44. In terms of education, 39.9% of the respondents graduated from middle school, 31.9% had a high school diploma, while 18.2% of them held associate degree. With respect to monthly income, 38.0% earned RMB 2000-2999 per month while 33.8% of them earned RMB 3000-3999. Again, most participants (93.7%) were full time hotel employees.

Table 4

Demographic Information of Second Round Data

Characteristics		N	Percentage
Gender	Male	110	25.6
	Female	319	74.4
Age	16-24 years	75	17.5
	35-44 years	138	32.2
	45-54 years	134	31.2
	More than 55 Years	74	17.2
Education	Middle School	171	39.9
	High School	137	31.9
	Community College	78	18.2
	Four-year College	43	10.0
Monthly Income	Less than 2000 RMB	15	3.5
	2000-2999 RMB	163	38.0
	3000-3999 RMB	145	33.8
	4000-4999 RMB	55	12.8
	5000-5999 RMB	14	3.3
	More than 6000 RMB	37	8.6
Work Type	Full Time	402	93.7
	Part Time	27	6.3

Table 4 Continued

Characteristics		N	Percentage
Tenure in Hotel	Less than 6 months	67	15.6
	6 months-2 years	123	28.7
	2-4 years	79	18.4
	4-6 years	36	8.4
	More than 6 years	123	28.7
Tenure at Current Hotel	Less than 6 months	111	25.9
	6 months-2 years	138	32.2
	2-4 years	53	12.4
	4-6 years	41	9.6
	More than 6 years	86	20.0

Data Screening

After the data were collected, data screening was carried out in order to ensure that the data accurately represent what is measured and all the data meet the underlying statistical assumptions. In this study, data screening included checking missing data, outliers, normality, linearity, homoscedasticity, and multi-collinearity. All assumption tests were performed using IBM SPSS 22.

Missing Data

While the respondents were encouraged to answer all of the questions presented to them, missing data sometimes were inevitable for a variety of reasons (Meyers, Gamst, & Guarino, 2013). Some of them may be reluctant to respond to some personal questions in the demographic section of the survey. Some may not have the competency to answer some survey items, while some others may suffer from fatigue and have no motivation to provide answers. However, since missing data can influence the statistical power and thus causing to commit Type I error, it is important to identify the pattern of missing data and mechanisms of missingness (the relationship between the variables under study and the missing values) (Enders, 2010). Typically, the patterns of missing data can be subsumed into three mechanisms of missingness: missing completely at

random (MCAR), missing at random (MAR), and not missing at random (NMAR) (Graham, 2009).

There are a number of methods for how to handle the missing data: listwise deletion, pairwise deletion, single imputation by mean substitution, single imputation by multiple regression or modern imputation methods such as expectation maximization (EM) algorithm, full-information maximum likelihood (FIML), multiple imputation (MI) analysis (Allison, 2002; Enders, 2010). In the first round of data collection of this study, there were 43 missing values (0.26%) with 9 missing cases (2.87%), while the second round only 93 missing values (0.39%) with 22 missing cases (4.89%) were detected. Little's MCAR test was used to test the patterns of these missing data. Since the results were not statistically significant ($p > .05$), it could be concluded from this omnibus missing value assessment test that the missing data were probably MCAR. Following a recommendation made by Meyers, et al. (2013), listwise deletion method was adopted to handle the missing data.

Outliers

Outliers are extreme or unusual values of variable(s) that can have an adverse effect on the regression solution and therefore should be eliminated (Aaker, Kumar, Day, & Lawley, 2005). Outlier is an observation point that lies far distant from the general linear pattern. Univariate outliers can be detected by looking at the frequency distribution or box plot of each variable. As a rule of thumb, observations with Z scores greater than ± 2.5 can be considered as outliers (Hair, Black, Babin, & Anderson, 2010). For this study, the corresponding features of IBM SPSS 22 were used to detect outliers. The box plots for all items for the first-round data showed that there were 288 values (1.71%) identified as univariate outliers. In the second round, the box plots for all items indicated that only 146 values (0.07%) were identified as univariate

outliers. The box plots of each variable for second round of data are presented in Appendix C. It can be seen that there were only 11 values identified as univariate outliers (0.34%).

Multivariate outliers can be identified by running bivariate scatterplots for combinations of key variables or by computing the Mahalanobis distance of each case (Maddala, 2001). The Mahalanobis distance is measured using a chi-square distribution with a stringent alpha level of 0.001. Cases that reach this significant level can be outliers and possible candidates for deletion (Meyers, et al., 2013). Since relationships were tested using the second data, only Mahalanobis distance for multivariate in the second data was measured. The results showed that only 9 cases reached 0.001 level (2%).

Deletion of outliers should be carefully considered as the removal of these cases will affect the statistical solutions (Dielman, 2001). If outliers are few (less than 1-2% of the sample size) and not too extreme, they can possibly be left alone (Cohen, Cohen, West, & Aiken, 2003). Considering that the number of outliers is small and they are not too extreme in the two samples, they were not deleted in the data.

Normality

Prior to statistical analyses for the variables of interest, normality should be checked to make sure that the shape of a distribution of quantitative variables corresponds to a normal distribution (Meyers, et al., 2013). This is to say that the distribution curve of variables' values should be or roughly be bell-shaped. In statistics, various statistical or graphical approaches can be used to test univariate normality (Stevens, 2009). The coefficients of skewness and kurtosis, inspection of histograms or stem-and-leaf plots, and the Shapiro-Wilk test are all among the methods that are available through the IBM SPSS. For this study, the coefficients of skew and kurtosis were employed to test univariate normality. If the skewness index exceeds ± 3.0 (z

score), the distribution is considered unsymmetrical. If the kurtosis index exceeds ± 10.0 (z score), the data is considered to be peaked (Kline, 2011). In the first-round data, the largest absolute value of skewness and kurtosis for the items is 1.432 and 2.634, respectively, a vast majority of them are within -1 and +1. For the second-round data, the largest absolute value of skewness and kurtosis for the items is 1.329 and 2.229, respectively, a vast majority of them are also within -1 and +1. For the 5 variables in the second-round data, these indices are all within -1 and +1 (See Appendix D). Therefore, it can be concluded that, in the samples of this study, there was no significant skewness or kurtosis. The data distributions were liberally symmetrical and not peaked.

Linearity

It is also assumed that in many multivariate analyses, variables are related to each other in a linear manner (Meyers, et al., 2013). This assumption can be tested by examining variables' scatter plots. This is the most commonly-used method to test any nonlinearity in the data (Hair et al., 2006). "Variables that are normally distributed and linearly related to each other will produce scatter plots that are oval shaped or elliptical" (Meyers, et al., 2013, p.69). Another way to test linearity is to use regression analysis and check the residual scatter plots. This study will use the former approach. As shown in Appendix E, any two variables previously tested to be normally distributed produced scatter plots that were oval shaped or elliptical. Therefore, the relationships between any two variables are mostly likely to be linear.

Homoscedasticity

Homoscedasticity means homogeneity of variance. This assumption requires that the scores of a dependent variable have equal variances across all scores of an independent variable. Homogeneity of variance is very important to the proper application of regression analysis.

When this assumption is violated in some cases, heteroscedasticity will happen in which the variability of a variable is unequal across the range of values of a predictive variable (Hair et al., 2010). Heteroscedasticity may result in variable estimation biases and cause inaccurate estimation of the population. The issue of heteroscedasticity can be remedied by means of data transformations (Tabachnick & Fidell, 2007). However, most of the homoscedasticity violations result from normality breach and most of the univariate and multivariate analyses are fairly robust with respect to distributions deviating from normality (Meyers, et al., 2013). Therefore, even though normality is violated for some reasons, the impact of this on the alpha levels is minimal when there is a large sample size in the research (Meyers, et al., 2013).

Appendix F showed scatterplots of the standardized residuals against the standardized scores for the variables. It can be seen that the distributions of all the standardized residuals in these scatterplots roughly formed rectangular patterns, indicating homoscedasticity of the data.

Multi-Collinearity

Multicollinearity refers to a situation in which two or more independent variables are highly correlated with each other in a multiple regression (Hair et al., 2010). When multicollinearity occurs, the standard errors of the coefficients tend to be large. Therefore, there is a greater chance to fail to reject a false null hypothesis in that case, committing a type II error. Multi-collinearity can be detected by examining a correlation matrix, variance inflation factors (VIF) and tolerances (Field, 2013). In correlation matrix, multicollinearity problem exists if high correlation ($r > 0.90$) is found among some of the predictors. For VIF and tolerance, the former should be under 10 while the latter needs to be above 0.10 (Stevens, 2009). However, there is still no consensus about the cutoff scores for detecting the multicollinearity of linear regression.

In this study, all the three approaches were used to determine whether this assumption is breached. In the data, when TIL was a dependent variable, the VIFs were all 1.931 for both predictor variables. When OCB was a dependent variable, the VIFs were 2.317, 2.642, and 2.825 for 3 predictor variables. When Service Quality was a dependent variable, the VIFs were 2.346, 2.799, 3.270, and 2.286 for 4 predictor variables. Therefore, there was no multi-collinearity between dependent variable and independent variable.

Data Analysis

In this study, common method variance, construct validity, descriptive information, correlation, and structural equation modeling were involved using IBM SPSS 22 and Mplus 7.4 as statistic tools to analyze the data collected. In addition, Cronbach Alpha for all the scales would be reported. Furthermore, confirmatory factor analysis (CFA) was used to test the proposed model and to confirm the measures adopted in this study. Structural equation modelling (SEM) was conducted to test the relationships and mediating effect among the variables.

Reliability

Reliability refers to the consistency of a measure. It is a statistical measurement to ensure accuracy, precision, and consistency of measured variables (Cooper & Schindler, 2006). An instrument scale is believed to be reliable if it generates similar results under the same conditions. There are four types of practical strategies to estimate the reliability: test-retest reliability method, parallel -forms method, split-half method, and internal consistency. The most commonly used reliability is internal consistency and Cronbach's alpha is often reported in most studies (Cortina, 1993). Table 5 and 6 presented the reliability scores of the all measures of the two rounds of data in this study. Since all of the Cronbach's alpha scores were greater than .90, all the reliabilities of the measures for the two rounds of data were excellent.

Table 5

Reliabilities of All Measures of the First Round of Data

Measure	Number of items	Cronbach's alpha
Servant Leadership	24	.970

Table 6

Reliabilities of All Measures of the Second Round of Data

Measure	Number of items	Cronbach's alpha
Servant Leadership	24	.945
PJC	7	.908
Trust in Leaders	6	.908
OCB	6	.902
Service Quality	5	.903

Common Method Biases

Podsakoff, MacKenzie, Lee, and Podsakoff (2003) identified several causes of common method biases, of which self-report questionnaires as a sole measurement method is one of the sources prevalent in behavioral science. To control for different sources of methods bias, several approaches were recommended by these authors. Due to the nature of this study and time constrain, social desirability, self-report data, and same time measurement are problems that potentially result in common methods bias. Harman's single factor test was used to detect whether common methods bias existed. Exploratory factor analysis (EFA) was conducted constraining the number of factors extracted to be just one. The common method bias would be an issue if a single factor accounts for more than 50% of the variance of the data. The results

showed that in the first and second round data, one single factor explained 43.70% and 41.81% of the variance, respectively. Therefore, it could be concluded that common method biases might exist in the data, but not a major issue.

Structural Equation Modelling (SEM)

In this study, SEM was used to examine the hypothesized structural relationships and mediating effect among the variables. CFA was first conducted to confirm servant leadership as a second-order factor construct containing 6 factors and 24 items. To do so, conventional regression methods or classic path analyses are often adopted to test hypotheses proposed by the researchers. These techniques only use composite scores in the data analysis, thus not readily accommodating a multiple-indicator approach to measurement (Kline, 2016). In stark contrast, latent variable techniques take the measurement errors into account for these purposes by using SEM. This study used latent variable technique. Conventional steps in conducting SEM include model specification, estimation, fit evaluation, and re-specification.

It is worth noting that in fit evaluation, the researcher needs to decide whether the model specified provides an adequate representation of the data. That is to say that the fit of the model is evaluated by how well the model is able to reproduce the covariate structure found in the data. Once the parameters are estimated, the model can generate a fitted co-variance matrix. The closeness of this fitted matrix to the sample covariance determines the fit. There are some fit indices people usually report when using SEM to test a model. Table 7 provided these fit indices used in Mplus and their cut-off scores for good fit. These fit indices were used to test the model fit in this study.

