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THE ROLE OF CULTURE ON CUSTOMER PARTICIPATION IN SERVICES

BY

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A Thesis Submitted to the Hong Kong Polytechnic
University for the degree of Doctor of Philosophy

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Abstract of thesis entitled "The Role of Culture on Customer Participation in Services" submitted by Alison E. Lloyd for the degree of Doctor of Philosophy at The Hong Kong Polytechnic University (February, 2003)

ABSTRACT

The major impetus of the research is to understand some of the unanswered questions that surround the construct of customer participation. Customer participation is all about the contributions that are made by the customer in the service process, which ultimately shape the service they receive as well as the quality that is achieved. To date, the amount of literature on this construct is limited but there have been some theories developed and some empirical testing of the construct. However, one of the major setbacks in the extant customer participation research is the lack of a scale to and also lack of focus as to what customer participation is comprised of. This is a prerequisite that needs to be fulfilled if advancement is to be made in the understanding of this phenomenon.

The research also attempts to examine the effect of culture on customer participation behaviour, a move that has been called for by academics. This is done through testing of the role of culture in various models. Furthermore, the research aims to investigate possible antecedents and consequences of customer participation behaviour in order to understand not only the immediate construct itself, but also what affects its intensity as well as its effects on other variables in a model of customers' consumption of services.

The study has been conducted on two service types, namely tourism and phone banking and data has been collected from three cultural groups, including Hong Kong Chinese, Japanese and British respondents. Work on the scale has demonstrated that it possesses reliability as well as validity and remains promising

for future research in other service contexts although there are still improvements that need to be made, most notably being the search for possible additional dimensions of participation.

Furthermore, findings from the research signal various important implications for service providers including the use of customer participation as a basis of segmentation, or as an aid in the development of new services or even as a vehicle to change the ways in which individuals interact in the service encounter.

This research has served to highlight the importance of this recognised but relatively unexplored construct in services marketing. A first attempt has been made to unveil the properties of customer participation, its antecedents and consequences.

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Chapter 1 INTRODUCTION

1.1 *Introduction*

This chapter serves to introduce the background of the thesis via a prologue into the service economy of Hong Kong in general and then some brief discussion on the industries that will be focused upon. This section will also delve into the research problem and objectives of the research. This will be followed up by justifications for the research and lastly an overview of the organisation of the thesis.

1.2 *Background of the Study*

The study has the main purpose of examining a particular type of behaviour that can occur in the service process when the customer actually performs some service tasks. This type of behaviour has been labeled “customer participation” and an attempt will be made to construct a scale to quantitatively measure this construct. Once a scale can be developed, it will allow the investigation of the impact of customer participation on other key constructs in services marketing. Not only will it allow for the investigation of its impact, but also the examination of what factors affect its intensity. As customer participation is a behaviour that can occur in the service setting due to the fact that for services, sometimes the customer inevitably has to take part in the service process in order to ensure delivery of a service; two services, namely tourism and retail banking, will be selected to investigate customer participation. The following paragraph will give some insight into the importance of services in general for Hong Kong’s economy as well as some discussion into the specific services chosen for the study.

Hong Kong's services sector is probably among one of the most developed in East Asia. Hong Kong is already established as one of the principal services centres both globally and in the Asia Pacific Region. However, in order to reach this status, Hong Kong's economy has undergone great change in the past two decades. During the last two decades, there has been rapid expansion of the services sector. In 1997 alone, this sector generated 85% of Hong Kong's Gross Domestic Product (GDP). The transformation into a service economy has been due to the restructuring of the manufacturing sector, which has seen many Hong Kong firms move their low value-added work out of Hong Kong and concentrate on high-value, technology based markets.

Tourism represents one of the largest revenue earners for Hong Kong today. In 1999, the total amount of tourism receipts was HK\$69 billion. Tourism has several benefits such as being a source of foreign exchange earnings; it is also a means to economic growth, raises the quality of life, creates employment and improves the overall balance of payments by helping to offset deficits in other sectors (Singh, 1997). People visit Hong Kong from many countries however the main markets are split into two categories; namely long haul and short haul visitors. Long-haul markets comprise of the Americas, Europe, Africa, Middle East, Australia, New Zealand and South Pacific. Short-haul markets comprise of North Asia, South and Southeast Asia, China and Taiwan. Over the past few years Hong Kong has remained the most popular city destination in Asia, thereby further boosting the importance of tourism.

In the 1999 annual statistical review of the HKTA, research revealed that the average visitor to Hong Kong came for the purpose of vacation the average visitor was aged 40 or below, was married and held a senior white-collar occupation. Males

mostly dominated the visitor market. The average visitor also came to Hong Kong without a package arrangement. Such travel options are known as Foreign Independent Tours (FIT). FIT's are travel arrangements designed to tailor-fit the needs and interests of the individual traveller (Poynter, 1989) and it is this characteristic that sets it apart from other travel options. The FIT is made up of several components including air and ground transportation, accommodation, sightseeing, entertainment and dining. The advantages that accrue from FIT's include flexible schedule, freedom of choice in terms of destinations, places of interest, sightseeing, dining, accommodation and forms of entertainment.

Tours involve both goods and services, however the focus of this research will centre in on the service part of tours, specifically on the role of the travel agency that helps to organise the arrangements and itinerary of a trip. FIT's are unique in that they require a significant amount of participation from the consumer during the service production and delivery. For example, during the booking of a hotel reservation, the customer participates in providing information on the length of stay, days of arrival and departure as well as the room type preferred.

Banking makes up a significant proportion of the service industry. Hong Kong is one of the world's leading banking centres and its services are used by clients throughout the world and more specifically in the Asia Pacific Region (Census and Statistics Department, HKSAR, 1999). In this research, focus is placed on the area of retail banking in particular. The label retail banking can be rather broad so only a specific segment of this will be examined. The use of telephone banking will be examined as this is a service where participation of the customer is perhaps more obvious than other forms of service delivery such as the Automatic Teller Machine or the use of the Human Teller. At the time the research

commenced, telephone banking was a relatively new service that had been introduced in retail banking as an alternative service delivery method. The move towards these other forms of service delivery in recent years have come about due to increases in branch maintenance costs and the advantages of new technology. Such service delivery methods give the customer the opportunity to use the service outside of the normal operating hours of a branch. Thereby, allowing the customer to receive service whenever needed. The use of these other methods also allows the bank to have more efficient distribution as well as geographical reach.

1.3 Research Problem and Objectives

It has long been recognised that the customer is an integral part of the service process as customers are often involved in the production and delivery part (Czepiel et al., 1985). The contribution that the customer makes to the service process has often been referred to as customer participation (Silpakit and Fisk, 1985). Customer participation is an area that is lacking in research despite the fact that it is widely recognised that it occurs in some services due to the nature of inseparability between service production and delivery. Previous research on customer participation has mainly been on a conceptual level (Silpakit and Fisk, 1985) or if it is empirically examined, it has often been operationalised as a single-item measure (Cermak et al., 1994). More importantly, although it is a recognised construct, there has been little impetus to examine its components, and what it encompasses. This gives rise to the research question of, *what constitutes customer participation?* This is an essential initial step that must be taken if understanding of this construct is to be achieved. More importantly, the research that has been conducted on customer participation has been done so on Western subjects and it can be argued that it is inappropriate to

simply “transplant” certain theories and expect the same behaviour to occur, given the fact that culture is known to exert its influence on our attitudes and behaviour. The fact that the majority of extant literature pertains mainly to that of Western cultures, another important research question that must be asked is, *are previous theories about customer participation culturally appropriate and do they apply in the same way?* In order to comprehend the benefits of customer participation, it is vital that its relationship with other constructs be examined in order to further our understanding of the workings of this phenomenon.

Also, in order to reap the benefits from the knowledge of customer participation it is also essential to consider the investigation of some of the possible antecedents and consequences of this construct, hence this is the basis of another research problem in the thesis. By understanding the possible antecedents, knowledge can be gained about research questions such as, *what influences the intensity of customer participation?* By examining the consequences of customer participation, one is able to understand or gain insight into other research questions such as, *what are the effects of customer participation on other constructs pertinent to the service encounter?* These issues and unanswered questions give rise to the specific objectives behind this research:

1. to develop an instrument to measure the construct of participation;
2. to examine the cultural effects on customer participation; and
3. to investigate the effect of customer participation on customer perceptions of service quality, and ultimately on behavioural intentions toward the service.

In the research, these problems and questions are solved in several ways. Extensive literature review was conducted to unearth potential antecedents to and consequences of customer participation. Literature review was also conducted to find items that were relevant to the construct of customer participation. The items were then validated by means of the use of focus groups. These items were then subjected to rigorous scale development procedures. The examination of culture has been undertaken through the measurement of cultural values. Data was collected from three different cultural groups for this study namely: Chinese, Japanese and British. The integrated causal relationships between these antecedents and consequences have been analysed with structural equation modeling.

Therefore, this serves to outline the scope of the study itself, and the major bodies of theory that will be covered include areas of customer participation, perceived service quality, behavioural intentions, locus of control, culture and perceived risk. Each of these constructs is covered in ample detail in Chapter 3 of the thesis.

1.4 Justification for the Research

Little previous research has been conducted in the area of participation although it has long been recognised that the customer inevitably plays an active role in the service process. This vital part of the service encounter which encompasses the characteristic of inseparability as well as the unique aspect of having the customer participate in the production and delivery of the service, merits an in-depth study to find out more about this phenomenon. Related fields of literature have mostly concentrated on areas such as employee motivation and employee empowerment. This signals a need to also examine the customer side of the

encounter, as they too are involved in the service transaction and can also affect the service outcome. This also signals that there is a knowledge gap in the extant literature and theory and is an area that would benefit from further investigation if we are to advance in what we know. Therefore, through this study, it is hoped that a greater understanding can be achieved in order to make some contribution to the existing theory.

Although there have been previous theories generated about participation, it has often only considered single aspects of participation each time. As Churchill (1979) has stated that it is sometimes inappropriate to use single-item measures as these can be methodologically flawed, it is therefore vital that more about customer participation is explored so as to understand the whole domain, hence the need for a multi-item scale. Since one of the objectives of the study is to devise a scale or some sort of instrument to measure customer participation in services, it is vital that these theories be considered holistically in order to fully capture the domain of customer participation. Previous works have also utilised relatively less powerful forms of analyses to examine the impact of customer participation on other constructs and this is an area where this research fills the void by utilising causal analysis to examine the effects and directionality.

Participation can be regarded as what may also be termed as service involvement. Traditional involvement theory has focused extensively on physical goods (Richins et al., 1992; Laurent and Kapferer, 1985; Jensen et al., 1989) and the theory is insufficient when services are studied, as services possess a behavioural element not found in goods. Although a rigorous boundary can be drawn between these two concepts, one of the contributions of this research may perhaps serve as an extension of the involvement literature by adding a behavioural aspect to it.

In terms of practical significance, a better understanding of customer participation could have potential implications for service training as well as the management of service quality. This would be especially true if certain propositions made about this construct and its positive effect on perceived service quality and behavioural intentions were to hold true. Also, the ability to measure customer participation could provide service providers with some insight in the future development of services. The study can also give service providers a method of market segmentation based on levels of participation. Such information is important for service providers given that the majority of Hong Kong economy is based on service industries, therefore, the potential for application and applicability could be extensive and vast.

The study also attempts to do something that has not been done in previous studies on customer participation that is to examine customer participation from the viewpoint of cultural values and the influences it exerts on participation. Since customer participation is a behaviour, some scholars such as File et al., (1995) have argued that it is apt to be affected by cultural values, which play a role in determining the why in which individuals interact and the behaviours that are displayed. Therefore, this study will incorporate culture. Furthermore, it also attempts to look for significant differences in customer participation based on cultural group.

The need to consider customer participation as part of an integrated framework involving both antecedents and consequences is also beneficial to research in this area. This study also contributes in that it does not singularly view customer participation, but instead tries to capture the antecedents that influence it as well as the consequences of customer participation on service quality and

behavioural outcomes. This is also something that has not been attempted in previous studies, and this is an area where much can be learned.

1.5 Organisation of the Thesis

This first chapter provides a brief introduction into the background and objectives of the study in a general manner. Chapter 2 looks at the broader theoretical background against which customer participation needs to be considered. Chapter 3 narrows down the theory to services in particular and is an extensive and comprehensive literature review section on the all six constructs that are examined in the study. These six constructs include customer participation, culture, perceived service quality, perceived risk, locus of control and behavioural intentions. An in-depth look is taken at each of these constructs. Chapter 4 is based solely on the types of overall models that are considered in the research that try to investigate the role of culture on customer participation. Chapter 5 is the research methodology chapter. Due to the sheer complexity of this research, this chapter is broken down into two main areas, the first area concentrates on the method behind the scale construction process for customer participation; and the second area looks at the methodology that will be used in the research in general. Chapter 6 provides the results that are obtained from the exploratory focus groups as well as the initial pilot study. Chapter 7 gives the results from the main data collection and discusses in detail the results from the exploratory factor analysis, confirmatory analysis, structural equation modeling as well as multigroup analysis. Chapter 8 will give the final discussions on the findings and the implications of the research followed by the limitations of the work as well as areas for roads for possible future research. Lastly, this will be followed by the list of references used in the research as well as the

appendix.

1.6 Delimitation of the Research

There are certain boundaries of the research that need to be expressed. The industries chosen are that of telephone banking and self-organised tourism or FIT's. These two services were considered based on the fact that certain aspects of these services required a certain level of customer participation from the consumer and it was in these services that it was deemed would be suitable to assess the degree of customer participation by asking respondents to rate how much effort, for example they engaged in order to obtain and create the service. The research findings are based upon results obtained from a specific segment of the population, namely professionals. A reason for this being was that the specific services examined were thought to be used by this segment due to the fact that use of these particular services are often more expensive than their alternatives and it was considered that the professional segment had a greater amount of disposable income to spend. All respondents, regardless of their nationality were living and working in Hong Kong. Perhaps, this may be regarded as a possible delimitation as the research does not sample respondents from their native countries. Therefore, the sample is restricted to Hong Kong only. Lastly, the level of analysis is conducted at the individual level, that is, at the level of the individual consumer.

1.7 Chapter Summary

This chapter has laid down the practicalities of the research. It has introduced some of the research questions and also the specific research objectives

that are addressed in the research. It has also provided the justifications for the research as well as a brief description of how the study will be carried out. Finally, an outline of the thesis was provided and succinct descriptions of the limitations that surround it were also given. On these grounds, the thesis can proceed with a detailed account of the research that was conducted.

Chapter 2 THEORETICAL FOUNDATIONS

2.1 *Introduction*

This chapter introduces the broad concept of services and attempts to view them from a broader theoretical framework. The broader theoretical framework that will be considered is that of Home Production Economics originating from the work of Becker (1965). More importantly, it views customer participation in light of this theory to understand some of the considerations that may be applicable when customers select between varying service delivery options.

2.2 *Applicability of Household Production to Services*

The basic underlying assumption of the household production model (Becker, 1965; Pollak & Wachter, 1975) is that households “combine time and market goods to produce more basic commodities that directly enter their utility functions”. A major contribution of Becker’s work has been to call attention to the possibility of applying economic analysis to understanding allocation of time among different activities by individuals.

In more recent times, there has been a call to the possibility of extending the household production model to services (Ohe, 2002) meaning that the model should not be restricted purely to activities that are conducted in the home but extended to activities that occur outside of the home. One such example is tourism, a service that is included in this study. Due to the simultaneous production and consumption characteristics of goods it is rational to see the extension of this model outside of the home.

