Confucian Air: Examining the effects of East Asian culture on the quality of service provisions in an airline context.

By

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STATEMENT OF CANDIDATE

I, Doris Viengkham, certify that the work in this thesis entitled *Confucian Air: Examining the effects of East Asian culture on the quality of service provisions in an airline context*, has not been previously submitted for a degree, nor has it been submitted as part of requirements for a degree to any other university or institution other than Macquarie University.

I also certify that the thesis is an original piece of research and has been written by me in its entirety. Any help or assistance that I have received in my research work, including the preparation of the thesis itself, have been appropriately acknowledged.

In addition, I certify that all information sources and literature used are indicated in the thesis.

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This research meets the requirements of the National Statement on Ethical Conduct in Human Research (2007). The National Statement is available at the following web site:
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ABSTRACT

The purpose of this study was to examine the effect of the traditional SERVQUAL scale (Parasuraman *et al*. 1988), and a newly developed scale called the *Confucian Branded Service Quality* (CBSQ) on customer loyalty, mediated by satisfaction and perceived competitiveness. The study distinguishes between a well established Western construction of service quality, and a newly proposed measure that is the CBSQ that captures the underlying cultural influences of East Asian values on service staff performance. The focus is on distinguishing the two service quality scales, and how these impact customer loyalty in a commercial airline context. Using original data collected from a survey of 476 respondents, service quality models in two categories (East Asian airlines and Western airlines) were tested. Structural equation modelling (SEM) was applied, resulting in models for the two airline categories, establishing notable differences in perceptions of service quality between Asian and Western airlines. Furthermore, the level of Confucian values of two distinct ethnic groups (East Asian and Caucasian) was measured to determine what effect this has on consumer evaluation and preference for either Asian or Western airlines. The results indicated that high Confucian values were not wholly unique to individuals of East Asian ethnicity, as previously thought, and that many of the same values are held by the Caucasian ethnic group. Ultimately, the study establishes key differences in customer loyalty between the two airline categories, as well as the mediating role of satisfaction and perceived competitiveness, providing a framework for future service quality research and East Asian studies.

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CHAPTER 1: INTRODUCTION

The performance of East Asian service brands in the hospitality industry consistently receive worldwide praise for its service excellence, as evidenced by their strong performance in hotel chains, restaurants and airlines. In their evaluation of hotel stays, reviewers often comment on the exceptional service of employees who are efficient in their delivery, and hospitable in demeanour, placing a sense of care at the heart of the experience. This performance is even recognized in the airline industry in Skytrax's 5-Star Airline Rating (2015) award – the highest standard for overall service quality – where six of the seven airline brands listed come from the Asia Pacific region. In the past, Western nations were better known as pioneers of the hospitality industry (Mattila 1999), yet it seems these roles have since reversed.

The strong performance of East Asian countries such as Japan, South Korea, Hong Kong, Taiwan and China has long been of interest to those wishing to understand how the region has experienced phenomenal growth in recent time (Zhou *et al.* 2010). Culturally, East Asia has been categorized as a group of nations influenced by a long tradition of Confucian teachings and principles, which are understood to have a prevailing influence on individual values and norms (Rowley & Warner 2010). Confucian culture has been used to explain a nation's institutional development, as recognized in studies on East Asian academic success (Marginson 2010), and business management practices (Zhu & Warner 2000; Leung & Bozionelos 2004). But it has also been applied at the micro-level to explain the dimensions of individual performance and competitiveness (Baumann & Hamin 2011; Baumann & Winzar 2014), and to understand consumer behaviour (Monkhouse *et al.* 2013).

Despite the recognition that Confucian culture plays a formative role in the shaping of attitudes and behaviours, few studies have examined its influence on frontline employee performance in a service context (Tsang 2011). This exploratory study fills this gap by investigating how the influences of Confucian culture may shape the quality of service provisions in an airline context. Specifically, the study will consider how the performance and behaviours of the frontline employees providing the service reflect aspects of culture which distinguish the service as 'distinctly Confucian'.

Studies that have examined the influence of culture on service quality, have mostly applied dimensions developed by Hofstede (1980), Trompenaars and Hampden-Turner (1999) and Hall (1976) in explaining how consumer expectations and perceptions are shaped (Donthu & Yoo 1998; Furrer *et al.* 2000). These dimensions, as useful as they are in broadly conceptualizing and understanding cultural differences at the national level, place too much emphasis on situating individuals at either extreme ends of the spectrum. For example, Hofstede's (1980) dimensions of Individualism and Collectivism have been applied extensively to explaining the "I" versus "We" consciousness supposedly held by people of Western and Asian nations, respectively. In a further study geared specifically towards explaining Asian culture, "Confucian Dynamism" (Hofstede 1991) was introduced, organizing values in polar opposites (i.e. positive and negative), when in fact the very essence of Confucianism expresses co-existence and harmony (Fang 2003).

Furthermore, efforts to understand Asian culture through a Western lens are also evident across studies of service quality, which adopt generic Western-conceived metrics. In particular, SERVQUAL, as developed by Parasuraman, Zeithaml and Berry (1988) remains the most widely applied tool to assess a firm's performance in relation to its service provisions. More specifically, it is used as a tool to measure outcomes of customer satisfaction and loyalty.

Most, if not all, service businesses are concerned with providing their customers with consistently high levels of service quality in an effort to gain their loyalty. However, what constitutes quality is arbitrarily construed, and affected by a number of factors within and beyond the provider's control (Parasuraman *et al.* 1985). In particular, the performance of the frontline employees and the moment of interaction with the consumer is often the moment that defines the service's quality (Bitner *et al.* 1990); therefore providing quality service is in the hands of the employee. In Japan, *omotenashi* refers to the spirit of hospitality, and a wholehearted approach to service by staff. It is not just established in an operations manual, but stems from a culture deeply rooted in tradition, such as Confucianism (Hobson 1994). This concept is quite different to Western standards of service (Smith & Siguaw 2010), and whilst such distinction is readily observed, it has hardly been examined with regards to culture and performance as a driver of service quality.

This study examines the role of Confucian culture in shaping the behaviours and attitudes of frontline employees, and ultimately the quality of service provided. Despite SERVQUAL's

many strengths as a diagnostic tool of service performance, its applicability outside of its Western origins is less clear. In fact many researchers have argued that the assumptions of its universal relevance is inaccurate, and that a blind adoption of the Western developed metric to non-Western contexts results in the omission of important culture-specific dimensions (Kettinger & Lee 1994; Donthu & Yoo 1998; Imrie *et al.* 2002; Raajpoot 2004; Stanworth *et al.* 2014). As such, there is a growing need to advance the discourse on service quality by developing and refining a dimensionality distinct from Western standards of service, yet coherent with the quality of East Asian hospitality.

This study undertakes this task by introducing the *Confucian Branded Service Quality* (CBSQ) scale that seeks to capture the performance and processes of service oriented East Asian brands, as a measurable construct unique from SERVQUAL. In doing so, it may improve the understanding of the relationship between service quality and loyalty, via satisfaction and competitiveness for Asian service brands.

As loyalty is the ultimate outcome of excellent service quality (Yu & Dean 2001), such outcomes can only be understood in relation to the antecedent dimensions used to measure them. Increasingly, the intense competition of global markets is forcing services to become more standardized in an effort to be efficient, convenient and reliable (Carman & Langeard 1980), all the while meeting the demands of ethnically and culturally diverse consumers. Although it has been highlighted that the uniformity of service provisions helps ensure consistency (Victorino *et al.* 2012), this is an approach that would disadvantage service brands that can differentiate themselves on the basis of a unique cultural heritage.

1.1 – RESEARCH OBJECTIVES

This thesis aims to investigate the drivers of service loyalty, and distinguish between CBSQ and SERVQUAL scales in their application to Asian and Western airline brands. As this study is exploratory in nature, it extends the service quality literature with an investigation of the dimensions of service quality from a novel perspective. More emphasis is placed on understanding the antecedents of loyalty (i.e. service quality), rather than the outcome itself, in an effort to establish whether a discernible difference exists between brands embedded in different ‘cultural origins’.

In particular, this study is focused around three fundamental, yet interrelated, research objectives:

1. To introduce and refine a culture-specific measure of service quality which captures the underlying performance of frontline employees inspired by Confucian culture and traditions.
2. To determine the most effective predictor of loyalty, as mediated by satisfaction and competitiveness for each brand category (i.e. Asian and Western).
3. To examine whether perceptions of service quality vary by the respondent's cultural orientation (i.e. Confucian value).

A set of hypotheses are developed from the literature in Chapter 2, and organized around the three research objectives listed above.

1.2 – CONTRIBUTIONS OF CURRENT STUDY

This study makes a unique contribution in four distinct ways. Firstly, this study furthers the understanding of East Asian service quality by introducing the *Confucian Branded Service Quality* (CBSQ) scale, as a unique measure of frontline employee performance. Secondly, this study compares the CBSQ to the traditional measure of SERVQUAL to test its relative effect in explaining loyalty towards Asian brands vis-à-vis Western brands. This is a first attempt to empirically validate the perceived differences in service quality in a controlled context. Thirdly, this study reconceptualizes the relationship between satisfaction and loyalty, by introducing perceived competitiveness to the framework. Culture, which can also be regarded as a unique asset (Banks 1993) is formative in shaping a firm's and individual's competitive attitude (Baumann & Pintado 2013), and accordingly may render a brand to be more innovative in its performance, as perceived by the consumer. And lastly, this study provides insights about the effect that ethnicity and cultural orientation have on the perception of service quality between the two brand groups.

1.3 – OUTLINE OF FOLLOWING CHAPTERS

The remainder of this thesis is organized in four chapters. Chapter 2 reviews the literature and theoretical explanations related to this study. Specifically, a discussion on the role of East Asian Confucian culture in shaping values and attitude towards work is provided, to establish the foundation for this study's development of an alternative service quality model. Next, research on service quality, satisfaction, perceived competitiveness, and loyalty are reviewed in order to develop the conceptual framework for this study. Chapter 3 presents the research methods of this study, including methodology, latent variables, data and methods of analysis to examine the conceptual model across two airline groups. Chapter 4 reports the results from data analysis. Chapter 5 provides a discussion of the study's findings. And Chapter 6 discusses implications for theory and practice, as well as recommendations for future research.

CHAPTER 2: LITERATURE REVIEW

This exploratory study is an attempt to investigate the influence of Confucian culture on the quality of service provisions of East Asian brands. Given the limited attention that has been placed on the development and measurement of service quality constructs outside of their nascent Western context, the findings generated from this study provides a step in the direction of understanding how global service brands, particularly in the hospitality sector, can differentiate on the basis of cultural attributes. The study situates itself within the landscape of service quality, by developing and testing a model to better understand the drivers of loyalty.

The literature review is organized in two sections. First, an overview of the theoretical foundation underpinning East Asian Confucian culture is provided to outline its influence on the formation of value and attitudes. Next, a discussion on the role of culture and the provision of service is provided to establish the basis for this study's introduction of the *Confucian Branded Service Quality*. Then an outline of the dominant paradigm of service quality and its relationship to satisfaction, competitiveness, and loyalty are included, to highlight the gaps in which this study seeks to address. Taken together, a conceptual model is proposed and hypotheses developed to address the three research objectives of this study.

2.1 – THEORETICAL FOUNDATION

2.1.1 – The Influences of East Asian Confucian Culture

Confucius was an ancient Chinese philosopher, politician and teacher, and though he was not considered influential during his lifetime, his teachings have endured to form the basis of values across East Asian countries (Tu 1988). Confucian teachings are mainly concerned with the practical expression of moral conduct, social relationships, and principles of good governance, with a sustained interest in personal ethics, virtuous behaviour, social harmony, and continuous learning (Tamai & Lee 2002).

The philosophy sets forth principles that define the appropriate manners and attitudes towards the self and others, and strongly influences communication patterns which emphasise social

relationships in East Asia (Yum 1988). The basic teachings of Confucius are distilled in four core but interrelated concepts (Tu 1998):

- Goodwill (*Ren*) is the capacity for the individual to extend generosity and compassion to all fellow humans, and manifests as a devoted allegiance to his fellow community. An important value of goodwill is that of *reciprocity* which entails treating others as one would wish to be treated. In practice, it implies that the obligation to return favours is genuine and not a forced encounter.
- Protocol (*li*) refers to the unwritten laws and rules of proper conduct which governs how one should carry themselves in all aspects of life, including their behaviour and desires. Individuals should seek to save *face* by maintaining one's public dignity and avoiding threats to public image (Lim 2003).
- Filial Piety (*hsiao*) emphasizes to love and respect one's family first, before extending it to greater society. Promoting the maintenance of harmonious relationship is of paramount importance to human relationships and social order.
- Doctrine of the Mean (*zhong yong*) is an appreciation of the central virtues that achieve balance between extremes. In practice, it entails an individual to be sincere and honest, whilst exercising moderation and equilibrium in life.

The teachings and traditions of Confucianism have influenced a number of East Asian countries including Japan, South Korea, Taiwan, Hong Kong, Singapore and Vietnam, who have historically shared strong literary and cultural ties with China (Little & Reed 1989). Despite the varying ideological and political stance of different governments, as well as the rapidly changing demographic landscape (Kim & Oh 2011), the influence of Confucianism has remained a constant, underpinning the social and moral fabric of each nation to develop a unique Asian identity (Milner 1996). In global studies on cultural clusters (Gupta *et al*. 2002), Confucian Asia is recognized and confirmed as one of ten distinct groups, not only based on geographic proximity (Furnham *et al*. 1994), but also ethnic social capital (Portes & Zhou 1994) and socio-psychological variables such as attitudes, values and work goals (Haire *et al.*1996; Ronen & Shenkar 1985).

Researchers have highlighted that there are distinct differences between these countries (e.g. Tamai & Lee 2002), but others have observed similarities in cultural and workforce performance that have warranted a categorical approach in business studies (Baumann *et al.*

Forthcoming). In particular, a study by Cho and Kim (2012) comparing Asian civic values of South Korean, Hong Kong and Taiwanese students revealed a love for traditional culture was explicit across all three groups, with a common respect for cultural identity and a heightened sense of responsibility to preserve it. These findings suggest that despite the pressures of modernization and Western influence, life-long lessons informed by Confucian teachings remain an integral part of social identity, which is carried from schooling to the workforce (Arcodia 2003).

The distinctive values of Confucian culture held by East Asian states have long been honoured for its emphasis on ethical mindfulness and unique blend of secular rationalism. But most important to the preservation of Confucian tradition is its ability to counter the influence of 'unsavoury' aspects of Western culture (Tan 1995; Tu 1989), reinforcing the dichotomy between Eastern and Western philosophies (Xiangjun 2006). This contrast has instigated resurgence in interest, in what scholars have identified as a *Confucian renaissance* (Hall & Ames 1987; Little & Reed 1989; Tu 1996). In particular, in light of the economic boom of East Asia of the last half century, academic scholars have been quick to argue that underlying traits embedded in the "Confucian ideal of society" (Cheng 1990) are responsible for the unprecedented growth witnessed by the modern world (Ornatowski 1993; Kim & Park 2003; Kim & Strudler 2012; Zhang *et al*. 2012). Furthermore, Kahn's (1979) neo-Confucian hypothesis stipulated that the common cultural heritage of East Asian countries, which permeates both national and corporate levels, constitutes a competitive advantage for successful business activities.

In an effort to conceptualize and measure the unique cultural traits of East Asia, Hofstede (1991) extended his four-dimension monograph of national culture (i.e. masculinity, power distance, uncertainty avoidance and individualism) to include a fifth dimension based on a Chinese Values Survey called "Confucian Dynamism" (Hofstede 1991; Chinese Cultural Connection 1987; Minkov & Hofstede 2010). The dimension captures values imparted by Confucian teachings, and presents them in polar opposites. Such Confucian ideals that reflected a dynamic, future-oriented mentality were considered Long-term Orientation, whereas static and traditional thinking were Short-term. However, the dimensions are limited in encompassing broader aspects of Confucian culture that underlie performance attributes (Fang 2003), and are only capable of explaining a fraction of the underlying values and norms abided by many of East Asian origin (Newman & Nollen 1996).

More recent attempts to capture the essence of Confucianism as a measurable construct has been made by researchers who advocate an indigenous psychological, or "bottom up" approach to examining the knowledge, skills and beliefs individuals have about themselves within their natural context (Kim & Park 2006). For example, Monkhouse, Barnes and Pham (2013) developed a scale to capture Confucian values in consultation with East Asian families and scholars to be applied to studies in consumer behaviour. Tsang (2011) developed and refined dimensions of Chinese cultural values to understand frontline employees' attitude and behaviours towards the provision of service. And Stanworth, Hsu and Chang (2014) used a multi-stage approach to identify six service quality dimensions, which could be used to evaluate service in Asian hospitality settings. Such attempts provide a more holistic understanding of the nature of Confucian culture which doesn't attempt to dichotomize elements, such as Hofstede had in his conceptualization of "Confucian Dynamism" which propound that there are both positive and negative traits that do not interrelate.

Confucian Culture and Attitude Towards Work

Examination of East Asian Confucian culture in a business management context has been widely applied at the macro-level. The focus has been on analysing the impact of culture on economic development, social civility, and the ways in which political and social institutions have been shaped by historic tradition. In particular, the concept of the Confucian Work Ethic (CWE) has emerged in explaining how values relate to individual job attitudes such as organizational commitment, motivation to work, and performance orientation (Leong *et al*. 2013). Correlations have been drawn between Confucian values and Weber's (1968) concept of the Protestant Work Ethic (PWE), wherein the latter has been established to have played an integral role in the development of Western capitalism. For example, one finding revealed that PWE dimensions of hard work and internal motivation to perform were strongly linked to values associated with Confucian teachings that are Future-oriented, such as persistence, observing relational hierarchy, thrift and sense of shame (Lim & Lay 2003; Redding 1999; Dana 1999).

This notion of work ethic in an Asian context has implications for the meaning, value and motivation of work, which differ markedly from the Western perspective. The social psychological factors that shape the meaning of work in the Weberian sense bear less weight in explaining the industrialization process and performance of East Asian firms, where the

emphasis remains on diligence, loyalty, education, and respect for authority. For instance, Kim and Park's (2003) study on the "economic miracle" of South Korea was largely attributed to the 'ideological mobilization', commitment and motivation of its labour workforce. They found that motivation to work via voluntary participation and the maintenance of harmonious workplaces was grounded in loyalty to the nation and ensuring its prosperity – attributes linked to teachings inspired by Confucian principles. Moreover, links between Confucian values were found to facilitate the development of kinship with colleagues and employers, which increased the emotional attachment to the organization (Chan *et al.* 2011).

Extant studies on how Confucian values are internalized and applied to practice with regards to work motivation, service orientation, workplace civility, and ethical relations have demonstrated that East Asian civic and social norms flow naturally into the organizational setting (Chan *et al.* 2011; Ip 2009; Hong 1997). In fact, a conceptual study on the affective and normative motives to work overtime in Asian organizations (Kang *et al.* 2015) revealed that such behaviours were intrinsic, fuelled by a desire to achieve challenging goals. Such is consistent with the Confucian tenet of protocol which promotes diligence and hard work. Moreover, Hong (1997) discusses that the dynamic of Asian workplaces and the attitude to work therein is grounded in the collectivist nature of society, respect for hierarchy, emphasis on harmony, and compliance to rules and procedures.

Traditional explanations of motivation that underpin workplace behaviour are often placed at the rudimentary level of Maslow's (1954) hierarchy of needs, to McClelland's (1961) driver-based theories of affiliation, achievement and power, which assume that culture is not involved. However, a recent exploratory study on workforce performance at the micro level (i.e. individual) highlighted that East Asians, particularly South Koreans, outperformed those from Western countries on the dimensions of competitive attitude, speed and willingness to serve (Baumann *et al.* Forthcoming). This was in stark contrast to the performance of individuals from Western nations.

2.1.2 – Attitude and Behaviours of Frontline Employees

Frontline employees, according to Zeithaml and Bitner (2000), are referred to as 'boundary spanners' as they provide the link between the customer, environment and organization. They play a critical role in the filtering and interpretation of information. More importantly, the overall judgement of service quality is largely dependent on the behaviours and attitudes of

the frontline employee in their encounter with the consumer (Bitner 1990; Ambady and Rosenthal 1993; Barker & Hartel 2004).

Unlike physical goods which can be assessed on a number of hard attributes or tangible cues, services are characterized by their heterogeneity, perishability and intangibility – making the evaluation of quality both difficult to conceptualize and measure as a construct (Parasuraman *et al.* 1985; Lovelock & Yip 1996). Some studies have highlighted that in service exchanges with a high level of interaction between the customer and employee, the *interpersonal* element is a major determinant of satisfaction (Adelman *et al.* 1994; King & Garey 1997). Martin and Lundberg (1991) exemplified this notion in their study of a US restaurant chain, where 15 percent of customers stopped dining because of product dissatisfaction, but 67 percent cited 'an indifferent attitude' shown towards them by employees.