Table 7

Cut-Off Scores of Model Fit Indices

Fit index	Description	Cut-off score for good fit
Chi-square (χ^2)	Assess overall fit and the discrepancy between the sample and fitted covariance matrices. Sensitive to sample size. H0: The model fits perfectly.	P > .05
Root Mean Square Error of Approximation (RMSEA)	A parsimony-adjusted index. Values closer to 0 represent a good fit.	< .08
Standardized Root Mean Square Residual	The square-root of the difference between the residuals of the sample covariance matrix and the hypothesized model.	< .08
Comparative Fit Index (CFI)	A revised form of NFI. Not very sensitive to sample size. Compares the fit of a target model to the fit of an independent, or null, model.	>.90
Non-Normed Fit Index (NNFI) Tucker Lewis Index (TLI)	An NNFI of .90, indicates the model of interest improves the fit by 90% relative to the null model. NNFI is preferable for smaller samples. Sometimes the NNFI is called the Tucker Lewis index (TLI)	>.90

Summary

This chapter dealt with the proposed methodology to be used in this study. Specifically, sample derivation, sample size, measures, data collection procedures, statistical assumptions, common method bases test, and data analysis methods were discussed. Research participants were recruited from first-line employees of hotel companies in China. Before conducting this study, a pilot study was carried out to examine the feasibility of these instruments using with hotel management major students. The collected data were checked for missing data, outliers, and statistical assumptions such as normality, linearity, homoscedasticity, and multicollinearity. In addition, common method bias was tested using Harman’s single-factor approach. Model fit

index was also given in the last paragraph. The results of the data analyses were provided in the next chapter.

CHAPTER IV

RESULTS

This chapter presented the results of the data analysis on the basis of the research methodology outlined in Chapter Four. First, the first round of data was used to test a 6-factor model and a second-order factor model of servant leadership. The model fit indices were presented and compared. Afterwards, the second round of data was used to test the hypothesized model proposed in Chapter Two. The results of model fit index, descriptive statistics of five variables, and correlations would be presented, and the 7 hypotheses would be tested.

Confirmation of Servant Leadership Model

Model fit

For model fit, the output of Mplus provides a number of well-known goodness of fit index, including X^2 (df), Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Standardized Root Mean Square Residual (SRMR). Appendix G illustrated the structure of CFA test for a 6-factor model and a higher-order servant leadership model. It can be clearly shown that for the former model, the model fitted the data well ($X^2 = 450.323$, $df = 237$, $p < .01$, $RMSEA = 0.054$, $CFI = 0.941$, $TLI = 0.931$, $SRMR = 0.048$) (See Table 8). From the 6-factor model in Appendix G, the correlation coefficients among the 6 factors were all statistically significant. These meant that it was possible that there existed certain common variance among the 6 factors. Thus, a second-order factor model was further tested. This model fitted the data equally well ($X^2 = 474.778$, $df = 246$, $p < .01$, $RMSEA = 0.055$, $CFI = 0.937$, $TLI = 0.929$, $SRMR = 0.052$). Given that the latter model was more parsimonious and there was little difference between two models. The second-order factor model was used in the next analysis to examine the relationships among the 5 variables and test 7 hypotheses.

Table 8

CFA Fit Indices for the Second-Order Servant Leadership Model

Model	X ² (df)	RMSEA	CFI	TLI	SRMR
Six-factor model	450.323 (237)	.054	.941	.931	.048
Second-order factor model	474.778 (246)	.055	.937	.929	.052

Descriptive Statistics

As mentioned previously, the second round of data was used to examine the relationships among the 5 variables and test proposed hypotheses. This study employed the latent variable technique for this purpose. However, the basic descriptive statistics such as mean and standard deviation of composite variables and number of cases were calculated using SPSS 22 (See Table 9). To compute the values of composite variables, the values of items were averaged for each variable.

Table 9

Descriptive Statistics

Variable	N	Mean	Std. Deviation
Servant Leadership	429	3.629	.583
PJC	429	3.995	.660
Trust in Leaders	429	4.062	.666
OCB	429	4.046	.665
Service Quality	429	4.154	.655
Valid N (listwise)	429		

In Table 9, it can be seen that there were no significant variations among the means of PJC (3.995 out of 5), Trust in Leaders (4.062 out of 5), OCB (4.046 out of 5), and Service Quality (4.154 out of 5). Servant Leadership (3.629 out of 5), however, had a lowest mean than any other 4 variables. The mean for Service Quality was the highest of all the variables. The standard deviations ranged from 0.583 and 0.666.

Correlation Coefficients

Correlation Coefficients among the five composite variables were provided in Table 10. In this sample, all the strengths of association were strong ($r > .50$) according to Coolidge (2006). All of them were positively statistically significant. Servant Leadership was significantly associated with PJC ($r = .694, p < .01$), Trust in Leaders ($r = .718, p < .01$), OCB ($r = .610, p < .01$), and Service Quality ($r = .554, p < .01$). PJC was significantly correlated with Trust in Leaders ($r = .758, p < .01$), OCB ($r = .674, p < .01$), and Service Quality ($r = .588, p < .01$). Trust in Leaders was significantly related to OCB ($r = .720, p < .01$) and Service Quality ($r = .615, p < .01$), and OCB also was significantly correlated with Service Quality ($r = .780, p < .01$).

Table 10

Inter-correlations between Variables

		Servant Leadership	PJC	TIL	OCB	Service Quality
Servant Leadership	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	429				
PJC	Pearson Correlation	.694**	1			
	Sig. (2-tailed)	.000				
	N	429	429			
Trust in Leaders	Pearson Correlation	.718**	.758**	1		
	Sig. (2-tailed)	.000	.000			
	N	429	429	429		
OCB	Pearson Correlation	.610**	.674**	.720**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	429	429	429	429	
Service Quality	Pearson Correlation	.554**	.588**	.615**	.780**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	429	429	429	429	429

** . Correlation is significant at the 0.01 level (2-tailed).

Validity of Measures

CFA was conducted to ensure all the variables were distinct constructs using the second round of data. Mplus 7.4 was also used as a statistical tool. The results were presented in Table 11. First, the fit of five-factor model was examined (servant leadership, PJC, trust in leaders, OCB, and service quality). This model had an adequate fit with the data ($\chi^2 = 1952.231$, $df = 1064$, $p < .01$; RMSEA = .044, SRMR = .052; CFI = .919, TLI = .914). Then, this five-factor model was compared with a two-factor model (servant leadership, PJC, and trust in leaders were combined as a factor as they were strongly correlated and OCB and service quality were combined for the same reason) and a one-factor model (all combined). Neither the two-factor model ($\chi^2 = 3997.213$, $df = 1079$, $p < .01$; RMSEA = .079, SRMR = .071; CFI = .735, TLI = .722) nor one-factor model ($\chi^2 = 4824.078$, $df = 1080$, $p < .01$; RMSEA = .090, SRMR = .083;

CFI = .659, TLI = .644) fit the data well. The five-factor model fit the data better than either the two-factor model ($\Delta \chi^2 = 2044.982$, $df = 15$, $p < .001$) or the one-factor model ($\Delta \chi^2 = 2871.847$, $df = 16$, $p < .001$). Therefore, servant leadership, PJC, trust in leaders, OCB, and service quality are five distinct constructs.

Table 11

Three Model Comparison

Model	$\chi^2 (df)$	RMSEA	CFI	TLI	SRMR
Five-factor model	1952.231 (1064)	.044	.919	.914	.052
Two-factor model	3997.213(1079)	.079	.735	.722	.071
One factor model	4824.078(1080)	.090	.659	.644	.083

Confirmation of the Hypothesized Model

The hypothesized model proposed in chapter Two was confirmed using the second round of data. Like in CFA conducted in testing Servant Leadership second-order factor model, $\chi^2 (df)$, RMSEA, CFI, TLI, and SRMR were used to evaluate the model fit. The results for confirming the hypothesized model were provided in Table 12.

Table 12

Model Fit Indices

Model	$\chi^2 (df)$	RMSEA	CFI	TLI	SRMR
Hypothesized model	1951.941 (1066)	.044	.919	.915	.052

Results from the Table 12 indicated that chi-square test was significant ($\chi^2 = 1951.941$, $df = 1066$, $p < .01$). However, chi-square test is sensitive to the size of the correlations of variables and sample size (Kline, 2011). Especially in large sample, the value of chi-square usually leads to rejection of the model even though there is very small deviation from perfect fit in the sample. Therefore, other fit indices are needed to test the model fit. For this sample, it could be seen that RMSEA and SRMR were .044 and .052, respectively (less than .08). The indices for CFI and TLI were .919 and .915, respectively (greater than .90). Thus, the model fit the data well.

Model Testing

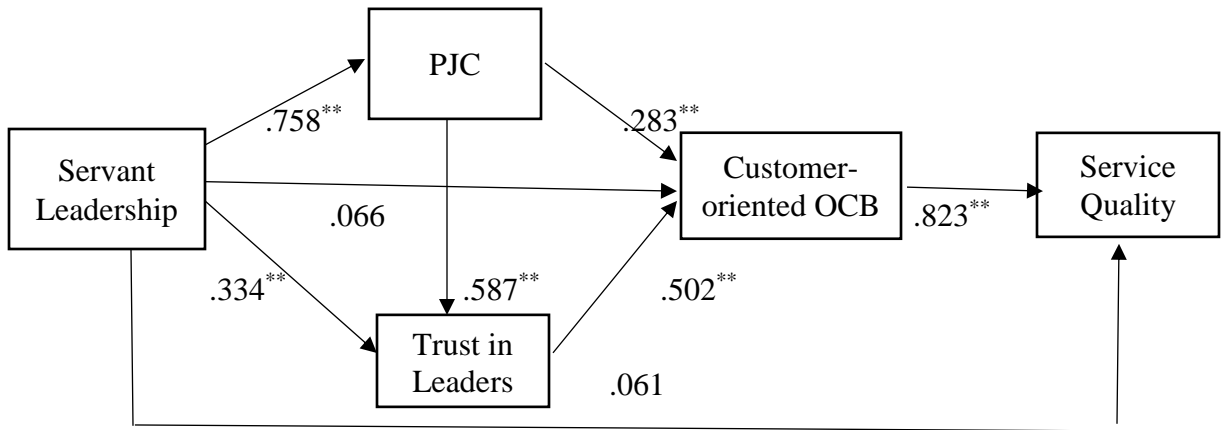
To test the hypothesized model proposed in Chapter Two, Mplus was also used as a statistical tool to conduct SEM. SEM can incorporate the measurement model and path model, and also can include both latent variables and their indicators in the same model. In the analysis, the standardized path coefficients (β) were examined to test the hypotheses, and Maximum Likelihood Estimation with Robust Standard Errors (MLR) was adopted to estimate the parameters.

The standardized path coefficients of the hypothesized model were presented in Figure 6. Figure 7 showed the Mplus output for the hypothesized model. It was clearly showed in this figure that Servant Leadership had no significantly positive relationship with OCB ($\beta = 0.066$, $p > 0.05$). Therefore, Hypothesis 1a was not supported, indicating that there was no statistically significant direct correlation between servant leadership and customer-oriented OCB in the hotel sector in China. For the mediation effect of PJC between Servant Leadership and customer-oriented OCB, it can be seen that the path coefficient from Servant Leadership to PJC was statistically significant ($\beta = .758$, $p < .001$) while that from PJC to OCB was also statistically significant ($\beta = .282$, $p < .001$). It was easy to calculate that the indirect effect was .214 ($p < .001$),

which was statistically significant. Thus, Hypothesis 1b₁ was supported, while Hypothesis 1b₀ was rejected. Given that there was no statistically significant relationship between Servant Leadership and OCB, PJC was a full mediator between servant leadership and customer-oriented OCB in the hotel sector in China.

Servant Leadership was significantly correlated with Trust in Leaders ($\beta = .334, p < .001$), supporting Hypothesis 2. This meant that there was a statistically significant correlation between servant leadership and trust in leaders in the hotel sector in China. Trust in Leaders, in turn, was significantly associated with OCB ($\beta = .502, p < .001$). Thus, Hypothesis 3 was supported, there was a statistically significant correlation between trust in leaders and customer-oriented OCB in the hotel sector in China. However, the path coefficient was .061, not statistically significant at 0.05 level, which did not support Hypothesis 4. There is no statistically significant correlation between servant leadership and service quality in the hotel sector in China.

There was a statistically significant correlation between customer-oriented OCB and service quality ($\beta = .823, p < .001$) and this association was the strongest of all the possible relationships between two variables. Therefore, Hypothesis 5 was supported in this model. The relationship between PJC and Trust in Leaders was also statistically significant ($\beta = .587, p < .001$). Thus, Hypothesis 6 was also supported.