2.3 *Choosing Between Service Delivery Options*

It is possible that the concept of customer participation may be considered within a larger theoretical backdrop. Most services result from the combination of intangible input from the customer and the service employee as well as some physical goods. For instance, check-in service at a hotel is performed by combining the inputs from the customer and the receptionist into the computer systems of the hotel. Therefore, in some cases, it seems that the line between goods and services can be quite blurred. However, there are certain factors that fall within the broad area of the household production function which need to be considered when understanding customer participation behaviour.

An important consideration that needs to be taken into account in this research is that there are various forms of service delivery for each type of service. For instance, individuals can select to have their laundry done for them or they can opt to perform this task completely by themselves. Therefore, it is essential to examine customer participation from the viewpoint of the types of trade-offs that customers make in selecting a service option that requires greater input from them.

It is possible that in studying this research that when selecting options that involve greater participation, the customer may be faced with having to balance circumstances such as the amount of time they have to do the service. It may be possible that if customers are not able to spare much time, they would possibly select services options whereby they receive the service quickest, which could involve either more or less effort on their behalf.

They may also have to consider the question of the cost of differing options. In some cases customers are given a monetary incentive in the form of reduced prices for performing all the service tasks themselves such as in the case of self-

services.

The amount of effort that one needs to exert is also another consideration factor. It is possible that some customers may consider the effort they exert and whether it balances or exceeds the benefits they receive. Later on, there is some coverage on the types of benefits that customers may receive as a result of selecting services that entail higher participation levels. Sometimes, these benefits may not be of a monetary nature but could be benefits such as increased confidence or even relational benefits with the service provider.

The willingness of the individual to engage in services with higher participation levels is a factor that also needs to be taken into account. It may be rational to assume that the more willing someone is to take on service tasks, the greater the amount of effort they would be willing to put into providing service inputs.

2.4 Chapter Summary

This chapter has served to highlight the broader field in which customer participation needs to be considered in order to understand better how this phenomenon works. The household production model is an ideal theoretical framework to understand the allocation of time and the possible factors that could lead to customers using a service delivery option requiring greater customer participation. This chapter has shown that sometimes the distinction between goods and services is not concrete and that most services result from a combination of human input and physical goods. In the following chapter, the body of theory narrows down to looking at the concept of customer participation specifically in services.

Chapter 3 LITERATURE REVIEW

3.1 *Introduction*

In this part of the thesis, an overview of the parent discipline of customer participation in services will be provided as a means to demonstrate the evolution of customer participation into what it is today. The second half of this chapter will also describe the immediate discipline of customer participation as well as the other constructs that are examined in the research. The second half of the chapter can be further delineated into the antecedents and consequences of customer participation. From the extensive literature review conducted, it was found that the constructs of culture, perceived risk and locus of control served as possible antecedents to customer participation. The types of consequences that will be covered in this research included perceived service quality as well as some of the associated behavioural outcomes or behavioural intentions as they are also known. In this chapter, a comprehensive description of the literature into each of these constructs (namely: customer participation, culture, perceived service quality, perceived risk, locus of control and lastly, behavioural intentions) will be provided.

3.2 *Parent Disciplines*

To understand the emergence of customer participation as an area of study, a mind map can be developed in order to navigate the progress towards customer participation in the literature as seen below.

The parent discipline of customer participation is the field of services marketing. To be more specific, the roots of customer participation can first be

traced to a key characteristic of services – inseparability in the production and consumption of a service. Unlike goods that are produced first, and then sold and consumed, services are produced and consumed at the same time. Zeithaml (1981) pointed out that because of this inseparability, the buyer usually participates in producing the service, thereby affecting the performance and quality of the service. Carmen and Langeard (1980) have added that the characteristic of inseparability in services forces the buyer into intimate contact with the production process. Ennew and Binks (1998) and Dahringer et al., (1991) added to this by stating that both parties (customer and service employee) are involved in the service provision and the outcome of the service delivery process may depend as much on the actions of the customer as on the actions of the employee; thereby making marketing and production to be highly interactive (Gronroos, 1978).

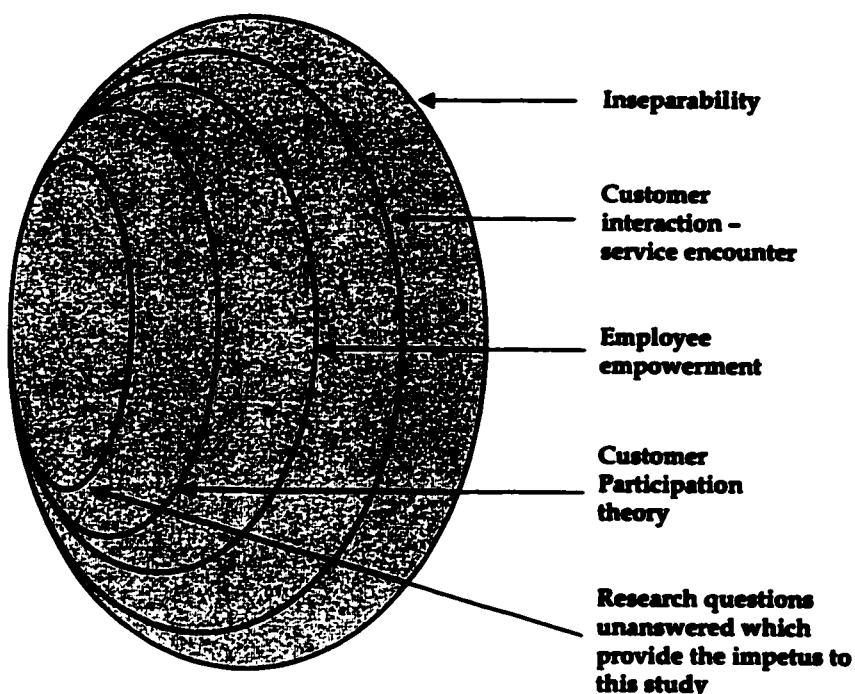


Figure 3-1: Mind map showing the evolution of customer participation

Chase (1978) also distinguished between services that he classified as being “low contact” and “high contact”. Chase (1978) also introduced the term “customer contact” which he defined as the physical presence of the customer in the system. He argued that the extent of contact could be defined as the percentage of time the customer must be in the system relative to the total time it takes to serve him. Chase (1978) recognised that some services differed in the amount of customer contact that they had. High contact systems according to Chase (1978) were situations where the customer could affect the time of demand, the exact nature of the service, and the quality of service since he tends to become involved in the process itself. From this definition, it is fair to suggest that what Chase (1978) was referring to was a situation in which customer participation was required. Kellogg (2000) also stressed that customer contact is another phase used to describe customer participation.

Grönroos (1998) recognised that the consumption and production stage of a service is a critical part of the service experience. He also expanded by adding that perception of this process is important for the perception of the total quality of a service, hence the importance of adequately managing this part of the service he termed “interactive marketing”. The time frame when the customer interacts with a service is known as the “service encounter” (Shostack, 1985; Bitner, 1990). Mills (1990, p.31) argued that, “a clear focus on service encounters is important because such a relationship provides a crucial, if not the primary, mechanism through which clients/customers provide information raw material for service operations, and it is also the paramount mechanism through which clients/customers are brought into the workflow of these organisations”.

The majority of research on the importance of the service encounter has attended to the importance of employee attitudes and behaviours in the influence of

customers' perception of service (Bowen & Schneider, 1985; Bitner, 1990; Bitner, Booms & Mohr, 1994). Hartline and Ferrell (1996) also expressed this view as they stated "because of the importance of the service encounter, service firms must find ways to effectively manage customer-contact employees to help ensure that their attitudes and behaviours are conducive to the delivery of quality service". Hence, such viewpoints placed emphasis on management techniques such as employee empowerment which refers to a situation in which the manager gives employees the discretion to make day-to-day decisions about job-related activities (Bowen & Lawler, 1992; Conger & Kanungo, 1988). Perhaps, this focus on the employee side of the dyad has been as Ennew and Binks (1998) have mentioned due to the fact that, "arguably, organisations might expect to have much greater influence over their own staff than over customers". The urgent call for more research into the roles of customers in creating service outcomes and their role in enhancing or detracting from their own satisfaction and the value received has been voiced by Bitner et al. (1997).

Therefore, it is nonetheless essential to recognise that both parties (employee and customer) are inevitably both part of the service provision and the outcome of the service delivery is dependent on both parties. Ennew and Binks (1998) have argued that the provision of inappropriate services to the customer may not just be the fault of organisational failures but equally caused by the provision of inadequate information on the consumer's behalf. This has highlighted the need not just to consider issues such as employee empowerment in the service production and delivery process but also the need to consider issues such as customer participation in the process.

In earlier research on the part of the customer in service delivery, theories

such as the “partial employee theory” (Bowen and Schneider, 1985) emerged. In the search for understanding of the part that the customer plays in the service delivery process, the impetus behind the theory was concentrated on the perspective of improving productivity within an organisation and effectively using customers as part of its human resources (Bowen, 1986). Lovelock and Young (1979) encouraged managers “to look to customers to increase productivity”.

Customer participation research looks at the behavioural process of taking part in the service production and delivery process, not only just at the aim of improving productivity of a firm. Current literature on customer participation has also provided the theory with linkages to other major constructs in the services marketing arena, which will all be elaborated upon in the following section which deals with the immediate discipline of customer participation in service delivery and production.

3.3 Immediate Discipline: Customer Participation

Participation can be defined as the specific behaviours, degree of consumer’s effort and involvement, both mental and physical that relate to the production and delivery of a service (Cermak, File & Prince, 1994, Silpakit & Fisk, 1985). File et al. (1992) further elaborated upon this definition by stating that in terms of a marketing construct, participation, “refers to the types and level of behaviour in which buyers actually engage in connection with the definition and delivery of the service they seek” (p.6). For many services, the customer is required to participate to an extent in order for the service to occur and be consumed. Participation could be in the form of acquisition of service-related information (Dabholkar, 1990) or the exertion of effort (Kelley, Donnelly & Skinner, 1990). Zeithaml (1981) states that

customer participation is vital in some services for good quality and a satisfactory outcome. For example, when going to see the physician, the patient is required to participate in the form of giving information on their ailments or symptoms in order for the physician to make a diagnosis of the illness. Czepiel et al. (1985) argued that due to inseparability, customers would inevitably be involved in the production process. Silpakit & Fisk (1985) have hypothesised that the more participation, the easier it is for customers to evaluate services. They also proposed that the more participation that is put in by the customer, the more customers would associate a dissatisfactory outcome with the services to themselves instead of the service firm.

3.3.1 Participation and Involvement

Researchers such as Cermak et al. (1994) have argued that there are certain commonalities and distinctions with the construct of involvement and customer participation. However, customer participation is often seen as a behaviour that occurs in the service process and involvement has always traditionally been associated with goods. Dahringer et al. (1991) have argued along the lines that service involvement is similar to customer participation, in their description of what service involvement entails. However, involvement as later explained, has often been regarded as an attitudinal construct and customer participation as the behavioural element. There are different views to this argument, and these are explained in detail in this section, but nonetheless, part of a possible contribution of this research is to perhaps extend involvement into services. However, often the definition of service involvement has coincided with customer participation.

Lastovicka and Gardner (1978) have expressed the diverse, vague and confusing usage of the term "involvement". There is to date actually no consensus as to its precise definition, dimensionality and measurement method. Zaichkowsky

(1985) has defined involvement as “a person’s perceived relevance of the object based on inherent needs, values and interests”. Mittal (1989) has characterised involvement as “a motivational state that has been activated by a stimulus, situation or a decision task”. Dahringer et al., (1991) have expressed involvement as the degree of interest in a product. While definitions may differ, there is a common thread of understanding that lies in all these studies. It has been generally concluded that when a purchase is considered by a consumer to be important or relevant to his or her values or needs, a high involvement state exists (Suh et al., 1997). Suh et al., (1997) further mentioned that consumers with high involvement levels actively seek out and use information about the choice alternatives and follow a comprehensive process of decision-making. Conversely, those consumers who have a low involvement level tend to gather little or no evaluation information about the choice alternative they face and follow relatively simple, non-comprehensive decision-making processes (Suh et al., 1997).

The majority of the extensive research that has been conducted on involvement has been done so in the context of physical goods (Alden et al., 1989; Clarke and Belk, 1979; Jensen et al., 1989; Richins et al., 1992). Good (1990), Dahringer et al., (1991) and Arora (1993) have stated that the examination of involvement in the service context is deficient. Good (1990) strongly advocated that there is a distinct difference between involvement with a service and involvement with a product. Grönroos (1982) has reasoned that services are activities and goods are things; production and consumption of services are relatively simultaneous. It may be fair to state that services are in fact, performances. Good (1990) has stated that services involve some sort of interaction among people and has even defined involvement in the service context as “...the amount of participation by the

consumer to be required to engage in a particular activity or service". Good (1990) later mentioned that involvement in the service context encompasses two types: (i) *physical involvement*, which relates to the degree to which the consumer personally performs the activity and (ii) *mental involvement*, which relates to the level of decision-making activity by the consumer. It can be deduced from this definition that what Good (1990) was referring to was the concept of customer participation.

Services involve interactions among persons, which inevitably mean the existence of a behavioural element in the event. Traditional involvement theory has often considered involvement to be attitude (Cermak et al., 1994) and has focused extensively on the element of information searching. Bateson and Langeard (1982) have also called for the extension of involvement theory in services and have stressed that "...since consumers are more and more being called upon to be the producer of their service it would have to be extended to cover consumers participation as a producer. Cermak et al., (1994) have also pointed out that some of the scales that have been developed to measure involvement, measure it in part as a behaviour such as Slama and Tashchian's (1985) "Purchasing Involvement Scale" which includes statements that pertain to the carrying out of certain behaviours. Some types of involvement such as "task involvement" (Clarke and Belk, 1979) also concern the exertion of actual behaviour. Cermak et al., (1994) have stressed the need to establish the differences between the constructs of involvement and customer participation to avoid confusion. File et al. (1992a) have stated that involvement usually connotes the importance of the category to the buyer and includes aspects of the product or service that reflect the customer's self image or values. Cermak et al. (1994) have also argued that involvement has traditionally referred to the personal relevance or importance a product has for a consumer. Involvement can be thought

of as an attitudinal construct. Conversely, academics tend to agree that customer participation is a behavioural construct as it refers to the actual behaviours the customer exhibits during the specification and delivery of a service (Cermak et al. 1994). Furthermore, these authors have argued for the vigorous need to maintain a strong boundary between attitudes such as involvement and behaviours such as customer participation in theory development and construct measurement. Hence, on this basis, it is deemed appropriate to classify involvement as a form of customer attitude and customer participation as a form of behaviour specific to production and delivery of a service.

Previous studies that have applied instruments such as Zaichkowsky's (1985, 1986) Personal Involvement Inventory and the Laurent and Kapferer (1985) Involvement Profile in a service context (Arora, 1993; Dahringer et al., 1991; Edgett and Cullen, 1993; Zaichkowsky and Sood, 1989) have often failed to incorporate into their measures of involvement in services some specific items designed to tap the behavioural aspect of the service encounter. This has only delayed research that provides understanding to the behavioural element present in service encounters and remains to be an area that is in need of exploration. This study pays specific attention to the behavioural aspects of a service encounter in the form of customer participation in the service production and delivery process.