Human interaction is a critical part of the overall service with the customer, and the behaviours of the individuals providing the service is a key component in the determination of quality (Nickson *et al.* 2005). Furthermore, it has been suggested that the positive attitudes towards service staff that result from a good experience are transferred directly towards the firm or brand, resulting in more loyal tendencies (Bove & Johnson 2000). In Witkowski and Wolfinbarger's (2002) comparative study of German and American service staff, it was documented that the overall lower perception of service quality was attributed to a "notoriously unfriendly" attitude towards the consumer at times.

Increasingly, service firms are concerned with attracting employees who possess not only the right attitude and 'soft skills' (Caudron 1999; Robles 2012), but also the attributes that favourably appeal to consumers' visual and aural senses (Nickson *et al.* 2001). These are generally developed through rigorous training and/or monitoring programs, with an emphasis on attitudinal restructuring of employees to fit the culture and image of the organization (Hochschild 1983; Guerrier & Adib 2003). In Individualistic and egalitarian countries such as the United States, some service workers are found to be confronted by role conflict when required to subordinate their feelings or beliefs, particularly when asked to serve with the motto "the customer is always right, even when wrong" (Hartline & Ferrell 1996; Zeithaml & Bitner 2000). Accordingly, such role conflict stems from the discord between service role and requirement and the employee's sense of self in relation to others, an issue which is culture-bound (Shamir 1980). In contrast to the above example, a study on affective and normative behaviours to work overtime in East Asian employees was fuelled by motivation and a desire

for achievement (Kang *et al.* 2015), stemming from a norm embedded in culture. These discrepancies in attitude towards work, rooted in cultural values, arguably establish the basis for a perceived difference in service quality.

Most studies published in the field of service quality have addressed issues of satisfaction and service quality from the customer's perspective. Very few have focused specifically on the employees responsible for the provision of service, and ultimately quality. Susskind *et al.* (2000) and Pizam (2008) have called for more researchers to focus on the attitude and behaviour of frontline employees. This study extends this approach by also considering the role of culture.

2.1.3 – Importance of Culture on Service Provision

The attitudes and behaviours of an individual are influenced by their cultural value system (Tsang 2011). As such, frontline employees of different cultural backgrounds differ in their predisposition to providing service (Johns *et al.* 2003).

Reisinger and Turner (1998) suggested that some behaviours are universal, such as being polite, honest, friendly, sincere, and respectful; and that cultural differences can be found in facets dealing with proxemics, self-presentation, facial expressions and gestures. This was further highlighted by Tsang and Ap (2007) whose study on the cultural differences between Asian and Western tourists' perception of relational quality revealed that Asian customers focused on quality derived from interpersonal relationships and kindness, whereas Western customers placed emphasis on goal completion, time saving and efficiency.

Shames and Glover (1988) argued that culture has a great influence on what the service provider perceives as a need in the service exchange, and that the "employee enters the service experience with a predisposition to certain behaviours, based on their own national or ethnic culture, as well as the culture of the organization he or she represents". More importantly, the actions of the frontline employee become a manifestation of the organization's product offering to the consumer, which forms a distinct brand image (Nickson *et al.* 2001).

The complexities of culture have been well established in models such as Hofstede's (198) Value Survey Model; Kluckhohn and Strodtbeck's (1961) Value Orientation Model; and Hall's (1976) Low- and High-context Cultural Dimensions Model, which confirm that indeed cultural values shape the beliefs and attitudes and guide the behaviour of people. A more

valuable recognition is that cultural values also vary from one country to another, and can lead to nations developing *specific competencies* (Tsang 2011). In particular, Cultural Difference Theory (Banks 1993; Cole & Bruner 1971) argues that all cultures differ from one another and have varying assets, or as Bourdieu (1997) theorizes, "cultural capital". This study is concerned with the embodiment of cultural capital fuelled by both Confucian teachings and traditions of East Asian countries, and its unequivocal role in explaining individual performance in the Asian context. Specifically, this study is concerned with examining how cultural values derived from Confucian teachings play a formative role in shaping the "right" behaviours and attitudes possessed by frontline employees, and that such behaviours are evident in their quality of service provisions.

2.1.4 – Measuring Service Quality

The service quality domain is one which has been widely researched in the area of services marketing, and applied to a diverse range of contexts and industries. Since its conception, service quality research has been largely concerned with consumer behaviour and the confirmation-disconfirmation paradigm (Gronroos 1992). This states that when evaluating a service, the consumer compares the quality they have experienced, to that of prior expectations; and that the 'gap' that emerges from the comparison of expectation and perception of actual performance results in either dis/satisfaction with the service encounter (Parasuraman *et al.*1988).

The concept of quality has been subjected to scrutiny over the decades, where the search for a universal definition has yielded inconsistent results (Reeves & Bednar 1994). According to the Japanese philosophy, quality means "zero defects", whilst Crosby (1979) defines it as "conformance to requirements". In the absence of tangible cues on which to judge quality, consumers depend on other aspects such as the performance of contact staff in achieving the outcome. As such, Gronroos (1982) postulated two types of service quality: *technical* (outcome) and *functional* (process). This study is specifically concerned with the functional process of service quality, and the influence of culture on shaping the behaviours of the frontline employees who perform them.

Furthermore, the determination of quality in a service setting is contingent upon the dimensions used to measure it. SERVQUAL, developed by Parasuraman, Zeithaml and Berry (1988) remains the most widely used and accepted measure of service quality encounters, both in theory and practice (Buttle 1996; Asuboteng *et al*. 1996; Lam & Woo 1997).

The five core dimensions include: *tangibles* which measure the appearance of physical facilities, equipment and personnel; *reliability* which measures the ability to perform the service accurately; *responsiveness* which measures an employee's willingness to help customer; *assurance* which measures the knowledge and courtesy of employees; and *empathy* which measures the level of care and individualized attention provided. Taken together, the 22-item scale provides an evaluative instrument of the processes of a service with emphasis on the employees performing them.

SERVQUAL has been "criticized by different authors for diverse reasons, such as the operationalization of expectations, the reliability and validity of the instrument's difference score formulation and the scale's dimensionability across disparate industrial settings" (Sureshchander *et al.* 2001; Cronin & Taylor 1992; Babakus & Boller 1992). Despite its shortcomings, researchers have demonstrated its reliability and validity across replication studies (McCleary & Swan 1996; Lam & Woo 1997), but mostly in Western cultural settings.

However, SERVQUAL's replication in non-Western contexts have failed to validate its dimensional structure (Lam 1995; Akan 1995), and it has been argued that the Western construct is largely concerned with efficiency, task- and deadline orientation (Chen 2002), with less emphasis on the relational and interpersonal aspects of service (Stanworth *et al.* 2013).

Whilst SERVQUAL holds it merit in allowing researchers to ascertain data about the functional aspects of service quality, its feasibility beyond its Western origins is less clear. A review of extant cross-cultural consumer services research by Zhang, Beatty and Walsh (2008) highlighted the need to incorporate different components of culture, including values, beliefs, communication systems and material culture, to capture the richness and its impact on the service experience, in what they call "cultural service personality".

Researchers have argued that the lack of explanatory power of SERVQUAL in Asian settings means that significant and defining dimensions may be overlooked. A handful of studies have revealed that Western interpretations of service quality, namely SERVQUAL, do not readily apply in non-Western cultural contexts such as Chinese (Meng *et al.* 2009), Japanese (Winsted 1997), nor Middle Eastern (Raajpoot 2004). The main consensus being that the adoption of an instrument from foreign countries (i.e. Western to non-Western context) results in the omission of important culture-specific constructs indigenous to a particular culture (Yiu *et al.* 2001; Cheung *et al.* 2001). In Winsted's (1997) study on service

experience between Japanese and American consumers, it was revealed that although many of the same factors appeared for both groups, the behaviours underlying the constructs were markedly different. Studies by Donthu and Yoo (1998), Mattila (1999), and Furrer *et al.* (2000) also support this finding, confirming that consumers of different cultures tend to assign different meanings to established SERVQUAL dimensions.

In light of these discrepancies, it is the objective of this study to refine a culture-specific measure of service quality which captures the nuanced aspects of delivery of East Asian 'Confucian' brands. In doing so, it allows for a better understanding of its impact on the outcomes of satisfaction and loyalty to be achieved.

2.1.5 – Outcomes of Service Quality

Service quality has been established to be an important antecedent of outcomes such as satisfaction and loyalty. However, a misspecification of the dimensions on which a service encounter is evaluated may yield inconsistent results about consumers' attitudes and their behavioural intentions (Raajpoot 2004). As such, this study introduces the *Confucian Branded Service Quality* (CBSQ) scale, as a culture-specific measure of East Asian service quality, to test its ability to measure the following outcomes.

Customer Satisfaction

Achieving customer satisfaction remains a primary goal for most service firms, as its benefit towards improving profitability and lowered marketing expenditures has been well established (Reichheld 1996; Heskett *et al.* 1997). Additionally, it is widely accepted that satisfaction is a strong predictor for behavioural outcomes including recommendation, repeat patronage, and loyalty (Liljander & Strandvik 1995; Ravald & Gronroos 1996).

Dominant models of customer satisfaction within the services literature define it as "a summary cognitive and affective reaction to a service incident" whereby "satisfaction results from experiencing a service quality encounter and comparing said encounter with what was expected" (Oliver 1980; Rust & Oliver 1994). Traditionally, satisfaction has been measured via its cognitive component influenced by the disconfirmation paradigm (Parasuraman *et al.* 1988), where satisfaction emerges from the consumer's feelings that the performance has exceeded the expectation (i.e. confirmation).

However, feelings of satisfaction also represent an "affective state of mind" and can inspire an emotional reaction (Babin & Griffin 1998; Bagozzi *et al*. 1999) such as happiness, joy or frustration. A study by Yu and Dean (2001) revealed that the positive affective (emotional) component of satisfaction was a stronger predictor of positive word-of-mouth and loyalty, and that overall, emotions drive behaviour. Often, how the consumer feels about the frontline employee determines the formation of either positive or negative emotional response towards the individual and the organization (Liljander & Strandvik 1995).

Specifically, expressive displays such as a smile and small gestures can affect customers' emotions (Pugh 2001); and that research on emotional contagion demonstrated that exposure to someone expressing either positive or negative emotions can produce a corresponding change in the observer's emotional state (McHugo *et al.* 1985).

Edvardsson (2005) states that understanding both the determinants and consequences of emotional reactions elicited during a service experience are more useful to the management of service quality. As service encounters involve the human interaction between frontline employee and customers, satisfaction as measured through its cognitive and affective components is adopted in this study as an outcome of service quality, and predictor of loyalty.

Perceived Competitiveness

Some researchers contend that the relationship between satisfaction and loyalty is inconsistent, and that other factors come into play to develop loyalty (Gremler & Brown 1996; Baumann *et al.* 2012; Kumar *et al.* 2013). For example, whilst a customer may be satisfied with the quality of service received their overall appraisal of the performance and formation of psychological preference may be contingent upon how they perceive the brand to perform relative to its competitors (Cobb-Walgren *et al.* 1995). Companies who strive to maintain customers via the strategic configuration of both tangible and intangible resources are better able to obtain long-lasting competitive advantage in the fierce market competition (Li 2009). In particular, enterprises which value positioning on operational excellence should be able to provide customers with cost-effective products and high-quality services (Woodruff 1997), compared to enterprises that are less efficient. Such discrepancy is perceived by customer evaluations, and facilitates behavioural and attitudinal loyalty (Li 2009).

Competitiveness has typically been explained at the macro-level in order to determine a country or region's competitive position in providing products and services to the international market place (Porter 1980). Despite a wealth of scientific literature devoted to the explanation and identification of competitiveness drivers, a lack of agreement continues to emerge (Balkyte & Tvaronaviciene 2010).

The term "competitiveness" yields different meanings and measurements when applied to different areas of activity. For example, the determination of a country's level of competitiveness is measured through the Global Competitiveness Index on what it defines as the "twelve pillars of competitiveness" that include efficiency enhancers, innovation and sophistication factors. Competitive attitude at the individual level, however, is measured through psychometric inventories that examine competitive orientation (Ryckman *et al.* 1996, 1990; King *et al.* 2012).

For the firm, competitiveness is the ability to produce the right goods and services, of the right quality, at the right price and time. Furthermore, it is the perception that a firm can meet the needs of the customer more efficiently and effectively than other firms (Edmonds 2000; Law 2009). Feurer and Chaharbaghi (1994) postulated a more holistic definition of competitiveness: it is *relative* rather than absolute, and depends on customer values and shareholders, as well as the firm's financial strength which determines its ability to perform within the competitive environment (Crouch & Ritchie 1999).

Dominant theories relating to competitiveness include the Resource-Based View of the firm (Penrose 1959) and Porter's (1980) five forces of competition model. Both specify that a firm's configuration of unique assets and knowledge (such as culture) can serve to produce a competitive advantage.

More recent, Baumann and Pintado (2013) introduced the concept of *Competitive Productivity* and suggested that it is an attitude and behaviour geared at beating the competition at both the macro- and micro-levels. As such, it is a performance-oriented culture that manifests in the consumer's perspective as a brand being more innovative in its service orientation and speed to market of products. Furthermore, it is result of cultural, educational and infrastructural developments combined (Baumann & Pintado 2013; Baumann & Hamin 2011). As discussed previously, culture has been considered to contain certain assets or 'cultural capital' (Bourdieu 1997) that add to a brand's competitiveness, which in this case, includes the performance of frontline employees.

Few studies have empirically examined the consumer's perception of a brand's performance *relative* to its competitors. The literature has implied links between the role of competitiveness and loyalty, but there is a general lack of empirical evidence. As such, this study incorporates perceived competitiveness to better understand the link between service quality and loyalty.

Service Loyalty

Customer loyalty is recognized to be one of the most important outcomes in the transaction of goods and services, yet its conceptualization and measurement remains disputed in the literature (Caruana 2002). The original definition of the loyalty construct has focused largely on brand loyalty with respect to tangible goods (Kostecki 1994; Cunningham 1956). With increasing attention placed on the importance of understanding perceived service quality, more attention has been paid to mapping the domain of loyalty and its dimensions (Oliver 1997). In doing so, some researchers have argued that service loyalty differs significantly from that of brand loyalty due to the distinct characteristics of services (Gremler & Brown 1996). Specifically, the heightened person-to-person interaction of service encounters provides the opportunity to create stronger loyalty bonds (Czeipiel & Gilmore 1987; Zeithaml 1981) that manifest through attitudinal formation and behavioural intention.

A customer's willingness to recommend or spread positive word of mouth is important for a firm (Buttle 1998), but is often overshadowed by outcomes such as repeat patronage and purchase intention (Ladhari *et al.* 2011). In a service context, measuring repeat patronage alone offers a limited view of consumers' psychological preference because the consumption of services is highly situational (Filiatrault & Ritchie 1988). Instead, willingness to recommend a service is an advantageous outcome for a service firm, as it can also attenuate the perceived risk for consumers in the pre-purchase information search phase.

2.2 – CONCEPTUAL MODEL & HYPOTHESES

The literature review identified some gaps in the current knowledge, which this study seeks to fill. A conceptual model was developed (Figure 1) to address the hypotheses listed below, which have been organized in three sections.

- Phase 1 of the study addresses the first objective of refining a culture-specific measure of service quality, which this study introduces as the *Confucian Branded Service Quality* (CBSQ) scale.
- Phase 2 of the study compares the CBSQ and SERVQUAL constructs to explain loyalty, mediated by competitiveness and satisfaction, for the two airline brand categories.
- Phase 3 examines the effect of respondents' ethnicity and Confucian culture on their perception of service quality.

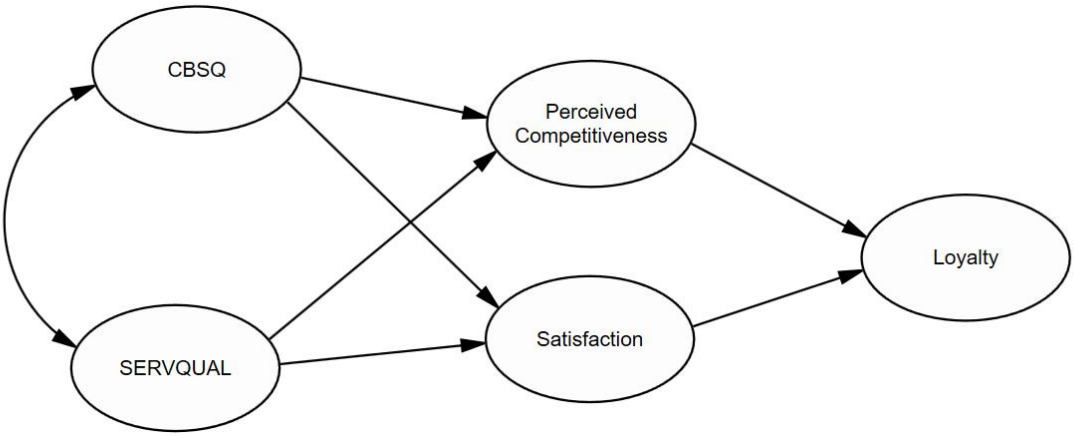

Figure 1: Conceptual Model

PHASE 1: Development and Refinement of Measurement Scale

H1 – CBSQ scale will measure the quality of service provisions performed by the frontline employees of Asian service brands, as a unique non-Western construct.

PHASE 2: Testing the Hypothesized Model

H2.1 – CBSQ has a significant impact on *Loyalty*, mediated by *Competitiveness* for Asian airlines.

H2.2 – CBSQ has a significant impact on *Loyalty*, mediated by *Satisfaction* for Asian airlines.

H2.3 – SERVQUAL has a significant impact on *Loyalty*, mediated by *Competitiveness* for Asian airlines.

H2.4 – SERVQUAL has a significant impact on *Loyalty*, mediated by *Satisfaction* for Asian airlines.

H3.1 – CBSQ has a significant impact on *Loyalty*, mediated by *Competitiveness* for Western airlines.

H3.2 – CBSQ has a significant impact on *Loyalty*, mediated by *Satisfaction* for Western airlines.

H3.3 – SERVQUAL has a significant impact on *Loyalty*, mediated by *Competitiveness* for Western airlines.

H3.4 – SERVQUAL has a significant impact on *Loyalty*, mediated by *Satisfaction* for Western airlines.

H4 – CBSQ will be a better predictor of Loyalty for Asian airlines, than SERVQUAL.

H5 – SERVQUAL will be a better predictor of Loyalty for Western airlines, than CBSQ.

PHASE 3: Assessing Group Differences

H6 – Consumers' evaluation of service quality for Asian and Western airline brands will be influenced by their level of Confucian value (i.e. cultural orientation).

CHAPTER 3: RESEARCH DESIGN & METHODS

This chapter explains the methodology undertaken to test the conceptual model, and hypotheses. It provides justification for the appropriateness of the methodological approach, including: development of measurement constructs; survey instrument; and analytical statistical techniques. A discussion of the study's sampling procedure, data collection and preparation processes are included. Lastly, the methods of analysis are discussed in the three Phases aimed at addressing the research objectives.

3.1 – EXAMINING SERVICE QUALITY IN AN AIRLINE CONTEXT

The decision to focus on service quality in a commercial airline context for this study was made for a number of reasons. Previous chapters have already set the scene and discussed the characteristics of services in the hospitality sector, but this section will detail the reasons for its appropriateness and relevance in testing this study's hypotheses.

National airline brands actively promote their country identity, and often leverage country of origin (COO) effects through their marketing efforts to promote a certain standard of quality (Hoenen & Quester 2005), by incorporating national symbolism and country imagery in their communications to construct a unique brand identity (Insch & Florek 2007). Due to its highly competitive nature, delivering a high quality of service to passengers is essential for an airline's survival, and is the greatest opportunity for brands to distinguish themselves amidst the increasing competitive pressures in the airline industry. Major airlines have long realized that the battle to achieve competitive advantage cannot be fought on price alone, due to its fluctuation and ease of imitation (Ostrowski *et al.* 1991; 1993).

Furthermore, airline carriers have limited capacity for differentiation on physical attributes (e.g. standardized check-in procedures; near identical aircrafts; and similar environments) which are beyond the brand's control (Driver 1999). Thus, identifying and developing a superior service aimed at eliciting a positive overall experience for passengers is a crucial prerequisite to the satisfaction and loyalty equation, and one in which emphasizes the importance of functional aspects of a service as performed by frontline employees. This is realized in the consistent out-performance of East Asian airline brands, compared to their

Western competitors as reported in industry-wide performance appraisals (Skytrax 2015) and consumer reviews. Thus the focus of this study is on the respondents' perceptions of service quality between East Asian (from herein referred to as Asian airline) and Western airline brands from a purely functional perspective.

However, it is also acknowledged that the evaluation of an airline's service is ultimately affected by its product offerings (e.g. loyalty programs and in-flight amenities); cabin class; and marketing capabilities (Park *et al.* 2006). Yet these features cannot be used to define an airline brand's long-term and sustainable competitive advantage (Oliver 1997), due to how easily they can be imitated by competitors. Instead, by focusing on the performance of frontline employees providing the service in an airline context, this study seeks to explore the role that underlying culture plays in fundamentally shaping the quality of such, contributing to a better understanding of competitive advantage in the services literature.