** Path coefficient is significant at the 0.01 level (2-tailed).

Figure 6 Results of Standardized Path Coefficients

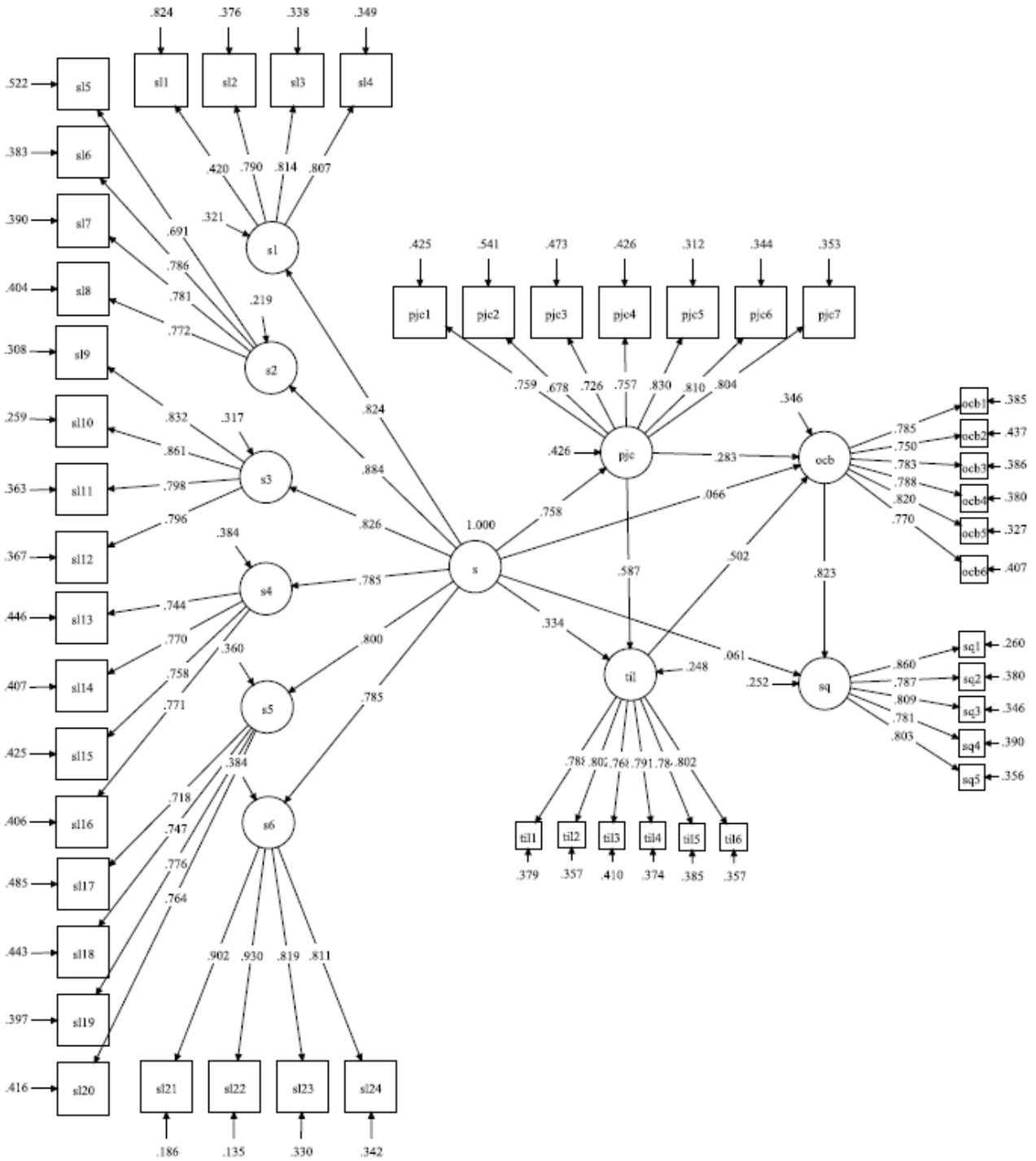


Figure 7 Mplus output for the hypothesized model

Summary

Chapter IV presented the results of tests for the hypothesized model and 7 hypotheses. First, the first round of data was used to test a 6-factor model and a second-order factor model of servant leadership. The model fit indices for two models were presented and compared. Servant Leadership as a second-order factor construct was confirmed. Second, the second round of data was used to test the hypothesized model proposed in Chapter Two. The results of model fit index, descriptive statistics of five variables, and bivariate correlations were presented, and the 7 hypotheses were tested. The path coefficients between variables and mediation effect were examined in this Chapter.

In this study, Servant Leadership was not significantly directly correlated to customer-oriented OCB in the hotel sector in China. However, the indirect relationship between these two variables was significant. Servant Leadership was positively related to PJC which in turn was positively associated with OCB. This is to say that PJC has mediating effect on the relationship between servant leadership and OCB in the hotel sector in China. In addition, there was a statistically significant correlation between Servant Leadership and Trust in Leaders, and Trust in Leaders was also significantly associated with customer-oriented OCB. Furthermore, while there was no significant correlation between Servant Leadership and Service Quality, Customer-Oriented OCB and Service Quality were strongly related. Finally, the relationship between PJC and Trust in Leaders was also statistically significant in the hotel sector in China. Chapter V would provide a detailed discussion of these results.

CHAPTER V CONCLUSION AND IMPLICATIONS

In this chapter, the findings of this study were reviewed in relation to the literature and the hypotheses proposed. In addition, several implications were discussed and avenues for future research were also presented. And last, several conclusions were made based on the results of this study and the discussions.

Discussion

The purposes of this study were:(a) to confirm the 6 factor-24-item SLS scale; (b) to investigate the relationships among servant leadership, PJC, trust in leaders, customer-oriented OCB, and employees' service quality in the context of Chinese hotel industry; and (c) to examine the mediating effect of PJC between servant leadership and customer-oriented OCB. There was one exogenous variable in this study: servant leadership. All other four variables were endogenous variables: PJC, trust in leaders, customer-oriented OCB, and service quality. More clearly, this study measured all these variables as perceived by the leader' followers in the hotel industry in China. There were two rounds of data collected from hotel frontline employees across China. The first round of data derived from hotels in east, south, west, north, and central parts of China using both conventional instrument distribution method and online Wechat distribution. A total of 305 usable data were obtained in this round of sampling. The purpose of the first round of data collection was to confirm the second-order factor construct of Servant Leadership. The second round of data were collected from hotel employees also in all parts of China via Wechat distribution. A total of 429 hotel cases were considered to be valid. The purpose of this round of data was to examine the relationships among these five variables, e.g. Servant Leadership, PJC, Trust in Leaders, OCB, and Service Quality and mediating effect of PJC between Servant Leadership and customer-oriented OCB.

The CFA result indicated that Servant Leadership can be treated as second-order factor construct to be used in measuring servant leadership behaviors in the Chinese hotel industry. The factors of Servant Leadership include integrity, self-sacrifice, building community, empowering people, emotional healing and visioning. Subsequent SEM results demonstrated that Servant Leadership was not significantly directly correlated to Customer-Oriented OCB in the hotel sector in China. However, the indirect relationship between these two variables was significant. PJC had mediating effect on the relationship between servant leadership and OCB. Additionally, a statistically significant correlation was found between Servant Leadership and Trust in Leaders, and Trust in Leaders was also significantly associated with customer-oriented OCB. Further, it was found that Customer-Oriented OCB and Service Quality were strongly related, whereas there was no significant correlation between Servant Leadership and Service Quality. Lastly, the relationship between PJC and Trust in Leaders was also statistically significant.

By comparing the results of correlation coefficients and standardized path coefficients of the hypothesized model, correlation coefficient between Servant Leadership and OCB was statistically significant while the path coefficient from Servant Leadership to OCB was not. The same thing happened to the relationship between Servant Leadership and Service Quality. These are because in the former, correlation coefficient was zero-order coefficient without controlling other variables.

Servant Leadership and customer-oriented OCB and Mediating effect of PJC

The results of this study showed that Servant Leadership did not predict customer-oriented OCB in the Chinese hotel industry, not supporting the hypothesis. This result was also not consistent with the findings of prior studies (Ehrhart, 2004; Hunter et al., 2013; Neubert, Kacmar, Carlson, Chonko, & Roberts, 2008; Van Dierendonck & Nuijten, 2011; Walumbwa,

Hartnell, & Oke, 2010). As mentioned above, the magnitude of correlation between Servant Leadership and OCB was pretty large and significant ($r = .610, p < .01$). This inconsistency resulted from controls of other variables, such as PJC and Trust in Leaders. In this study, when PJC was added into the equation in SEM, PJC acted as a mediating variable. Servant Leadership did not have direct influence on customer-oriented OCB. Instead, the underlying mechanism was that Servant Leadership influenced PJC, which in turn, affected customer-oriented OCB. In this sense, PJC was a full mediator between Servant Leadership and OCB. Therefore, when PJC was added to the model and controlled, the relationship between Servant Leadership and OCB was not significant anymore.

It is plausible that when different variables as mediators were added into the model, the mediating effects they produce would vary from variables to variables. When Service Climate acted as a mediator between Servant Leadership and OCB in Hunter et al.'s (2013) study, its effect was partial. Servant Leadership still had significant direct effect on OCB, not as great as total effect though. The same logic could explain the results in Van Dierendonck and Nuijten's (2011) study. However, Ehrhart (2004) found that PJC partially mediated the relationship between servant-leadership and OCB in the USA. Walumbwa, Hartnell, and Oke (2010) conducted a study in Kenya which also demonstrated that PJC partially mediated the effect of servant leadership on OCB. The results of this study showed that there PJC acted as full mediator between Servant Leadership and Customer-oriented OCB. The fact that the same PJC had different effect on the relationships between two variables might be attributed to different cultural backgrounds.

China is considered to be a low uncertainty avoidance country (Hofstede, Hofstede, & Minkov, 2010). Uncertainty avoidance is defined by Hofstede (1980) as the extent to which

people in a certain culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid these uncertainties. Employees in Chinese companies are generally comfortable with ambiguity. Leaders can be relied on to solve ambiguity. Adherence to rules regulations is flexible to suit the actual situation. Servant leaders can hold to strong ethical standards and be fair with their followers in their decision-making (Spears, 1998). It is understandable that servant leaders in the Chinese hotels are more likely than their Western counterparts to be perceived by their followers to create a stronger procedural justice culture in which disputes are fairly resolved and resources are fairly allocated. Moreover, servant leaders in Chinese hotels craft a clear vision and articulate a clear purpose and direction for their organization's future (Greenleaf, 1970). They tend to reduce the uncertainty to a minimum level to allow their employees to make decisions when employees satisfy customers' needs. Therefore, when employees perceive they are treated fairly, they are more likely to go the extra mile to provide better service to customers. To conclude, in the Chinese culture, the influence of Servant Leadership on the OCB is transmitted through the indirect effect of the servant leaders' fair procedure in their decision-making to the extent that there can be little direct effect of Servant Leadership on OCB.

Servant Leadership and Trust in Leaders

The results of this study showed that Servant Leadership strongly predicted Trust in Leaders. This finding is congruent with most of the observations in past leadership literature that there were direct association between servant leadership and trust in leaders (Burton, Peachey, & Wells, 2017; Chan & Mak, 2014; Chatbury & Beaty, 2011; Joseph & Winston, 2005; Ling, Liu, & Wu, 2017; Rezaei, Salehi, Shafiei, & Sabet, 2012). In the Chinese hotel sector, leaders who display servant leadership attributes have substantial impact on followers and gain trust from

followers. The result dovetails with the LXM theory and traditional culture of Confucianism that largely affects the values and behaviors of Chinese hotel leaders (Lin, 2008). It is widely known that Confucianism and collectivism are the two most typical traditional values in Chinese culture (Lin, 2008). At the core of Confucianism values are benevolence, sympathy, forgiveness, friendliness, harmony, loyalty, righteousness, virtuousness, and humility (Chuang & Chan, 2005). These values are exemplified in the hotel leaders' behaviors such as self-sacrifice, building community, empowering people, emotional healing, taking care of employees' welfare, and respecting their feelings (Chuang & Chan, 2005; Fu & Tsui, 2003; Qiu, & Dooley, 2019). According to LMX theory suggested by Blau (1964) and Graen and Uhl-Bien (1995), when servant leaders in hotels put their employees first, respect, trust, and empower them, employees are most likely to reciprocate by generating high-quality relationships such as trusting their leaders, loyal to their leaders, and mutual commitments (Cropanzano & Mitchell, 2005). Furthermore, collectivism attaches importance to the interests of the group and organization (Hofstede, 1980), which motivates hotel leaders to transcend their own self-interests to achieve group goals (Ling, Liu, & Wu, 2017). As employees view themselves as connected with the group and the hotels as a whole, social framework is strong, and the employees in the hotels tend to value group goals over their personal goals (Wasti, 2003; Woo, 2018). In addition, servant leaders conceptualize shared goals and articulate the organization's purposes and missions, their followers are incentivized to work to achieve both their personal goals and the common goals. Thus, the employees trust their leaders.

Trust in Leaders and customer-oriented OCB

It was also demonstrated that trust in leaders can be a good indicator for followers' customer-oriented OCB. Again, this relationship was also consistent with the LMX theory in that

employees tend to reciprocate favors when leader acts in the way they perceive to benefit their interests. If followers trust their leaders, build mutual respect and commitment, they have no doubt about the intentions and behaviors of the leaders (Jung & Avolio, 2000). When followers are asked to perform certain tasks beyond their own job descriptions, they are prone to “go the extra miles” to serve their customers without reluctance. Or they may voluntarily do additional work to help and satisfy their guests without any order from their supervisors. Most of the hotel work by nature is hard to monitor, and willingness to take on tasks by heart and OCB are critical for hotels to serve customers. The finding was in line with those of previous studies which found that trust in leaders exerted a positive influence on OCB (Kim, 2012; Lee, 2012; Lim, Han, & Joo, 2018; Goodwin, Whittington, Murray, & Nichols, 2011; Zeinabadi & Salehi, 2011).