3.3.2 Levels of Customer Participation

It has been acclaimed that participation levels differ in various services (File et al., 1992a; Ennew and Binks, 1998; Fitzsimmons, 1985), with some services such as counseling or psychotherapy requiring more customer participation than services such as pest control where the customer plays a relatively inactive role. Some researchers such as Silpakit & Fisk (1985) have expressed that participation levels

are high in services that are classified as involving intangible actions and are directed at people's minds, such as education. High participation levels may also be required in services that are highly customised and highly judgmental in meeting individual needs.

The type of service delivery option that a customer chooses can also affect the level of participation required. Taking the example of performing a fund transfer for instance, a customer can perform this task through various types of service delivery modes. The customer can use an ATM, or choose to use Telephone Banking and lastly can also choose the use of a human teller. All three types of service delivery options essentially will have the same outcome (i.e. the transfer of funds); however, the level of customer participation will differ. In the case of using the ATM or Telephone Banking, the customer is required to perform more of the service tasks in the process when contrasted with the use of the human teller.

With this basic concept in mind, Goodwin & Radford (1993) have developed a matrix (see Figure 3-2) to classify the various types of service delivery options according to the level of participation as well as control over inputs in the service process. The various types of delivery options can also be plotted on this matrix. From the matrix, it can be seen that the type of service delivery can be split up into four types of models. Each section is divided according to the amount of customer participation as well as the provider's ability to control inputs. Customers represent inputs to the service process here. Control over inputs refers to the abilities of the service provider to screen and select customers. Participation in this matrix refers to the customer's ability to exercise options that will affect the sequence as well as the substance of the service delivery process throughout the service encounter (Goodwin & Radford, 1993).

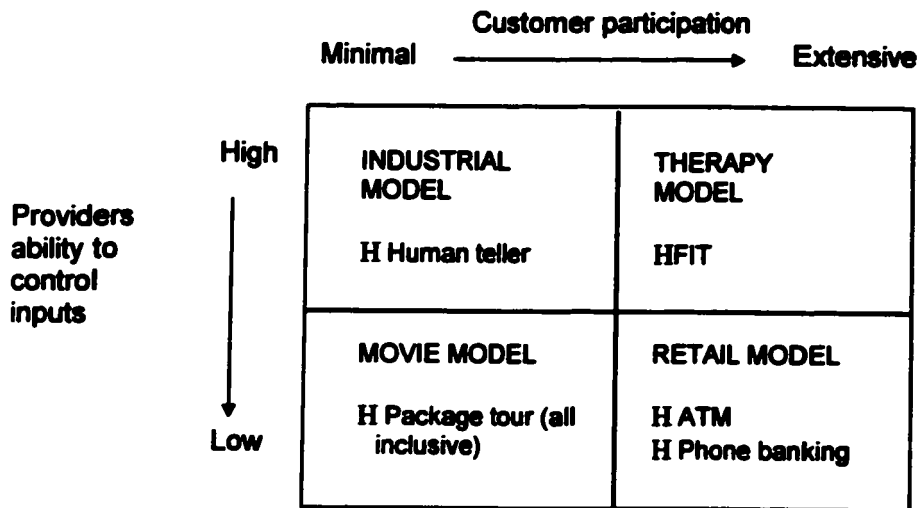


Figure 3-2: Models of Service Delivery (Goodwin & Radford, 1993)

The first model has been termed by Goodwin & Radford (1993) as an “industrial model”. This is described as a situation where the provider has high control over inputs and the customer exercises little participation. The use of a human teller has been classified in this section. Banks often exert some influence on the types of customers they wish to have; especially in very select types of retail banking. For example, a local retail bank in Hong Kong runs a special area of retail banking for customers who have deposits of over HK\$1 million in savings. This serves as a means of screening suitable customers. In terms of the amount of customer participation in the use of a human teller is comparatively less than say with an ATM as the customer provides only information regarding the type of transaction they want as well as the amount. The teller in such a situation does most of the tasks.

The second kind of model has been termed by Goodwin & Radford (1993) as a “therapy model”. The therapy model combines high control over inputs with high customer participation. Here, the service process depends on the customer’s willingness to participate. In such a model, there are no fixed options available but

the actual service delivered is tailor-made to the customer's requirement. The example used here is the FIT travel option. In such a case, the customer decides the type of accommodation, places of sightseeing as well as entertainment that they prefer.

The third type of model is known as the "movie model". Under such circumstances the customer often takes a passive role in the service and there is little control over inputs. The example quoted here is that of organised group package tours. Such travel options will have pre-arranged the accommodation, meals, and visits to tourist attractions as well as transportation. Such packages have a single price that incorporates all these factors. Group tours means that the customer doesn't have a choice to go to other places or do other things that are not specified in the itinerary. Control over inputs is also low, as there is seldom the use of any screening mechanism. Customers can join such tours if they pay.

Lastly, there is the "retail model". Here there is little control over inputs but there is extensive customer participation. The example used here is the ATM or Telephone Banking. Under such conditions, the customer will identify their need and find ways to meet their own need. With the use of an ATM the customer performs the majority of tasks and the bank exerts little control over entitlement to use such an option except for the fact the customer must own an ATM card.

It is important to recognise the different degree of participation in various service delivery options, as these will affect the role and the amount of information searching that the customer needs to undertake. It may also dictate the amount of customisation that the service requires. It also dictates the role that employees play in the delivery of the service as well as other vital issues such as resource requirement; therefore the recognition of the degree of participation is extremely

important.

3.3.3 Classification of Participation Levels

The work of Bitner et al. (1997) has provided a classification scheme on the levels of customer participation. Bitner et al. (1997) have stated that some services merely require customer presence while others require the customer to perform most of the task. The table below shows the levels of customer participation across different services.

<i>Low Participation</i>	<i>Moderate Participation</i>	<i>High Participation</i>
<ul style="list-style-type: none"> • Products are standardised • Service is provided regardless of any individual purchase • Payment may be the only required customer input 	<ul style="list-style-type: none"> • Client inputs customise a standard service • Provision of service requires customer purchase • Customer input (information, materials) are necessary for an adequate outcome, but the service firm provides the service 	<ul style="list-style-type: none"> • Active client participation guides the customised service • Service cannot be created apart from the customer's purchase • Customer inputs are mandatory and co-create the outcome
Examples	Examples	Examples
<ul style="list-style-type: none"> • airline travel • motel stay • fast-food restaurant • pest control • maintenance service 	<ul style="list-style-type: none"> • hair cut • annual physical exam • full service restaurant • independent freight and transportation • payroll service 	<ul style="list-style-type: none"> • marriage counseling • personal training • weight-reduction program • executive management seminar • management consulting

Table 1 : Levels of Customer Participation (from Bitner et al., 1997)

Bitner et al. (1997) explained that services that required low customer participation usually just needed the presence of the customer in order for the service to be performed. Services with moderate customer participation require the customer to contribute inputs in the form of information, effort or physical possessions and that high participation required the customer to co-create the service; should the role not be fulfilled, it would affect the nature of the service outcome (Bitner et al., 1997).

3.3.4 Benefits of Customer Participation

Research from Bateson (1983, 1985) and Dabholkar (1996) has demonstrated that some customers are intrinsically motivated to participate in the service process without some monetary incentive. File et al. (1992a) have argued that customers participated in the service process to work towards the certainty of a positive service outcome and to reduce the impact of risk. Bateson (1985) has shown that customers that participate often feel that they can obtain the service quicker, have greater perceived control over the service process, instills in them a sense of independence in that they don't rely on other people as well as being more efficient.

The benefits of customer participation for the firm are well documented in the literature including enhanced productivity (Bowen, 1986) as the customer contributes resources and is viewed as a "partial employee"; greater customer satisfaction, enhanced loyalty, higher retention rates, positive word-of-mouth (Ennew & Binks, 1999; File et al, 1992a) for the firm. Customers who actively participate in the service process may be more familiar with the constraints on the service provider in terms of what is possible and what isn't; therefore, their expectations are more realistic and gaps between expectations and performance can therefore be smaller (Ennew & Binks, 1999). Therefore, the constraints placed on the service provider are more realistic.

However, benefits to the customer are less well documented but can include, lower prices, more efficient service delivery, greater customisation, and the perception of greater control of the service delivery process (Kelley et al, 1990; Bateson, 1985, Bowen, 1986).

3.3.5 Components of Customer Participation

From the literature, three conceptual dimensions of customer participation have been derived and each one will be explained in detail.

Perceived Effort

Participation can also be viewed from the perspective of how much effort is put into service delivery. However, previous research has mainly dealt with looking at this from the employee perspective; but in services, the customer actually makes a contribution towards service production and delivery and so effort on behalf of the customer must be considered. Mohr & Bitner (1995) define perceived effort as “the amount of energy an observer believes an actor has invested in a behaviour”. Effort can also be considered as the amount of time spent in performing a service task too. Effort has also been shown to have a strong positive relationship with satisfaction in a variety of services (Mohr & Bitner, 1995). Mohr & Bitner (1995) have also included the item of persistence in their examination of perceived effort and therefore, this is also included in the measure of perceived effort. Languard et al. (1981) have found that when deciding between different methods of service delivery, customers often considered the amount of effort needed to be put in.

Task Definition

Globerson and Maggard (1991) have stated “the customer’s willingness to participate in the service process depends to a large extent on the complexity of the tasks in which he or she is expected to play an active role”. Mills and Morris (1986) in their typology of client involvement have included the item of task activity that encompasses the uncertainty or complexity that the consumer faces with the task.

Another factor involved in the task dimension is the perceived ability of the individual. Meyer & Hallermann (1974) have found that the difficulty of the task and the individual’s perception of their own ability to perform the task are related to

required effort. They state that individuals who perceive their ability as low will often exert high levels of effort on easy tasks. Conversely, individuals who perceive their abilities as high will exert more effort on difficult tasks than easy ones. Arvey (1972), in his research on task performance also found that ability was a key variable that is highly related to performance. He further added that people tend to perform best in situations where they perceive a high relationship between their effort and performance.

Locke et al. (1981) have indicated that the performance of a task is related to the task difficulty or task complexity, so this is another factor to be considered in the task dimension. Wofford (1981) has also supported this notion and further explains that the human system is capable to adapt itself to its perception of the demands of the environment.

Wood (1986) has also found other factors that underlie task. These factors include the task inputs, the acts or behaviours required to complete the task as well as information cues. He states "the required acts and information cues in a task are important task inputs because they set upper limits on the knowledge, skills, and resources individuals need for successful task performance". The task performance in this case being the role that the customer plays in the production and consumption of the service. The acts of the task include all the actions or behaviours that are needed to complete a performance. Information cues include the pieces of information which the consumer utilises to make judgments he or she is required to make during the performance.

Information-Seeking

In terms of information seeking which is part of the construct of

participation, information seeking in this sense is different from the information that is used in involvement. Traditionally, in involvement, information seeking is primarily for the purpose of evaluation. However, in customer participation in service production and delivery, information seeking is different in that the type of information sought relates to the interactive part of the service encounter itself. Kellogg et al. (1997) have argued that customers will engage in information exchange behaviours for the purposes of clarifying service requirements and satisfying other cognitive needs. For example, customers seek information on service requirements as well as about service status and clarification of service parameters. Kellogg et al (1997) further explain that just as employees obtain information to determine their role in the organisation, customers seek to understand the nature of the service as well as their roles in the delivery process. Not only do customers obtain information about their service roles, information is also obtained on the organisational climate (Kelley et al. 1990) or service situation. This is useful in that it helps to convey to the customer an idea of the service expectations for what should be done during an encounter. Information may also be obtained regarding the actual service task itself that gives the customer an understanding of the task at hand.

3.3.6 Linking Customer Participation to Other Key Constructs

Customers participate in the service delivery process by providing input (e.g. in the form of information), this constitutes the raw material with which the service employee transforms into the service. Mills et al. (1983) have argued that as a consequence of this, customers directly contribute to their own satisfaction and as Bitner et al. (1997) have echoed, a contributor to the quality of services which they receive. This strongly demonstrates the linkage that connects customer participation to other key constructs in services marketing such as perceived service quality and

customer satisfaction. Ennew and Binks (1999) have also suggested that participation might be reasonably expected to affect other attitudinal and behavioural outcomes such as retention. In a study by File et al. (1992a), they had empirically discovered that customer participation also affected word-of-mouth and referrals.

Although there are several theories (some conceptual and others empirical), regarding the effect of customer participation on other key constructs as mentioned above, there are still some problems (Cermak et al., 1994; Ennew and Binks, 1998, 1999). To date, there is still a lack of consensus on a quantitative instrument to measure participation. Some studies such as File et al. (1992a; 1992b), Cermak et al. (1994) and File et al. (1993) have all operationalised customer participation as a single-item construct which is sometimes considered problematic and insufficient to capture the full domain of a construct. While, other studies such as Ennew and Binks (1998, 1999) have been preoccupied with looking at the ways in which a customer participates in the service such as through actions like sending faxes, calling the service provider. Studies conducted by Kellogg and Chase (1995) and Kellogg (2000) have attempted to measure the construct of customer contact, however, their efforts are from an operations management perspective. Their work captures the construct of customer contact using the three dimensions of contact time, intimacy and information. However, the struggle to examine the task and behavioural aspects of customer participation has been deficient and is an area that merits further exploration as services involve a behavioural element too.

ANTECEDENTS OF CUSTOMER PARTICIPATION

From the literature review, it was found that the constructs of culture, perceived risk and locus-of-control were possible antecedents of customer

participation. Each of these three antecedents is discussed below.

3.4 Culture and Values

There are various definitions of culture including a “transmitted and created content and patterns of values, ideas, and other symbolic meaningful systems as factors in the shaping of human behaviour and the artifacts produced through behaviour” (Kroeber and Parsons, 1958). Other scholars such as Bond and Hofstede (1988) have argued that culture be viewed as “the collective programming of the mind that distinguishes the members of one category of people from those of another”. McCort and Malhotra (1993) have expressed that “...culture is the shared, consumption relevant knowledge system necessary to operate in a manner acceptable to one’s society. This knowledge system, though the formation of culturally learned rules of perception and interpretation imbues objects and behaviours with meanings for its members”. Hofstede (1999) has argued that the core element in culture is values and it is values that guide what is considered good, evil, dirty, clean, immoral and immoral, irrational and rational. Therefore, it could be argued that the “knowledge system” that McCort and Malhotra (1993) were referring to is a values system.

With this in mind it can be regarded that culture provides individuals with a system of values in which to apply meaning to the environment in which they live. Rokeach (1973) referred to values as an enduring belief that a specific mode of conduct or end-state is personally preferable to its opposite. Adler (1997) stated that values were “that which is explicitly or implicitly desirable to an individual or a group and which influences selection from available modes, means, and ends of action”. Feather (1994) puts it plainly in terms that “values influence many aspects

of our lives, affecting both the way we construe and evaluate situations and the actions that we take in pursuit of important goals.” He further adds that values serve to “provide standards or criteria that can be used to evaluate actions or outcomes, to justify opinions and conduct, to plan and guide behaviour.” The influence that culture exerts upon individuals is extensive and is shown in Figure 3-3. Munson (1984) contended that values exist on a transcendental level to attitudes; thereby values guide attitudes, which in turn guide behaviour. This hierarchical system of values[]attitudes[]behaviour has also been proven in research conducted by Homer & Kahle (1988). Homer & Kahle (1988) further stated that due to the fact that values are the most abstract of social cognitions, they reflect the most basic characteristics of adaptation and that it is these abstractions that serve as prototypes from which attitudes and behaviour are produced.