3.2 – JUSTIFICATION FOR THE METHODOLOGY

A quantitative methodology is a theory validation procedure, from which conceptual theories are refined, validated or invalidated as a result of applications of empirical datasets (Muijs 2004; Denzin & Lincoln 2000). As an aim of quantitative research is to analyse information obtained from representative samples of a population, the ability to produce reliable outcome data that can be generalized on a larger scale, is recognized as one of its many strengths. Furthermore, the generalizations derived from quantitative methods provide new knowledge to the extant body of literature (Kachigan 1991). As such, a quantitative method was employed to collect and analyse the data used to validate this study's conceptual model, and test its hypotheses.

3.2.1 – Online Survey Methodology

Data were collected via an online questionnaire designed to ascertain respondents' perceptions of service quality across two categories. The use of a survey methodology for this study was both appropriate and necessary for a number of reasons. First, the structured and systematic nature of surveys facilitates the collection of information about the same variable across multiple cases with ease (De Vaus 2002). This provides the researcher with directly comparable data between cases, through quantifiable evidence. Second, a survey methodology offers the convenience of distribution via an online panel where the use of

advanced screening criteria helps lower non-response bias (Collis & Hussey 2013). Third, it offers researchers better control in obtaining a representative sample of the population of interest. Fourth, the advantages associated with interface design can increase engagement for respondents (Dillman *et al*. 1998). And fifth, a key advantage of this method is the speed at which data is obtained from the relevant sample – often a key consideration when under time constraint. With regards to the application of an online survey methodology in the context of travel studies, Denstadli (2000) concluded that there were no considerable differences in terms of efficacy between the uses of intercept or household surveys.

3.2.2 – Factor Analysis

One of the key objectives of the study was to develop and test a service quality instrument that conceptually measured the underlying performance attributes of Confucian branded services. This involved the adoption of newly developed dimensions by Stanworth, Hsu and Chang (2014), whose research supports "the assertion that service quality is a socio-cultural construction" (Edvardsson *et al.* 2011). As such, six new dimensions were reported from their findings, and subsequently used as the basis for the present study's instrument that is the *Confucian Branded Service Quality* (from herein referred to as CBSQ). Due to the exploratory nature and novelty of this construct, this study is a first attempt at validating the scale and refining the factorial structure prior to further analysis (Netmeyer *et al.* 2004). This involves subjecting the scale to factor reduction (via exploratory means) and validation (via confirmatory techniques) to measure the relationship and strength between each common factor, and collapsing a large number of variables into a few interpretable underlying factors (DeCoster 1998).

In this instance, the advantages of factor analysis are twofold. Firstly, it offers the researcher a useful tool in assessing pilot study data and screen out low-loading or redundant items that may prove problematic to the overall measurement of a construct. This provides relevant feedback for the inclusion or removal of items, at the discretion of the researcher whilst based on a theoretical underpinning. And secondly, it is a tried and tested approach that often yields simple structure (Tabachnick & Fidell 2007) through the reduction of a large group of items to a refined set, prior to pursuing other means of analysis.

3.2.3 – Structural Equation Modelling (SEM)

Structural Equation Modelling (from herein referred to as SEM) is a set of statistical modelling techniques designed to test *a priori* conceptual or theoretical models (Schreiber *et al.* 2006). Due to its ability to estimate and test relationships among hypothesized latent constructs (i.e. multiple independent, dependent, and mediating variables) simultaneously, it is considered the most suitable means of data analysis for this present study. Additionally, SEM is well regarded for its statistical efficiency because it "does not designate a single statistical technique, but instead refers to a family of related procedures" (Kline 2010), providing the researcher with a versatile tool to understand causal effects via direct and indirect paths (Baron & Kenny 1986).

3.3 – ETHICAL CONSIDERATIONS

In all forms of social research, an important ethical consideration involves the ensured privacy and confidentiality of all participants, across stages of data collection, storage and reporting. In adhering to mandatory ethical procedures, the study was reviewed and approved by the Macquarie University Human Research Ethics Committee. Participants were informed through a supplied Information and Consent Form (see Appendix A) of the nature of the study, its scope, and written assurance of the maintenance of their privacy and confidentiality should they choose to participate in the study. Participants were also given the opportunity to refuse or opt-out of the study at any time without consequence. In offering full disclosure, participants were given the opportunity to request a summary copy of the study's results; and provided with the appropriate contact details to discuss issues or concerns regarding the conduct of the study.

3.4 – INSTRUMENT DEVELOPMENT

This section focuses on the development of the questionnaire. In particular, a discussion on the variables measured, the measurement scale, and pre-testing are included. The final questionnaire is presented in Appendix B.

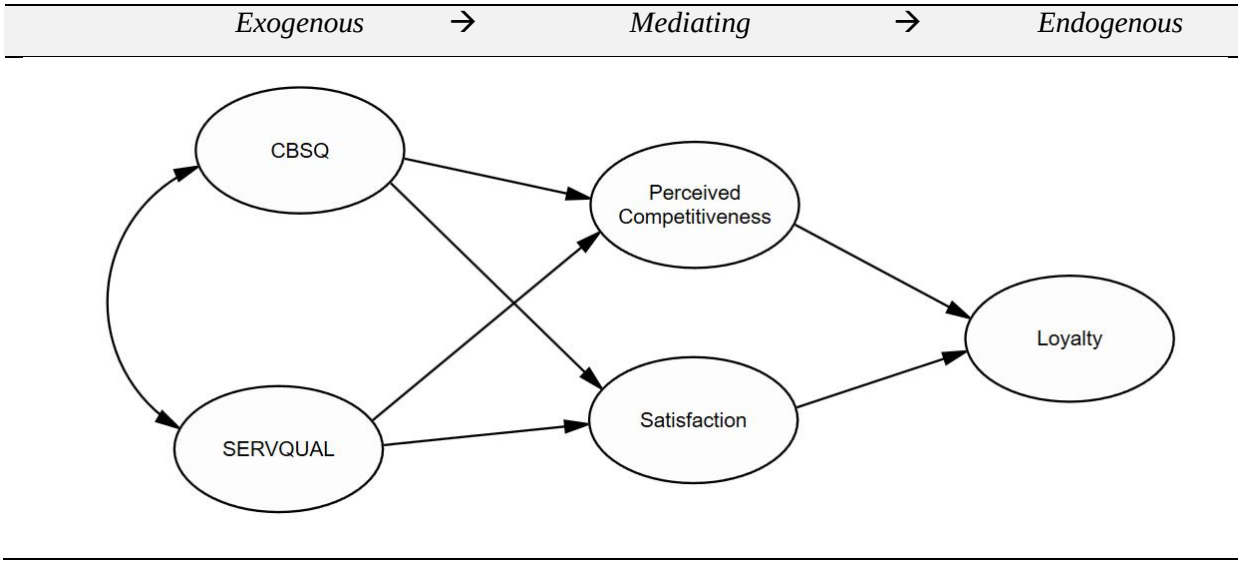

Figure 2: Exogenous, Mediating and Endogenous Variables

3.4.1 – Selecting Representative Airline Brands: Asian vis-à-vis Western

In order to examine whether a discernible difference does exist between Asian and Western brands within the context of airline services, the researcher was required to select a number of *representative* brands for each respective category. A discussion of the unique conditions of studying service quality in an airline context was presented at the beginning of this chapter, in which a country's major airline carrier being a symbol of its national identity was highlighted. Due to the enormous list of airline brands that satisfy the criteria of being from Asian or Western origins, the researcher established a list of requirements to determine which airline brands would be included in this study as proxies.

As the data collection process only included responses from Australian residents, desktop research was conducted to determine the major airline carriers that operated international routes from Australian hubs. This resulted in a selection of over twenty airline brands that could be used. From that list, the airlines that demonstrated a concentrated effort in

promoting their country's image and national culture were selected. Furthermore, as this study takes the view that the performance of frontline employees, as artefacts of their culture, can be viewed as an extension of the *culture of brand origin* (Lim & O'Cass 2001) effect, only airline brands that actively promote their image with service staff were included. Table 2 lists the airline brands selected for each category.

Table 1: Selected Asian Airline Brands vis-à-vis Western Airline Brands

Asian Airline Brands	Western Airline Brands
• Asiana Airlines (South Korea)	• Qantas Airlines (Australia)
• Cathay Pacific (Hong Kong)	• American Airlines (United States)
• Japan Airlines (Japan)	• British Airways (United Kingdom)
• Korean Air (South Korea)	• United Airlines (United States)
• Singapore Airlines (Singapore)	• Virgin Airlines (Australia)
• Thai Airways (Thailand)	• Jetstar (Australia)

It was acknowledged that using the Asian versus Western dichotomy to differentiate the brands results in a highly broad categorization, but as this study is exploratory in nature, this design was most appropriate in determining if a difference does exist in perceptions of service quality. Middle Eastern airlines such as Emirates, Etihad and Qatar Airways have also demonstrated their strong performance capabilities, and would be a good inclusion for future studies.

3.4.2 – Operationalization of Variables

The design of this study's questionnaire was based on multiple item measurement scales. All observed variables were adopted from established and validated constructs within the literature, with the exception of the CBSQ scale which was modified based on the findings of Stanworth *et al.'s* (2013) study on Chinese service quality. The decision to utilize established scales was to facilitate comparability against published and future studies (Hinkin 1998). As well as consulting the relevant literature for the development of the model's latent constructs, selection was based on scale validation, reliability, and internal consistency as reported from their sources. An outline of each latent variable, their respective questions, and source from which they were developed can be seen in Table 3. A brief outline of each construct is provided below.

3.4.2a – Airline Brands: Asian vis-à-vis Western

Respondents were asked to select the Asian and Western airline brands they have had the most experience travelling with. The selected airlines became the reference points for the subsequent questions measuring service quality, satisfaction, perceived competitiveness and loyalty (a similar approach conducted by Baumann *et al.* 2015). Respondents were instructed to consider their last experience when responding to perception measurement items, and although this does not provide an indication of enduring attitude, in areas of tourism and hospitality this approach is considered to provide a good indication of overall perceived service quality (Fick & Ritchie 1991).

3.4.2b – Exogenous Variables: SERVQUAL vis-à-vis CBSQ

Service quality as measured through the generic 22-item SERVQUAL (Parasuraman *et al.* 1988) instrument was used as a baseline variable for the study, as presented in the conceptual model. Its link to satisfaction and loyalty has been well established within the literature (Ladhari 2009), but with varying degrees of explanatory power (Kwan & Hee 1994; Saurina & Coenders 2002; Baumann *et al*. 2007). Whilst modifying the SERVQUAL dimensions to its specific industry through the inclusion and exclusion of items is recommended (Parasuraman *et al*. 1988; Carrillat *et al*. 2007), this study follows Sultan and Simpson's (2000) example by adopting the original statements with modifications that reflect the evaluation of the performance of the airline's employees (see Table 3).

The *Confucian Branded Service Quality* (CBSQ) scale was appropriated from the findings of an exploratory study on 'Chinese Service Quality' by Stanworth, Hsu and Chang (2014). The empirical study was conducted within a Chinese hospitality service context, and grounded in the view that there exists "limited explanatory power of service quality models outside their nascent Western contexts" (Stanworth *et al.*2014; Winsted 1997; Kettinger & Lee 1994). The study utilized a substantive multi-stage research design which involved identifying behavioural drivers and service quality determinants via qualitative analysis, and formative confirmation through quantitative methods for instrument development with a sample size of 394. To increase the level of parsimony, the researchers examined the variance proportions in each collinearity diagnostic, excluding between one and three indicators for each dimension that did not uniquely contribute to the formative modelling. This resulted in eighteen behavioural indicators, associated with the following six service quality dimensions: Chienchih, Active Service, Respect, Professionalism, Sincerity, and Comfortableness, which

were interpreted based on existing literature. Their corresponding items coincide with the service performance attributes that this study hypothesizes as being inspired by Confucian traditions. However, this scale has never been empirically tested or validated in any other study. Utilizing this instrument was especially appropriate because of the multi-stage approach undertaken by its authors to achieve a scale that reflected the expectations of Confucian consumers, and behavioural drivers of East Asian service providers.

Both the SERVQUAL and CBSQ instruments were operationalized through *perception-only* (Cronin & Taylor 1994) statements, rather than calculating them as perception-minus-expectation difference scores (i.e. a Gap Analysis that assesses the difference between customer expectations and perceptions of service quality). Studies have demonstrated that perception-only scores are better at predicting some behavioural intentions (Brown *et al*. 1993), and outperformed gap scores to predict an overall evaluation of service (Durvasula *et al*. 1999). Furthermore, this method was also selected for the practical reason of reducing the length of the questionnaire.

3.4.2c – Mediating Variables: Competitiveness vis-à-vis Satisfaction

Perceived competitiveness was measured through two dimensions: innovation and infrastructure. As the purpose of this construct was to capture the respondent's perception of each brand's performance relative to its competition, questions related to the product offerings and the delivery of service based on an overall impression (Baumann & Pintado 2013).

In following Edvardsson's (2005) suggestion, both the cognitive and affective components of satisfaction were measured. Overall satisfaction was measured with one question, as advised by Drolet and Morrison (2001), and affective attitude featured four questions detailing the like, enjoyment, feeling of goodness and sense of belonging to the brand (Baumann *et al.* 2007).

3.4.2d – Endogenous Variable: Loyalty

Service loyalty was measured as both an intention to use the service again, and willingness to recommend the brand to others. The consumption of services (including professional and hospitality) depends on situational factors, and therefore an over-reliance on behavioural intentions alone fails to capture the attitudinal components of loyalty. Therefore, measuring

the propensity to recommend was deemed more appropriate, especially given the literature on the advantages of positive word of mouth for service firms (Buttle 1998).

3.4.2e – Demographic Variables: Ethnicity vis-à-vis Confucian Values

Ethnicity and culture have been demonstrated to play an important in a respondent's expectations and perceptions of service quality (Donthu & Yoo 1998; Mattila 1999; Laroche *et al*. 2005). The examination of Confucian culture on the quality of service provisions from brands of East Asian origin also requires an assessment of the range of Confucian values held by respondents, to facilitate an understanding of consumer behaviour.

Monkhouse, Barnes and Pham's (2013) scale of Confucian values was adopted because it was the most comprehensive inventory available which was developed in an East Asian context, and has been empirically examined to explain consumer behaviour (Yao *et al.* 2015). The values are measured along five dimensions: reciprocity, face saving, humility, hierarchy and group orientation, which when taken together, reflect the key tenets of Confucian teachings that inform how an individual views themselves in relation to others.

This study defines an ethnic group as "people who perceive themselves as constituting a community because of common culture, language, ancestry, history, religion, or customs" (Riggins 1992), and the "categorization of individuals based on shared psychological attributes" (Okazaki & Sue 1995). Respondents were asked to indicate the ethnicity they best identified as. For this study, two major ethnic groups are of particular interest: Caucasians and East Asians. Given the nature of the study's investigation into the dichotomy of Asian versus Western airline brands, it was equally appropriate to focus on these two ethnicities to examine how they would respond to level of service between Asian and Western airline brands.

Respondents who indicated they were of Chinese, Japanese, Taiwanese and Korean ethnic backgrounds were grouped as East Asian.

The focus on Caucasians as a mainstream population has been a common strategy employed by researchers studying ethnicity (Okazaki & Sue 1995). Whilst some have argued that they do not represent one homogeneous group (Chung & Fischer 1999), others have highlighted that shared traits, such as similar attitudes and behaviours exist regardless of geographical dispersion, are apparent (Tung & Baumann 2009).

Table 2: Summary of Latent Constructs and Sources for Development

Latent	Dimensions	Questions	References
Service Quality (SERVQUAL)	*Tangibles*	1. XYZ's aircraft was modern looking in appearance 2. XYZ was visually appealing 3. The materials associated with XYZ's services were visually appealing 4. Employees of XYZ were neat in appearance	Parasuraman, Berry & Zeithaml (1988); Sultan & Simpson (2000)
	Reliability	1. XYZ's employees performed duties in a timely manner 2. If a customer had a problem, XYZ's employees showed a sincere interest in trying to resolve it 3. XYZ's employees performed services correctly the first time 4. Services were performed at the time promised 5. The performance of services were generally free of error or mistake	
	Responsiveness	1. XYZ's employees notified customers of when services would be performed 2. XYZ's employees were always willing to help customers 3. XYZ's employees provided prompt service 4. XYZ's employees were never too busy to respond to customers' requests for service	
	Assurance	1. The behaviour of XYZ's employees instilled confidence in me 2. XYZ's employees made me feel safe in my transaction with them 3. The employees of XYZ were knowledgeable and able to answer customer's questions 4. Employees of XYZ were consistently courteous	
	Empathy	1. XYZ's employees provided individual attention to its customers 2. XYZ's employees provided service at convenient operating hours 3. XYZ's employees gave personal attention to its customers 4. I felt that XYZ's employees had their customer's best interest at heart 5. I believe that XYZ's employees understood the specific need of their customers well	
Confucian Branded Service Quality (CBSQ)	*Chienchih*	1. Were warm and kind to their customers 2. Presented a nice face to their customers at all times 3. Used warm greeting when addressing their customers	Stanworth, Hsu & Chang (2014)
	Active Service	1. Automatically came to the assistance of customers if they noticed them looking around 2. Offered recommendations when a customer was unsure 3. Would actively inquire the customer's needs without being asked	

	Respect	1. Provided equal service for everyone, and would not treat some customers better than others 2. Consistently used 'please', 'thank you', and 'excuse me', when addressing customers 3. Focused on serving their customers at all times, and were not distracted by other things or staff 4. Always asked the customer permission before performing a service 5. Always acted on their promises to customers 6. Were fair to all customers, operating on a 'first in, first served' basis	
	Sincerity	1. Would never assign blame to the customer in an event of disruption, conflict or complaint 2. Provided specific and detailed information when required	
	Professionalism	1. Always offered a clear introduction and welcome to their customers 2. Delivered and performed their services in an ordered manner 3. Looked presentable at all times 4. Handled questions from customers well, articulating clear responses 5. Always delivered the service correctly	
	Comfortableness	1. Provided their customers with quiet and uninterrupted space 2. Maintained comfort by keeping a certain distance from their customers 3. Gave the customers privacy and did not ask irrelevant questions, or make unnecessary comments	
Competitiveness	*Infrastructure*	1. XYZ is about creating and upgrading its services: including booking, check-in systems, and flight information 2. XYZ is about creating and upgrading its in-flight products and services: including entertainment, food and beverages, and presentation	Baumann & Pintado (2013)
	Innovation	1. The speed to market with new products and services of this airline is more competitive than other airlines 2. The delivery of services by this airline is more competitive than other airlines	
Satisfaction	*Satisfaction*	1. Overall, I am satisfied with XYZ	Drolet & Morrison (2001)
	Affective Attitude	1. I like XYZ 2. I enjoy travelling with XYZ 3. I feel good about XYZ 4. I have a sense of belonging to XYZ	Baumann *et al.* (2007)
Loyalty	*Word of Mouth*	1. If other people *inquired* about XYZ, then I would recommend it 2. I am happy to *voluntarily* recommend XYZ to others	Baumann *et al.* (2007)
	Behavioural Intention	1. The next time I travel, I intend to use XYZ again	

Confucian Values	*Face Saving*	1. I am concerned with not bringing shame to myself 2. I am concerned with not bringing shame to others. 3. I pay a lot of attention to how others see me. 4. I am concerned with protecting the pride of my family. 5. I feel ashamed if I lose my face.	Monkhouse, Barnes & Pham (2013)
	Humility	1. I avoid singing my own praises. 2. I try not to openly talk about my accomplishments. 3. I like to draw others' attention to my accomplishments. 4. Being boastful is a sign of weakness and insecurity. 5. I only tell others about my achievements when I am asked to.	
	Group Orientation	1. I recognize and respect social expectations, norms and practices. 2. When I am uncertain how to act in a social situation, I try to do the same as what others do. 3. I usually make decisions without listening to others. 4. When I buy the same things my friends buy, I feel closer to them. 5. If there is a conflict between my interest and my family's interest, I will put priority on mine.	
	Hierarchy	1. I am happy if people look up to me. 2. We have a vertical order in the society that we should respect. 3 A person with high personal achievements is considered to have high social standing. 4. Wealth and power are becoming important determinants of social status.	
	Reciprocity	1. The practice of 'give and take' of favours is an important part of social relationships. 2. I feel a sense of obligation to a person for doing me a favour. 3. It is bad manners not to return favours. 4. When I receive a big favour, I try to go an extra mile to do something nice in return. 5. When I buy a gift to say thank you to someone, I try my best to make sure the person will appreciate it.	

3.4.3 – Question Types

All observed variables in the study (i.e. service quality dimensions, satisfaction, competitiveness, and loyalty), and respondents' self-reported Confucian value, were measured using interval scaled questions. A 7-point Likert scale was applied to all statements asking respondents to indicate their level of agreement or disagreement; anchored as "1=Strongly Disagree" and "7=Strongly Agree". Many empirical studies in marketing and management, particularly the service quality literature, have utilised this standard measurement technique for attitude intensity (Albaum 1997). More importantly, numerous advantages have been identified in using this type of question: namely, reducing the questionnaire length, ease of completion for respondents, and ease of coding and analysis of data.