Servant Leadership and Service Quality

Like the relationship between servant leadership and customer-oriented OCB, the study results indicated that servant leadership had no significant direct effect on service quality in the Chinese hotel industry, which did not support the hypothesis. The result contradicted the findings of previous studies in the literature. (Koyuncu, Burke, Astakhova, Eren, & Cetin, 2014; Ling, Lin, & Wu, 2016). However, this result supported the study conducted in South Korea by Kwak and Kim (2015) who did not find significant direct relationship between servant leadership and customer service quality. It can be noticed that the zero-order correlation servant leadership and service quality was statistically significant. According to transformational leadership theory (Bass, 1997), the atmosphere servant leaders create and their determination and conviction lead to the followers identifying with them and wanting to emulate them by providing excellent service to their customers. Yet, servant leadership was not a strong predictor of service quality. The reason for this inconsistency is that PJC, trust in leaders, and customer-oriented OCB were

introduced as intermediate variables. When these intermediate variables were added into the equation in SEM, they transmitted the effect of servant leadership onto customer service quality so much so that the impact of servant leadership on service quality was no longer significant in the Chinese hotel context.

Customer-oriented OCB and Service Quality

The study results indicated that employees' customer-oriented OCB had a stronger effect on their service quality in the Chinese hotel sector. If employees are willing to "go the extra mile" in helping customers, the perceived service quality would improve. This result was in line with those reported in previous research in servant leadership literature (Bell & Menguc, 2002; Ghorbani & Ghaempanah, 2014; Husin, Chelladurai, & Musa, 2012; Kwak & Kim, 2015; Yohana, 2017). The possible explanation is that when employees try hard to do extra work for their guests, their behavior would be rewarded both physically and psychologically by their supervisor and customers, leading them to gain a positive self-image and further perceive of the best work performance. Alternatively, doing extra work for customers would enhance followers' skills and confidence to serve, resulting in better service quality.

PJC and Trust in Leaders

The data of this study supported Hypothesis 6 that there was a statistically significant correlation between PJC and Trust in Leaders in the hotel sector in China. This is to say that the fairer employees perceived to be treated by their leaders, the more likely they would trust their leaders. This result corresponded with the findings of prior research in the literature that organizational justice was strongly associated with followers' trust in their leaders. (Cohen-Charash & Spector, 2001). More specifically, this study result was consistent with those derived from research conducted to examine the relationship between procedural justice culture and trust

in leaders (AL-Abrow, Shaker, & Harooni, 2013; Ashja, Nouri, Arizi, & Samavatyan, 2009; Hopkins & Weathington, 2006; Kale, 2013; Wong, Ngo, & Wong, 2006). DeConinck, (2010) observed that if the followers were believed to be treated fairly in terms of the granting of bonuses and assessment process, the level of trust between the leaders and followers, and, accordingly, the organizational trust would increase, which would result in positive achievements. In actuality, when followers perceived fairness and transparency of the processes by which decision was made and treatment they received from their leaders, they are more likely to perceive themselves to be valued members in the organizations (Tyler, DeGoey, & Smith, 1996), and to perceive their leaders to possess high moral standards, thus they are more likely to trust their leaders.

Theoretical and Practical Implications

One of the purposes of this study was to examine the relationships and mediating effects among servant leadership, PJC, trust in leaders, customer-oriented OCB, and service quality for employees of the hotel industry in China. Achieving this research purpose makes several important theoretical contributions to leadership study and to improving the theoretical understanding of leadership in the Chinese hotel industry. First, the result of this study supports the conceptualization of servant leadership as a second-order factor construct consisting of 6 dimensions and 24 items in the Chinese hotel context. Qiu and Dooley's (2019) servant leadership scale was initially developed and validated in the hotel industry in Southern part of China. The 6 dimensions included integrity, self-sacrifice, building community, empowering people, emotional healing, and visioning. Each dimension embraces 4 items. When adopting this servant leadership scale in other industries or other parts of China, its dimensions and items need to be confirmed as they may vary across industries, regions, and even sub-cultures. This study

apparently confirmed that the 6-dimension-24-item servant leadership scale can be nicely used in the hotel sector in all parts of China, thus supporting the claim that this servant leadership scale has good internal consistency and strong construct validity (Qiu & Dooley, 2019). This study might also inspire other researchers to apply this servant leadership scale to other industries to test its generalizability.

Next, this research provides a framework for understanding the mediating effect of PJC on the relationship between Servant Leadership and Customer-Oriented OCB in the Chinese Culture. Ehrhart (2004), Hunter et al. (2013), and Neubert et al. (2008) found that PJC partially mediates the relationship between servant-leadership and OCB using Western samples. However, the result of this study indicated that PJC fully mediates the relationship between servant-leadership and OCB in the Chinese hotel industry. Therefore, this research might ignite sparks to control for other related variables to look at the same mediating effect, or conducting research using the same variables in other industries in China.

Third, this research also offers a framework to understand the interrelationships between servant leadership and other related constructs, such as PJC, trust in leaders, customer-oriented OCB, and service quality. Regarding the relationship between servant leadership and trust in leaders, the result of this research suggested that servant leadership positively impacts trust in leaders. This positive association that was identified between these two variables may be explained by the servant leadership attributes and culture of Confucianism. The higher level of servant leadership behaviors perceived by the employees, the more they may trust their leaders. In addition, this study revealed that trust in leaders has direct effect on customer-oriented OCB, and in turn, customer-oriented OCB positively impacts service quality. These findings are consistent with the previous studies in leadership literature and thus further confirm that the

positive relationships among servant leadership, trust in leaders, customer-oriented OCB, and service quality. However, servant leadership was not found to have a significant direct effect on service quality, which was not in line with most prior studies. This inconsistency will also incentivize other scholars to provide more evidence to make a more solid conclusion.

Fourth, this study adds more components to the servant leadership models and LXM model articulated previously as theoretical guidelines of this study. In the model provided by Russell and Stone (2002), servant leadership serves as an independent variable affecting the subsequent organizational performance as the dependent variable. In addition, organizational culture and employee attitudes act as mediating variables influencing the effectiveness of servant leadership and have a governing effect upon organizational performance. In van Dierendonck's (2011) model, the attributes of servant leaders influence both on the individual leader–follower relationship and on the general psychological environment within a team or organization, which in turn are expected to affect the followers in terms of self-actualization, positive job attitudes and increased performance, and corporate social responsibility (CSR). Liden, Panaccio, Meuser, Hu, and Wayne's (2014) model identified individual characteristics of leaders and followers that are conducive to servant leadership, as well as the mediating mechanisms through which servant leader behaviors lead to attitudinal and behavioral outcomes. However, none of the above models included PJC as an outcome of servant leadership to examine the relationships between PJC and other variables and its mediating effects. Even Dulebohn, Bommer, Liden, Brouer, & Ferris (2012), who was considered to provide a more comprehensive framework, did not include PJC in their LMX model as a consequence variable, much less to test its effects on other variables. Therefore, this study enriches both servant leadership and LXM models and made contributions to leadership theory.

This study also makes contributions to practices and has a number of implications for hotel leadership practitioners and companies. First, this study confirmed Qiu and Dooley's (2019) servant leadership second-order factor model. Hotels can use this scale as a criterion to measure and assess their leaders' servant leadership behaviors. In addition, hotel firms can apply this servant leadership scale in their recruitment and selection of leaders who possess servant leadership attributes. Furthermore, as it is believed that certain aspects of leadership behavior can be learned, hotels can provide human development programs and ethics training programs for their managers to develop servant leadership (Wu et al., 2013). For example, managers can be trained to be more empathetic to the needs and concerns of followers, more helpful and ethical, and more community-conscious. This scale may be generalized to other industries for the same purposes as well.

Second, it was suggested that servant leadership makes a difference in servant quality in the Chinese hotel industry. In this study, servant leadership affected PJC, trust in leaders, customer-oriented OCB, and service quality. Although servant leaders might have no direct impact on OCB and service quality, the results suggested that servant leaders can create procedural justice climate in hotel organizations, and they tend to gain the respect and trust from their followers. Improved procedural justice climate and more trust increase employees' propensity to go the extra mile to serve customers, leading to improved customer service. Further, hotel front-line employees are directly responsible for customer service, quality of service, and customer satisfaction. Therefore, servant leaders are crucial in providing a more effective leadership paradigm in the hotel industry than traditional autocratic style because they are more supportive, empathetic, healing, listening, and most importantly, they put employees first (Liden et al., 2008; van Dierendonck 2012). Given today's challenging and complex climate

and more empirical evidence of its importance in the hotel sector, hotel and other industries in China should be aware that the old leadership paradigms need to be replaced by new paradigms such as servant leadership in order to guarantee long term financial and social benefits for the organizations (Qiu & Dooley, 2019).

Third, servant leadership would lead to enhanced employees' willingness to do extra work for their guests and would accordingly result in increased customer service quality. This research showed that servant leadership approach transmits its impact through perceived procedural justice climate to increase the levels of organizational citizenship behaviors and customer service. Employees' trust in leaders is also a possible intermediating factor through which this leadership approach influences followers' OCB and customer service provided. However, if hotel employees have a low sensitivity to fair treatment and do not show respect nor trust to their leaders in the case of other dominant intervening factors, servant leaders would fail to achieve the expected goals even though they show such behaviors towards their followers. Therefore, leaders in hotel firms need to be aware that many factors come into play to affect employees' willingness to provide quality service to the customers and ultimately organizations' final goals. Hotel leaders need to consider aligning employees' goals with organizations' goals and setting organizations' expectations. When employees understand the importance of customer service to the success of both hotels and employees, they are more likely to engage in customer-oriented OCB and to advance service quality (Wu et al., 2013).

Limitations and recommendations for Future Research

Although this study provides a number of contributions for theoretically, leadership theory, and practically, hotel management, organization development, and leadership development, there are still several limitations that might affect the validity of inference drawn

from this study. In addition to identifying the limitations, recommendations for future study were also provided.

Firstly, although some necessary method treatments were instilled to mitigate the effects of common method bias, such as reversed wording, different survey methods, and item review to eliminate ambiguity, it is still a major concern that might threaten construct validity, distort the dimensional structure of Servant Leadership, and obscure the relationships among five variables examined in this study (Podsakoff et al., 2012). Social desirability, self-report questionnaire, response style, and same time measurement may potentially result in common methods bias. When conducting Harman's single factor test for checking common method bias, one single factor explained 43.70% and 41.81% of the variance for the first and second round data, respectively. Therefore, common method biases might exist in the data, thus constituting a potential problem to harm the study; it was not a major issue though. It is recommended that future study could control for method bias sources by obtaining measures of predictors and criterion variables from different sources, introducing temporal separation between the measures of the predictor and criterion variables, and minimizing the scale properties shared by the measures (Podsakoff et al., 2012).

Secondly, the purpose of this study was to examine the relationships and mediating effects among servant leadership, PJC, trust in leaders, customer-oriented OCB, and service quality for employees of the hotel industry in China. Although demographic information of the participants was included in the questionnaires, it was not included as controlling variables in the tested model. However, there might be some effects of demographic variables on the five variables and the relationships among them. Demographic variables such as employees' gender, age group, education level, income, work type, and tenure can be involved to examine whether

their effects on the relationships among five variables are significantly different than otherwise. Or the invariance can be examined for different gender, age, education, income and tenure. Future research could include some or all these demographic variables to test their effects if the purposes of the studies allow.

Third, there were five variables used in this study and five measure scales for these variables were employed. Only instrument scale of servant leadership was developed and validated in the Chinese culture. All other four instruments used in this study were directly borrowed from those developed in the Western countries. There might be a cultural difference in the responses of the variable items and the relationships among these variables. Therefore, more natively-developed and validated instruments are recommended to study the relationships in the Chinese culture in future studies. Future researchers could also apply the instruments and replicate the research in other industries.

Lastly, this study was basically one-off cross-sectional. Further study could be conducted to investigate the causal relationships among variables using a longitudinal study (Shadish et al. 2002). Or experimental and quasi-experimental design can be adopted in which some variables are manipulated to affect the other dependent variables in order to examine the convincing causal links between any two of these five variables (Shadish et al. 2002).

Conclusion

The purposes of this study were: (a) to confirm the 6 factor-24-item SLS scale; (b) to investigate the relationships among servant leadership, PJC, trust in leaders, customer-oriented OCB, and employees' service quality in the context of Chinese hotel industry; and (c) to examine the mediating effect of PJC between servant leadership and customer-oriented OCB. There is one exogenous variable in this study: servant leadership. All other four variables are endogenous

variables: PJC, trust in leaders, customer-oriented OCB, and service quality. This study measured all these variables as perceived by the leader' followers in the hotel industry in China. On the basis of Servant Leadership theory, LXM model, Transformational Leadership theory, and related leadership literature, seven hypotheses were proposed in the hotel industry in China. Servant leadership was significant related to customer-oriented OCB, PJC has a mediating effect on the relationship between servant leadership and customer-oriented OCB, servant leadership strong was associated with trust in leaders which in turn significantly related with customer-oriented OCB, servant leadership was significantly related to service quality, customer-oriented OCB was strongly associated with service quality, and was significantly related to trust in leaders.