Values as mentioned earlier are involved with an individual’s attitude and behaviour. Madrigal & Kahle (1994) alleged that values represent more abstract ideals, positive or negative, that are not tied to any specific object or situation; whereas an attitude is usually directed at specific objects or situations. With this notion, it has been argued by various researchers (Madrigal & Kahle, 1994; Kamakura & Mazzon, 1991; Kamakura & Novak, 1992) that values are more stable over time as they are more central to an individual’s cognitive system. Therefore, due to their centrality and stability, values are better predictors of an individual’s behaviour (Madrigal & Kahle, 1994).

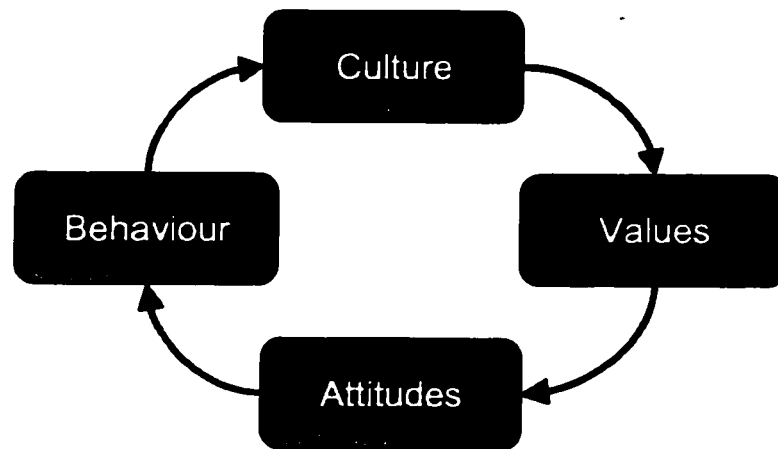


Figure 3-3: Influence of Culture on Behaviour (Adler, 1997)

It is essential that culture be viewed in the study due to the extensive influence of culture. In numerous past studies, culture has been empirically proven to have an impact on the formation of expectations (Armstrong et al. 1997), as well as quality expectations (Luk et al., 1993). More importantly, culture is seen to have an impact on interaction behaviour (Reisinger & Turner, 1998), which is of importance in services given the nature of the service encounter, which is a dyadic interaction between customer and service provider. Furthermore, File et al. (1995) have argued that the service encounter is a social process and is apt to be affected by differences in cultural perceptions and values, thus strengthening the need to consider customer participation in light of cultural values. Therefore, it is essential to consider culture in the study in order to gain a better understanding of how culture affects the various constructs involved in the whole of the research.

3.4.1 Measuring Values

Several instruments have been devised to measure cultural values in relation to other contexts. The following section examines some of these instruments regarding their usage, strengths and weaknesses.

3.4.2 The Rokeach Value Survey (RVS)

There have been several instruments that have been devised to quantitatively measure values. One such instrument is the Rokeach Value Survey (RVS) developed by Rokeach (1973). This is probably one of the most famous value measurement instruments. The RVS consists of 18 instrumental values, which represent desired modes of conduct, and 18 terminal values, which represent desired modes of existence. These values are then rank ordered in terms of their importance as guiding principles of the respondent's life. The RVS has received widespread use in consumer behaviour studies that have applied values to understand other areas such as segmentation (Pitts & Woodside 1983), and consumption patterns (Valette-Florence & Jolibert 1990). The psychometric properties of the RVS have been well documented (Reynolds & Jolly, 1980; Miethe, 1985). However, the RVS has not been without criticism. It has been criticised because of the difficulty in ranking 36 items (Kamakura & Novak, 1992). The use of ranking (Kamakura & Mazzon, 1991) these 36 values leads to an ipsative measure, which is more suited to intra-individual analyses rather than being used as a comparison between individuals.

Researchers have dealt with the shortcomings of the RVS by modifying it to yield an interval measure of value importance (Miethe, 1985; Munson & McIntyre, 1979; Reynolds & Jolly, (1980). These researchers have also compared the use of ranking and rating methods. The findings from the research indicated that the results were mixed. However, the ranking method has shown higher test-retest reliability (Munson & McIntyre, 1979) as well as a lower measurement error (Miethe, 1985). Despite the controversy, the ranking method has been the choice of researchers due to the fact that ranking enables the reflection of the comparative nature of values (Kamakura & Mazzon, 1991).

Research conducted to investigate the applicability of the RVS to cross-

cultural results has not been encouraging. Valette-Florence & Jolibert (1990) have found that the two factor structure of the RVS (instrumental and terminal values) was not found when the instrument was used on French subjects leading them to question the cross-cultural validity of the instrument. Hofstede & Bond (1984) have declared the RVS as “pseudoetic” in that it “uses the emic categories of one culture and then imposes these as quasi-universal categories on others”. As Hofstede & Bond (1984) concluded on the applicability of the instrument for cross-cultural purposes; “the RVS was not designed as an instrument for cross-cultural research”. Therefore, the use of the RVS in this research is deemed unnecessary.

3.4.3 The List of Values (LOV)

In an effort to overcome the shortfalls of the RVS, an alternative simplified instrument to measure values known as the List of Values (LOV) was devised by Kahle (1983). The list of values was compiled by integrating a shortened list of Rokeach’s 18 terminal values as well as Maslow’s hierarchy of needs and other contemporaries in value research (Kahle & Kennedy, 1988). It is composed of the following nine values: a sense of belonging, excitement, fun and enjoyment in life, self-fulfillment, being well respected, warm relationships with others, security, accomplishment, and self-respect. Only the terminal values of the RVS were included in the LOV items because the terminal values operate at a greater level of abstraction than do instrumental values and appear to be more relevant to the field of consumer behaviour (Madrigal & Kahle, 1994). Homer & Kahle (1988) have found in their research support for the theoretical suggestion that LOV values are better represented at an abstract level by value domains that represent either an internal or external locus of control. Madrigal & Kahle (1994) have described value domains as “higher order groupings of single values that may also be grouped on the basis of

their compatibilities and contradictions". Schwartz & Bilsky (1987) have also stressed the importance of using value domains as predictors of attitudes and behaviours as a more effective and reliable measure than single values.

The LOV has been used in several studies covering areas such as natural food shopping (Homer & Kahle 1988), vacation activity preferences (Madrigal & Kahle 1994), consumption patterns (Schopphoven 1991) and segmentation (Kamakura & Mazzon 1991; Kamakura & Novak 1992). The LOV has been chosen by researchers as the tool to measure values in their work due to the fact that it has been argued that the LOV contains values that are relevant to the daily lives of individuals unlike the RVS. The LOV is also easier to administer due to the reduced number of items. Kahle & Kennedy (1988) proclaimed that nine values are the approximate number of items a human adult can hold in short term memory and so therefore, these nine values are viable for storage in short term memory; unlike that of the RVS in which the number of items exceeds people's normal short term memory.

Criticism of the LOV has fallen on the issue of its classification of individuals on the basis of their single most important value. Kamakura & Mazzon (1991) have argued that this can often lead to measurement errors since it uses a single observation per respondent and that it doesn't consider Rokeach's suggestion of the concept of value systems or hierarchies. Use of only the top ranked value means that the other value priorities are not made full use of. However, Kamakura & Mazzon (1991) argued that with the LOV, the use of the top -ranked value is justified since the LOV is based on Maslow's hierarchy of needs; therefore the assumption that this particular value can determine the position of the individual on the underlying hierarchy is verified. Also, the researchers further argue that the use of a single value is only justified for the LOV instrument since no such consensus

has been reached on the ordering of Rokeach's instrumental and terminal values. Kahle & Kennedy (1988) have argued that the LOV avoids or lessens some of the methodological problems faced by the RVS such as the tendency to respond in a socially desirable manner rather than a candid manner. Furthermore, the RVS uses ordinal analyses, which refutes the requirements needed to perform powerful and advanced techniques of causal analysis unlike the LOV, which uses variables measured at the interval level.

3.4.4 Hofstede's Cultural Dimensions

Hofstede (1980) in his research on cultural values conducted in 40 countries around the world with the responses of over 100,000 employees, it was found that cultural values tended to fall into four main dimensions. These dimensions are comprised of:

- *Power distance*: "the extent to which members of a society accept that power in institutions and organisations is distributed unequally."
- *Uncertainty avoidance*: "the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity, which leads them to support beliefs promising certainty and to maintain institutions protecting conformity."
- *Masculinity/femininity*: "a preference for achievement, heroism, assertiveness, and material success as opposed to femininity which is a preference for relationships, modesty, caring for the weak, and quality of life."
- *Individualism/collectivism*: "a preference for a loosely knit social framework in society in which individuals are supposed to take care of themselves and their immediate families only as opposed to ...a

preference for a tightly knit social framework in which individuals can expect their relatives, clan or other in-group to look after them, in exchange for unquestioning loyalty.”

Despite the tremendous contribution to our understanding of value dimensions, the work of Hofstede (1980) has faced criticism (Hunt, 1981; Yeh, 1988; Triandis, 1982). One of these criticisms relates to the issue of whether the instrument is culture bound. The Chinese Culture Connection (1987) emphasizes the fact that the practice and implementation of social science is Western in origin; the researchers also proclaimed that “Hofstede’s survey of work related values is of course, only one bequest of this legacy”. Ralston et al. (1992) have declared that Hofstede’s dimensions are “based solely on evaluative instruments developed in the West”. This again illustrates the point that the cultural dimensions are unsuitable for use to capture the Eastern value system.

Goodstein (1981) has also questioned whether the cultural dimensions contain some built-in bias, as all the respondents of the original sample are employees of a single multinational organisation. He goes on to further question whether all the employees in the organisation are selected due to the possession of similar traits. With this notion in mind, several questions can be raised about the sample. For example, could it be possible that all employees of this organisation share some similar characteristics? Also, the employees of IBM doubtlessly differed from the general population in terms of education. Perhaps, it would be fair to say that this difference would be even more conspicuous in some Third World countries. As such, it may be appropriate to argue that the sample used in the Hofstede study was not representative of the general population. Hunt (1981) similarly questioned whether a sample of employees from the same multinational organisation means

their results can be generalised to entire societies. Hunt (1981) also strongly believed that the explanations made by Hofstede could be better related to cultural differences. Furthermore, the sample of nations is incomplete and more importantly did not include some countries that operated under a system of state socialism. If such countries had been included in the study, it would have been quite conceivable that it would affect the dimensions that emerged.

The Hofstede study has been argued by some as being methodologically flawed too. One must question whether the specific values that he examined have similar meaning across different cultures. In the Hofstede study (1980), there is no mention of the need to ensure equivalence of meaning in the data collected, which is of utmost importance in any undertaking of cross-cultural research. To warrant equivalence of meaning, the back-translation technique (Brislin, 1970) can be applied. However, there is no mention in Hofstede (1980) of any such precautions being taken when embarking on such a large cross-cultural study. Yeh (1988) has debated that the dimensions are statistically flawed as the four dimensions were obtained by a factor analysis of 32 questionnaire items with only 40 subjects of data points.

Some academics such as Schwartz (1990) have regarded the Hofstede dimensions as being too broad. Triandis (1982) has attested that there are many other important value dimensions that have not been included in Hofstede's study. It is important to bear in mind that Hofstede's research was based on data that were obtained from the period of 1967-1973. However, during the last two decades, the world has changed dramatically and the Hofstede findings may no longer be applicable to the world as it is today. Since his data were collected, there have been vast changes to countries in the Asia Pacific, Eastern Europe as well as other

developing nations.

3.4.5 Chinese Cultural Value Scale (CCVS)

Yau (1994) devised the CCVS to measure Chinese cultural values. The instrument was used to study consumer behaviour in particular. Due to the fact that most of the literature on consumer behaviour originates from American culture (Yau, 1994), there was a danger in transplanting these theories into other cultures assuming they too would behave in the same way; this foundation provided the impetus to the creation of this instrument.

The CCVS is composed of 12 values including: harmony with nature, yuan, abasement, situation-orientation, respect for authority, interdependence, group-orientation, face, continuity, past-time orientation, doctrine of the mean, and harmony with others. Yau (1994) has used the instrument to look at consumer behaviour for two goods, namely ball-pens and cassette recorders. The CCVS has shown different internal reliability estimates for the two goods. Although, in general, the CCVS holds some value in that it has devised a method to quantify Chinese cultural values, there has been limited research done on the instrument by other academics to examine whether the model holds reliability and validity in other situations.

3.4.6 Chinese Value Survey (CVS)

In response to the limitations found in Western developed measures of values, the Chinese Culture Connection (1987), an international network of colleagues orchestrated by Michael H. Bond, developed the Chinese Value Survey. The impetus behind their research was to investigate whether an instrument derived from a different cultural tradition and used to measure values in other countries would yield the same or different results from those of Hofstede. The Chinese

Culture Connection wanted to find whether the dimensions were universal or whether there was some "...new dimensions of cultural variation invisible to the Western conceptual retina". The Chinese Culture Connection further proclaimed that should their results from an Eastern instrument correlate with those from a Western instrument that it would constitute a robust dimension of cultural variations in valuing.

The CVS is comprised of 40 fundamental values found in Chinese culture, which are rated on a 9-point Likert scale that ranged from extreme importance (9) to no importance (1). These values are derived from the work of a number of Chinese social scientists. In their study of 22 countries, the Chinese Culture Connection identified four factors within the CVS instrument. These factors are:

- *Integration*: this dimension focuses upon social stability and can be characterised as having tolerance for others; integration places importance on being trustworthy and enjoying a close friendship; it also corresponds to Hofstede's power distance dimension (Ralston et al., 1993).
- *Confucian work dynamism*: this dimension deals with a society's search for virtue (Hofstede and Bond, 1988) and reflects the teachings of Confucius. It also implies the need to order relationships by status and to respect the order of that status. Hofstede and Bond (1988) have argued that this dimension has filled the void in the content of Western instruments.
- *Human-heartedness*: this dimension is about an individual's level of social consciousness or awareness and is a measure of one's compassion towards others; characterised by the need to be kind, forgiving and

courteous (Ralston et al., 1993). This dimension is viewed to be comparable to Hofstede's masculinity-femininity dimension.

- *Moral Discipline*: the focus of this dimension is on keeping oneself under control in relation to others, and is characterised by the need to be moderate, prudent and adaptable (Ralston et al., 1993). This dimension corresponds to Hofstede's individualism-collectivism and also identifies whether individuals see themselves as an integral part of a group or not (Ralston et al., 1993).

Although the CVS was initially developed to be used as a measure of values held by Chinese people, the dimensions of the instrument have been compared with Western instruments. The dimension that did not align with Western instruments was that of Confucian Work Dynamism. Ralston et al. (1992) argued that the CVS is largely consistent with Western instruments but at the same time it adds an element that is missing from Western-developed measures.

Unlike the C CVS, the CVS has been used in other research used to study cross-cultural managerial values (Ralston et al. 1992; Ralston et al. 1993). In both of these studies, it was found that the four-factor structure was valid. Furthermore, the CVS has been put to test in use for cross-cultural research purposes that have shown that it is viable for use under such requirements, which makes it a suitable instrument to use in this research.

Various instruments to measure values have been described, their distinct properties are summarised in Table 2.