The decision to use a 7-point scale – as opposed to the traditional 5-point scale – was informed by findings reported by Harzing *et al.* (2009), who suggest that it can reduce both extreme and middle response styles (ERS and MRS, respectively). Given the nature of this study in examining the negative/positive attitudes of respondents in their evaluation of service quality, the 7-point scale was chosen in an attempt to mitigate midpoint responses, which may be apparent in Asian respondents less inclined to expressing intense emotions (Chen 1995). This is supported by an investigation by Lee *et al.* (2002), who found that Japanese and Chinese respondents were more honest in their response when confronted with a 7-point scale, rather than 3.

The question asking respondents to identify which airline brand they had most experience travelling with for each respective category was in the form of a nominal scale, as were all supplementary questions relating to their frequency (i.e. "1-2 times", "3-4 times", or "5 times or more" in the past 5 years), and purpose (i.e. "Leisure", "Business", "Visit Family and Friends", or "Other"). All questions relating to demographic variables were also nominal.

3.4.4 – Questionnaire Pre-testing

Prior to administering the final questionnaire, a pilot study was distributed to two groups of 15 respondents for pre-testing. This process was performed to ensure the questionnaire's

clarity by reducing ambiguity of instructions and statement wording, enhancing the layout, and determining completion time. The pre-test was carried out across two phases[1].

The first round of pre-testing involved the completion of the preliminary questionnaire by 15 subjects, who represented similar demographics to the target population. This also included a selection of respondents based on ethnicity – a key design of the research study. On average, respondents took 25 minutes to complete the questionnaire; this was longer than originally anticipated, and many commented on the lengthiness of the questionnaire in their feedback. Other comments included the layout of the questions being too repetitive, attributing to a lack of focus. Upon this feedback, the questionnaire was altered and distributed to a second group of 15 respondents for further pre-testing. The average time for completion was 19 minutes, and many of the issues in the initial phase of pre-testing were resolved.

After a final round of revisions, an online version of the questionnaire was designed using the research software *Qualtrics*. This approach allows the researcher to generate a personalized questionnaire per respondent based on the Asian and Western airline brands they select during the screening criteria. As seen in the final questionnaire in Appendix B, the airline brand selected for each category is treated as the reference point for the subsequent questions relating to service quality, satisfaction, perceived competitiveness, and loyalty. Such approach is consistent with methods employed by Mano and Oliver's (1993), and Baumann *et al*. (2014), which are more individualistic (i.e. subjective to each participant) in nature.

3.5 – SAMPLING PROCEDURE

The main objective of this study was to examine respondents' evaluation of airline service quality of Asian brands and its effect on loyalty, compared to Western brands. As commercial airline is a major mode of international transport, the study focused on a rather broad consumer segment distributed by age, gender, annual income and education. This was to ensure that no one demographic was over-represented in the sample, which might obscure the results in favour of one sub-group. Furthermore, airline travel as a service has become more accessible to a broad demographic; therefore it is important to understand how service quality is perceived and what drives loyalty.

[1] Data resulting from both pre-test phases were not utilised in the final analysis.

3.5.1 – Sample Size

Calculating the required sample size for Structural Equation Modelling remains a challenge for researchers, with many referring to conflicting rules of thumb (Wolf *et al*. 2013). This is due in part to a number of issues that must be taken into consideration such as: complexity of the model, number of parameters, type of estimation algorithm, and distributional characteristics of the data (Kline 2011, p.12). Instead, in determining the appropriate sample size for this study, the researcher heeds Kline's (2011) and Blunch's (2013) advice to think about recommended sample size in more absolute terms, and by referring to the "typical" number of sample size used in published studies that employ SEM. This corresponds to an approximate median of 200 cases[2] in a number of journal reviews (for example, see: Breckler 1990; Shah & Goldstein 2006). However, caution must still be exercised when analyzing complex models, dealing with data that is non-normal, or applying an estimate method other than maximum likelihood (ML) – conditions wherein a sample size of 200 may be inadequate. Additionally, Barrett (2007) suggests that journal reviewers should routinely reject publications using SEM analysis where the sample size is less than 200 (unless the population studied is restricted in size). In light of this, this researcher takes a pragmatic approach in sampling a minimum of 400 cases, which will also assist in better generalization of findings from analyses across groups (Green 1991).

3.5.2 – Online Sample Panel

A professional market research company[3] was used to gain access to an adequately large sample, and to ensure the gathering of high quality data via their online consumer panels. This is a tried and tested approach that is gaining much popularity by researchers due to its ability to capture reliable and well represented data across various disciplines (for example, see: Drew & Stanford 2001; Faber *et al*. 1987; Baumann & Hamin 2014).

Participants who fit the sample specification criteria were recruited on behalf of the researcher in the second last week of July 2015. Data were collected over a six day period.

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[2] This figure is based on a survey of published articles in which SEM results are reported. This includes 72 articles in personality and social psychology journals by Breckler (1990), and 93 in management science journals by Shah & Goldstein (2006).

[3] *Research Now Pty Ltd* is a market research company with headquarters based in the United States. The researcher utilised services from their Australian office. The researcher would like to express gratitude to both Mary Santos and Melissa Burton for their assistance throughout the entire data collection process.

3.5.3 – Screening: Eligibility Criteria

The survey design included a screening criterion to determine whether respondents qualified to complete the remainder of the questionnaire. This involved a question asking respondents to indicate which Asian airline from the provided list they have had most experience travelling with. The same process was included for the Western airline category. If the respondent selected *I have not travelled with any of the airlines listed above*, for either one of the categories, they were not deemed eligible to continue with the survey and redirected to a screen thanking them for their participation. Because the study's focus is on examining the perception of service quality between Asian and Western airline brands and its effect on satisfaction and loyalty, it was imperative that the data reflected a comparison of such based on each respondent's experiences.

3.6 – DATA COLLECTION & SURVEY RESPONSE

The questionnaire was administered to a total of 1,211 respondents over six days, with 502 returned as completed. The 709 incomplete responses had been started by participants, but either did not qualify based on the eligibility criteria (701 cases), or did not see the survey through to its completion (8 cases). The study achieved a response rate of 41%, which is consistent with online travel studies of a similar nature that report an average of 40% (Pan 2010; Sheehan & McMillan 1999; Cook *et al.* 2000).

Another great advantage of using online questionnaires is the direct feedback generated from survey tracking technology. This gave the researcher better insight into survey response time and patterns, including information relating to the target populations' response behaviours (e.g. the correlation between time of day and survey completion by age group). The average time taken to complete the survey was recorded at 21 minutes, providing a good indication that generally, a serious attempt was made to answer the questions, and that the data was usable for further analysis (Nulty 2008).

3.7 – DATA PREPARATION

Prior to statistically testing the model, the data was rigorously screened, cleaned and tested for non-response errors. This section details the procedures undertaken in obtaining the final usable sample of 476. An overview of the sample population can be seen in Table 3.

3.7.1 – Data Screening and Cleaning

The data set was loaded onto an *Excel* file which was carefully screened for usability. Firstly, all cases were sorted by the time taken to complete the survey, and those that fell below the 6 minute mark[4] were removed because they were deemed to not have been taken seriously. Next, each row was assessed for incompletion which resulted in the removal of 7 cases. For all cases, parts or whole sections of a survey page had missing values totalling to an overall 1.4% of item non-response[5]. And lastly, the data was screened for unengaged responses in which respondents provided straight-line answers to almost all statements, resulting in the removal of 7 cases[6].

The data was then loaded on IBM SPSS version 21, where an exploratory analysis was employed to examine descriptive statistics, frequencies and distributions. Lastly, the variables were renamed and recoded, and the data set split into two sections: data reflecting Asian airline measures, and data reflecting Western airline measures.

3.7.2 – Assessment of Normality

An important assumption of Structural Equation Modelling is that the data is normally distributed. Skewness and Kurtosis were assessed through normality tests and found to be within the range of their respective thresholds.

[4] A total of 12 cases were removed as a result of fast completion time.
[5] This was not confined to any one particular question or page.
[6] The decision to remove unengaged response cases was almost made in conjunction with their overall time to complete.

Table 3: Overview of Sample Demographics

Variable		Frequency	Percentage
Gender	Female	240	50.4%
	Male	236	49.6%
Age	18-24 years	37	7.8%
	25-34 years	96	20.2%
	35-44 years	94	19.7%
	45-54 years	79	16.6%
	55-64 years	73	15.3%
	65 years or above	97	20.4%
Ethnicity	Caucasian	219	46%
	Chinese	88	18.5%
	Japanese	37	7.8%
	Korean	53	11.1%
	Taiwanese	7	1.5%
	South Asian	17	3.6%
	Indian	20	4.2%
	Middle Eastern	10	2.1%
	African	8	1.7%
	Other	17	3.6%
Income	$29,999 or under	106	22.3%
	$30,000-$49,999	60	12.6%
	$50,000-$69,999	89	18.7%
	$70,000-$89,999	181	38%
	$90,000 or more	40	8.4%
Education	Year 10 or equivalent	35	7.4%
	Year 11 or equivalent	11	2.3%
	Year 12 or equivalent	77	16.2%
	Diploma	106	22.3%
	Bachelor Degree	144	30.3%
	Honors Degree	26	5.5%
	Masters Degree	66	13.9%
	Doctoral Degree	11	2.3%
Main Purpose for Travel	Leisure (i.e. Holiday)	321	67.4%
	Business	61	12.8%
	Visit Family & Friends	94	19.7%

3.8 – METHODS OF DATA ANALYSIS

The data was analysed with SEM using IBM SPSS AMOS version 21, to refine the dimensions of the CBSQ scale, and then statistically test the associations between CBSQ, SERVQUAL, satisfaction, competitiveness, and loyalty – as hypothesized in the conceptual model. There are two main components of SEM: the measurement model, which involves a Confirmatory Factor Analysis (CFA); and structural model which specifies the relationship effect between factors (Kline 2010). This section will detail the three Phases and the processes undertaken to address the study's objectives and hypotheses to arrive at the most parsimonious model for both the Asian airline and Western airline groups. The results are reported in Chapter 4.

PHASE 1: DEVELOPING THE MEASUREMENT SCALE

3.8.1 – Exploratory Factor Analysis

An Exploratory Factor Analysis (EFA) was used to address the first research objective of this study: to develop and refine a culture-specific measure of service quality that captures the underlying service dimensions of East Asian airline brands.

Churchill (1979) emphasizes the necessity of constructing sound conceptual specifications when developing new measurement scales, and in particular, that researchers can benefit from existing scales as a starting point in scale development. Because this study's development of the CBSQ scale is a refinement of Stanworth *et al.'s* (2014) findings on Chinese service quality, it is crucial that the researcher adheres to all of the stages from purification to validation (Chu & Murrmann 2006). Bartlett's test of sphericity, and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy were performed confirming the appropriateness of factor analysis on the sample data. Following that, the instrument was purified by calculating the item-to-total correlations; Cronbach's alpha coefficient, and performing an EFA (Churchill 199; Parasuraman *et al.* 1988). Nunally (1970) recommends the removal of items below 0.30, and as the alpha coefficient values were found to range between 0.73 to 0.94, no omissions were made. Therefore, EFA was performed to uncover the underlying dimensions of the CBSQ scale using Maximum Likelihood (ML) and Varimax rotation. This was performed in iterations, with low factor loadings (<0.30) removed one at a time, and alpha values recomputed for the remaining items after each omission (Hair *et al.*

1995; Ruscio & Roche 2012). This process resulted in three factors with Cronbach's alpha values above >0.87. The results are presented in Tables 5 and 6 of Chapter 4.

PHASE 2: TESTING THE HYPOTHESIZED MODELS

3.8.2 – Confirmatory Factor Analysis

To further refine the CBSQ scale, and to validate the measurement model of all latent constructs, a Confirmatory Factor Analysis (CFA) was performed. As it is a confirmatory technique, the researcher must constantly bear in mind the underlying theoretical construct in which it is hypothesized to measure through the selected indicators (Ullman 2006). This process was performed twice, once for each of the models with their respective data sets.

For each separate model (i.e. Asian and Western), CFA was performed on *all* of the latent constructs combined, and then the standardized estimates, factor loadings, and squared multiple correlations (R^2) were assessed. Upon assessment, any items with a factor loading less than 0.60, or an R^2 less than 0.40 were removed from the measurement model (Nunnally 1978; Hooper *et al.*2008). In the case that these low loading items were resolved, and the measurement fit indices were still below the required level, the model was assessed for item redundancy and minor adjustments were made through the Modification Indices until a good model fit was achieved. The results are presented in Table 7 of Chapter 4.

3.8.3 – Validating the Measurement Model

An important outcome from the CFA process is the validation of the measurement model, through the assessment of the unidimensionality, validity and reliability of latent constructs. Without a thorough inspection of each construct's nature, and an assessment of its ability to capture the underlying theory, they would be considered useless in providing any meaningful explanation in the resulting SEM analysis (Kline 2010).

Unidimensionality was achieved when all of the observed items presented an acceptable and positive factor loading for its respective construct (i.e. >0.60), as was the case for both models in this study. Based on each latent construct's standardized factor loadings, the Composite Reliability (CR), Cronbach's alpha, and Average Variance Extracted (AVE) were also calculated, and satisfied the respective minimum value requirement. Lastly, the convergent and discriminant validity of the overall instrument for each measurement model

was examined by looking at the fit indices and standardized regression weights, which had good fit, with exogenous correlation less than 0.85 – indicating no problems with multicollinearity (Chong, Nazim & Ahmad 2014). The results are presented in Tables 8a, 8b, 9a and 9b of Chapter 4.

3.8.4 – Model Specification

The study's hypotheses were transposed into the form of a model, as seen in Figure 3. The use of directional lines indicates the relationship between variables: a line with *one* arrow head is used to represent a hypothesized relationship, whereas a line with *two* arrow heads indicates a covariance with no implied directional effect between exogenous variables (Kline 2010, p.100). In the model of Figure 3, the researcher specifies six direct paths, and one covariance.

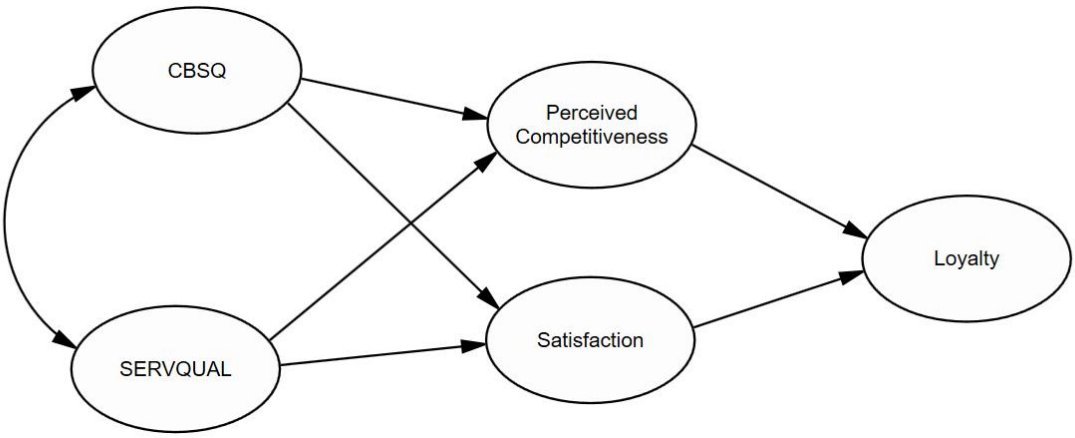


Figure 3: Model Specification of Causal Paths

3.8.5 – Model Identification

In order to theoretically develop a unique estimate for each parameter, certain criteria within the model had to first be identified, before proceeding with the assessment. Four commonly used rules of thumb as suggested by Bollen (1989) and Kline (2010) were applied in satisfying model identification:

1. *Scaling of Latent Variables*

   In setting a scale for every latent construct within the model, this involved fixing one of the regression coefficients between a latent construct to its observed indicator to a weight of 1.0.

2. *Minimum Condition of Identification*

   A method of model identification stipulates that the number of known values has to be equal to, or greater than, the number of free parameters within the model. The modelling of both Asian and Western airline groups produced distinct sample moments *or* known values (231 and 190, respectively) greater than the number of free parameters (53 and 49, respectively), thus allowing the model to be identified.

3. *Two-Indicator Rule*

   It is a basic requirement for each latent variable within the model to have a minimum of two observed indicators to be just-identified. Both the Asian and Western airline models satisfied this rule.

4. *Recursive Rule*

   In satisfying all of the above requirements, both models were identified as recursive structural models. That is, that all causal effects were unidirectional and the model's disturbances were unrelated (Kline 2011).

3.8.6 – Model Assessment

Once the model for both the Asian airline and Western airline groups were confirmed to be identified, the interrelationships of the structural models were run through IBM SPSS AMOS version 21 software using the Maximum Likelihood method.

This process addressed the second objective, and their corresponding hypotheses: to determine the relative effect of each construct in predicting loyalty, mediated by satisfaction competitiveness, for each airline group.

Based on conventional practice within the marketing and management literature, three categories of model fit indices were obtained and assessed (Table 5).

Table 4: Categories of Model Fit Indices

	Index Abbrev.	Index Name	Acceptance Level	Supporting Literature
Absolute Fit	Chi-Square	Discrepancy of Chi-Square	$p > 0.05$	Wheaton *et al.* (1977)
	RMSEA	Root Mean Square of Error Approx	< 0.07	Browne & Cudeck (1993)
	GFI	Goodness of Fit Index	> 0.90	Joreskog & Sorbom (1984)
	AGFI	Adjusted Goodness of Fit	> 0.80	Tanaka & Huba (1985)
Incremental Fit	CFI	Comparative Fit Index	> 0.90	Bentler (1990)
	TLI	Tucker-Lewis Index	> 0.90	Bentler & Bonett (1980)
	NFI	Normed Fit Index	> 0.90	Bollen (1989b)
Parsimonious Fit	Chisq/df	Chi-Square / Degrees of Freedom	< 5.0	Marsh & Hocevar (1985)

In determining the appropriate threshold for each fit index, Hu and Bentler (1999, p.27) advise that because the estimate of indices do not work equally well across various conditions, a cut-off criterion *greater* than the conventional rules of thumb is recommended. Additionally, because this study has uniformly applied a 7-point scale to all of its interval questions, a standardized root mean square was not examined; this is usually preferred when questionnaires utilize various scale points (Hooper, Coughlan & Mullen 2008).

The Asian and Western airline models' fit indices were confirmed as adequate, and the path estimates were examined in relation to the hypotheses specified at the end of Chapter 2. The results for the Asian and Western airline models are presented in Tables 11 and 13 of Chapter 4.

PHASE 3: ASSESSING GROUP DIFFERENCES

3.8.7 – Composite Factor Score

The last phase of the modelling process involved examining the effect of demographic variables (i.e. ethnicity and Confucian values) on perceptions of service quality across both airline groups.

The latent variable measuring Confucian values, adopted from Monkhouse *et al.*'s (2013) study, underwent an EFA to uncover its underlying structure and remove low loading (<0.30)

items which confirmed its structure. A factor score for each case was computed via a sum scores method[7] (Comrey & Lee 1992), which was then averaged to retain its scale metric. Summed factor scores are useful in preserving the variation within the original data, and are generally most acceptable for exploratory research studies (Tabeachinck & Fidell 2001).

Descriptive statistics for the Confucian Values composite scores were examined, and checked for outliers and normality of distribution (see Appendix C). The new set of scores ranged from 3.07 (min) to 7.00 (max), which were split in three categorical ranges: *low* (3.07 to 4.74); *medium* (4.75 to 5.25); and *high* (5.26 to 7.00). This was analysed against the two major ethnic groups of interest in the study (East Asian and Caucasian) through cross-tabulation.

3.8.8 – Split Group SEM Analysis: High / Low Confucian Values

The final objective of this study was to determine whether respondents' perceptions of service quality varied depending on cultural orientation (i.e. level of Confucian value) influencing their loyalty to either Asian or Western airline brands. The findings from the previous procedure did not reveal a distinct enough difference between the East Asian and Caucasian ethnic groups based on their degree of Confucian values, as presented in Figure 5 of Chapter 4.

Instead, all cases – regardless of their ethnicity – were organized into low, medium and high groups based on the value ranges listed previously. To establish a clear distinction, only low and high were used. Using the two new sets of data, a separate model was run for the Asian and Western airline groups again, resulting in four new models. Fit indices were assessed, which satisfied the cutoff levels (see Appendix D) and regression weights examined. The results are presented in Table 18 of Chapter 4.

3.9 – SUMMARY

This chapter discussed the research design and methods of analysis undertaken to test the conceptual model and hypotheses. The following chapter will present the results that were obtained through the methods of data analysis.

[7] The researcher decided to utilise a non-refined method to create a factor score as it was deemed adequate in providing information about the individuals' placement on the factor distribution (DiStefano, Zhu & Mindrila 2009).