Both hard copy and online Wechat survey were utilized to collect data. After the pilot study, two rounds of data collections were carried out with two weeks apart in this study. The purpose of the first round of data collection was to confirm a second-order factor construct of Servant Leadership to see whether this model can be used in the Chinese hotel sector. A total of 305 usable data were obtained. The purpose of this data was to test the relationships among these five variables and mediating effect. Altogether, 429 valid data were collected in this round. After data screening was performed, common method variance, construct validity, descriptive information, correlation, and structural equation modeling were involved to analyze the data collected. The results demonstrated that servant leadership is not significantly related to customer-oriented OCB and PJC significantly mediates the relationship between servant leadership and customer-oriented OCB. Servant leadership strongly predicts trust in leaders which in turn significantly predicts customer-oriented OCB, and PJC also significantly predicts

trust in leaders. It was also found that servant leadership is not significantly related to service quality; however, customer-oriented OCB is strongly associated with service quality.

The result of this study suggested that although servant leadership does not directly influence customer-oriented OCB and service quality, its effect cascaded down through PJC and Trust in Leaders to impact OCB and service quality. Thus, it still plays an important role in the Chinese hotel industry. Qiu and Dooley's (2019) Servant Leadership Scale can be used as a criterion to select, train, and evaluate the hotel leaders in China. While this study makes several theoretical and practical contributions, it also inevitably has some limitations.

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APPENDIX A

Servant Leadership Questionnaire

Dear Sir/Madam:

You are invited to participate in studies conducted by Dr. Larry Dooley and Mr. Shaoping Qiu at College of Education and Human Development, Texas A&M University. There are 6 questionnaires. The purpose of these questionnaires is to investigate the servant immediate supervisor ship and employees' attitude and behavior in the hospitality industry. Please mark with a tick "√" for each question based on your opinion.

Your participation in the studies is totally voluntary and confidential. Your name and address is not required. If you agree to take part, please complete this one-time survey that takes 20 minutes.

Thank you!

Part one: Servant Leadership

Listed below are a number of statements. Beside each statement, choose the number that best matches your agreement or disagreement. Please respond to every statement.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Number	Item	Response Category				
		1	2	3	4	5
1	My immediate supervisor has a vision of the future.					
2	My immediate supervisor is able to articulate a clear purpose and direction for my organization's future.					
3	My immediate supervisor has a strong sense of mission.					
4	My immediate supervisor is able to effectively think through complex problems					
5	I would seek help from my immediate supervisor if I had a personal problem.					
6	My immediate supervisor takes time to talk to me on a personal level.					
7	My immediate supervisor cares about my personal well-being.					
8	My immediate supervisor is one I would turn to if I had a personal trauma.					

9	I am encouraged by my immediate supervisor to volunteer in the community.					
10	My immediate supervisor is involved in community activities.					
11	My immediate supervisor is always interested in helping people in our community.					
12	My immediate supervisor emphasizes the importance of giving back to the community.					
13	My immediate supervisor encourages me to make important work decisions.					
14	My immediate supervisor gives me the freedom to handle difficult situations in the way that I feel is best					
15	My immediate supervisor gives me the authority to make decisions about my job					
16	My immediate supervisor enables me to solve problems myself instead of just telling me what to do.					
17	My immediate supervisor sacrifices his/her own interests to meet my needs.					
18	My immediate supervisor does everything he/she can to serve us.					
19	My immediate supervisor puts my best interests ahead of his/her own.					
20	My immediate supervisor does what she/he can do to make my job easier.					
21	My immediate supervisor never feathers his/her own nest.					
22	My immediate supervisor never abuses power for personal gains.					
23	My immediate supervisor is free from any misconduct of corruption.					
24	My immediate supervisor leads by example.					

Part Two: Procedural Justice Climate

Listed below are a number of statements about the procedures used to arrive at the outcome by your immediate supervisor. Beside each statement, choose the number that best matches your agreement or disagreement. Please respond to every statement.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Number	Item	Response Category
--------	------	-------------------

		1	2	3	4	5
1	My immediate supervisor is able to express his (her) views and feelings during those procedures.					
2	My immediate supervisor has influence over the outcome arrived at by those procedures.					
3	My immediate supervisor applies those procedures consistently.					
4	Those procedures used by my immediate supervisor are free of bias.					
5	Those procedures are based on accurate information.					
6	My immediate supervisor is able to appeal the outcome arrived at by those procedures.					
7	Those procedures uphold ethical and moral standards.					

Part Three: Trust in Leaders

Listed below are a number of statements. Beside each statement, choose the number that best matches your agreement or disagreement. Please respond to every statement.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Number	Item	Response Category				
		1	2	3	4	5
1	My immediate supervisor and I can both freely share our ideas, feelings, and hopes					
2	I can talk freely to my immediate supervisor about the difficulties I am having at work and know that (s) he will want to listen.					
3	If I shared my problems with my immediate supervisor, I know he would respond constructively and caringly.					

4	Given my immediate supervisor 's track record, I see no reason to doubt his/her competence and preparation for the job.					
5	Most people, even those who aren't close friends of my immediate supervisor, trust and respect him/her as a coworker.					
6	Other work associates of mine who must interact with my immediate supervisor consider him/her to be trustworthy.					

Part Four: Customer-oriented Organizational Citizenship Behavior

Listed below are a number of statements. Beside each statement, choose the number that best matches your agreement or disagreement. Please respond to every statement.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Number	Item	Response Category				
		1	2	3	4	5
1	I am assisting co-workers to deliver high-quality customer oriented services.					
2	To serve my customers, I volunteer for things that are not required.					
3	I make innovative suggestions to improve customer service.					
4	I expend considerable energy to come up with creative ways to assist customers facing problems.					
5	I exchange ideas with colleagues on how to improve customer service.					
6	I deal restlessly with customer problems until they are resolved.					

Part Five: Employee Service Quality

Listed below are a number of statements. Beside each statement, choose the number that best matches your agreement or disagreement. Please respond to every statement.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Number	Item	Response Category				
		1	2	3	4	5
1	The employee is always helpful to customers.					
2	The employee is very concerned about the needs of the customer.					
3	The employee is highly dedicated to his/her job.					
4	The employee is highly communicative with customers.					
5	The employee is very flexibility to provide service to customers.					

Part Six: Demographic Information

This section attempts to obtain demographic information about respondents. Please select one appropriate response or provide one answer to each question.

- Gender: Male Female
- Age: 16-24 25-34 35-44 45- 54 55 and above
- Education: Middle School High School Community College University
- Monthly Income: Less than ¥2000 ¥2000-2999 ¥ 3000-3999 ¥4000-4999
¥5000-5999 More than ¥6000
- Work Type: Full time Part time Internship
- Tenure in service industry: Less than 6 months 6months- 2 years 2-4 years 4-6years more than 6years
- Tenure in your service company: Less than 6 months 6months- 2 years 2-4 years 4-6years more than 6years

APPENDIX B
IRB Approval Letter

DIVISION OF RESEARCH



**APPROVAL OF RESEARCH
Using Expedited Procedures**

June 15, 2018

Type of Review:	Initial Review Submission Form
Title:	An Empirical Study on the Relationships Among Servant leadership, Procedural Justice Climate, Trust in Leaders, Organizational Citizenship Behavior, and Service Quality in the Chinese Hospitality Industry
Investigator:	Larry Dooley
IRB ID:	IRB2018-0605D
Reference Number:	076896
Funding:	None
Documents Approved:	<ul style="list-style-type: none"> • IRB Application Version 1.1 • Recruiting Script (Chinese) Version 1.0 • Recruiting Script (English) Version 1.0 • Information sheet(Chinese) Version 1.0 • Information Sheet (English) Version 1.0 • Questionnaires(Chinese) Version 1.0 • Questionnaires(English) Version 1.0
Special Determinations:	Written of documentation of consent in accordance with 45 CF 46.117/ 21 CFR 50.27
Risk Level of Study:	Not Greater than Minimal Risk under 45 CFR 46 / 21 CFR 56
Review Category:	Category 7: Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies

Dear Larry Dooley:

The IRB approved this research from 06/15/2018 to 06/14/2019 inclusive.

It is recommended that you submit your next continuing review by 05/14/2019 to avoid a lapse in approval. Your study approval will end on 06/14/2019.

Your study must maintain an **approved status** as long as you are interacting or intervening with living individuals or their identifiable private information or identifiable specimens.

Obtaining identifiable private information or identifiable specimens includes, but is not limited to:

1. using, studying, or analyzing for research purposes identifiable private information or identifiable specimens that have been provided to investigators from any source; and
2. using, studying, or analyzing for research purposes identifiable private information or identifiable specimens that were already in the possession of the investigator.

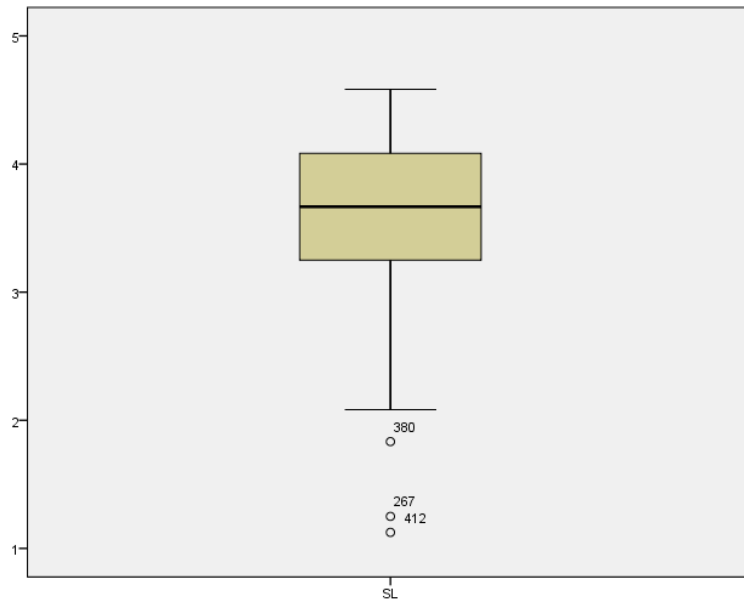
In general, OHRP considers private information or specimens to be individually identifiable as defined at 45 CFR 46.102(f) when they can be linked to specific individuals by the investigator(s) either directly or indirectly through coding systems.

If you have any questions, please contact the IRB Administrative Office at 1-979-458-4067, toll free at 1-855-795-8636.

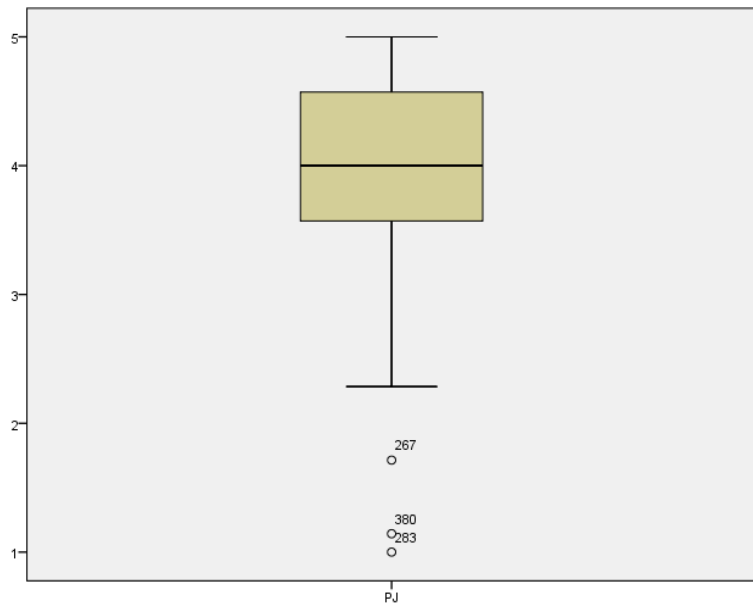
Sincerely,
IRB Administration

APPENDIX C

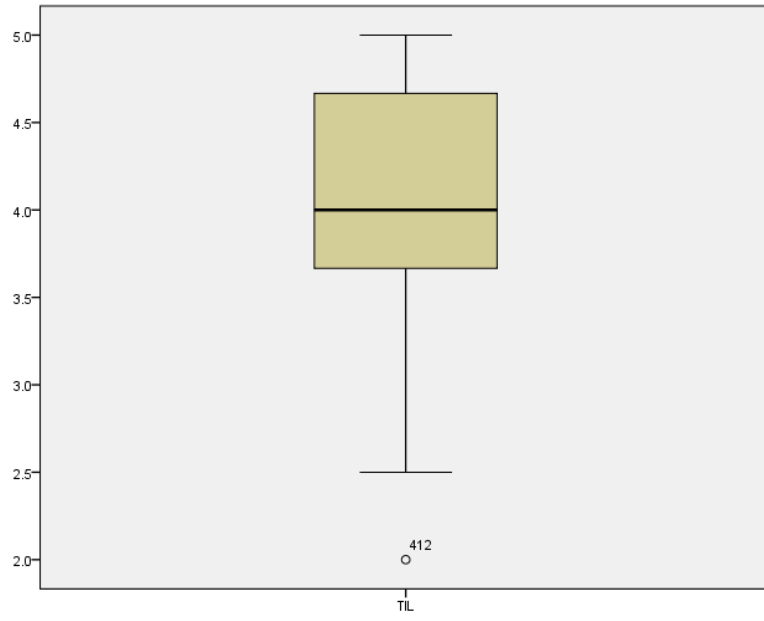
Box Plots for the Variables of Second Round Data