<i>Authors</i>	<i>Type of instrument</i>	<i>Study Area</i>	<i>Sample Size</i>	<i>Strengths of instrument</i>	<i>Weaknesses of instrument</i>
Crosby, Bitner & Gill (1990)	RVS	Values	418	- shows construct validity - prove 2-factor structure	-a priori classification of values into 2 groups -use of ranking -inability to account for most variance -low correlation between values
Munson & McIntyre (1979)	RVS	Cross-cultural research	49	-high test-retest reliability	-use of ranking
Pitts & Woodside (1983)	RVS	Market segmentation Consumer choice	830	-effective for values research	-factor structure not related to product class or intentions
Valette-Florence & Jolibert (1990)	RVS	Values, lifestyles and consumption behaviour	1797	-increases explanatory power of socioeconomic variables	-2 factor structure not found -weak links to consumption patterns -needs improvement for cross-cultural research
Madrigal & Kahle (1994)	LOV	segmentation	394	-effective for segmentation	
Kamakura & Novak (1992)	LOV	segmentation	1406	-value system segments consistent -face validity	
Kamakura & Mazzon (1991)	LOV	values	800	-parsimonious list	- uses only the information provided by the top value
Schopphoven (1991)	LOV	consumption behaviour and segmentation	143	-better predictor of consumer behaviour than VALS	-requires adaptation for cross-cultural research
Homer & Kahle (1988)	LOV	values and behaviour	831	-higher relevance to daily lives -possesses an internal /external dimension -closer to Rokeach methodology	
Ralston, Gustafson, Elsass, Cheung & Terpstra (1992)	CVS	managerial values	325	-relationship of all 4 dimensions is logical and reasonable	
Ralston, Gustafson, Cheung & Terpstra (1993)	CVS	managerial values	326	-CVS dimensions align with RVS and Hofstede dimensions -comparable to Western instruments	-Hofstede's Uncertainty Avoidance doesn't correlate

Table 2: Summary of Studies on Various Value Instruments

3.5 *Perceived Risk*

Bauer first introduced the concept of perceived risk into the literature in 1960. Since the debut of perceived risk, it has stimulated over three decades of marketing research into the incorporation of perception of risk into studies of consumer choice (Dowling, 1986). Bauer (1960) viewed consumer behaviour as an instance of risk taking in the sense that any action that a consumer takes produced consequences, which cannot be anticipated with certainty. He further argued that “it is inconceivable that a consumer can consider more than a few of these possible consequences of his actions and it is seldom that he can anticipate even these few consequences with a high degree of certainty”. Bauer (1960) explicitly states that he discusses “perceived risk” and not risk that exists in the “real world” because individuals can respond to and deal with risk only as they perceive it subjectively.

Mitchell (1999) declared that perceived risk has established a tradition of research unparalleled in consumer behaviour research. Mitchell (1999) contended that perceived risk still enjoys immense attention from academics and practitioners for four reasons. First, Mitchell (1999) argues that perceived risk is more powerful at explaining consumers’ behaviour since consumers are more often motivated to avoid mistakes than to maximise utility in purchasing. Second, perceived risk has intuitive appeal as it allows marketers to see the world from the customer perspective. Third, the concept can almost be universally applied and its versatility has been demonstrated among a spectrum of applications. Fourth, risk analysis can be used in marketing resource allocation decisions.

Despite the intensity of research into perceived risk, there still remains considerable debate as to its composition and definition. Stone and Winter (1985) have declared that comparisons between different measurements of risk have been

difficult as different researchers conceptualise risk differently. Different researchers also employ numerous definitions of perceived risk, all of which make comparison and consensus difficult to reach.

3.5.1 Definitions of Perceived Risk

Taylor (1974) has defined perceived risk as "...the nature and amount of risk perceived by a consumer in contemplating a particular decision". Mitchell (1999) declared that in classical decision theory, risk is most commonly conceived as reflecting variation in the distribution of possible outcomes, their likelihoods and their subjective values. Stone and Grønhaug (1993) argued that risk could be defined as expectations of loss.

In the consumer behaviour literature, perceived risk has been defined in numerous ways. Bauer (1960) originally defined risk as having a two-dimensional structure, namely uncertainty and adverse consequences. Cunningham (1967) also echoed this sentiment. Bauer (1960) did not explicitly define the precise definition of adverse consequences. However, Cox and Rich (1964) interpreted adverse consequences as the amount at stake in a purchase decision and Taylor (1974) regarded it as importance of loss. Bettman (1973) partitions risk into two different constructs, namely inherent risk and handled risk. He defined inherent risk as the latent risk a product class holds for a consumer and handled risk as the amount of conflict the product class is able to arouse when the buyer chooses a brand from a product class in his usual buying situation. Handled risk represents the end results of the action of information and risk reductions processes on inherent risk (Bettman, 1973). The definition of perceived risk in this study is that utilised by Stone and Grønhaug (1993) as "...a subjective expectations of loss". The more certain one is about this expectation, the greater the risk for the individual (Stone and Winter,

1987).

3.5.2 Measurement of Perceived Risk

Cunningham (1967) suggested that a multiplicative model (i.e. perceived uncertainty or consequences multiplied by the importance of those consequences) for the components of risk to be utilised. This follows in the footsteps of prior work in economics and statistical decision theory (Ho & Ng, 1994). However, Bettman (1974) demonstrated empirically that a linear model of perceived risk outperformed the multiplicative model. Stone and Grønhaug (1993) have also debated that multiplicative models are inappropriate in consumer behaviour research and are suspicious of the use of ordinal scale multiplication products as the basis for comparisons, and even further doubted whether consumers really perform such calculations. Ross (1974) declared in his overview of risk studies that in some cases it was very difficult to distinguish whether uncertainty or consequences was being measured as some studies such as Taylor (1974) have tended to use the terms risk and uncertainty interchangeably. However, Stone and Winter (1987) criticised that by allowing risk and uncertainty to be viewed synonymously, it has only served to hamper consumer risk research as a result of this misstatement.

In addition to the two dimensions of perceived risk, researchers have operationalised the construct by means of measuring various types of loss. Ho & Ng (1994) have stated that this risk-component approach identifies and measures the several basic dimensions of overall perceived risk in buying behaviour. These six types of risk include performance, financial, physical, psychological, social and time (Roselius, 1971; Jacoby and Kaplan, 1972; Kaplan et al., 1974). Support for this definition can also be found in the marketing literature by Stem et al., (1977) in their assertion that these six risk types would constitute a more complete model of overall

perceived risk and also recommended that this approach be used in future research. Jacoby and Kaplan (1972) defined financial risk as the chance the customer will lose money because of a particular purchase decision; performance risk as the likelihood that the product will not work properly; physical risk as the chance that the consumer will incur some sort of bodily harm; psychological risk as the chances the purchase does not fit with the self-concept of the consumer and social risk as the chances the purchase will affect how others regard the consumer. Roselius (1971) defined time loss as the time wasted, convenience, and effort getting a product adjusted, repaired, or replaced. The relative importance of the various risk types need not necessarily be the same across purchase decisions, as some risk aspects will be more prevalent in some purchase situations than in others (Stone and Grønhaug, 1993). There are numerous studies to date that have utilised the six risk types to assess overall perceived risk (Garner, 1986; Garner & Thompson, 1985; Mitchell & Greatorex, 1993; Ho & Ng, 1994; George & Tsou, 1984; Mitra et al., 1999).

3.5.3 Perceived Risk in Services

Early work on perceived risk focused extensively on perceived risk in consumer behaviour for goods. However, in the past two decades or so, there has been increasing evidence that consumers evaluate and purchase services in a different manner to goods. Empirical work by Guseman (1981) and Murray and Schlacter (1990) provided evidence that suggests that by their fundamental nature, services may be perceived as being more risky. Guseman (1981) explained that services possessed higher risk than goods due to the unique characteristics of services such as heterogeneity and intangibility. Heterogeneity means that the customer may be faced with differing levels of quality; intangibility hinders the establishment of quality control standards (Guseman, 1981). Guseman (1981)

further elaborated that intangibility means that the customer has no tangible factors to evaluate, thereby making the evaluation of quality difficult. In view of this, the amount and/or quality of the information available for services are diminished, and the amount of perceived risk is expected to be elevated (Murray and Schlacter, 1990; Cox and Rich, 1964). Inseparability means that the customer is personally involved in the purchase and is usually present when the service is being purchased; thereby creating an element of conspicuous consumption (Mitchell & Greatedorex, 1993). Murray and Schlacter (1990) have further noted that many services typically involve costs that cannot be fully determined by the consumer in advance of the purchase decision, contributing to the uncertainty of the outcome leading to a heightened degree of financial loss to the customer. They further postulated that even in services where costs are fixed, the nonstandardisation of services leads to uncertainty with respect to the real costs and performance of the service.

Mitra et al. (1999) verified that the degree of perceived risk would increase along a continuum from services with just search attributes to services with credence attributes. Search properties are attributes of a product or service that can be evaluated prior to purchase and credence properties are attributes that cannot be judged confidently by the consumer even after purchase and consumption. In research conducted by Mitra et al., (1999) has demonstrated that services which possess credence attributes had higher perceived risk associated with them. They also found that high-risk credence services were associated with greater information search and greater reliance on personal information sources. A summary of some of the studies conducted on perceived risk is provided in Table 2-3.

<i>Authors</i>	<i>Type of approach</i>	<i>Study Area</i>	<i>Sample Size</i>	<i>Strengths of instrument</i>	<i>Weaknesses of instrument</i>
Cox & Rich (1964)	2 types: amount at stake and uncertainty	telephone shopping for goods	4132	- shows that perceived risk is a major behavioural determinant	- sample selection bias - no reporting on reliability
Cunningham (1967)	2 types: uncertainty and consequences	grocery products	1200	- demonstrates that products can be ranked on a riskiness continuum	- uses single items to assess dimensions - no reporting on reliability of model
Roselius (1971)	4 types: time, hazard, ego and money	risk relievers	472	- delineated respondents into high and low risk perceivers and evaluated the type of reliever that was preferable for them - used scenarios to prevent introducing product bias	- used single item measures for each risk reliever - only six of the eleven types of risk relievers found to be significant
Bettman (1973)	2 types: handled risk and inherent risk	grocery products	123	- linear model fits better than multiplicative model	- multicollinearity of variables - additional variables need to be added to the inherent risk model
Kaplan, Szybillo & Jacoby (1974)	5 types (social, physical, financial, performance and psychological)	life insurance	104	- 5 types explain 74% of overall risk - shows cross validity and construct validity - some consequences correlated	
Brown & Gentry (1975)	uses Cunningham's definition	automobiles	84	- supported the finding that higher risk = more information search	- no reporting on reliability of model - sample selection bias
Guseman (1981)	consequences and uncertainty	goods and services	192	- confirms services are riskier than goods - 2-factor structure supported	- uses ordinal measures
Garner & Thompson (1985)	6 types of risk time, social, psychological] performance financial physical	physician services	179	- significant relationship for 5 out of the 6 types of risk in terms of information used	- findings limited to physician services - no significant relationship between time risk and information used
Garner (1986)	6 types of risk time, social, psychological] performance financial physical	hairstyling, dry-cleaning, real estate services	179	- used interval scale - significant relationship for 5 out of the 6 types of risk in terms of information used	- no consensus on ranking of risks - no significant relationship between time risk and information used
Mitchell & Grestorex (1983)	6 types (but combined social and psychological)	services	75	- 4 point scales match other studies of perceived risk - test-retest reliability	- didn't reach consensus on risk reduction strategies
Stone & Grønhaug (1983)	6 types (mediated all types of risk through psychological risk)	personal computers	177	- uses multiple items to assess each dimension - all risk dimensions correlate positively with overall risk - more than 90% of overall risk captured by these 6 types	- psychological risk doesn't mediate financial risk

Table 3: Summary of Studies on Perceived Risk

3.6 *Locus of Control*

Locus of control refers to assumed internal states that explain why certain people actively, resiliently, and willingly try to deal with difficult circumstances, while others succumb to a range of negative emotions (Lefcourt, 1991). The construct of locus of control began with the seminal work of Rotter (1966) in the area of social learning theory. Rotter (1966) used social learning theory as the general theoretical background for his work to explain the nature and effects of reinforcement. He described reinforcement, in social learning theory acted to strengthen an expectancy that a particular behaviour or event would be followed by that reinforcement in future. Rotter (1966) elucidated that the effects of reward or reinforcement on preceding behaviour depended in part on whether the person perceives the reward as contingent on his or her own behaviour or independent of it. Basically, Rotter's work focused on whether or not an individual believed that his own skills, behaviour or internal disposition determined what reinforcements he received. This viewpoint is similarly echoed by Lefcourt (1991) in which he stated that locus of control bore some commonalties with constructs such as helplessness, which concerns beliefs those individuals hold regarding the relationships between actions and outcomes. He classified two kinds of individuals based on this definition. He stated that if a person perceives that an event is contingent upon his own behaviour, they were regarded as "internals". Those that regarded the event as being contingent upon something else such as luck, fate, chance or anything that is out of their control and cannot be predetermined could be regarded as "externals".

Lefcourt (1991) also further debated that the construct of locus of control is different from other constructs in that it is used primarily as a personality characteristic; an individual difference that is assumed to have some stability and

generalisability. Since its inception, the majority of work on locus of control has been directed at its relationship with various work situations variables (Duffy et al., 1977). To date, there has been limited work examining locus of control in the light of consumer behaviour research despite its reputed relationship with perceived risk (Lumpkin, 1985). Research by Lumpkin (1985) has demonstrated that “internals” tend to have greater life satisfaction, activity and good health, to cope better and have less perceived risk. In a study conducted by Srinivasan and Tikoo (1992), it was also discovered that “internals” tended to engage in greater pre-purchase external information search.

3.6.1 Measurement of Locus of Control

Rotter (1966) developed one of the foremost scales developed for the measurement of locus of control. The final version of this instrument was composed of a total of 29 questions, including 6 filler items. Rotter’s Internal-External (I-E) scale as it has become to be known, has demonstrated relatively stable internal consistency estimates. However, the I-E scale is also not without its critics. Despite its popularity, Duffy et al (1977) have argued that some investigators have presented evidence that the I-E scale may have in fact oversimplified the dimensionality of the construct. Ang and Chang (1999) have also called into question the dimensionality of the I-E scale. Duffy et al., (1977) have also provided evidence that although a general theme of external and internal locus of control run throughout the I-E scale, people are able and do distinguish among different types of control. Rotter (1966) viewed the construct of locus of control as a unidimensional entity that varied along a continuum of Internal or External locus of control. However, Duffy and his colleagues have argued that the I-E scale can be described as two major independent dimensions.

Lefcourt (1991) also expressed disappointment that "...an unfortunate consequence of the I-E scale is that it has viewed locus of control as a typology...it should be evident that a 23-item questionnaire cannot sort individuals into types and that much error and confusion will result from attempts to interpret scalar differences that way (p.415)". Another drawback of the I-E scale presented by Hodgkinson (1992) is the tendency of the scale to correlate quite significantly with social desirability response set and therefore serves as an indication that there has been a lack of effort to control for social desirability bias. Hodgkinson (1992) further elaborated and stated that as a result of this, it is possible that previous studies linking locus of control with issues such as strategy making, structure and environment could be a function of respondents attempting to present themselves in a socially desirable manner.

As a result of the drawbacks of the I-E scale, alternative scales to measure locus of control have been developed. One of the more notable ones is a scale devised by Lumpkin (1985). Lumpkin (1985) deemed the I-E scale to be too lengthy and worked instead on creating a rather more concise scale to measure locus of control. The Lumpkin scale is composed of a total of six items. All six items are derived from the original I-E scale. Three of the items tap internal locus of control and the other three tap external locus of control. Lumpkin's scale was also tested on actual consumers, a significant difference from many previous works, which tended to use students more. By using consumers, Lumpkin (1985) postulated that it aided generalisability. Although, the Lumpkin scale is a considerably shorter version, empirically it has proved that it performs just as well as the full scale. With regards to all the efforts that have gone into the construction of a scale, Lefcourt (1991) has declared that "...despite the plenitude of research attesting to the value of the locus

of control construct as a conceptual tool, the variance accounted for by many of the extant measures of locus of control has often left much to be desired”.