CHAPTER 4: RESULTS

This chapter presents the results based on the methods of analysis discussed in Chapter 3. The results are organized in three Phases, with each addressing a research objective of this study. The first Phase provides the results for the refined Confucian Branded Service Quality (CBSQ) scale, and its underlying dimension structure. The second Phase presents the results of the structural model for both the Asian and Western airline models to determine the best predictor of loyalty, via satisfaction and competitiveness. And the third Phase examines group differences between high and low scoring Confucian respondents on each model, to determine the effect of cultural values on the evaluation of service quality.

PHASE 1: DEVELOPING THE MEASUREMENT SCALE

4.1 – EXPLORATORY FACTOR ANALYSIS

This section presents the results of the Exploratory Factor Analysis (EFA) performed on the data from the original 22-item *Confucian Branded Service Quality* (CBSQ) scale. It addresses the first objective of the study: to develop a service quality scale that captures the underlying performance of East Asian Confucian brands.

4.1.1 – Confucian Branded Service Quality (CBSQ) Scale

An EFA with Maximum Likelihood and Varimax rotation on the CBSQ scale resulted in the extraction of 14 items, loading onto three factors, as seen in Table 5. An examination of the Kaiser-Mayer Olkin measure of sampling adequacy suggested the sampled data was factorable (KMO = 0.982). In following Nunnally's (1978) instructions on new scale development, only items with factor loadings greater than 0.30 were retained. Each factor returned a Cronbach's alpha greater than 0.87 (above the acceptance level of 0.70), and the overall reliability coefficient was 0.962.

Table 5: Exploratory Factor Analysis Loadings of CBSQ Scale

Factors	1	2	3	Cronbach's
PRF4	.973			
PRF3	.827			
CHC3	.803			
RES2	.691			0.95
CHC2	.679			
PRF6	.662			
PRF5		.800		
ASE2		.783		
RES3		.639		0.89
SIN2		.488		
PRF1		.463		
ASE1			.974	
ASE3			.541	0.87
RES4			.336	

NOTE: Extraction Method – Maximum Likelihood; Varimax Rotation.

Table 6: Refined Structure of CBSQ Scale

Factor 1 *Employee Presentation*	PRF4	Looked presentable at all times.
	PRF3	Delivered their services in an ordered manner.
	CHC3	Used warm greetings when addressing their customers.
	RES2	Consistently used please, thank you, and excuse me.
	CHC2	Presented a nice face to their customers at all times.
	PRF6	Always delivered the service correctly.
Factor 2 *Customer Focus*	PRF5	Asked the customer permission before performing a service.
	ASE2	Offered recommendations when a customer was unsure.
	RES3	Were fair to all customers, operating on a first in first served basis.
	SIN2	Would not assign blame to the customer in the event of disruption, conflict, or complaint.
	PRF1	Provided specific and detailed information when required.
Factor 3 *Active Service*	ASE1	Would automatically come to the customer's assistance if they were looking around.
	ASE3	Would actively inquire the customers' needs without being asked.
	RES4	Focused on serving their customers at all times, and were not distracted.

Table 6 presents each new factor name and the corresponding items that make up the CBSQ scale. The six items that loaded onto Factor 1 all relate to the employee's outward presentation of self and delivery, and therefore labelled *Employee Presentation*. Four items loaded onto Factor 2, and all focused on the customer as the centre of the service provision. This factor was labelled *Customer Focus*. Lastly, the three items that loaded onto Factor 3 identified the employee's ability to perform their services undirected with initiative, and was labelled *Active Service.* A discussion on the dimensions of the CBSQ scale can be found in Chapter 5.

PHASE 2: TESTING THE HYPOTHESIZED MODELS

4.2 – MEASUREMENT MODEL SPECIFICATION & VALIDATION

This section presents the results the Confirmatory Factor Analysis (CFA) – the first phase of the SEM procedure, used to determine whether patterns of variance and covariance in the dataset were consistent with the hypothesized model (Kline 2005). Assessments of the validity and reliability of both measurement models for the Asian airline and Western airline groups are included.

4.2.1 – Confirmatory Factor Analysis (CFA)

A validation of each of the measurement models (i.e. Asian airline and Western airline) in this study was conducted through a Confirmatory Factor Analysis (CFA), to examine all latent variables (CBSQ, SERVQUAL, Satisfaction, Competitiveness and Loyalty) and their observed indicators. Simultaneously assessing all constructs for each measurement model allows a researcher to determine whether patterns of variance and covariance in the real dataset is consistent with the hypothesized model (Kline 2005). Fit indices used to determine goodness of fit indicated that both the Asian airline and Western airline models achieved adequate fit, as presented in Table 7.

For the Asian and Western airline models, both Chi-square statistics were found to be statistically significant ($p<0.05$), despite the recommended acceptance level being above the alpha level ($p>0.05$). However, the Chi-square tends to "almost always be statistically significant" in models with 400 or more cases (Kenny 2004), and as this study had a final usable sample size of 476, other indices were used to determine overall fit (Blunch 2008).

Both the Asian and Western airline models obtained a high GFI (>0.90) and exceptional CFI (>0.95). The RMSEA value for the Asian airline model was acceptable (0.049), but the Western airline model fell within the reasonable error of approximation (Browne & Cudeck 1993).

Table 7: CFA Fit Indices for Asian and Western Airline Models

	Fit Indices								
	X^2	df	X^2/df	RMSEA	GFI	AGFI	NFI	CFI	RMR
Cutoff Point	Small p>0.05		≤ 5	≤ 0.05	≥ 0.9	≥ 0.8	≥ 0.9	≥ 0.95	≤ 0.05
Asian Airline	171.240***	80	2.141	0.049	0.954	0.931	0.978	0.988	0.024
Western Airline	194.113***	80	2.426	0.055	0.946	0.920	0.979	0.987	0.025

NOTE: *** p<0.001

4.2.2 – Construct Analysis: Validity and Reliability

All latent constructs were checked for validity and reliability issues by calculating Cronbach's alpha, Composite Reliability, and Average Variance Extracted. As can be seen in Table 8a and Table 9a, the Asian and Western airline models presented no issues within the measurement model, as all minimum threshold levels were satisfied. Discriminant validity (Table 8b and Table 9b) was also assessed using the Square-root of AVE (highlighted in bold) and correlation values between respective constructs. Discriminant value was achieved as all diagonal values are higher than the values in its rows and columns (Chong *et al.* 2014). Furthermore, the correlation between the exogenous constructs (CBSQ and SERVQUAL) was estimated at 0.82 – below the 0.85 threshold, concluding there were no serious issues with multicollinearity. Although the correlation was quite high, this was an anticipated outcome early in the study given that both constructs are conceptually similar. That is, that they both measure aspects of 'service quality', albeit with nuanced differences.

Table 8a: Measurement Model Summary for Asian Airline Model

Construct	Items	Factor Loading	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
			≥ 0.7	≥ 0.7	≥ 0.5
SERVQUAL	EMP	.90	0.948	0.941	0.761
	ASR	.87			
	RSP	.87			
	TAN	.83			
	REL	.89			
CBSQ	PRES	.87	0.962	0.928	0.811
	PRCUST	.94			
	ACTSER	.89			
Competitiveness	INNV	.89	0.849	0.918	0.849
	INFR	.95			
Satisfaction	AFFATT	.96	0.959	0.960	0.889
	SAT	.94			
Loyalty	WOM	.96	0.895	0.908	0.770
	BINT	.72			

Table 8b: Discriminant Validity Index Summary for Asian Airline Model Constructs

Variable	CBSQ	SERVQUAL	Competitiveness	Satisfaction	Loyalty
CBSQ	**0.901**				
SERVQUAL	0.816	**0.872**			
Competitiveness	0.766	0.705	**0.921**		
Satisfaction	0.748	0.853	0.753	**0.943**	
Loyalty	0.727	0.727	0.720	0.877	**0.877**

Table 9a: Measurement Model Summary for Western Airline Model

Construct	Items	Factor Loading	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
			≥ 0.7	≥ 0.7	≥ 0.5
SERVQUAL	RSP	.90	0.942	0.954	0.806
	ASR	.89			
	EMP	.90			
	TAN	.89			
	REL	.91			
CBSQ	PRES	.87	0.935	0.927	0.811
	PRCUST	.94			
	ACTSER	.89			
Competitiveness	INNV	.90	0.906	0.906	0.828
	INFR	.92			
Satisfaction	AFFATT	.96	0.969	0.970	0.915
	SAT	.95			
Loyalty	WOM	.96	0.936	0.939	0.839
	BINT	.82			

Table 9b: Discriminant Validity Index Summary for Western Airline Model Constructs

Variable	CBSQ	SERVQUAL	Competitiveness	Satisfaction	Loyalty
CBSQ	**0.901**				
SERVQUAL	0.828	**0.898**			
Competitiveness	0.829	0.806	**0.910**		
Satisfaction	0.866	0.894	0.883	**0.957**	
Loyalty	0.820	0.823	0.837	0.913	**0.916**

4.3 – STRUCTURAL EQUATION MODEL

After confirming that the measurement model adequately fit the data, the structural model for both groups was examined to understand the relationships between latent variables, as presented in Figure 4. This section presents the models developed for both the Asian airline and Western airline groups, from the data obtained in this study. Each model was assessed for its overall fit indices (i.e. how well the model fits the data); the hypothesized path estimates between variables; and squared multiple correlations (R^2). It addresses the second objective of the study: to determine the best predictors of loyalty.

4.3.1 – Model Assessment: Asian and Western Airline Models

Table 10 presents the model fit indices for the Asian and Western airline models, and their corresponding levels of acceptance based on generally accepted rules of thumb (Hu & Bentler 1999; Bollen 1989). Due to its sensitivity to sample size, the Chi-Square statistic was large and significant ($p<0.001$), and therefore considered an inadequate measure of the goodness-of-fit. Therefore, goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), Tucker-Lewis index (TLI), comparative fit index (CFI) and root mean square error of approximation (RMSEA) were used. All fit indices for both the Asian and Western airline models suggested an excellent fit, except for the RMSEA. However, with a 90 percent confidence interval of 0.047 to 0.065 (Asian airline model) and 0.059 to 0.077 (Western airline model), the poor fit hypothesis was rejected (Kelley & Lai 2011).

Table 10: Goodness-of-fit Measures: Asian and Western Airline Models

Fit Measure	X^2	df	X^2/df	RMSEA	GFI	AGFI	TLI	CFI
Cutoff Point	Small $p>0.05$		≤ 5	≤ 0.05	≥ 0.9	≥ 0.8	≥ 0.9	≥ 0.95
Asian Airline	449.046***	178	2.523	0.057	0.916	0.892	0.971	0.976
Western Airline	449.767***	141	3.190	0.068	0.907	0.875	0.969	0.974

NOTE: *** $p<0.001$

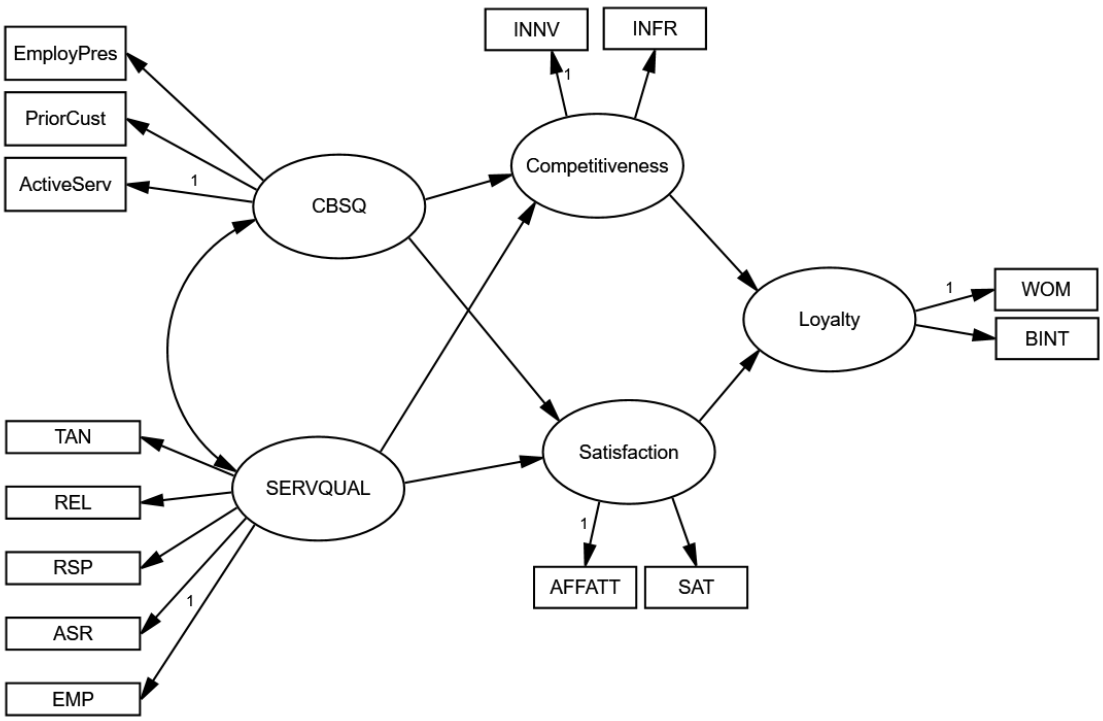


Figure 4: Structural Equation Model Diagram

4.3.2 – Examining Effects among Research Variables: Asian Airline

Table 11 presents the path estimates between latent variables for the Asian airline model.

The structural model hypothesized that customer loyalty could be explained by CBSQ and SERVQUAL, mediated by satisfaction and competitiveness (*H2.1 – H2.4*). More specifically, the study hypothesized that loyalty for the Asian airline model would be better explained via dimensions apparent along the CBSQ scale (*H4*). Except for one causal path, all other hypothesized relationships were found to be statistically significant ($p<0.001$), with strong and positive coefficients.

Table 11: Regression Weights for Asian Airline Model

Relationship			Std. Estimate	S.E.	*p*
CBSQ	→	Competitiveness	0.761	0.139	***
CBSQ	→	Satisfaction	0.443	0.097	***
SERVQUAL	→	Competitiveness	0.004	0.136	0.972
SERVQUAL	→	Satisfaction	0.341	0.096	***
Competitiveness	→	Loyalty	0.141	0.045	***
Satisfaction	→	Loyalty	0.769	0.050	***

NOTE: *** $p<0.001$, ** $p<0.01$, * $p<0.05$

Table 12: R^2 Values for the Asian Airline Model

	Competitiveness	Satisfaction	Loyalty
Asian Airline	0.698	0.754	0.775

Predicting Satisfaction and Competitiveness for Asian airlines

Approximately 70 percent (R^2=0.698) of the variation in competitiveness could be explained by perceived service quality, with the stronger predictor being the CBSQ variable with a beta of 0.761 ($p<0.001$). In contrast, SERVQUAL dimensions were not significant in predicting competitiveness.

Satisfaction could be explained by both CBSQ and SERVQUAL variables, which were both highly significant ($p<0.001$) with positive betas (0.443 and 0.341, respectively). Approximately 75 percent (R^2=0.754) of the variation in satisfaction could be explained by CBSQ and SERVQUAL variables combined.

Predicting Loyalty for Asian airlines

The variation in loyalty – which also included satisfaction and competitiveness as predictors – was approximately 78 percent (R^2=0.775). Significant associations were found for both mediating variables to loyalty, with satisfaction being the stronger predictor with a beta of 0.769 ($p<0.001$). All paths between perceived service quality (CBSQ and SERVQUAL) and loyalty were fully mediated, with the exception of SERVQUAL to competitiveness, therefore *H2.3* was rejected.

4.3.3 – Examining Effects among Research Variables: Western Airline

The development of the CBSQ scale aimed to capture the aspects of service delivery within an Asian context, that Western constructs like the SERVQUAL scale were not sufficient in explaining. By that logic, the study hypothesized that loyalty for the Western airline model would be better explained via dimensions apparent along the SERVQUAL scale (*H5*). Table 13 presents the path estimates between latent variables for the Western airline model. All hypothesized causal paths (*H3.1 – H3.*4) were found to be statistically significant ($p<0.05$).

Table 13: Regression Weights for Western Airline Model

Relationship			Std. Estimate	S.E.	*p*
CBSQ	→	Competitiveness	0.425	0.105	***
CBSQ	→	Satisfaction	0.289	0.080	***
SERVQUAL	→	Competitiveness	0.223	0.115	0.026
SERVQUAL	→	Satisfaction	0.624	0.090	***
Competitiveness	→	Loyalty	0.113	0.060	0.042
Satisfaction	→	Loyalty	0.823	0.061	***

NOTE: *** $p<0.001$, ** $p<0.01$, * $p<0.05$

Table 14: R^2 Values for the Western Airline Model

	Competitiveness	Satisfaction	Loyalty
Western Airline	0.585	0.805	0.855

Predicting Satisfaction and Competitiveness for Western airlines

Approximately 59 percent (R^2=0.585) of the variation in competitiveness could be explained by perceived service quality, with the stronger predictor being CBSQ with a beta 0.425 ($p<0.001$), double that of SERVQUAL (beta = 0.223). Unlike the Asian airline model, there was also a significant association between SERVQUAL dimensions and competitiveness ($p<0.05$).

The paths betweens CBSQ to satisfaction and SERVQUAL to satisfaction were positively and significantly associated ($p<0.001$). As hypothesized for the Western airline model, SERVQUAL was the stronger predictor of satisfaction with a beta of 0.624; the coefficient

was more than double that of CBSQ to satisfaction. Roughly 81 percent (R^2=0.805) of the variation in satisfaction could be explained by both service quality variables.

Predicting Loyalty for Western airlines

The variables in the Western airline model could explain approximately 86 percent (R^2=0.855) of the variation in loyalty. Overall, the extent of the model's explanatory power was 8 percent higher than that of the Asian airline model. Significant associations were found for both mediating variables to loyalty, and again, satisfaction represented the strongest predictor with a beta of 0.823 (p<0.001). All paths between CBSQ and SERVQUAL to loyalty were fully mediated.

PHASE 3: ASSESSING GROUP DIFFERENCES

4.4 – CONFUCIAN VALUES & ETHNICITY

This section examines and compares respondents' self-reported level of Confucian values between East Asian and Caucasian ethnic groups. These two ethnic groups account for 84.9 percent of the study's sample demographic.

4.4.1 – Composite Confucian Values Scores

For the purpose of this study, Confucian values were measured by Monkhouse *et al.*'s (2013) original scale comprising of five factors: reciprocity, humility, face saving, hierarchy, and group orientation. The data were treated through EFA to determine the extent to which items could load onto their corresponding factors (for pattern matrix, see Appendix E). The remaining items, which loaded onto their four respective factors, returned a Cronbach's alpha coefficient of 0.82, indicating good internal consistency. The Confucian value dimensions were converted into a composite factor score, and the descriptive statistics are presented in Table 15.

The composite values had a mean score of 5.09 (min 3.07 to max 7.00), and were normally distributed. Using the composite factor scores, the Confucian values were organized into three ranges: low, medium and high.

Table 15: Composite Confucian Values Descriptive Statistics

N	Missing	Mean	Mode	Skewness	Std. Error	Kurtosis	Std. Error
476	0	5.09	4.79	-.024	.112	-.003	.223

Two ethnic groups, East Asians and Caucasians, were compared based on their Confucian values scores as presented in Table 16. Overall, the mean score for the East Asians (5.32) was marginally higher than Caucasians (4.97). An assessment of the distribution of scores in Figure 5 highlights three ranges specifying the degree of Confucian values held by respondents: low (3.07 to 4.71), medium (4.79 to 5.21), and high (5.23 to 7.00), for both ethnic groups. For the high Confucian value range, East Asian respondents demonstrated a relatively even spread, whereas Caucasians placed towards the centre. Surprisingly, a considerable number of East Asian respondents scored in the low range, whilst a considerable number of Caucasians scored in the high range.