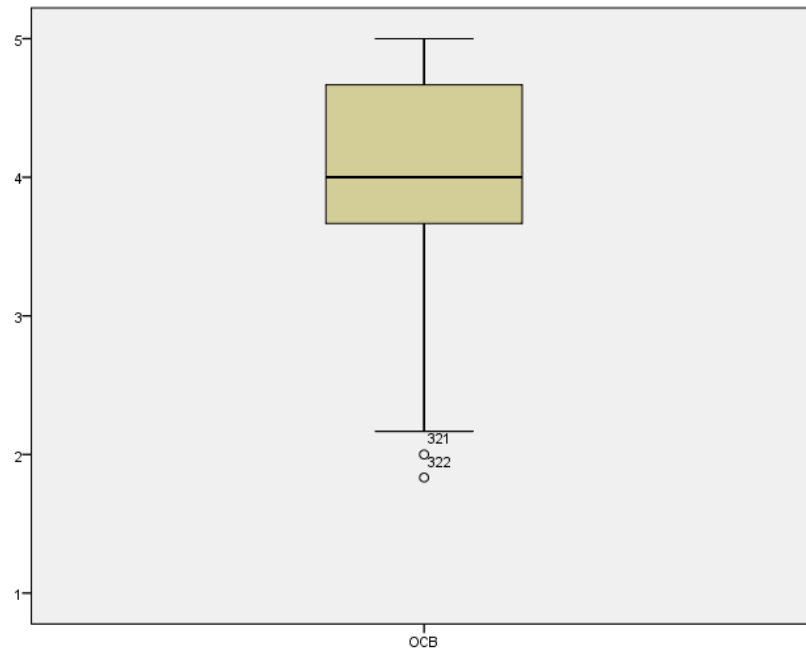
PJC



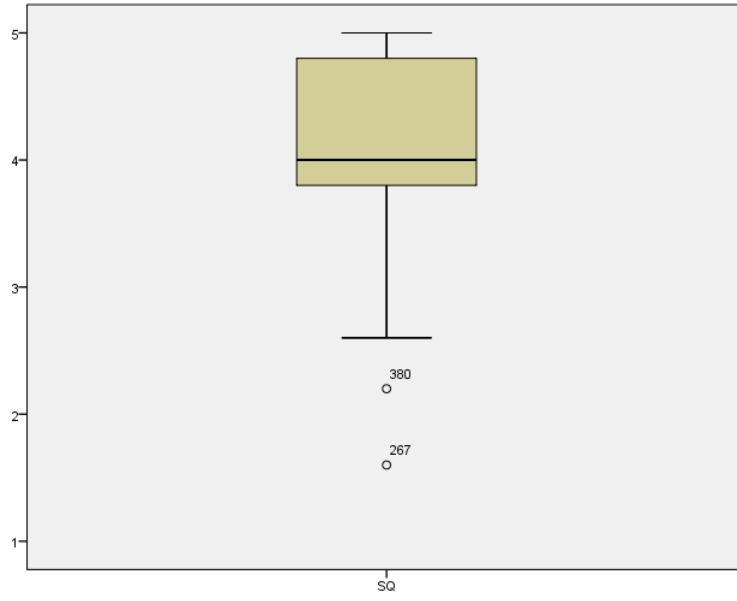
TIL



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APPENDIX D

Descriptive Statistics for the 5 Variables

		Statistic	Std. Error	
SL	Mean	3.6290	.02813	
	95% Confidence Interval Lower Bound	3.5737		
	for Mean	Upper Bound	3.6843	
	5% Trimmed Mean	3.6500		
	Median	3.6667		
	Variance	.339		
	Std. Deviation	.58264		
	Minimum	1.13		
	Maximum	4.58		
	Range	3.46		
	Interquartile Range	.83		
	Skewness	-.499	.118	
	Kurtosis	.599	.235	
PJC	Mean	3.9950	.03184	
	95% Confidence Interval Lower Bound	3.9324		
	for Mean	Upper Bound	4.0576	
	5% Trimmed Mean	4.0148		
	Median	4.0000		

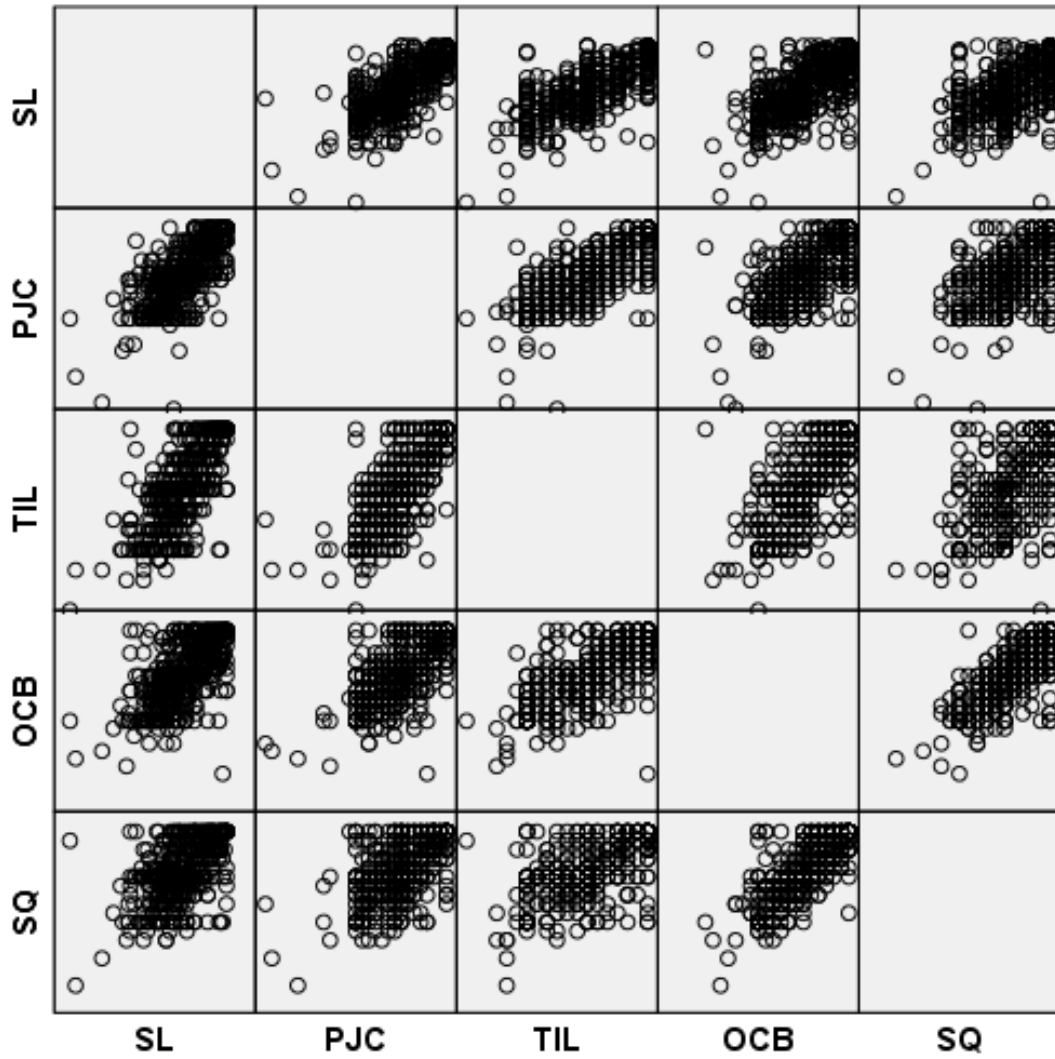
	Variance	.435	
	Std. Deviation	.65946	
	Minimum	1.00	
	Maximum	5.00	
	Range	4.00	
	Interquartile Range	1.00	
	Skewness	-.540	.118
	Kurtosis	.950	.235
TIL	Mean	4.0622	.03214
	95% Confidence Interval Lower Bound for Mean	3.9990	
	Upper Bound	4.1253	
	5% Trimmed Mean	4.0794	
	Median	4.0000	
	Variance	.443	
	Std. Deviation	.66561	
	Minimum	2.00	
	Maximum	5.00	
	Range	3.00	
	Interquartile Range	1.00	
	Skewness	-.212	.118
	Kurtosis	-.784	.235
OCB	Mean	4.0462	.03209

	95% Confidence Interval Lower Bound	3.9832	
	for Mean	Upper Bound	4.1093
	5% Trimmed Mean	4.0678	
	Median	4.0000	
	Variance	.442	
	Std. Deviation	.66462	
	Minimum	1.83	
	Maximum	5.00	
	Range	3.17	
	Interquartile Range	1.00	
	Skewness	-.326	.118
	Kurtosis	-.441	.235
SQ	Mean	4.1538	.03164
	95% Confidence Interval Lower Bound	4.0917	
	for Mean	Upper Bound	4.2160
	5% Trimmed Mean	4.1829	
	Median	4.0000	
	Variance	.429	
	Std. Deviation	.65526	
	Minimum	1.60	
	Maximum	5.00	
	Range	3.40	