CONSEQUENCES OF CUSTOMER PARTICIPATION

From the literature it was found that often studies tended to use constructs such as perceived service quality and behavioural intentions when examining some of effects of customer participation. Therefore, in this research, these two constructs of perceived service quality and behavioural intentions have been classified as the consequences of customer participation and are discussed individually in the sections that follow.

3.7 *Perceived Service Quality*

Service quality was introduced into the literature in the early 1980's. The construct of service quality has changed slightly since then however, there is still considerable debate over a suitable instrument of measurement. Service quality has been an important research topic over the years due to its relationship with customer satisfaction (Bolton and Drew, 1991, Boulding et al., 1993) customer retention (Reichheld and Sasser, 1990) as well as a variety of behavioural intentions such repurchase intentions (Boulding et al., 1993). Parasuraman, Zeithaml and Berry (1988, hereafter referred to PZB) have defined service quality as “a form of attitude, related but not equivalent to satisfaction, and results from a comparison of expectations with perceptions of performance”. PZB (1985) have argued that perceived service quality is an overall evaluation that is similar to attitude.

According to Grönroos (1993), the foundation of service quality is the

confirmation/ disconfirmation concept that is derived from consumer behaviour. Some models of consumer behaviour argue that customers' postpurchase perception of a product is a function of the prepurchase expectations; the level of the quality perception depends on the degree to which quality expectations are confirmed or disconfirmed by the customer's experience of a given service (Grönroos, 1993). Based upon such theoretical underpinnings, the Perceived Service Quality model (Figure 3-4) was introduced in 1982 (Grönroos, 1982, 1990). According to this model perceived service quality is the outcome of an evaluation process where consumers compare their expectations with the service they perceive they have received. Consumers form expectations of a product or service when purchasing it. While and after consuming the product or service, the perceptions are then compared to the prior expectations. Grönroos (1982 & 1990) proposed that service quality is made up of two components: namely technical quality and functional quality. Technical quality is *what* the service provider gives to the customer; such as a withdrawal transaction at a bank. Functional quality is *how* the service is provided by the service firm; for example the withdrawal service may be provided through the ATM or by the teller in person

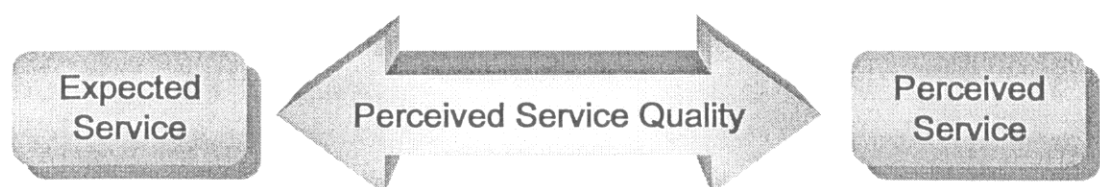


Figure 3-4: Perceived Service Quality (Grönroos, 1982)

The confirmation/ disconfirmation concept has been the foundation for most of the model building within the service quality field during the 1980's (Grönroos, 1993), for instance, the well known Gaps Model (PZB, 1985) and SERVQUAL models (PZB, 1988). Today, SERVQUAL is perhaps the model that has been

generally accepted as representing the construct of service quality and has received widespread replication in other service industries.

SERVQUAL was originally composed of ten components. These had been derived from earlier exploratory work done by PZB in 1985 to uncover the dimensions that consumers used to formulate expectations about and perception of services. The ten dimensions were tangibles, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding/knowing the customer, and access (PZB, 1985). In subsequent analyses on four service industries namely, banking, credit card service, repair and maintenance as well as long distance telephone company, these ten components were later collapsed into five broader dimensions as defined below:

- *Tangibles*: Physical facilities, equipment, and appearance of personnel
- *Reliability*: Ability to perform the promised service dependably and accurately
- *Responsiveness*: Willingness to help customers and provide prompt service
- *Assurance*: Knowledge and courtesy of employees and their ability to inspire trust and confidence
- *Empathy*: Caring, individualised attention the firm provides its customers

Each of these dimensions was made up of four to five items to tap the dimension. The SERVQUAL instrument is made up in total of 22 items to measure

expectations and perceptions of service. It is administered twice in different forms, one to measure expectations and one to measure perceptions. The respondents service quality score is then derived by subtracting the perception score from the expectation score as below.

$$\text{Service Quality (SQ)} = \text{Perceptions (P)} - \text{Expectations (E)}$$

PZB (1988) have claimed that the above five dimensions of service quality are generic. Later work by PZB (1991) on SERVQUAL aimed to refine their previous work by making modifications to the wording of the expectations items. According to PZB, the 1988 version of SERVQUAL was aimed at capturing respondent's normative expectations. However, subsequent word changing focused on what customers *would* expect from excellent service companies. They argued that by intending to measure customer's normative expectations via the use of the *should* terminology might contribute to unrealistically high expectations scores (PZB, 1991).

Since its inception, SERVQUAL has been widely replicated in a number of service industries including electric and gas utilities (Babakus and Boller, 1992), medical care (Headley and Miller, 1993), hotels (Armstrong et al. 1997), banking (Lam, 1985), dental practices (Carman, 1990), apparel retailing (Gagliano and Hathcote, 1994) and business school placement centres (Carman, 1990) just to mention a few.

3.7.1 Criticisms of SERVQUAL

Buttle (1996) emphasised that without question, SERVQUAL has been widely applied and is highly valued, however SERVQUAL is not without its critics.

Areas of disagreement in the literature are depicted below.

Expectations

There is considerable confusion over the precise meaning of expectations. PZB define expectations as including the following: desires, wants, what a service provider should offer, normative expectations, ideal standards, what the customer hopes to receive and adequate service (Teas, 1994). Multiple definitions and corresponding measurement operationalisations of the SERVQUAL model result in an expectations norm concept that is loosely defined and open to multiple interpretations (Teas, 1994).

PZB (1988) also distinguish the difference of expectations in service quality to those used in customer satisfaction. In customer satisfaction, expectations serve a prediction function regarding what the customer thinks will likely happen during the service encounter (Oliver, 1993). Whereas, in service quality, expectations serve as ideals, in terms of what the service provider should offer. Cronin and Taylor (1992) point out this distinction is inconsistent with the work of Woodruff et al. (1983) on customer satisfaction where the customers are asked what they should expect. Such implications mean that the distinction between customer satisfaction and service quality in the work of PZB are not clear (Cronin and Taylor, 1994).

Teas (1993) has asserted that PZB's definition of expectations is somewhat vague and looked into respondents' interpretation of the expectations battery of SERVQUAL. He found that it was possible that respondents were using any one of six interpretations of expectations:

- *Forecasted performance* – consumers' expectations concerning what

performance will probably be

- *Deserved Performance* – the performance level the customer, in light of their investments, feel performance should be
- *Equitable Performance* – represents the level of performance the consumer ought to receive given a perceived set of costs
- *Minimum Tolerable* – reflects what performance must be
- *Ideal Performance* – the optimal performance, what performance can be
- *Service Attribute Importance* – involves the degree to which an attribute is significant in the customer's evaluation of the product or service.

Teas (1993) contemplated that these findings on the differing interpretations of expectations suggested there are fundamental problems with the expectations battery. Furthermore, Teas (1993) stressed that a considerable portion of the variance in the SERVQUAL expectations battery is the result of measurement error induced by respondents misinterpreting the scale. Teas (1993) also noted that problems with respect to the conceptual and operational definitions of the expectations battery have created ambiguity concerning the interpretation and theoretical justification for the P-E perceived service quality concept. He also found in his qualitative assessment of SERVQUAL that the expectations battery lacked discriminant validity.

The issue of the precise meaning of expectations is further complicated when PZB (1991) changed the wording of the expectations battery by using the word *would* instead of *should* as mentioned earlier. The authors argued that by the word

should led to unrealistically high expectations scores. PZB also asked respondents to assess their expectations of excellent companies. However, Smith (1995) argued that this definition equates service excellence with quality rather than conformance to requirements and does not take into account service firms that aim for the low price and low excellence segment of the market.

Another major area of disagreement is regarding the role of expectations in the measurement of service quality. PZB (1988) have argued that the basis for the measurement of service quality is the comparison between expectations and perceptions of a service. Support for this stance remains in the earlier work on service quality such as that by Grönroos (1982). However, Cronin and Taylor (1992) thwarted their claim by arguing that there was little theoretical or empirical evidence that supports the relevance of the expectations-performance gap as the basis for measuring service quality. Cronin and Taylor (1992) cited Mazis et al. (1975) in support of this view. According to Cronin and Taylor (1992), the research of Mazis et al (1975) provided experimental evidence that indicates that the performance dimension alone predicts behavioural intentions and behaviour. They also cited that the marketing literature appears to offer considerable support for the superiority of simple performance-based measures of service quality (Bolton and Drew, 1991; Churchill and Surprenant, 1982, Woodruff, Cadotte and Jenkin, 1983).

A further criticism is that SERVQUAL fails to capture the dynamics of changing expectations. Buttle (1996) argues that consumers learn from experience and he further contended that the inference from PZB's work is that expectations rise over time. Grönroos (1993) identified this shortcoming and has called for a new phase of service quality research focusing on dynamic expectations. Such a claim is

also echoed by Iacobucci et al. (1994).

Dimensionality

Much criticism has been voiced regarding the dimensionality of the SERVQUAL scale as well as their stability in different contexts. PZB (1988) have claimed that the five factor structure displays consistent factor structure across five independent samples; thereby suggesting that the five factor structure is generic across different service contexts. Replication studies have yielded different numbers of dimensions ranging from nine (Carman, 1990); while others such as Cronin and Taylor (1992) have suggested a unidimensional construct of service quality. As a result of these conflicting findings, Babakus and Boller (1992) have commented that the dimensionality of the construct may be a function of the type of services under investigation.

In their testing of the revised version of SERVQUAL, PZB (1991) found that the dimension of tangibles had split into two factors – one pertaining to equipment and physical facilities and the other pertaining to employees and communication materials. They also found that the responsiveness and assurance dimensions showed considerable overlap and load on the same factor. PZB suggested that this was a result of imposing a five-factor structure on the analyses. Since then, PZB (1994) have posited that although SERVQUAL consists of five distinct dimensions; the dimensions are intercorrelated and hence are expected to overlap to some degree. Their interrelatedness is evidenced by the need for oblique rotations of factor solutions (PZB, 1991).

Carman (1990) tested the generic dimensions of SERVQUAL in three

setting: a tire store, placement centre and dental clinic. Following the suggestion of PZB, he added items and modified items in order to adapt the scales to the particular setting. Items on the original ten dimensions were retained. His factor analysis identified between five to seven factors in the different settings. Carman (1990) reported that the dimensions of Tangibles, Reliability and Security appeared in all three settings but Responsiveness appeared only weakly in the dental clinic. Responsiveness is a major component in the five dimensions. According to Carman (1990), customers are context-specific in the dimensions they use to evaluate service quality, as it was found that when one of the dimensions of quality is particularly important to customers, they are likely to break that dimensions into subdimensions. Carman (1990) also noted that "PZB combined their original Understanding and Access dimensions in Empathy...our results did not find this to be an appropriate combination". Furthermore, Carman (1990) claimed that the applicability of an individual item to the factor to which it was expected to belong is far less stable.

Scale Points

Lewis (1993) has criticised the seven-point Likert scale used in SERVQUAL for a lack of verbal labelling for points two to six. Lewis (1993) debated that such a practice would cause respondents to overuse the extreme ends of the scale and argued that this could be avoided by labelling all the other points. Another issue that is debated in relation to the scale points is the respondent's interpretation of the mid-point. In a study by Smith (1995), she found at least five broad meanings which respondents assigned to the mid-point of the scale:

- *Evaluative response* – a score of 4 was indicative of just sufficient

performance for the customer to continue with that service provider

- *Observations of lack of consistency of the service provider* – difficult for respondent to state a particular level of performance when the service provider is inconsistent
- *Neutrality* – some respondents did not see the relevance of particular items and thus chose the mid-point
- *Assumptions* – respondents did not know the level of performance on some items and assumed that the service firm carried out its operations accurately.
- *"I don't know"* – to some respondents who did not know about the relevance or performance of particular items, they interpreted the mid-point as this.

Use of Difference Scores

Brown et al. (1993) have criticised SERVQUAL for its utilisation of difference scores in the calculation of service quality. In SERVQUAL, service quality is assessed by subtracting respondents' rating of expected level of service from their perceptions of service. Brown et al. (1993) contended that the calculation of difference scores could lead to several psychometric problems. They argue that difference score measures often demonstrate poor reliability, primarily because any positive correlation between the component scores attenuates the reliability of the resulting difference score. They also further argue that "when two responses are taken from the same respondent and then subtracted to form a measure of a third

construct, only rarely will the difference score components not be positively related”.

In response to this line of reasoning, PZB (1993) have stated that the expectations component measures customers’ normative standards, and the perceptions component measures customers’ perceptions of service; therefore, they feel that there is no conceptual reason for these two components to be correlated.

A second area of concern when using difference scores is that pertinent to discriminant validity (Brown et al., 1993). Brown et al. (1993) have debated that low measure reliability attenuates correlations between constructs, therefore, a measure with low reliability may appear to possess discriminant validity simply because it is unreliable. They go on to assert that difference score measures are usually less reliable than non-difference score measures and are susceptible to this phenomenon. Furthermore, difference scores will always be highly correlated with, and distinct from, at least one of the component measures (Brown et al., 1993). If this condition holds, it would insinuate as Brown et al. (1993) have argued, that difference score measures will not typically demonstrate discriminant validity from their components, thereby making their construct validity questionable.

PZB (1993) in response to this rationale, proclaimed that low reliability was not a problem for SERVQUAL as the reliability of SERVQUAL has been shown to be consistently high. With regards to a lack of discriminant validity, PZB (1993) have attested that “although it is true that any difference score measure is likely to be correlated with its components, we disagree with the inference that such a correlation demonstrates lack of discriminant validity, especially for the difference score formulation of SERVQUAL”. PZB (1993) further declared that inferring poor discriminant validity for the difference score formulation of SERVQUAL on the

basis of its correlation with its components is inconsistent with the definition of discriminant validity. Brown et al. (1993) had hitherto defined discriminant validity as “the degree to which theoretically unrelated constructs do not correlate too highly with one another.” However, PZB (1985) have stated that they consider service quality as a *function* of the discrepancy between customer expectations and customer perceptions of service. Such a statement infers that the former construct is necessarily related to the latter two (PZB, 1993).

Brown et al. (1993) also raised a third concern with the use of difference scores. They argued that a problem was that of variance restriction. This occurs when one of the components used in calculating a difference score is consistently higher than the other (Peter et al., 1993), as it the case with the expectations component. Variance restriction problems can cause measure distributions to be other than normal (Brown et al., 1993). However, PZB (1993) counteract this claim by arguing the severity of the problem depended on how the difference scores were used. They argue that this issue raised by Brown et al. is only a problem when the difference scores are used in multivariate analysis, they further claim that the problem is not relevant when the difference scores are used for diagnostic purposes. PZB (1993) defended the use of difference scores to pinpoint the most serious shortfalls along the general SERVQUAL dimensions or specific service attributes.