Table 16: Overview of Ethnicity & Confucian Values: Descriptive Statistics

	N	Mean	Std. Dev	Std. Error	Minimum	Maximum
East Asian	185	5.32	.863	.063	3.07	7.00
Caucasian	219	4.97	.664	.045	3.07	6.93

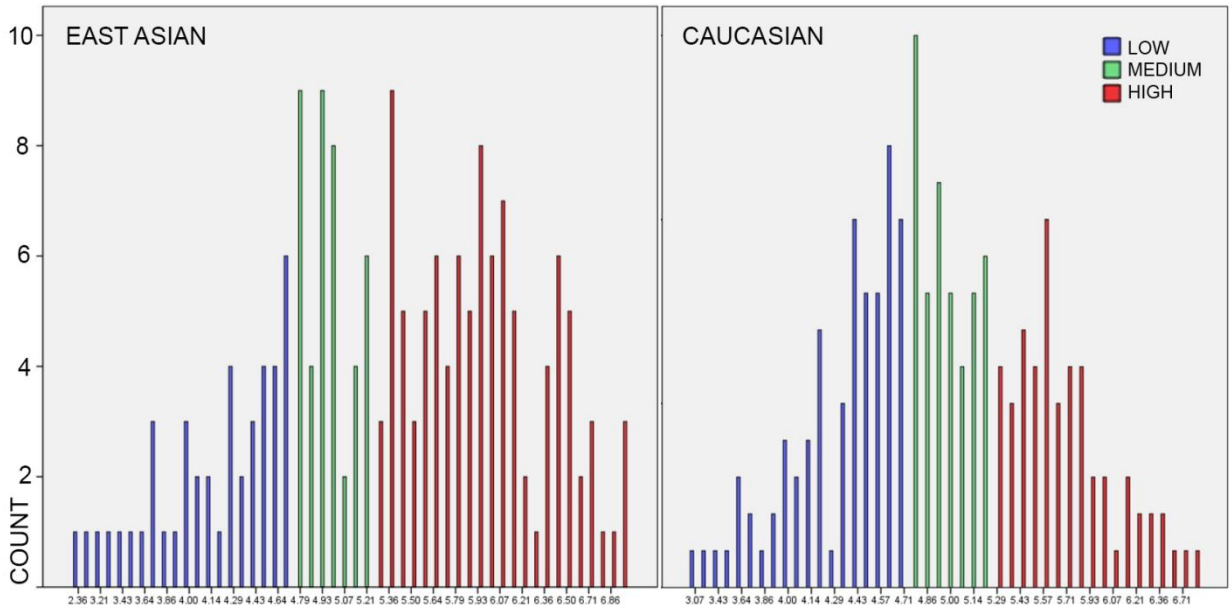


Figure 5: Range of Confucian value scores for East Asian and Caucasian ethnic groups

As the results indicated a lack of clear distinction between East Asian and Caucasian ethnic groups based on their level of Confucian value, further analysis was conducted based on the three categories (low, medium and high), irrespective of ethnicity. Table 17 shows the distribution, with a majority of respondents scoring in the high range (40.8 percent), then low (32.6 percent), and then medium (26.7 percent). To examine whether the degree of a respondent's Confucian values had any impact on their assessment of service quality for both the Asian and Western airline models, further analysis was only conducted on the two extreme categories: low and high. This process of dichotomizing quantitative variables is a frequently used method, and can more appropriately represent group differences on psychological attributes (Block & Ozer 1982; MacCallum *et al*. 2002).

Table 17: Frequency of Confucian Value Score by Range

Level	**Low**	**Medium**	**High**	Total
Frequency	155	127	194	476
Percentage	32.6%	26.7%	40.8%	100%

4.5 – SPLIT GROUP SEM

After separating the data based on low Confucian value scores and high Confucian value scores, the Asian and Western airline models were run again, resulting in four new models. Fit indices were obtained for each, and can be found in Appendix D. Table 18 presents the sets of results from the four models designed to address the third objective of this study: to determine whether the degree of Confucian value of respondents affects the perception of service quality across Asian and Western airline brands. Corresponding R^2 values can be found in Appendix J.

Table 18: Split Group Models: Regressions Weights for Asian and Western Airlines

Value Level	Model Path Relationships	Asian Airline Model		Western Airline Model	
		Std. Estimate	*p*	Std. Estimate	*p*
LOW	CBSQ→Comp.	0.605	**	0.566	.113
	CBSQ→Satisfaction	0.452	**	0.220	.213
	SERVQUAL→Comp.	0.190	.434	0.282	.174
	SERVQUAL→Sat.	0.400	*	0.888	***
	Satisfaction→Loyalty	0.785	***	0.574	***
	Comp. →Loyalty	0.050	.574	0.334	**
HIGH	CBSQ→Comp.	0.734	***	0.727	**
	CBSQ→Satisfaction	0.467	***	0.284	.262
	SERVQUAL→Comp.	0.011	.937	0.042	.903
	SERVQUAL→Sat.	0.437	***	0.589	**
	Satisfaction→Loyalty	0.769	***	0.896	***
	Comp. →Loyalty	0.183	**	0.053	.531

NOTE: *** $p<0.001$, ** $p<0.01$, * $p<0.05$

4.5.1 – Examining Effects among Research Variables: <u>LOW</u> Confucian Value

For the Asian airline model, four of the six hypothesized paths were significant ($p<0.05$) with positive associations. CBSQ and SERVQUAL were found to influence satisfaction, with CBSQ being the stronger predictor with a beta of 0.452 (compared to 0.400 for SERVQUAL). Roughly 70 percent ($R^2=0.702$) of the variation in satisfaction could be explained by both. Interestingly, competitiveness was only driven by CBSQ, where approximately 62 percent ($R^2=0.617$) of variation in competitiveness could be explained. Overall, only satisfaction was significant in predicting loyalty ($p<0.001$) with a beta of 0.785.

For the Western airline model, only three of the six hypothesized paths were significant ($p<0.05$) with positive associations. The only service quality variable to predict satisfaction was SERVQUAL with a beta of 0.888 ($p<0.001$), accounting for 79 percent ($R^2=0.792$) of the variation in satisfaction. There were no significant associations between either service quality constructs or competitiveness, however competitiveness was found to affect loyalty ($p<0.05$).

4.5.2 – Examining Effects among Research Variables: HIGH Confucian Value

The results from the assessment of the high Confucian value group on Asian and Western airline models were markedly different from the low value group.

For the Asian airline model, all but one of the hypothesized paths was highly significant ($p<0.05$). Both CBSQ and SERVQUAL had an impact on satisfaction, with CBSQ being the marginally stronger predictor. Approximately 76 percent ($R^2=0.757$) of the variation in satisfaction could be explained by overall perceived service quality. Most interesting was the non-significance between SERVQUAL and competitiveness, which demonstrated consistent findings across all three Asian airline models, where only CBSQ was found to be a strongly associated. 55 percent ($R^2=0.552$) of the variation in competitiveness could roughly be explained in this model. Significant associations were found for both mediating variables to loyalty, with the beta of satisfaction (0.769) almost four times that of competitiveness (0.183).The Western airline model presented a similar trend to that of the low Confucian value group, where only SERVQUAL was significantly associated with loyalty, via satisfaction.

CHAPTER 5: DISCUSSION

5.1 – SUMMARY OF STUDY

In acknowledging that the attitudes and behaviours of frontline employees who interact with customers is inherently shaped by underlying cultural precepts, this study has introduced and tested a measurement instrument which captures the aspects of service delivery identified as being inspired by East Asian Confucian culture, by introducing the *Confucian Branded Service Quality* (CBSQ) scale. The necessity of this approach is grounded in the inability of established instruments, such as SERVQUAL, in measuring the nuanced aspects of performance. Moreover, the blanket application of such generic service quality metrics continues to yield inconsistent results relating to satisfaction and loyalty which extant research has treated as a linear relationship. This linearity assumes that consumers do not evaluate the performance of a brand relative to competing offers, which is often not the case. Therefore, this study examined the relative effect of CBSQ and SERVQUAL on explaining loyalty, mediated by competitiveness and satisfaction, across Asian and Western airline brands. Additionally, as cultural values influence the perception of service quality, this study also measured respondents' level of Confucian value to determine its impact on their perception of service quality between Asian and Western airline brands.

Table 19: Table of Hypotheses Results

Table of Hypotheses and Results		
H1	CBSQ scale will measure the quality of service provisions performed by the frontline employees of East Asian service brands, as a unique non-Western construct.	**Supported**
H2.1	CBSQ has a significant impact on loyalty, mediated by competitiveness for Asian airlines.	**Supported**
H2.2	CBSQ has a significant impact on loyalty, mediated by satisfaction for Asian airlines.	**Supported**
H2.3	SERVQUAL has a significant impact on loyalty, mediated by competitiveness for Asian airlines.	**Not Supported**
H2.4	SERVQUAL has a significant impact on loyalty, mediated by satisfaction for Asian airlines.	**Supported**
H3.1	CBSQ has a significant impact on loyalty, mediated by competitiveness for Western airlines.	**Supported**
H3.2	CBSQ has a significant impact on loyalty, mediated by satisfaction for Western airlines.	**Supported**
H3.3	SERVQUAL has a significant impact on loyalty, mediated by competitiveness for Western air.	**Supported**
H3.4	SERVQUAL has a significant impact on loyalty, mediated by satisfaction for Western airlines.	**Supported**
H4	CBSQ will be a better predictor of loyalty for Asian airlines, than SERVQUAL.	**Supported**
H5	SERVQUAL will be a better predictor of loyalty for Western airlines, than CBSQ.	**Supported**
H6	Consumers' evaluation of service quality for Asian and Western airline brands will be influenced by their level of Confucian value (i.e. cultural orientation).	**Supported**

5.2 – DISCUSSION OF FINDINGS

This section provides interpretations of the research findings in relation to the three objectives of the study. The first discussion addresses the nature of the *Confucian Branded Service Quality* scale and its dimensions as relevant to the understanding of East Asian Confucian culture. The second discussion addresses the hypothesized models for both the Asian airline and Western airline, and the trends observed in relation to the relationship between service quality and loyalty, mediated by competitiveness and satisfaction. And third, a discussion on the observed effects of respondents' Confucian values on the perception of quality between Asian and Western airline brands is addressed.

5.2.1 – Confucian Branded Service Quality

The construction of service quality has predominantly been framed within the discourse of Western contexts. As such, the understanding of distinct relational elements of service quality of East Asian culture has largely been undervalued. This exploratory study refined and tested a culture-specific measure of service quality aimed at capturing the performance of frontline employees influenced by East Asian Confucian culture (CBSQ). Three factors emerged, comprised of fourteen dimensions that reflected the unique functional aspects of services performed by frontline employees of Asian airline brands. In consulting the literature on the influence of Confucian traditions on work ethic, motivation and self-conduct, the meaning of the factors that make up the *Confucian Branded Service Quality* can be explained.

The dimensions of *Employee Presentation* reflect the frontline employees' overall demeanour, and capacity to provide a smooth and natural flowing service experience. Taken together, the emphasis is on providing accurate service, whilst maintaining a harmonious atmosphere from start to finish. Relationalism holds its position as a constant social force in Confucian philosophy, and manifests through ritualistic traditions such as greetings and courteous behaviour. This performance of respect for others, and in this case customer, is the result of "an awareness and empathy for the thoughts and feelings of others" (Ho 1998). The dimension articulates a unique position held by East Asian service quality, which contrasts that of Western 'standards': whereas Western notions of service reliability are oriented towards task completion and outcomes (Tsang 2011), the Asian perspective assumes the outcome to be subject to unknown environmental influences (Chen 2002). Instead, frontline employees enact a sense of sincerity embodied through physical cues to demonstrate benevolence and a wholehearted rather than calculated effort towards service.

The second emerging factor, *Customer First*, represents the notions of hierarchy and respect consistent with Confucian principles of social order. Imrie *et al.* (2002) suggests that respect might reflect the customer's anticipation of a master-servant type relationship; that is, that showing respect is part of the employee's role requirement. Such interpretations of Asian predisposition to subservience in the service setting border on stereotyping and should be met with caution (Yen 2000). Instead, the emphasis is placed on employees observing the order of relationships and authority in the workplace, with performance orientation geared towards pleasing superiors (Mok *et al.* 1998). Such is consistent with John *et al.*'s (2003) conclusion that employees' willingness to serve was interpreted as mostly personal deference to the employer.

Lastly, *Active Service* emerged as a dimension distinctly unique from Western concepts of service quality which rely on customers first making their needs explicit in the service exchange (Parasuraman *et al.* 1985). *Active Service* focuses on the frontline employees' abilities to attentively observe and decode their customers' needs and respond unsolicited. Interpretations from a Confucian perspective suggest that Asian consumers may refrain from making explicit service requests in an effort not to lose face if it reveals a lack of knowledge, or is inappropriate (Ho 1976; Stanworth *et al.* 2014). Therefore, employees demonstrate an aptitude for understanding the non-verbal cues consistent with styles of communication in high context cultures (Hall 1992; Yum 1988). This factor represents a unique point of differentiation in the quality of service provisions between Asian and Western brands. Whilst it may come to be expected of Asian service brands, such unsolicited assistance in Western contexts may be regarded as a pleasant surprise that enhances the overall service experience. For instance, Lai, Lui and Hon (2014) found that the improvisation by frontline employees can create personal experiences that are individualized, and lead to innovative service ideas.

Taken together, the essence of the CBSQ dimensions reflect the four core virtues of Confucian teachings (Tu 1998). These results are consistent also with the 'Confucian Relational Ethics' of politeness, sincerity and generosity that were identified in Imrie *et al.*'s (2002) study in a Taiwanese service context.

5.2.2 – Explaining Loyalty towards Asian and Western Airline Brands

The specific hypotheses derived from the conceptual model were assessed based on their mediated associations between CBSQ and SERVQUAL, and loyalty. Only where CBSQ or SERVQUAL were mediated by satisfaction and competitiveness in their association with loyalty was the hypothesis deemed supported. All but one of the hypotheses developed in this study were supported, as seen in Table 19.

The findings of this study highlight that there is a key distinction between the *Confucian Branded Service Quality* (CBSQ) scale and generic SERVQUAL scale, in their application to airline service brands of different cultures. In particular, distinct drivers of loyalty emerged for both the Asian and Western airline brands: CBSQ dimensions were the key drivers of loyalty for the Asian airline brands, positively mediated by both satisfaction and competitiveness. At the same time, for the Western airline brands, SERVQUAL dimensions emerged as the stronger predictor. These findings suggest that there is, in fact, a difference in the provision of service delivery as perceived through consumers' evaluations. Additionally, it is through the evaluation of frontline employees' performances of each respective airline category, that overall perceptions of service quality and satisfaction are formed. The results of this study substantiate the call by some researchers to develop culture-specific measures of service quality (Raajpoot 2004; Stanworth *et al.* 2014; Imrie *et al.* 2002) by highlighting that Asian airline brands can differentiate their quality of service based on Confucian-inspired traditions embodied by their service staffs' performance.

The Asian airline brands in this study included national carriers from South Korea, Japan, Hong Kong and Singapore, countries which have been historically influenced by Confucian traditions. In this model, customer loyalty (measured as an intention to use the service again and willingness to recommend the brand) was mostly driven by CBSQ dimensions, mediated by an overall satisfaction and affective attitude (i.e. like, enjoyment and a sense of belonging), supporting *H2.1* and *H4* of the study. Whilst caution needs to be exercised to not assume that individuals of East Asian descent are homogeneous with regards to Confucian values, this study's findings indicate that the frontline employees of the Asian brands involved were consistent in their performance specified as being Confucian branded, as perceived by consumers. This can be explained by Lim and O'Cass' (2001) conception of the *culture of brand origin* (COBO) effect, wherein perceptions of quality may be construed based on consumers' understanding and impression of a particular culture, thus influencing

their expectations of quality. Established dimensions of COBO typically focus on linguistics and language as indicators of a brand's culture of origin; however frontline employees are increasingly seen as embodying the image and culture of the brand, as these findings suggest (Nickson *et al.* 2001).

The Western airline brands in this study included national carriers from Australia, United Kingdom and United States, and whilst these are countries characterized by high levels of cultural diversity (particularly reflected in their workforce), they are also defined as being highly Individualistic nations (Hofstede 1980). Overall, customer loyalty in the Western airline model was significantly associated with SERVQUAL dimensions, mediated by satisfaction supporting *H5* of the study. The weaker association of CBSQ (i.e. sincere relational aspects of service) in explaining loyalty for this model has been documented in previous studies by researchers such as Lord (1996) who describe Western service workers, such as German and Americans, as being relatively rule-bound and serving with a sense of compulsory compliance.

Interestingly, however, dimensions along the CBSQ were also significantly associated to loyalty via satisfaction for the Western airline brands. The *Confucian Branded Service Quality* moves beyond core service by emphasizing social regard defined as the genuine respect, deference and interest shown to the customer by the service provider in the interaction (Butcher *et al.* 2003). This finding demonstrates that although CBSQ is more apparent in Asian airline brands, aspects of service delivery in the Western airline were evaluated as being congruent with dimensions of social regard which elicited positive affect. Furthermore, the overall satisfaction as explained by CBSQ dimensions might be attributed to the concept of the novel service encounter (Lai *et al.* 2014) where frontline employees exercise creative discretion to develop new ways to provide service through improvisation (for example, through *Active Service*). This could generate customer delight, an affect response in the satisfaction paradigm (Oliver *et al.* 1997).

Similarly, SERVQUAL dimensions were also found to be strongly associated with loyalty and satisfaction for the Asian airline brands. Such finding is consistent with other studies that have advocated the need to develop culturally sensitive measures of service quality in non-Western contexts, but found that a *combination* of original SERVQUAL dimensions and newly developed criteria could best explain satisfaction (for example, see: Raajpoot 2004; Imrie *et al.* 2002). In this study, approximately 75 percent and 81 percent of satisfaction

could be explained through a combination of CBSQ and SERVQUAL dimensions for the Asian and Western airline brands, respectively. The explanatory power is higher than when SERVQUAL alone is used as a predictor. For example: Park, Robertson and Wu (2004) could only explain 58 percent of variance in satisfaction in their South Korean airline study, only 47 percent in Huang's (2009) airline study in a Taiwanese context, and 33 percent in An and Noh's (2009) study. This suggests that a hybrid approach to measuring service quality of 'Confucian' brands could be the best approach. This is similar to Yao, Baumann and Tan's (2015) hybrid marketing and Confucian behavioural model for explaining wine brand consumption. Furthermore, the strong association of both CBSQ and SERVQUAL dimensions in explaining outcomes for the Asian and Western airline brands can be explained with theories of convergence, divergence and cross-vergence (Ralston *et al.* 1997; Ralston 2008), where the adoption and erosion of cultural values over time are facilitated by heightened intercultural encounters.

An important driver of loyalty included in this study was that of perceived competitiveness (i.e. how innovative the consumer perceived the brand's performance to be relative to the competition). This variable was found to have a significant relationship with loyalty for the Asian airline brands, and was affected by CBSQ dimensions. SERVQUAL dimensions were not associated with perceptions of the brand's competitiveness. That is, consumers' intention to fly again and propensity to recommend the brand was predicated on their evaluation that the 'Confucian' elements of service delivery were more innovative than what other brands offer. This extends Tsang's (2011) argument that some cultures develop specific competencies that can be cultivated to develop a distinct competitive advantage. Further, it highlights that competitive productivity (Baumann & Pintado 2013) is not only a matter of product innovation, but that the competitive edge stems from the education and culture of the workers, reflected in their service delivery. Similarly, CBSQ was significantly and strongly associated with competitiveness in the Western airline, but had a weak association with SERVQUAL. This finding reifies that indeed, components of service that enhance relational quality and social regard (i.e. CBSQ) can produce experiences that are considered more unique (Dimitriadis & Koritos 2014; Butcher *et al.* 2003).

This study establishes that the perceived competitiveness of both Asian and Western airline brands is largely driven by CBSQ dimensions, and increases the predictive power of loyalty. Findings of other empirical studies across a number of industries have revealed that although a consumer is overall satisfied with a brand and has developed some form of affective

attitude, only so much of their decision to remain loyal can be explained (Gremler & Brown 1996; Baumann *et al.* 2005). Findings from this study highlight that a consumer's intention for repeat patronage, as well as their willingness to recommend the brand to others is not only informed by how much they enjoyed the experience, but also how they perceive the brand's service to perform relative to other competing brands. This may not be based on direct experience, but rather an overall perception of a brand being more competitive in its offerings. Additionally, a consumer's expectation of performance might be construed on the basis of exposure (e.g. advertising and word of mouth) to the brand, rather than direct experience that can influence their perceptions of quality (Fang *et al.* 2007). As such, the view that a brand is more competitive in its service offerings could also be attributed to a firm's marketing capabilities (Hooley *et al.* 1999).

Lastly, the findings of this study contribute to the understanding of drivers of attitudinal components of loyalty such as willingness to recommend (Yu & Dean 2001; Ladhari *et al.* 2011). In particular, the explanatory power of loyalty is increased when competitiveness is included in the conceptual model: approximately 78 percent of the Asian airline and 86 percent of the Western airline can be explained. Other studies that have examined the relationship between service quality, affective attitude and recommendation have yielded a mixture of results. In one banking study, 71 percent of the variance in willingness to recommend (loyalty) could be explained (Baumann *et al.* 2007), whereas only 63 percent could be explained for Ladhari *et al,*'s (2011) study; and 67 percent in Park *et al.*'s (2004) airline study.

Consumers who are more concerned with saving face may only recommend a brand if they consider it to be more competitive with high standards of performance because their recommendations may reflect upon their self-image (Kressman *et al.* 2006). Additionally, the outcome of positive word of mouth is especially important for global brands that facilitate dyadic intercultural service encounters (Barker & Hartel 2004), because recommendations act as method of risk reduction in the information-search phase when the service cannot be evaluated on tangible cues (Murray 1991; Buttle 1998). Such perceptions and evaluation of services are culture-bound (Zeithaml & Bitner 1996) and individuals of some cultures may be more reliant on information from those they trust in determining their brand choices (Lam *et al.* 2009).