Interquartile Range	1.00	
Skewness	-.466	.118
Kurtosis	-.270	.235

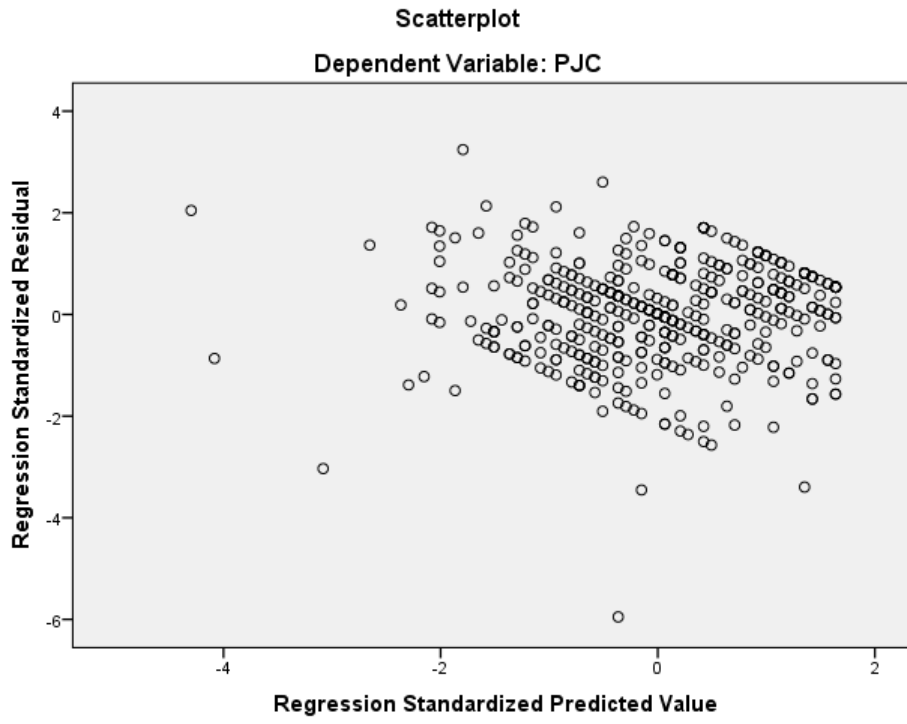
APPENDIX E

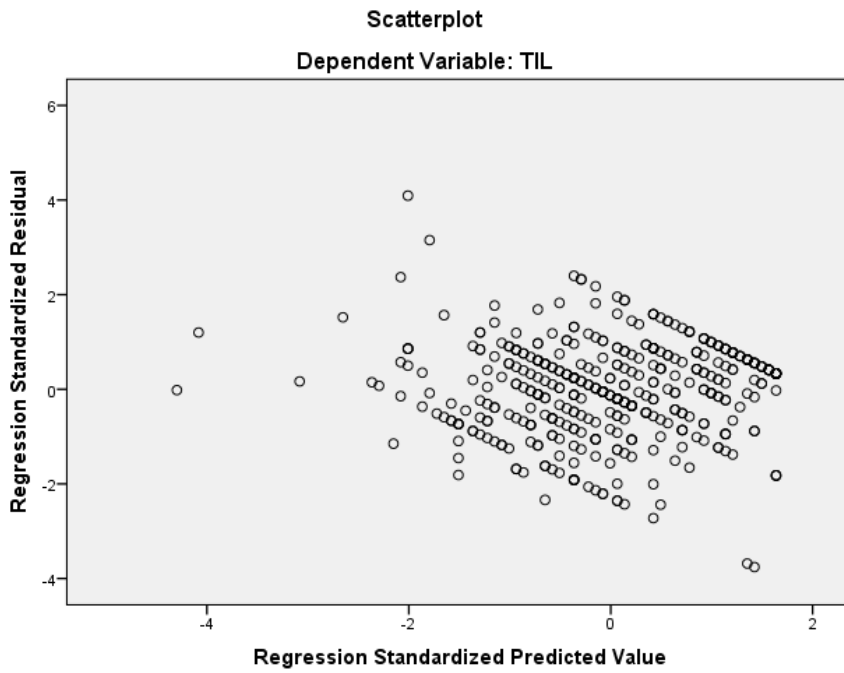
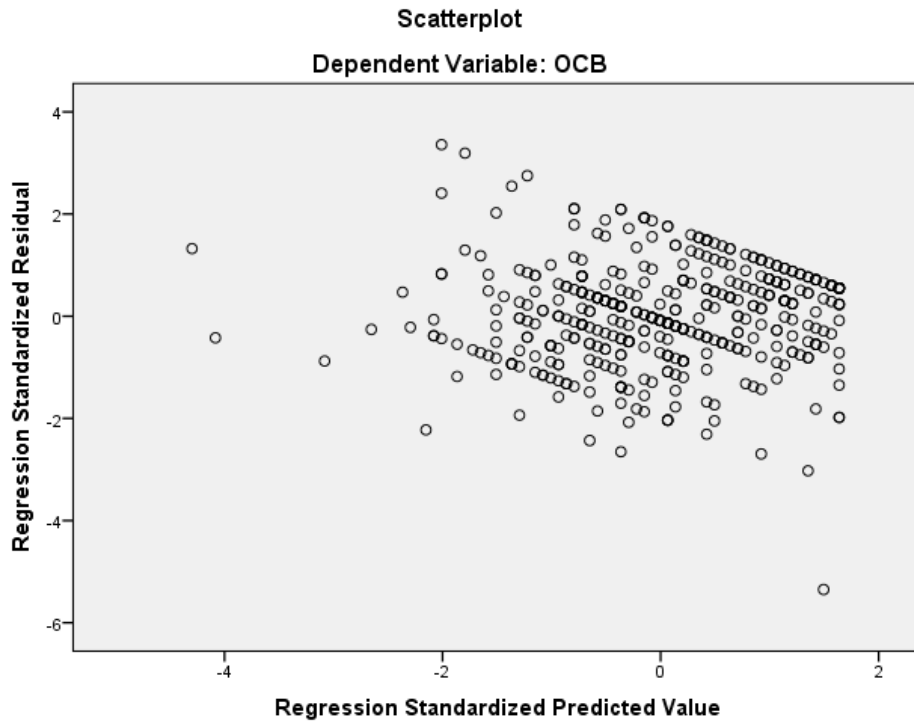
Bivariate Linearity Scatterplots

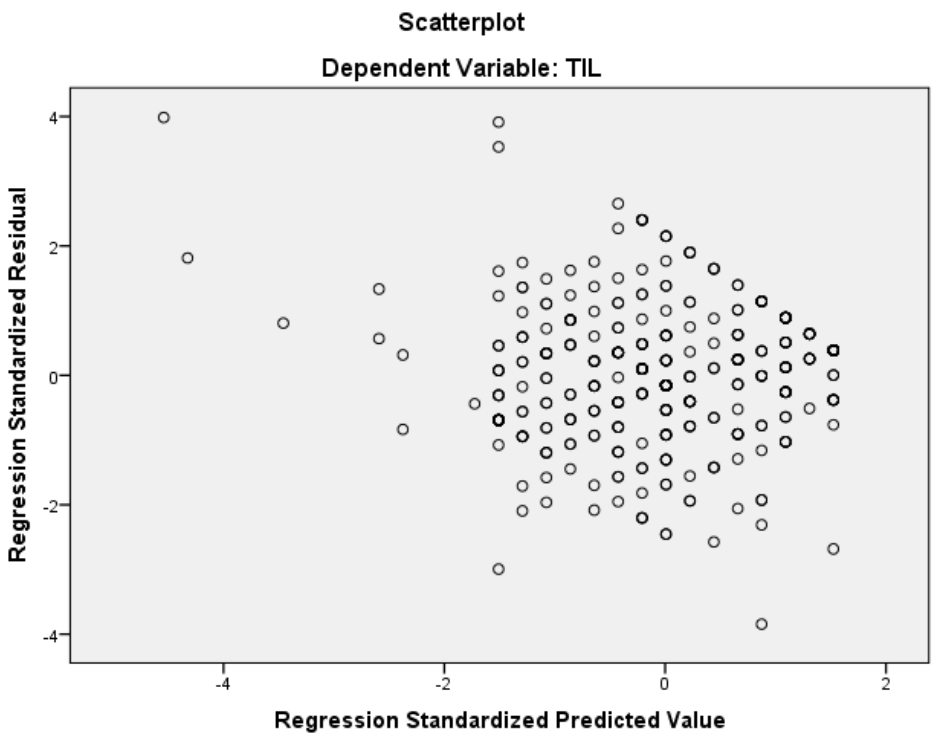
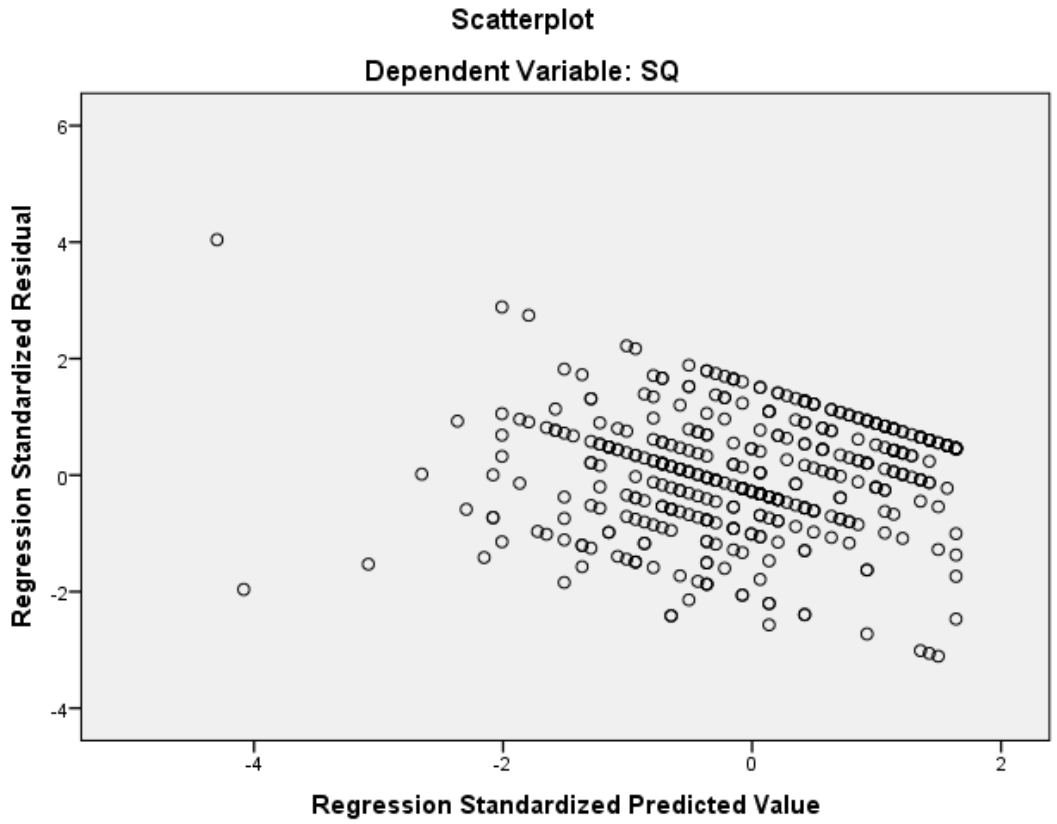


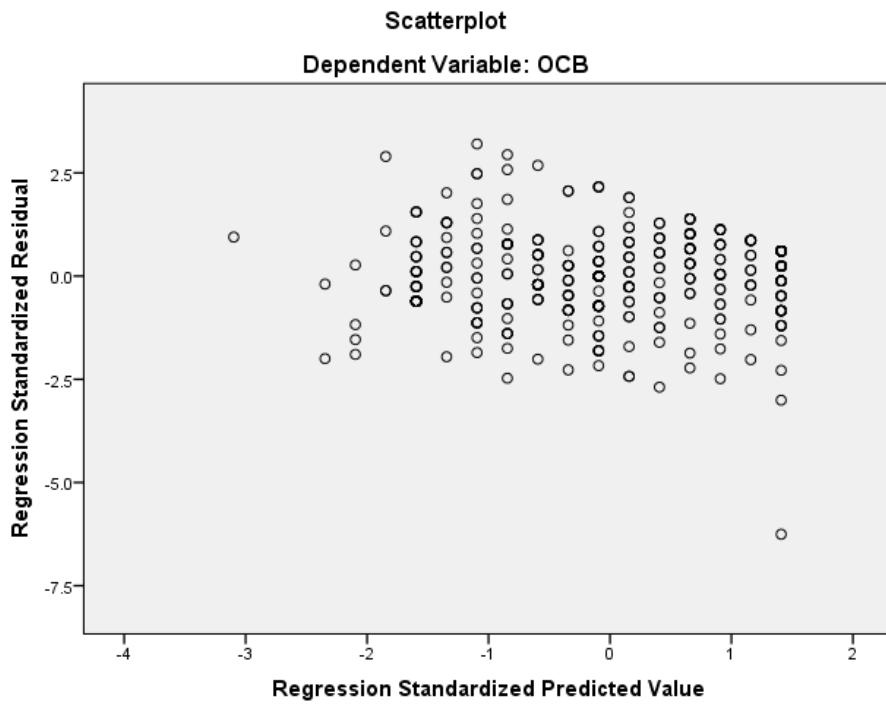
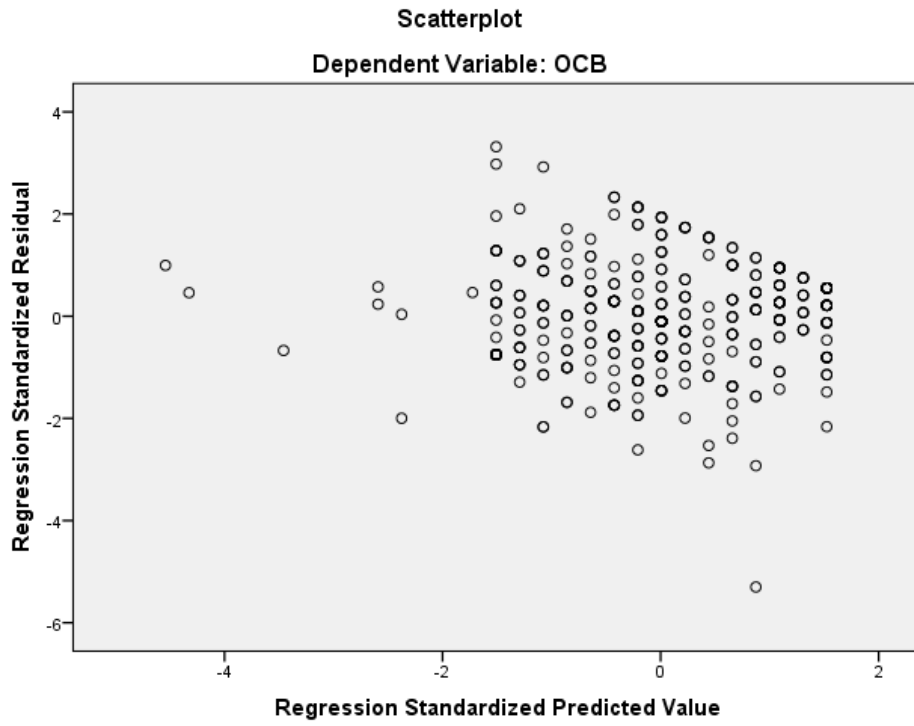
APPENDIX F