Practical Issues

One of the first areas of concern is that of the timing of administration of the instrument. Carman (1990) suggested that it was not practical to ask respondents to fill in the expectations component when they arrived at the service firm and then

complete the perceptions component at the end of the service encounter. Robinson (1999) also expressed this sentiment. PZB (1988) asked respondents to complete both expectations and perceptions in one administration; the only requirement being that they had used the services of the particular service firm in the previous three months. Carman (1990) expressed that by doing so, all respondent beliefs were entirely ex post and that these expectation responses can be of little value. Carman's (1990) solution to this problem was to collect data on the expectations-perceptions difference with a single question in a single administration, i.e. by using a non-difference approach.

Robinson (1999) maintained that if expectations and perceptions are recorded following a service encounter, as is the case with SERVQUAL, then expectations are likely to be coloured by the customer's experience. Robinson (1999) cited the work of Clow and Vorhies (1993) in support of this line of reasoning. Clow and Vorhies (1993) found that following negative experiences, customers tended to overstate their expectations, while positive experiences lead to an understatement of expectations. The previous sections above have described the intricate details of the debate behind the shortcomings of the SERVQUAL instrument. All the areas that are under scrutiny are summarised in Table 4.

The following section will describe the increasing support for the use of performance only measures of service quality. One of the more notable instruments, SERVPERF developed by Cronin and Taylor (1992) will be elaborated upon.

<i>Area of debate</i>	<i>Nature of disagreement</i>
<i>Expectations</i>	<ul style="list-style-type: none"> • precise definition of expectations • differentiation from expectations in customer satisfaction • whether to measure expectations or not • fails to capture the dynamics of changing expectations
<i>Dimensionality</i>	<ul style="list-style-type: none"> • whether the five dimensions are generic
<i>Scale Points</i>	<ul style="list-style-type: none"> • lack of labeling for points two to six • respondents' interpretation of the mid-point
<i>Difference Scores</i>	<ul style="list-style-type: none"> • poor reliability • lack of discriminant validity • variance restriction
<i>Practical Issues</i>	<ul style="list-style-type: none"> • Timing of the questionnaire administration • use of a non-difference score approach as an alternative

Table 4: Summary of the Service Quality Measurement Debate

3.7.2 Performance Only Measures: SERVPERF

The predicament of expectations in the measurement of service quality provided the impetus to later research on the development of performance only measures of service quality. In response to the problem of expectations, Cronin and Taylor (1992) argued that it was feasible that service quality could be measured via perceptions only. Support for the use of performance only measures can be found in the literature. In a field study by Bolton and Drew (1991), they concluded that current performance ratings of a service provider strongly affect attitudes whereas the effects of disconfirmation are generally insignificant. More importantly one of the authors of SERVQUAL has provided the most telling evidence to the superiority of performance only measures, "...our results are incompatible with both the one-dimensional view of expectations and the gap formulation for service quality. Instead, we find that service quality is directly influenced only by perceptions".

The measurement of perceptions only can be attained through the use of an instrument known as SERVPERF developed by Cronin and Taylor (1992). This scale is composed of the 22 perception items found in SERVQUAL. However, Cronin and Taylor (1992) treat perceptions scale as unidimensional and do not constrain it to produce a five-factor solution. In Cronin and Taylor (1992), these authors demonstrated that SERVPERF outperformed the SERVQUAL instrument in that the former was able to explain more of the variation in service quality. Suh et al. (1997) conducted research into service quality in the Korean hotel industry and conferred that a perceived performance-based measure of service quality confirmed to be a superior method to that of perceived expectation disconfirmation-based measure of service quality. In 1993, PZB also agreed that the perceptions component outperformed expectations as they inferred, “regarding the contribution of the expectations component to explaining variance in other variables, our findings are similar to those of other researchers – i.e., the perceptions measure seems to outperforms the difference-score measure in explaining variance in other variables”.

3.8 Behavioural Intentions

In the past two decades of research on service quality, there has been much stress placed upon research investigating measuring service quality in different industries as well as the impact of service quality on firm profits or other financial outcomes relevant to an organisation. Zeithaml et al. (1996) have noted the lack of studies that have demonstrated the impact of service quality on behavioural response of the customer. They have noted that the issue of importance today involves understanding the impact of service quality not only on profit but other outcomes such as customer retention. Zeithaml et al. (1996) have debated that if service

quality relates to the retention of customers at the aggregate level, then evidence of its impact on consumers' behavioural responses should be detectable.

It is essential to examine the after effects of customer participation and perceived service quality on post-purchase behavioural outcome or intent. This perhaps draws a larger picture of what happens not only during the interactive part of the service encounter but also the aftermath of the phenomenon and the implications, which it holds. The outcome behaviours of perceived service quality have been well noted in the literature (Liljander & Strandvik, 1995; Zeithaml et al. 1996; Headley et al. 1993; Boulding et al. 1993). However, the outcome behaviours associated with customer participation in service production and delivery have been virtually ignored theoretically and empirically (Kellogg et al., 1997). The need to understand the customer outcomes is essential in order to fully understand customer participation and perceived service quality. Bitner et al. (1997) have called for an inquiry into the "moderating influence, if any, of participation levels on post-purchase behaviours such as repurchase and word-of-mouth" (p.203).

The research aims to look at exactly these areas of outcome behaviour namely, the intention to repurchase, the intention to recommend the service to other people as well as the intention to use other related services offered by the service provider. These can be termed favourable behavioural intentions, as these are all actions that customers engage in when creating or strengthening bonds with a particular service provider. Zeithaml et al. (1996) have advocated that recent research has offered evidence that customer satisfaction and/or service quality perceptions positively affect intentions in the form of repurchases, praising of the service firm as well as other behaviours which signal that the customers are forging bonds with the company. Therefore, the inclusion of such post-encounter aspects is

justified in the research. A description of the importance of these various types of behavioural intentions for service firms follows.

Repurchasing and the purchase of other related services provided by the service firm brings diverse advantages for the service provider such as the reduced need to keep attracting new customers. The keeping of existing customers is obviously less costly than attracting new ones as the acquisition of new customers means that service firms incur costs for advertising and promotion and so on. It has also been found that existing customers generate increasing profits each year they stay with a firm (Reichheld & Sasser, 1990). In their research, Reichheld & Sasser (1990) have highlighted the importance of keeping customers, in that loyal customers tend to provide free advertising for the service firm when they recommend the service to other people.

Customers' intention to recommend and referrals are extremely important for service firms. File et al. (1992) have argued that word-of-mouth "is known to be an important factor in consumers' information search, evaluation and buying processes". Crocker (1986) has found that word-of-mouth can decrease customers' perception of risk as well as increase their intention to purchase the service and so therefore, word-of-mouth is important not only in pre-purchase stage but also the post-purchase stage. Word-of-mouth has been examined in research conducted by Zeithaml et al. (1996) where it formed part of the construct of loyalty in their work. Word-of-mouth was comprised of three items in that scale and was measured with the items "recommend XYZ to someone who seeks your advice" and "say positive things about XYZ to other people" as well as "encourage friends and relatives to do business with XYZ". Respondents then rated their agreement with the statement on a seven-point scale.

Behavioural intentions have been regarded by Gremler and Brown (1996) to be a part of service loyalty. The construct of service loyalty is an area that is also lacking in research. Gremler and Brown (1996) have also stated that service loyalty is distinctly different from brand loyalty where most of the work originates from the study of products or physical goods. Their work has led to the identification of three types of service loyalty:

- Behavioural loyalty – loyalty expressed as a form of behaviour such as repeat purchasing directed at a particular brand over time.
- Attitudinal loyalty – this dimension includes consumers' preferences or intentions
- Cognitive loyalty – it is suggested that this means that the particular brand or store comes up *first* in the consumer's mind when the need for making a decision as to what to buy or where to go arises.

Based on the above categories, behavioural intentions might be considered to fall under attitudinal loyalty as it encompasses intentions or preferences of the consumer.

3.8.1 Types of Behavioural Intentions

PZB (1996) developed a model that contained both favourable and unfavourable behavioural intentions. They described favourable behavioural intentions as "certain behaviors signal that customers are forging bonds with a company, when customer praise the firm, express preference...increase the volume of purchase...pay a premium price, they are indicating behaviorally that they are bonding with the company" (p.34). Most of the research on behavioural intentions has focused on examining favourable behavioural intentions.

Conversely, unfavorable behavioural intentions were described by PZB as

the exhibiting of behaviours that signal that customers are poised to leave the company or spend less with the company. According to PZB (1996), such intentions include complaining. Indicators of unfavourable behavioural intentions have been argued by PZB (1996) to include saying negative things about the company, switching to another company, complaining to external agencies and doing less business with the company.

While the focal point of most previous studies examining loyalty have looked at the benefits of it from a firm perspective; there is an emerging line of research that has uncovered the customer perspective of the situation. Initial early qualitative findings from Gremler and Brown (1996) revealed that customers often perceived they obtained benefits as a result of being a loyal customer. These benefits were termed by Gwinner et al., (1998) as *relational benefits* in a paper that continued on the study of Gremler and Brown (1996). Gwinner et al., (1998) have speculated that customers who have developed a relationship with a service provider expect not only satisfactory delivery of service but also are likely to receive benefits. It has been empirically demonstrated by Gwinner et al., (1998) that relational benefits fall into three categories. One of the first categories is that of “confidence benefits” and includes benefits that give the customer a feeling or comfort or security as a result of being in a relationship with the provider. Customers may also experience reduced anxiety, and/or possess feelings of trust and confidence in the provider. Secondly, some customers feel that as a result of being in a relationship with the service provider, they form bonds of friendship that allows the customer to experience “social benefits”. The study of Gwinner et al., (1998) also uncovered the fact that as a result of the development of such a friendship, the customer often received personal recognition when using the service provider. Lastly, customers also

experience “special treatment benefits”. Such benefits encompass getting price discounts or price breaks as well as customisation of the service offering (Gwinner et al., 1998).

3.9 Chapter Summary

This chapter has served to provide the theoretical framework based on the research questions and objectives of the areas that underlie the research. It has also unveiled the possible antecedents of culture, locus of control as well as perceived risk as having a possible influence on the intensity customer participation these have been conceptualised to effect consumer behaviour in services. Furthermore, the literature has also provided some possible linkages between customer participation and the constructs of perceived service quality as well as behavioural intentions. Therefore, the literature review has provided some insight into the research question of the possible antecedents and consequences of service quality. Investigation into the possible components of customer participation has also provided some ideas as to how the construct is to be captured, thereby giving some clues to the research question of what constitutes customer participation. However, the suitability of the items developed from the literature review stage need to be assessed in the use of focus groups as well as the pilot testing stage to ensure their appropriateness. Lastly, the literature review on culture has demonstrated very strongly that cultural values can indeed exert influence on behaviour. The effect of culture on other behaviours such as complaint behaviour (Le Claire, 1993) has been shown values can affect the types of behaviour that are considered appropriate and the types that are displayed. Therefore, this has provided a strong urge to include culture when studying customer participation. Overall, this chapter has served to provide the necessary input

required for the research to proceed to the next stage of developing a conceptual model as part of theory testing and also some discussion on the expected direction of relationships between the constructs in the study. This part is described in the next chapter.

Chapter 4 THEORY TESTING

4.1 *Introduction*

In this section of the thesis, the rationale and explanations will be provided behind the suggested relationships between the various constructs in the study. Due to the lack of research in the construct of participation and especially that of the effects of culture upon it merits theory testing by trying alternative models to understand which best fits. In the following sections, different models will be presented that focus on the possible roles of culture; namely (i) an antecedent to perceived risk and locus of control; (ii) as a mediator of perceived risk and locus of control; (iii) and as a moderator variable. After illustrating different versions of an overall model, the hypothesized directions of relationships between various constructs will be elaborated upon in detail.

4.2 *Proposed Various Roles of Culture*

One of the major contributions of this study is the inclusion of cultural values in understanding aspects of consumer behaviour. Kamakura and Mazzon (1991) have contemplated that values provide potentially powerful explanations of human behaviour because they serve as the standards or criteria of conduct and are also remarkably stable over time (Rokeach, 1974). A lot of research in consumer behaviour has been carried out in the United States and it may sometimes be inappropriate to assume that theories that have been applied in the U. S. can simply be “transplanted” into another cultural context and assumed to produce the same kind of reaction. Therefore, this study has chosen to integrate cultural values into

the research to provide greater insight. More importantly, Homer and Kahle (1988) have debated that it is differences in values that have been shown to relate to significant differences in a variety of attitudinal and behavioural outcomes.

Three models of the overall research will illustrate the possible different roles that culture could play and these will be subsequently tested in the data analysis stage. Explanation of the possible relationships and the expected direction between various constructs is also presented in the section following the overall models.

4.2.1 Overall Model 1

In this model culture is represented as an antecedent to perceived risk and locus of control as illustrated below. In this model, the effect of culture on customer participation in an indirect one that occurs through the constructs of perceived risk and locus of control.

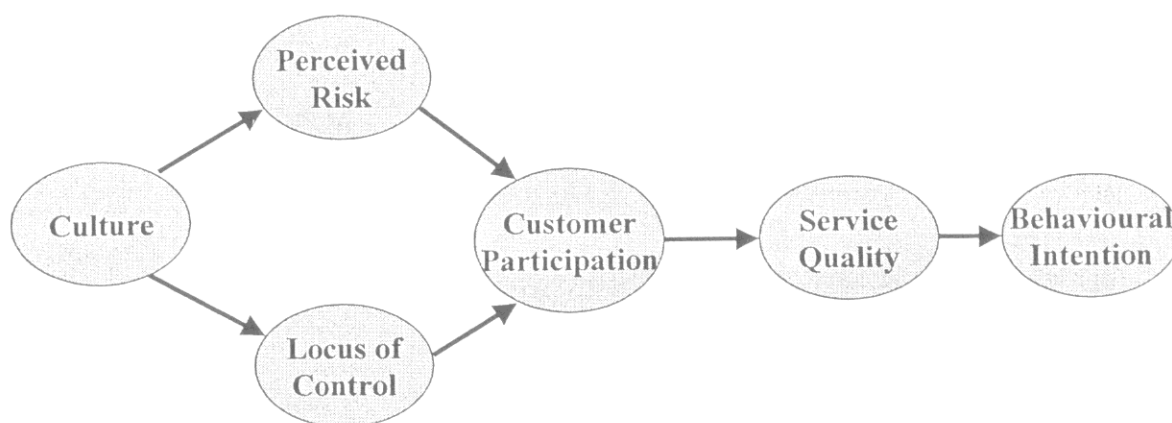


Figure 4-1: Culture as an Antecedent

4.2.2 Overall Model 2

In this model, culture is represented as a mediator variable that mediates the effect of perceived risk and locus of control on customer participation as illustrated below.