5.2.3 – Confucian Value of East Asian and Caucasian Ethnic Groups

The cultural orientations of the East Asian and Caucasian ethnic groups were assessed based on the degree to which they subscribed to the Confucian values measured in this study (Monkhouse *et al.*2013). This process yielded interesting results that challenge some of the assumptions about cultural homogeneity and stability across countries in line with Tung's (2008) discussion on intra-national diversity.

Respondents of East Asian ethnicity (including Chinese, Japanese, Korean and Taiwanese respondents) had a mean score marginally higher than the Caucasians, indicating that their subscription to values informed by Confucian principles (i.e. reciprocity, humility, face saving and hierarchy) were more salient, but not entirely unique or specific to one group. Surprisingly, the number of respondents who scored on the low and high extremes of the scale were relatively even between ethnic groups. These findings highlight that Confucian values are multifaceted, and supports Matthew's (2000) assertion that whilst they have a greater implied importance in Asian societies, they are also highly evident in Western ones.

Caucasians from Western nations have predominantly been viewed to be more individualistic in their cultural orientation, which differs markedly to those of Asian ethnic background who are supposedly collectivist (Hofstede 1980). However, findings from this study suggest that individualism and collectivism should not be viewed as two distinct polar opposites that do not intersect, because they overlook values that inherently serve the interest of both, such as wisdom and social justice (Schwartz 1990).

This can be explained by the concept of cross-vergence (Ralston *et al.* 1993), wherein different facets of the institutional environment over time can impact the transfer and erosion of cultural values. Furthermore, Yeung and Tung (1996) argue that culture is not static, but rather it evolves over time influenced by increased interactions amongst individuals of different national cultures which results in a 'negotiated culture' (Brannen & Salk 2000). Countries like Australia with a diverse ethnic population facilitate the process of cultural negotiation amongst individuals. This is supported by Guan and Dodder's (1998) study on national Chinese students studying in Australia, where the longer the stay in duration resulted in the erosion of some Confucian values, but the maintenance of others that helped preserve cultural identity.

5.2.4 – Explaining Loyalty for Low / High Confucian Value Groups

Given the breadth of literature that discusses the impact of individual culture on the expectation and perception of service quality (e.g. Donthu & Yoo 1998; Mattila 1999), it was imperative for this study to not only explore the role of Confucian culture on the behavioural drivers of service staff performance, but to also examine the effect of Confucian values on consumer behaviour. The findings indicate that the degree to which respondents, regardless of their ethnicity, subscribe to Confucian values (i.e. low or high) influences their evaluation of service quality between Asian and Western airline brands, thus supporting *H6* of this study.

Respondents identified as being *higher* on the Confucian value scale regard humility, face saving, hierarchy and reciprocity as important social components, and consider such values as foundational in their interaction with others. Both CBSQ and SERVQUAL were highly and significantly associated with loyalty mediated by satisfaction and competitiveness for the Asian airline brands. Maintaining "face" involves a reciprocal relationship of respect and courtesy, and the dimensions identified in the CBSQ are concerned with maintaining harmony by being promoting respect in service. This finding is consistent with Hoare and Butcher's (2008) study where face saving and harmony significantly influenced satisfaction.

Approximately 88 percent (R^2 = 0.883) of the variance in loyalty could be explained for the Asian airline model, for the high Confucian value group. Such high explanatory power, and strong associations between service quality and loyalty can be explained by perceived cultural congruency or proximity between the service provider and consumer (Weiermair 2000), where expectations and perceptions of service performance are formed on the basis of Confucian principles of social interaction. In particular, the value of reciprocity can be used to explain the strong association between CBSQ and loyalty, where consumers who are more 'Confucian-oriented' receive good service, and in turn return the favour by remaining loyal.

Furthermore, in human-to-human service interactions, cultural similarity facilitates communication and trust (Schumann *et al.* 2007), which can heighten the relational aspects of an exchange to form loyalty and even preference. A study by Baumann and Setogawa (2014) found that consumers, regardless of their ethnicity, prefer service staff of the same ethnicity which could be explained by language, country of origin and homophily effects. The findings of this study contribute to that thought by highlighting that shared cultural values are also a strong driver of (psychological) preference, which are not unique to one ethnic group as

previously thought. This supports current calls for the expansion of thinking about cultural variables to include more than just race and ethnicity (Cohen 2009).

In the assessment of the Western airline brands, CBSQ was a strong predictor of competitiveness, but only SERVQUAL could explain loyalty through satisfaction. This suggests that although service was perceived to overall be good, the relational dimensions of service were absent, or not as pronounced as those experienced with the frontline employees of the Asian airline brands.

Similarly, loyalty for the respondents who scored low on the Confucian value scale was also based on a combination of CBSQ and SERVQUAL dimensions, but with weaker associations and lower explanatory power ($R^2 = 0.677$). In the assessment of the Western airline brands, only SERVQUAL was a predictor of loyalty via satisfaction. This suggests that for respondents who place less importance on being reciprocal, expressing humility and observing hierarchy in social interactions, the core elements of service such as timeliness and task completion are better-received outcomes of the service encounter (Tsang & Ap 2007).

Most interesting, however, was an observed trend between the four models. For the Asian airline models (both the low and high Confucian values), a combination of CBSQ and SERVQUAL dimensions were responsible for explaining loyalty through satisfaction and competitiveness. At the same time, for the Western airline models (both low and high Confucian values), loyalty could only be explained by SERVQUAL via satisfaction. These findings are more pronounced and clear-cut than the study's 'baseline' models which incorporated the entire dataset. These four models highlight patterns of cross-vergence and divergence (Ralston *et al.* 1997; 2008). The Asian airline brands have cross-verged to develop a 'unique' standard of service by combining core levels expected from a Western standard and elements inspired by Confucian traditions, whereas the Western airlines have diverged to maintain a consistent standard of service (illustrated significance in path diagrams can be seen in Appendix F, G, H & I).

CHAPTER 6: IMPLICATIONS & CONCLUSION

6.1 – THEORETICAL IMPLICATIONS

The conceptual model developed to test this study's hypotheses was tested in two categories: Asian airline brands and Western airline brands. The findings from the resulting models have theoretical and practical implications, particularly for firms in the hospitality sector wishing to develop strategies to differentiate their quality of service.

Extant studies on service quality in non-Western contexts have habitually adopted generic measures, such as SERVQUAL (Parasuraman *et al*. 1988) to understand consumers' perceptions of a service encounter. Despite the reliability and validity of such measures, they are only capable of explaining a fraction of a firm's performance from a customer's perspective. This is especially the case for some Asian brands in the hospitality sector where the nuanced aspects of service delivery are not readily captured in SERVQUAL dimensions, but instead require a culture-specific approach as suggested by some cross-cultural researchers (Raajpoot 2004; Imrie *et al.* 2002; Stanworth *et al.* 2014). This exploratory study undertakes this task by introducing the *Confucian Branded Service Quality* (CBSQ) scale and analyses it against SERVQUAL, thereby making several contributions to the current state of knowledge.

The first contribution to the marketing literature is the introduction of the CBSQ scale to capture the overall performance and behaviours of frontline employees representing Asian service brands. The underlying dimensions of *Employee Presentation*, *Customer Focus* and *Active Service* reflect the actions of service staff that in essence, are built upon the Confucian principles that guide social and moral behaviour.

Culture is a complex social phenomenon, and by no means does Confucianism explain the behaviours of all East Asian entities. However, despite the heterogeneity of East Asian countries such as Japan, South Korea and Taiwan in many social, political and economic regards, the application of CBSQ to Asian airline brands in this study have uncovered some common traits of service delivery that provide better insight into the consumer's formation of satisfaction and loyalty. For researchers, the CBSQ presents a starting point to investigate some of dimensionalities of Asian service that isn't addressed in metrics such as SERVQUAL. It suggests there is a distinct approach to service, one which emphasizes not

only the skills and abilities of the frontline employee but rather how they are employed in specific social circumstances.

The second contribution of this study is the distinction between CBSQ and SERVQUAL and their associations in explaining loyalty. Positive significant associations between CBSQ and loyalty, via satisfaction and competitiveness were found with respect to the Asian airline brands. In contrast, SERVQUAL was found to have stronger positive associations with loyalty mediated through satisfaction for the Western brands. These findings suggest that consumers perceive the quality of services rendered between the two groups differently. Specifically, CBSQ emphasizes interpersonal dimensions of harmony and co-existence, which SERVQUAL's abstract questions fail to measure (Chen 2002). However, the findings also suggest that the CBSQ might not be an entirely comprehensive measure of service delivery of Asian service brands, due to the combined effect of SERVQUAL in explaining satisfaction and loyalty for both models. As such, further specification of the CBSQ construct is required and is a suggested avenue for future research. This study demonstrated that CBSQ and SERVQUAL items combined in explaining loyalty resulted in extremely high explanatory power; therefore, the development of a 'hybrid' measure that captures the core aspects specified by SERVQUAL and the relational functions of CBSQ warrants further attention (e.g. Yao, Baumann & Tan 2015).

Third, this study establishes in the hypothesized model that perceived competitiveness and satisfaction are strong predictors of loyalty. Competitiveness has been largely overlooked in the literature, but plays an important role as a brand's performance is generally benchmarked against competing offers (Zairi 1994). As such, new theory has emerged from this study in the framework of the proposed and tested service quality model. This study establishes that indeed perceived service quality explains loyalty when it is conceptualized as being mediated by *both* satisfaction and competitiveness. This relationship is especially strong for the Asian airline brands, where the significant associations are most apparent, and CBSQ dimensions are the main driver. This contributes to the notion of certain cultures developing specific competencies that can be leveraged to differentiate the brand. Additionally, the performance of the frontline employees, as an artefact of culture, embodies the brand's image and can be cultivated to elicit *culture of brand origin* effects (Lim & O'Cass 2001). The inclusion of competitiveness as a predictor increases the explanatory power of both models: approximately 78 percent for the Asian airlines and 86 percent for Western. However given the discrepancies, this suggests it may be necessary to examine other outcomes of service

quality and antecedents of loyalty that have not been considered in this conceptual model. For example, variables such as brand image, perceived value, trust and other marketing variables should be considered.

Fourth, this study found that the perceived quality of Asian and Western airline brands is influenced by the respondent's 'cultural orientation'. Specifically, the degree to which respondents subscribe to Confucian values suggests that different aspects of service quality are more salient than others. A wealth of empirical studies already supports the idea that an individual's cultural orientation informs not only how they evaluate the service, but also what they expect to receive. This study highlights that the strongest associations were found in the assessment of the Asian airline model by those who subscribe highly to Confucian values, supporting theories on cultural proximity and cultural distance (Weiermair 2000) which affect satisfaction based on pre-conceptions about similarity. The findings of this study's assessment of Confucian values between East Asian and Caucasian ethnic groups also point to intra-national diversity (Tung 2008). Neither ethnic group emerged as being more 'Confucian' than the other. Australia's diverse ethnic population facilitates the interaction between various social and cultural facets, and the understanding of culture cannot be constrained as homogeneous. Furthermore, the findings suggest that consumers, regardless of the ethnic background or cultural orientation, were able to discern the difference in service quality between Asian and Western airline brands based on CBSQ and SERVQUAL dimensions, respectively.

Last, findings from this study briefly allude to an important international debate: the one on convergence, divergence or cross-vergence of cultures (Ralston *et al.* 1997; 2006; 2008). A trend emerged within this study between the Asian and Western airline models. The Asian airlines demonstrated mild cross-vergence effects where a combination of CBSQ and SERVQUAL dimensions created a 'unique' quality of service. The Asian brands maintain a distinct style of service, but have also adopted Western approaches and practices. This is likely due to Asian brands benchmarking their service features to match Western standards. In contrast, the Western airline brands demonstrate a divergence effect.

6.2 – PRACTICAL IMPLICATIONS

For marketing practitioners and service managers, this study found evidence that the antecedents of loyalty are unique for Asian airline brands, based on dimensions different to that of Western service quality constructs. The implications for human resource development and service management practice reside in two main areas.

Firstly, hospitality managers of Asian brands are recommended to effectively leverage the unique cultural assets embodied by their frontline employees, by first understanding the specific behaviours that drive consumer satisfaction and loyalty. Specifically, they should not assume that ticking off the boxes of core dimensions of service are enough to ensure satisfaction and loyalty, but instead cultivate the cultural assets that define a *Confucian Branded Service Quality*. Relational elements that promote a sense of genuineness, sincere and uncalculated effort towards service are especially important in differentiating the brand from Western styles of service. Therefore, whilst it is important to tailor training programs to develop task-oriented skills and proficiency, it should not be at the risk of overshadowing other soft skills such as generosity, sincerity and respect (Imrie *et al.* 2002).

Behaviours that managers can monitor and control include customary greetings, employees' presentation and "aesthetic skills" (Nickson *et al.* 2005). However, one aspect to develop is active service. The ability of a frontline employee to provide a service or act unsolicited or unrequested may be expected in high context cultures (Stanworth *et al.* 2014), but may be less apparent in Western service contexts, where the consumer has to make a verbal request. Actions taken by frontline employees outside their normal protocol in an effort to help the consumer may be seen as unexpected or novel (Lai *et al.* 2014) and can elicit a positive affective response. Further yet, as highlighted in this study's findings, consumers may perceive the service to be more innovative and competitive in its delivery.

Second, service brands are increasingly faced with the pressures of globalization, and having to adopt their services accordingly to meet the expectations of consumers from diverse cultural and ethnic backgrounds (Laroche *et al.* 2005). Previous studies have suggested that firms should adapt their service offering to meet different cultural conditions (Furrer *et al.* 2000) through specific segmentation strategies. Findings from this exploratory study suggest that assumptions cannot be made about an individual's cultural values and orientation on the basis of ethnicity, at least not for consumers from countries with high intra-national diversity (Tung 2008). Stereotyping appears to be more implicit in intercultural service encounters

(Hartel & Fujimoto 2000), therefore service staff should be wary about treating consumers differently on the basis of nationality or ethnicity (Kim & Lee 2009)

6.3 – LIMITATIONS & SUGGESTIONS FOR FUTURE RESEARCH

As this study was exploratory in nature, it was restrained by several limitations. These are addressed below, as well as suggested areas for future research.

First, the empirical data were collected from a single industry (i.e. airline). Constraining the study in this manner allowed for better control for variations in product offerings. However, as this study's design focused on measuring the functional (process) aspects of service (i.e. frontline employee performance) only, the CBSQ instrument could be adapted to different service settings that involve high customer interface – especially in the tourism, retail, hotel and restaurant industries. Future research should also extend the measure to include technical (outcome), corporate (image) and service environment dimensions (Rust & Oliver 1994).

Second, the brands that were selected as proxies to represent Asian and Western airline brands were made at the researcher's discretion, and were chosen because they were considered 'extreme' cases for the purpose of this study. Many service brands in the hospitality sector that operate on a global scale of Asian origin have adopted Western practices and do not embody the essence of a 'Confucian brand', especially those with a culturally diverse workforce. Future research should examine whether perceptions of CBSQ are in fact based on the assessment of frontline employee behaviour, or the overall effort of the brand in creating a 'Confucian image'.

Third, this study treated frontline employees of Asian brands as being homogeneous group whose behaviours are informed by Confucian culture. It is acknowledged within the literature, as well as the findings from this study's assessment of Confucian values between ethnic groups, that cultural values are not entirely stable (Tung 2008). Furthermore, researchers have highlighted the rapid and dramatic demographic changes experienced by countries such as Japan, Taiwan and South Korea (Kim & Oh 2011). This poses an interesting avenue to investigate, where future research can validate the CBSQ dimensions by measuring the level of importance frontline employees place on these certain actions in their delivery of service. Furthermore, potential differences in employee performance across Asian countries should be explored.

Future research on the area of Confucian culture and competitiveness should also explore the inherent differences between East Asian nations. Despite sharing similar Confucian values, countries such as Japan, South Korea and China have achieved competitiveness in their service sector industries at different periods in time. An important question would be to investigate how culture has been capitalized to produce dynamic economies.

And lastly, issues of measuring constructs as either formative or reflective has become particularly topical in the literature to date, and should be considered in future applications of Structural Equation Modelling (Baumann *et al.* 2011; Jarvis *et al.* 2003). In particular, it is highlighted that the nature of constructs may not in fact be 'reflective', and that taking this application in the application of SEM may not be suited. Future studies should consider whether 'formative' constructs are more applicable in the development, which may achieve better model fit, as well as a better understanding and application of the observed and latent constructs.

6.4 – CONCLUSIONS

Confucian culture has been extensively applied to the understanding of strong performance in East Asia, but not in terms of the quality of services provided by their frontline employees. This exploratory study was designed to investigate the influence of culture on the perceived quality of service, and ultimately loyalty, by introducing the *Confucian Branded Service Quality* (CBSQ) scale. This was in contrast to the well-established and Western-conceived SERVQUAL scale, used to measure service quality. Using loyalty as a dependent variable, this study examined the relative strength of the predictors for the Asian and Western airline brands. In order to test the research hypotheses, the conceptual structural model on service quality was developed, which included perceived competitiveness and satisfaction as mediators.

The resulting models established that there were indeed differences in drivers of loyalty between the Asian and Western airline brands. CBSQ was the stronger predictor of loyalty, via competitiveness for Asian airlines, whereas SERVQUAL via satisfaction for the Western brands. The distinction highlights that there are unique dimensions of service quality for Asian brands, not readily captured by SERVQUAL. The findings of this study also support the idea that culture can be a unique asset, as CBSQ dimensions were the key drivers of perceived competitiveness across all models. Finally, consumers, regardless of their ethnicity or cultural orientation were able to discern the difference in quality of service between Asian

and Western airline brands based on CBSQ and SERVQUAL dimensions, respectively. The results of this study provide a framework to better understand that service brands can leverage unique cultural assets, as embodied by their frontline employees, to differentiate themselves in the global competitive landscape.

APPENDICES

APPENDIX A: Participant Information & Consent Form

MACQUARIE University

Participant Information and Consent Form

You are invited to participate in a research project funded by Macquarie University, being an investigation into the perceived quality of services performed across a number of commercial airline brands. This research also aims to understand how and to what extent the underlying culture of airline contact staff can influence the quality of service provisions, and how this might explain loyalty.

This research project is being conducted by Doris Viengkham to meet the requirements for the degree of Master of Research, under the supervision of Dr Chris Baumann (+61 (2) 9850 8551; chris.baumann@mq.edu.au) of the Department of Marketing and Management[1].

The survey will involve providing your agreement or disagreement with statements concerning your experience in particular service scenarios, as well as questions on personal background. Most questions will be answered on a seven-point scale. This online survey should take approximately 20 minutes to complete. Participation is entirely voluntary, and responses will be confidential to the degree permitted by the technology being used, including the use of password protected files and data storage in a securely locked cabinet unavailable to public access. If data will be published in a research journal, individuals will remain anonymous and will not be able to be identified from data analysis.

If you elect to volunteer, you are required to answer all questions in the survey. Submission of the survey will be interpreted as your informed consent to participate, and that you affirm that you are at least 18 years of age.

A summary of results can be obtained by email request.

Please print or save a copy of this page for your records.

***I have read the above information and agree to participate in this research project.**

[1] The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspects of your participation in this research, you may contact the Committee through the Director of Research Ethics via (02) 9850 7854 or ethics@mq.edu.au. Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

APPENDIX B: Airline Service Quality Survey

Part 1

1.1 – We are interested in understanding your experience with, and perceptions of various commercial airline brands. In order for us to do this, we would first like to ask you to think about the airline(s) you have travelled *internationally* with.

For **each** of the categories below, please **select one** airline that you have had the most experience travelling with.

Asian Airline Brands	Western Airline Brands
[ ] ASIANA AIRLINES	[ ] QANTAS
[ ] CATHAY PACIFIC	[ ] AmericanAirlines
[ ] ANA All Nippon Airways	[ ] BRITISH AIRWAYS
[ ] JAL JAPAN AIR LINES	[ ] United Airlines
[ ] KOREAN AIR SKYTEAM	[ ] Jetstar
[ ] SINGAPORE AIRLINES	[ ] Virgin australia
[ ] I have not travelled with any of the airlines listed above.	[ ] I have not travelled with any of the airlines listed above.

1.2 – Please tell us a little more about how often you have travelled with each of the nominated airline brands over the course of the **last 5 (five) years**.

Nominated Asian Airline Brand	Nominated Western Airline Brand
[ ] 1-2 times	[ ] 1-2 times
[ ] 3-5 times	[ ] 3-5 times
[ ] More than 5 times	[ ] More than 5 times

1.3 – Have you travelled with the nominated airline brands within the **last 12 (twelve) months**?

Nominated Asian Airline Brand	Nominated Western Airline Brand
[ ] Yes	[ ] Yes
[ ] No	[ ] No
[ ] Not sure.	[ ] Not sure.

1.4 – What would you consider to be your primary purpose for travel?

Please select one:
[ ] Business
[ ] Leisure
[ ] Visiting Family / Friends
[ ] Other

Part 2: Evaluation of Overall Service Quality

2.1 – Reflecting on your overall experience(s) travelling with the nominated airline brands, we would like to ask you some questions relating to your overall evaluations and impressions of the airline's service quality.

For **each** category, please click **only one** answer on the scale which represents to what extent you *agree* or *disagree* with the following statement.