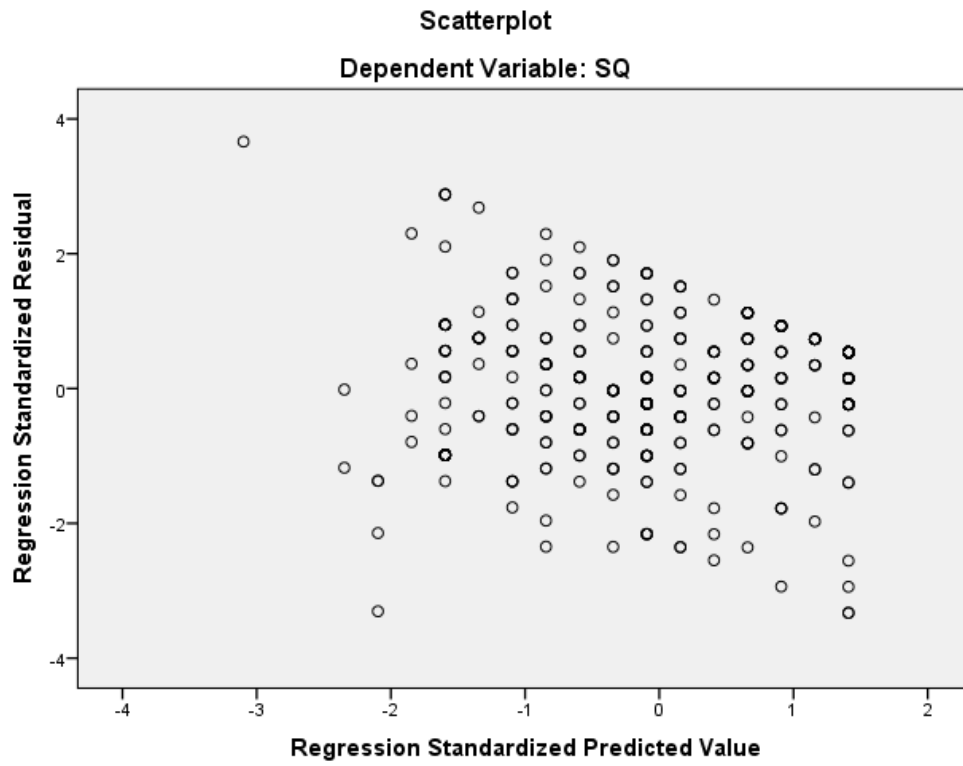
Homoscedasticity Scatterplots







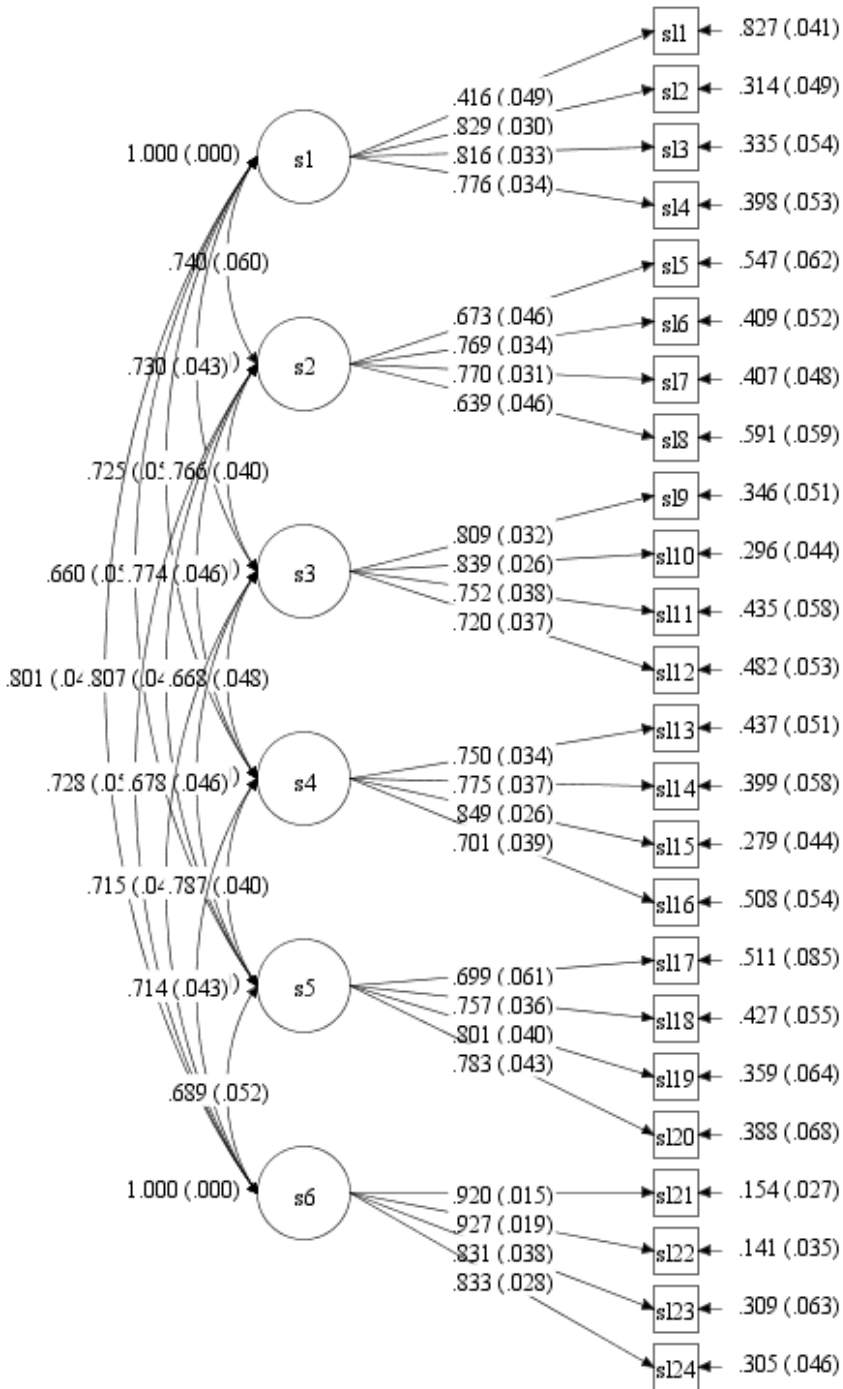




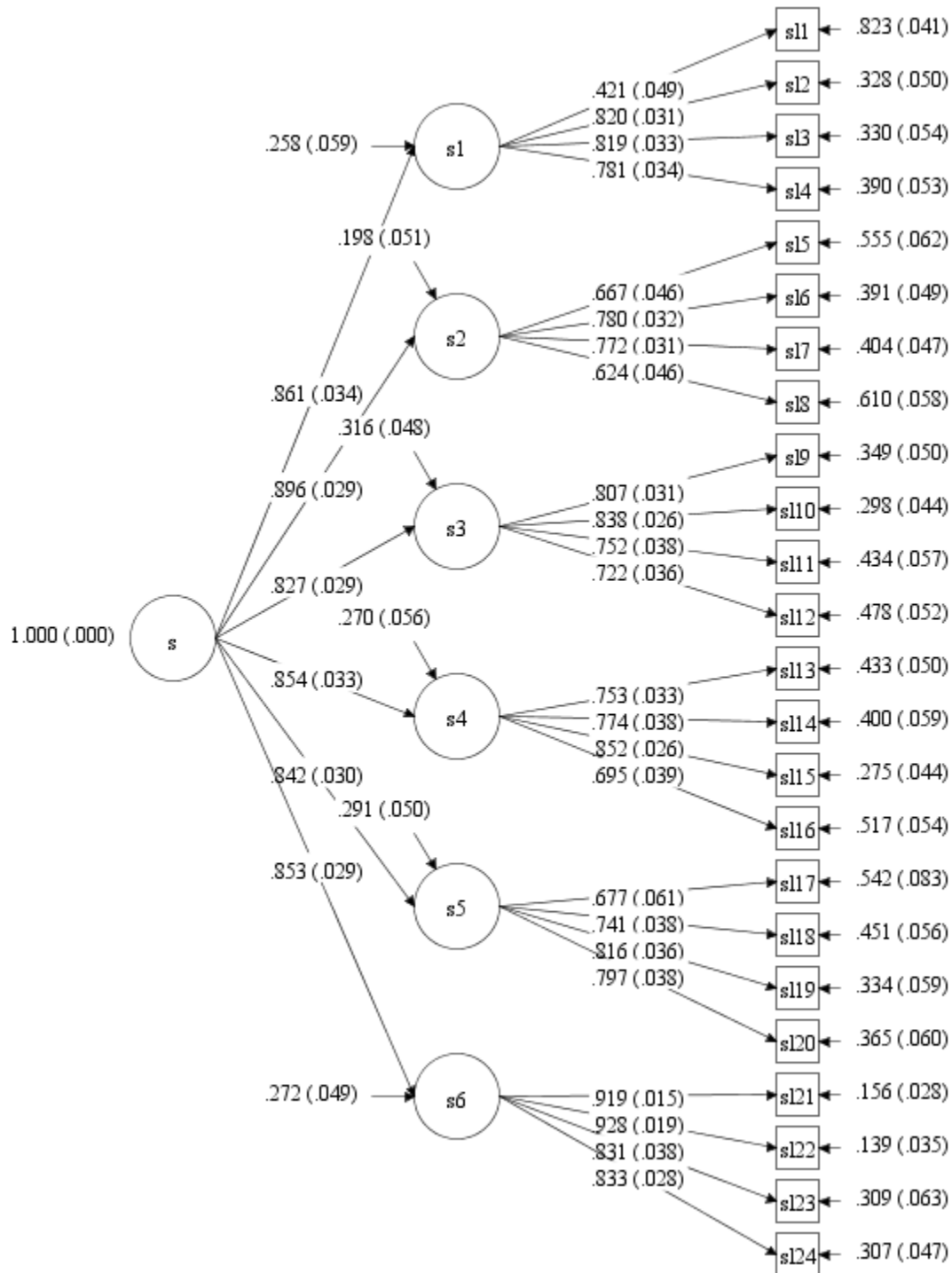
APPENDIX G

CFA for Servant Leadership

Six factor model (Standardized)



Second-order factor model (Standardized)



APPENDIX H

Model Fit Information

Number of Free Parameters 158

Loglikelihood

H0 Value -19419.810

H0 Scaling Correction Factor 1.5450

for MLR

H1 Value -18182.783

H1 Scaling Correction Factor 1.3033

for MLR

Information Criteria

Akaike (AIC) 39155.619

Bayesian (BIC) 39797.330

Sample-Size Adjusted BIC 39295.932

$(n^* = (n + 2) / 24)$

Chi-Square Test of Model Fit

Value 1951.941*

Degrees of Freedom 1066

P-Value 0.0000

Scaling Correction Factor 1.2675

for MLR

* The chi-square value for MLM, MLMV, MLR, ULSMV, WLSM and WLSMV cannot be used for chi-square difference testing in the regular way. MLM, MLR and WLSM chi-square difference testing is described on the Mplus website. MLMV, WLSMV, and ULSMV difference testing is done using the DIFFTEST option.

RMSEA (Root Mean Square Error Of Approximation)

Estimate	0.044
90 Percent C.I.	0.041 0.047
Probability RMSEA <= .05	0.999

CFI/TLI

CFI	0.919
TLI	0.915

Chi-Square Test of Model Fit for the Baseline Model

Value	12120.775
Degrees of Freedom	1128
P-Value	0.0000

SRMR (Standardized Root Mean Square Residual)

Value	0.052
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APPENDIX I

Syntax for Testing Hypothesized Model

Mplus VERSION 7.4
MUTHEN & MUTHEN
12/22/2018 10:20 PM

INPUT INSTRUCTIONS

TITLE:

SL2-mediation

DATA:

File is C:\Users\test\Desktop\s12.dat;

VARIABLE:

Names are s11-s124 pjc1-pjc7 til1-til6 ocb1-ocb6 sq1-sq5;

Usevariables are s11-s124 pjc1-pjc7 til1-til6 ocb1-ocb6 sq1-sq5;

ANALYSIS:

Estimator is MLR;

OUTPUT:

Stdyx mod(0)

MODEL:

s1 by s11-s14;

s2 by s15-s18;

s3 by s19-s112;

s4 by s113-s116;

s5 by s117-s120;

s6 by s121-s124;

s by s1-s6;

pjc by pjc1-pjc7;

til by til1-til6;

ocb by ocb1-ocb6;

sq by sq1-sq5;

sq on ocb s;

ocb on til pjc s;

til on pjc s;

pjc on s;

MODEL INDIRECT:

ocb ind pjc s;

APPENDIX J

Standardized Correlations and Indirect Effects among Variables

Two-Tailed

		Estimate	S.E.	Est./S.E.	P-Value
SQ	ON				
	OCB	0.823	0.055	14.968	0.000
	S	0.061	0.066	0.925	0.355
OCB	ON				
	TIL	0.502	0.093	5.386	0.000
	PJC	0.283	0.086	3.295	0.001
	S	0.066	0.075	0.882	0.378
TIL	ON				
	PJC	0.587	0.077	7.659	0.000
	S	0.334	0.081	4.125	0.000
PJC	ON				
	S	0.758	0.034	22.169	0.000
Effects from S to OCB					
	Indirect	0.214	0.066	3.249	0.001