1 Strongly Disagree	**2** Disagree	**3** Somewhat Disagree	**4** Neither Agree/Disagree	**5** Somewhat Agree	**6** Agree	**7** Strongly Agree

	Asian Airline Brand							**Western Airline Brand**						
The airline's aircraft was modern looking in appearance.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Overall, the airline was visually appealing.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The airline's employees were neat in their appearance.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The materials associated with the airline's services were visually appealing.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The airline's employees performed their duties in a timely manner.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
If a customer had a problem, the airline's staff showered a sincere interest in trying to resolve it.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The airline's employees performed the service correctly the first time.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The airline's employees performed its service at the time promised.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The performance of services was generally free of error or mistake.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The airline's employees notified customers of when services would be performed.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The airline's employees were always willing to help customers.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The airline's employees provided prompt service to their customers.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The airline's employees were never too busy to respond to customers' requests for service.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The behaviour of the airline's employees instilled confidence in me.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The airline's employees made me feel safe in my transaction with them.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The airline's employees were knowledgeable and able to answer customers' questions.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Employees of this airline were consistently courteous.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The airline's employees provided individual attention to its customers.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The airline's employees provided service at convenient operating hours.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The airline's employees gave personal attention to its customers.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
I felt that the airline's employees had the customers' best interest at heart.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
I believe that the airline's employees understood the specific needs of their customers well.	1	2	3	4	5	6	7	1	2	3	4	5	6	7

Part 3: Evaluation of Employee Performance

3.1 – Now we would like you think more specifically about the overall performance of the frontline employees / contact staff who provided these services to you, for each nominated airline brand.

For **each** category, please click **only one** answer on the scale which represents to what extent you *agree* or *disagree* with the following statement.

1 Strongly Disagree	**2** Disagree	**3** Somewhat Disagree	**4** Neither Agree/Disagree	**5** Somewhat Agree	**6** Agree	**7** Strongly Agree

In my experience, employees of this airline...	**Asian Airline Brand**							**Western Airline Brand**						
Are warm and kind to their customers.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Present a nice face to their customers at all times.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Use warm greetings when addressing customers.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Pay extra attention to those who are in need (e.g. elder, children, pregnant women, etc.)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Will automatically come to the assistance of a customer if they notice them lost or looking around	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Offer recommendations when a customer is unsure.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Will actively inquire the customer's needs without being asked.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Provide equal service to everyone.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Consistently use 'please', 'excuse me', and 'thank you' when addressing their customers.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Are fair to all customers, and operate on a 'first in, first served' basis.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Focus on serving their customers at all times, and are not distracted by other things or service staff.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Always ask a customer for permission before performing a service.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Always act on their promises to customers.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Will never assign blame to the customer in the event of disruption, conflict or complaint.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Provide specific and detailed information where required.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Always offer a clear introduction and welcome to its customers.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Deliver and perform their service in an ordered manner.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Look presentable at all times.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Handle questions from customers well and clearly express their responses.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Always deliver the service correctly.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Are warm and kind to their customers.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Present a nice face to their customers at all times.	1	2	3	4	5	6	7	1	2	3	4	5	6	7

Part 4: Airline Brands' Competitiveness

4.1 – For **each** category, please click **only one** answer on the scale which represents to what extent you *agree* or *disagree* with the following statement.

1 Strongly Disagree	**2** Disagree	**3** Somewhat Disagree	**4** Neither Agree/Disagree	**5** Somewhat Agree	**6** Agree	**7** Strongly Agree

	Asian Airline Brand							**Western Airline Brand**						
I think that this airline is all about creating and upgrading its services: including booking, check-in, and flight information	1	2	3	4	5	6	7	1	2	3	4	5	6	7
I think that this airline is all about creating and upgrading its in-flight products and services: including entertainment, food and beverages, seating, and presentation	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The speed to market with new product and services of this airline is more competitive than other airlines	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The delivery of services of this airline is more competitive than other airlines	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Asian Airline Brand							**Western Airline Brand**						
Overall, I am satisfied with this airline.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
I like this airline.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
I enjoy travelling with this airline.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
I feel good about this airline.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
I have a sense of belonging to this airline.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Asian Airline Brand							**Western Airline Brand**						
If other people inquired about this airline, then I would recommend it.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
I am happy to voluntarily recommend this airline to others.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
The next time I travel, I intend to use this airline again.	1	2	3	4	5	6	7	1	2	3	4	5	6	7

Part 5: Assessment of Personal Values

4.1 – We would now like to ask you a few questions about your personal values. Answering as honestly as possible, please indicate to what extent you *agree* or *disagree* with the following statements as they apply to you.

1 Strongly Disagree	**2** Disagree	**3** Somewhat Disagree	**4** Neither Agree/Disagree	**5** Somewhat Agree	**6** Agree	**7** Strongly Agree

I am concerned with not bringing shame to myself.	1	2	3	4	5	6	7
I am concerned with not bringing shame to others.	1	2	3	4	5	6	7
I pay a lot of attention to how others see me.	1	2	3	4	5	6	7
I am concerned with protecting the pride of my family.	1	2	3	4	5	6	7
I feel ashamed if I lose my face.	1	2	3	4	5	6	7
I avoid singing my own praises.	1	2	3	4	5	6	7
I try not to openly talk about my accomplishments.	1	2	3	4	5	6	7
I like to draw others' attention to my accomplishments.	1	2	3	4	5	6	7
Being boastful is a sign of weakness and insecurity.	1	2	3	4	5	6	7
I only tell others about my achievements when I am asked to.	1	2	3	4	5	6	7
I recognise and respect social expectations, norms, and practices.	1	2	3	4	5	6	7
When I am uncertain how to act in a social situation, I try to do the same as what others do.	1	2	3	4	5	6	7
I usually make decisions without listening to others.	1	2	3	4	5	6	7
When I buy the same things my friends buy, I feel closer to them.	1	2	3	4	5	6	7
If there is a conflict between mine and my family's interest, I will put priority on mine.	1	2	3	4	5	6	7
I am happy if people look up to me.	1	2	3	4	5	6	7
We have a vertical order in the society that we should respect.	1	2	3	4	5	6	7
A person with a high personal achievement is considered to have a high social standing.	1	2	3	4	5	6	7
Wealth and power are becoming important determinants of social status.	1	2	3	4	5	6	7
The practice of 'give and take' of favours is an important part of social relationships.	1	2	3	4	5	6	7
I feel a sense of obligation to a person for doing me a favour.	1	2	3	4	5	6	7
It is bad manners not to return favours.	1	2	3	4	5	6	7
When I receive a big favour, I try to go an extra mile to do something nice in return.	1	2	3	4	5	6	7
When I buy a gift to say thank you to someone, I try my best to make sure that person will appreciate it.	1	2	3	4	5	6	7

Part 6: Demographics

What is your gender?	○ Female ○ Male ○ I do not wish to answer.
What is your current age?	○ 18-24 years ○ 25-34 years ○ 35-44 years ○ 45-54 years ○ 55-64 years ○ 65 years and above ○ I do not wish to answer.
What is the level of the highest qualification you have *completed*?	○ Year 10 or equivalent ○ Year 11 or equivalent ○ Year 12 or equivalent ○ Diploma (Advanced / Associate) ○ Bachelor Degree ○ Honours Degree ○ Master Degree ○ Doctoral Degree ○ I do not wish to answer.
What is your gross income per annum?	○ $29,999 or under ○ $30,000-$49,999 ○ $50,000-$69,999 ○ $70,000-$89,999 ○ $90,000 and above ○ I do not wish to answer.
Please indicate the ethnicity you most identify with:	○ Caucasian ○ Chinese ○ Japanese ○ Korean ○ Indian ○ Vietnamese ○ Other _____

APPENDIX C: Normality Test for Confucian Value

Variable	Min.	Max.	Mean	Std. Dev	Skewness	Kurtosis
Confucian Values (Composite Score)	3.07	7.00	5.09	.765	-.024	-.003
	Kolmogorov-Smirnov			**Shapiro-Wilk**		
	Statistic	df	Sig.	Statistic	df	Sig.
	.054	476	.002	.996	476	.201

APPENDIX D: Model Fit Indices for Split Group SEM (Asian & Western)

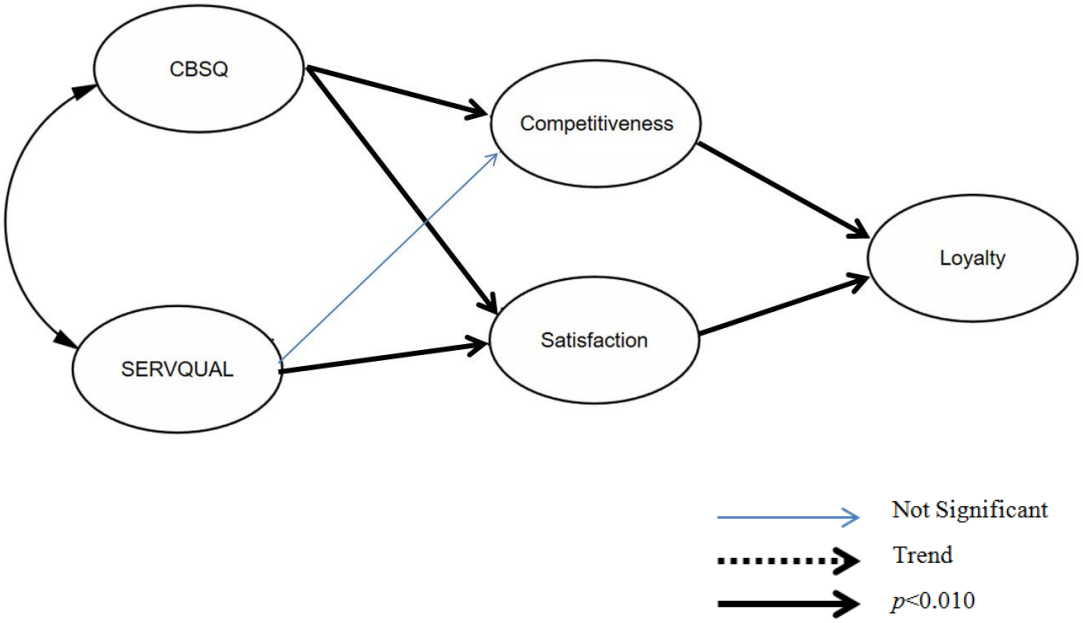
	Fit Indices								
	X^2	df	X^2/df	RMSEA	GFI	AGFI	NFI	CFI	RMR
Model	*Threshold*		≤ 5	≤ 0.08	≥ 0.9	≥ 0.8	≥ 0.9	≥ 0.95	≤ 0.05
ASIAN (H&L)	768.299	356	2.158	0.063	0.904	0.846	0.901	0.988	0.058
WESTERN (H&L)	732.352	282	2.597	0.080	0.920	0.887	0.889	0.923	0.072

APPENDIX E: Pattern Matrix for Confucian Values

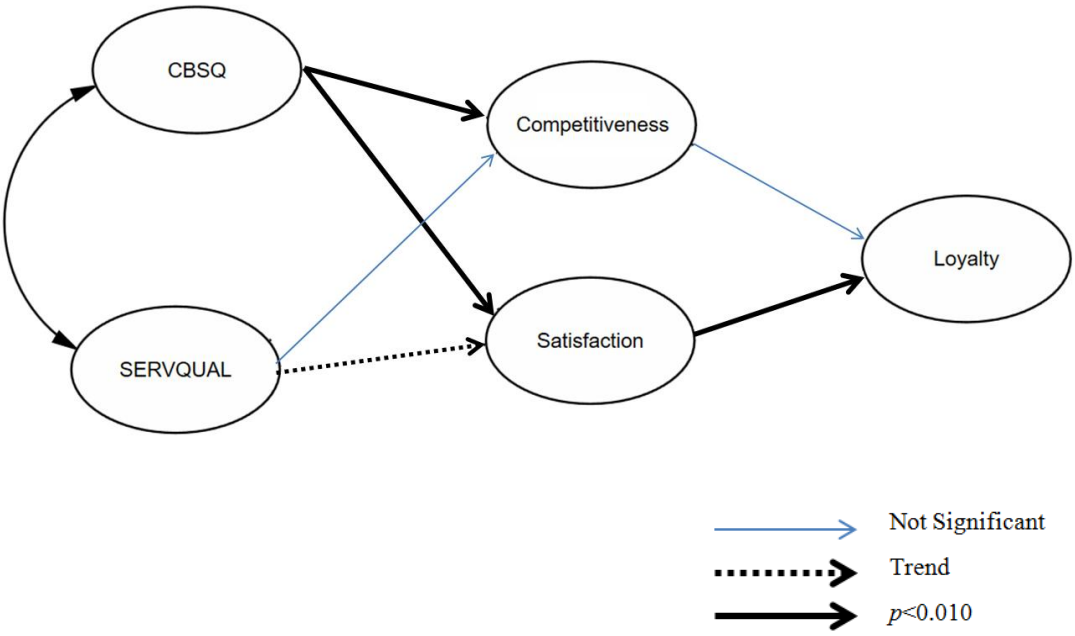
Exploratory Factor Analysis (EFA): Confucian Values

		Factor Loading			
Construct	Item	1	2	3	4
Reciprocity	REC4	.782			
	REC2	.767			
	REC3	.753			
	REC5	.713			
	REC1	.654			
Humility	HUM2		.804		
	HUM1		.795		
	HUM5		.663		
	HUM4		.599		
Face Saving	FS2			.778	
	FS4			.747	
	FS1			.708	
Hierarchy	HIE2				.831
	HIE1				.615

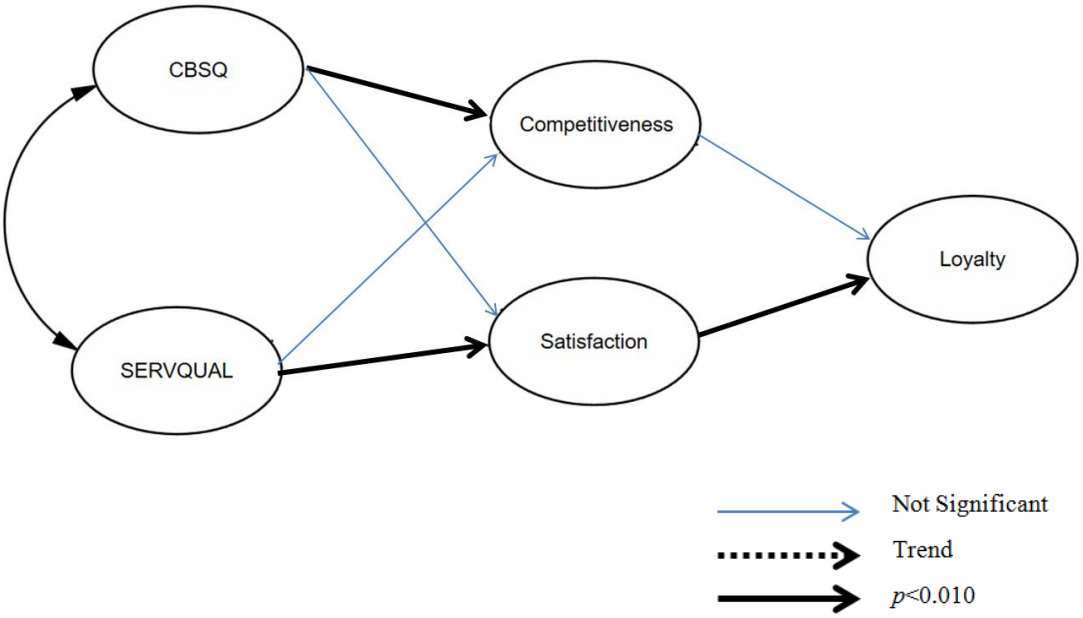
APPENDIX F: High Confucian Value – Asian Airline Model



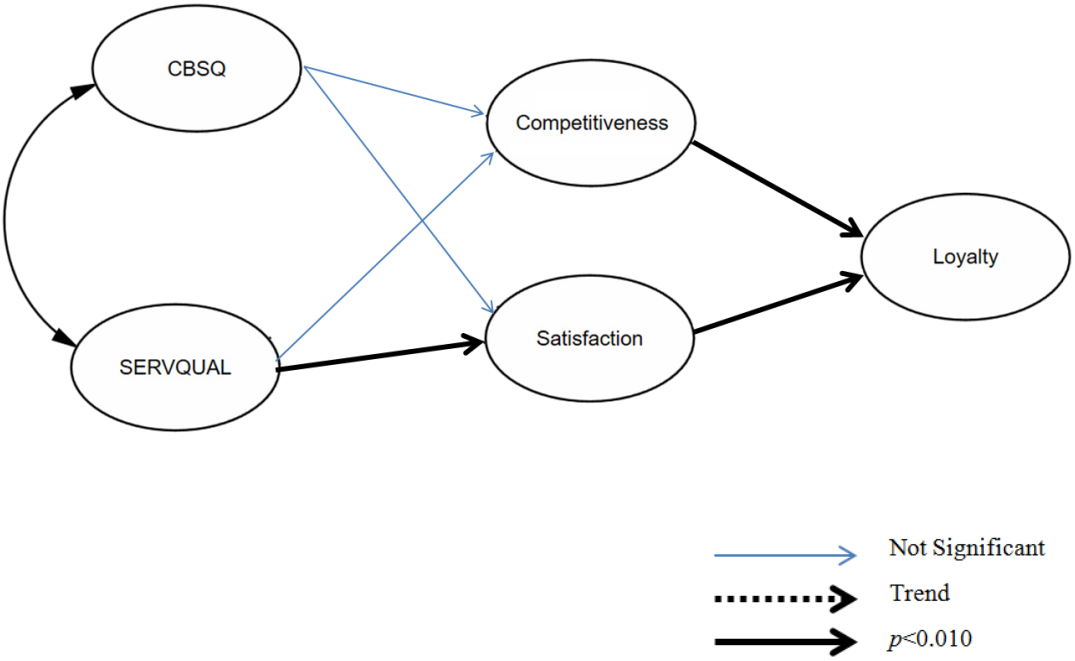
APPENDIX G: Low Confucian Value – Asian Airline Model



APPENDIX H: High Confucian Value – Western Airline Model



APPENDIX I: Low Confucian Value – Western Airline Model



APPENDIX J: R^2 Values for Split Group Models (High & Low Values)

		Asian Airline	Western Airline
LOW	Competitiveness	0.617	0.694
	Satisfaction	0.702	0.792
	Loyalty	0.677	0.779
HIGH	Competitiveness	0.552	0.537
	Satisfaction	0.757	0.744
	Loyalty	0.883	0.817

APPENDIX K: ETHICS APPROVAL

RE: 'Confucian Air: Examining the effects of culture on the quality of service provisions in an airline context' (Ref: 5201500595)

The above application was reviewed by the Faculty of Business & Economics Human Research Ethics Sub Committee. Approval of the above application is granted, effective "27/07/2015". This email constitutes ethical approval only.

This research meets requirements of the National Statement on Ethical Conduct in Human Research (2007). The National Statement is available at the following web site:

http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/e72.pdf.

The following personnel are authorised to conduct this research:

Dr Chris Baumann

Miss Doris Viengkham

NB. STUDENTS: IT IS YOUR RESPONSIBILITY TO KEEP A COPY OF THIS APPROVAL EMAIL TO SUBMIT WITH YOUR THESIS.

Please note the following standard requirements of approval:

1. The approval of this project is conditional upon your continuing compliance with the National Statement on Ethical Conduct in Human Research (2007).

2. Approval will be for a period of five (5) years subject to the provision of annual reports.

Progress Report 1 Due: 27th July 2016

Progress Report 2 Due: 27th July 2017

Progress Report 3 Due: 27th July 2018

Progress Report 4 Due: 27th July 2019

Final Report Due: 27th July 2020

3. If the project has run for more than five (5) years you cannot renew approval for the project. You will need to complete and submit a Final Report and submit a new application for the project. (The five year limit on renewal of approvals allows the Committee to fully re-review research in an environment where legislation, guidelines and requirements are continually changing, for example, new child protection and privacy laws).

4. All amendments to the project must be reviewed and approved by the Committee before implementation. Please complete and submit a Request for Amendment Form available at the following website:

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/forms

5. Please notify the Committee immediately in the event of any adverse effects on participants or of any unforeseen events that affect the continued ethical acceptability of the project.

6. At all times you are responsible for the ethical conduct of your research in accordance with the guidelines established by the University. This information is available at the following websites:

http://www.mq.edu.au/policy/

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/policy

If you will be applying for or have applied for internal or external funding for the above project it is your responsibility to provide the Macquarie University's Research Grants Management Assistant with a copy of this email as soon as possible. Internal and External funding agencies will not be informed that you have approval for your project and funds will not be released until the Research Grants Management Assistant has received a copy of this email.

If you need to provide a hard copy letter of approval to an External organisation as evidence that you have approval, please do not hesitate to contact the FBE Ethics Committee Secretariat, via fbe-ethics@mq.edu.au or 9850 4826.

Please retain a copy of this email as this is your official notification of ethics approval.

Yours sincerely,

Dr. Nikola Balnave

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