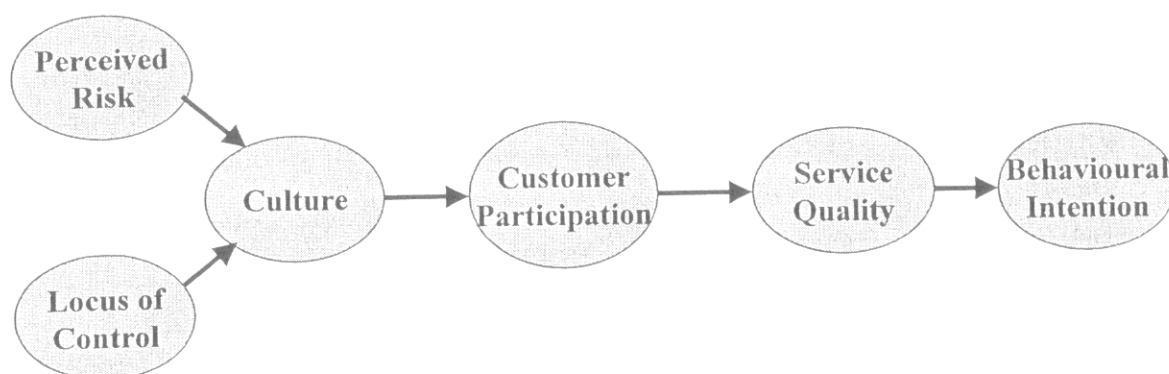


Figure 4-2: Culture as a Mediator

4.2.3 Overall Model 3

In this model, culture is represented as a moderator variable that moderates the effects of perceived risk and locus of control on customer participation and is illustrated in the figure below.

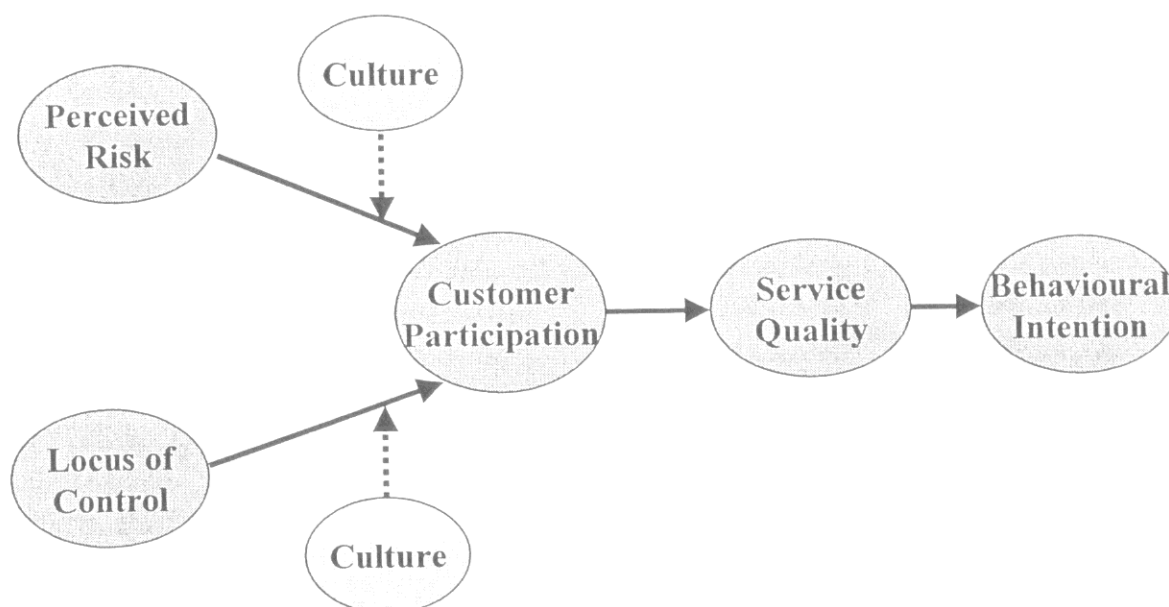


Figure 4-3: Culture as a Moderator

4.3 *Expected Directions of Structural Relationships*

In the following sections, there are no specific hypotheses developed as the model is in a theory development stage. As such there is more emphasis on finding out some possible underlying reasons for the direction of relationships between some of the constructs in the model.

4.3.1 *Culture and Perceived Risk*

Verhage et al., (1990) have made the contention that the majority of marketing concepts, especially that of perceived risk is based upon studies conducted in the United States and argue that this is a shortcoming of the literature and represents a void that needs to be filled. The literature in the area of culture and risk is rather sparse. However, incorporation of an understanding of cultural values is essential as Beatty et al., (1985) have argued that values may prove to be one of the most powerful explanations of, and influences on, consumer behaviour.

It can be argued that culture can exert an influence on risk perception. The work of Hofstede (1991) has demonstrated that different countries possess varying levels of tolerance towards uncertainty avoidance. Hofstede (1991) has also empirically demonstrated that countries such as Japan have strong uncertainty avoidance and countries such as the United States or Britain tend to possess weak uncertainty avoidance. One of the impacts of strong uncertainty avoidance according to Hofstede (1991) is the tendency to fear ambiguous situations and unfamiliar risks.

As mentioned in earlier sections, Adler (1997) has stated that the cultural orientation of a society could be reflected in its values, attitudes and behaviour and it has also been argued by Feather (1994) that values influence the way situations are construed therefore this line of argument could also apply to perceived risk. Since

perceived risk is a subjective assessment (Bauer, 1960) of the amount of risk inherent or the possible outcome of a purchase, it can be argued that culture exerts an influence on the way this subjective assessment is made as well as the way the situation is interpreted. Alden et al., (1994) have presented a similar argument in their study on evaluation strategies of American and Thai consumers, they stated that the response to risk seems likely to interact with cultural factors such as the desire to avoid uncertainty or engage in risk taking behaviour. Verhage et al., (1990) have asserted that the degree to which perceived risk influences decision making varies between countries and even Douglas and Wildavsky (1982) have boldly stated that perceptions of risk are determined by culture. If this line of argument is valid, we should expect to see the levels of perceived risk differ among the three cultural groups in the study.

To postulate whether there is a negative or positive relationship between these two, an understanding of the types of cultural values that are captured is needed. In this research, although the CVS is employed, only two of its dimensions have been extracted namely, Integration and Confucian Work Dynamism. The rationale for this is covered in later sections. Turning to these two dimensions, integration values focus on social stability and can be characterized as having tolerance for others. Integration places emphasis on being trustworthy, and enjoying a close friendship. Other values that fall into this dimension include the need to harmony, being conservative and non-competitive and it could be argued that individuals that hold such values strongly would be inclined towards wanting stability and therefore be less inclined to partake in any situations that would be regarded as departing from stability. In other words, individuals that are high in Integration would also have a greater perception of risk. Indicating a positive

relationship.

Confucian Work Dynamism is all about society's search for virtue and its values reflect the teachings of Confucius. This dimension also implies the need to order relationships by status and to respect the order of that status. Other values include steadiness, respecting tradition and protecting one's face; all of which have implications on risk perception. A focus on steadiness could make individuals less likely to partake in any situations that they would regard as being risk as it would be a threat on upsetting steadiness. Also, the need to protect one's face could make an individual less willing to undertake a particular activities that had an outcome that could result in loss of face. Therefore, it can be stated that individuals high in Confucian Work Dynamism would also hold a high level of risk perception, implying again that there is a positive relationship between these two thus leading to the hypothesis of:

[H1]: The greater the importance of Integration and Confucian Work Dynamism values, the higher the level of customer participation.

4.3.2 Culture and Locus of Control

Locus of control has been considered primarily as a personality characteristic and is assumed to have some stability and generalisability (Lefcourt, 1991). Personality is argued as being composed of a system of values (Rokeach, 1973). From this line of reasoning it may be rationale to assume that culture could have some sort of impact on locus of control given its effect on values. Supporting this notion is empirical work done by Homer and Kahle (1988) where it was revealed that values were directly related to locus of control which exemplifies the need to study the relationship between cultural values and locus of control.

This finding has also been further supported through the work of Winsted

(1997a, 1997b) on the evaluation of the service encounter with American and Japanese subjects, where it was noted that the major difference between the two groups was their perception of control. It was found that the Japanese group tended to take a more fatalistic approach to the service encounter believing they had no control over the activities in the encounter, whereas the American group considered they could control the activities. Although this analogy is tied closely with the area of perceived control, Winstead has drawn comparisons to the area of locus of control in the study. Even Bateson (1985) has called for the investigation into personality constructs like locus of control as a first step to understanding the phenomenon of control.

When focusing on the dimensions of culture and their relationship with risk, it can be argued that with Integration there are some specific values such as contentedness and maintenance of harmony could mean that individuals may be less inclined to actively control their environment and that the need to be content would also reflect such thinking. Therefore, it can be argued that strong adherence to such values could mean that an individual possessed greater external locus of control.

With Confucian Work Dynamism, the values could also act on locus of control in a similar fashion. Values such as steadiness could mean that an individual is less inclined to manipulate their environment as this may be considered as interfering, instead such individuals may prefer not to meddle but just to continue as they are. Therefore, as before, this suggests that a strong adherence to Confucian Work Dynamism values would mean that an individual has greater external local of control.

The scale for locus of control infers that the greater one rates the particular item on the scale, the more inclined they are to be externally controlled. Therefore it

is expected that the greater the adherence to cultural values, the more they would be externally controlled, implying a positive relationship between these two constructs giving rise to this hypothesis:

[H2:] The greater the importance of Integration and Confucian Work Dynamism values, the higher the level of customer participation.

4.3.3 Culture and Customer Participation

Kamakura and Novak (1992) have maintained that values are stable and occupy a more central position than attitudes in a person's cognitive system and so therefore, determine attitudes and behaviour. Pitts and Woodside (1986), citing Tolman (1951), Rosenberg (1956) and Parson and Shils (1951) have argued that values are conceptualised as an integral part of attitude and are, consequently, a causal influence on behaviour. As mentioned earlier, customer participation in service production and delivery is considered as a form of behaviour. From this perspective, it can be argued that cultural values will affect the behaviour of customer participation. In another line of argument, File et al., (1995) has contended that the act of customer participation and service provider interaction, the phase better known as the service encounter, is essentially a social process that is apt to be affected by differences in cultural perceptions and values. "Service encounters are first and foremost social encounters" (McCallum and Harrison, 1985). Solomon et al., (1985) have mentioned that service encounters are role performances in which both customers and employees have a role to play. Such notions are derived from the role theory perspective of service encounters. Broderick (1998) explained that role theory draws on a behavioural perspective by focusing on explanations of social interaction as behaviours associated with specific social positions. Role theory also sees the enactment of behaviours by individuals in a social encounter as a key

determinant of both the boundaries of social exchange and its future possibilities (Broderick, 1998). Winsted (1997b) has also considered that roles related to service encounters are likely to vary considerably from culture to culture, since culture provides the framework for social interaction in society.

Mattila (1999) has further argued that because service delivery inherently includes customer contact and interaction with employees, cultural factors may exert greater influence on consumer's evaluations of services than on their evaluations of tangible goods. Again, this lends support to the notion of the need to consider the influence of culture in the service delivery process, a process in which customer participation may be inevitable.

Cultural differences have been used to explain differences in behaviours such as negotiation style (Buttery and Leung, 1998); complaint behaviour (Le Claire, 1993); and tourism-host interaction (Reisinger and Turner, 1998). Since participation is also behaviour it is not unreasonable to expect that cultural values will play a part in preferences to participate in a service.

In research conducted by Winsted (1997a) on behaviour in two different cultural groups, she has argued that the Asian culture in her research, namely the Japanese (the Japanese also share similar cultural roots in the teachings of Confucius as the Chinese), tended to hold a rather fatalistic view to events, believing that events and outcomes were predetermined. One of the reasons for the fatalistic view can be partially attributed to the belief in *yuan* in Confucian societies. Yang (1997) stated that *yuan* has many meanings, but it basically demotes a predestined affinity or relationship. *Yuan* is important as it helps to maintain harmony in interpersonal relationships and group solidarity. The service encounter is essentially an interpersonal exchange. Winsted (1997a) found that participation in the service

encounter in some instances was felt to disrupt harmony or even result in hurting the feelings of the service provider. This line of argument is perhaps relevant to the values contained in the Integration dimension as these stress stability. Therefore it is possible that values such as maintaining harmony as well as being content and non-competitive could lead to less participation in the service production and delivery process.

However, it is also possible that certain values in the dimension of Confucian Work Dynamism lead to less customer participation too. Values such as ordering relationships are pertinent to the importance of relational harmony, which is often expressed in Asian cultures. Relational harmony (Yang, 1997) could be extended to the service encounter where societies that hold such values strongly would prefer not to participate as it may be regarded as encroaching on the other party's duties. Due to the need to "maintain harmony" in any interaction, such a consumer may be less willing to participate in order to avoid taking on any tasks that might be considered outside of their role. Instead such consumers would prefer to maintain harmony in the transaction by playing a less active role. It is also possible that values such as the need for steadiness could also mean that the consumer would be less inclined to participate in order to maintain perhaps some sort of status quo.

The arguments presented above have suggested that the more important the values of Integration and Confucian Work Dynamism, the less customer participation is exerted, hence suggesting a negative relationship between the two expressed in the following two hypotheses:

[H3:] The greater the importance of Integration and Confucian Work Dynamism values, the lower the level of customer participation.

4.3.4 Perceived Risk and Customer Participation

Guseman (1981) pointed to the difference in risk perception between goods and services, with services found to be riskier of the two. As explained in the literature review, this difference can be accounted for mainly by the generic characteristics of services that distinguish them from goods. It is these characteristics that often mean the consumer makes a decision with little tangible evidence, with a lack of quality standards; all these factors serve to increase the chance of failure or an unsatisfactory outcome with the service, hence increasing the perceived risk. Crocker (1986) referred to the fact that the relatively high degree of customer input into the service may serve to increase the degree of anxiety felt by the customer, or decrease the consumer's self confidence or both. He further added that if either one or both occur, it would increase the degree of risk perceived by the consumer. Due to the difficulty of evaluating services, consumers will generally perceive risk in their consumption; thereby they participate more in the process to reduce the magnitude of adverse consequences and increase the chances of a positive outcome (File et al., 1992). Even Silpakit and Fisk (1985) have stated that perhaps participation in the service encounter could be a means of reducing the risk for the consumer.

One of the most popular methods of risk reduction in the literature is through information searching (Murray and Schlacter, 1990). In the past, efforts into information searching have been more for evaluative purposes. However, Dabholkar (1990) has mentioned that information searching can also entail a form of participation. However, it can be suggested that information searching in the participative sense might be done to obtain information on the interactive part of the service process. From the argument presented previously, it can be possible that in situations of high perceived risk, the customer may increase participation so as to

reduce the chances of service failure and increase the chances of a satisfactory outcome thereby indicating a positive relationship between these two constructs therefore the hypothesis is presented as:

[H4:] Perceived risk has a direct positive impact on customer participation.

4.3.5 Locus of Control and Customer Participation

Andreasson (1983) has suggested that locus of control could be a factor which influences an individual's willingness to participate as well as the perception of the overall service outcome as attributable to themselves or to the service firm. Duffy et al. (1977) have defined locus of control as "...the attributions which a person believes to be operative for behavioural consequences and reinforcements". The authors then go on to state that the psychological construct of locus of control means that an individual believes that events are controlled by internal, personal forces of the actor or they are controlled by external, situational forces of the environment. An externally focused person perceives a "reward" as being the result of forces outside of his/her control; whereas an internally focused person attributes rewards as being contingent on their independent efforts. Silpakit and Fisk (1985) hypothesised that the more internal the consumer's locus of control, the more likely he or she will want to be participative in the relationship. However, the scale for locus of control infers that the greater one rates the particular item on the scale, the more inclined they are to be externally controlled. Therefore, it would be expected that as locus of control increased, the inclination to participate in the service process would decrease. As the more externally controlled one is, the more they believe outcomes are predetermined and that there would be little impact on the outcome of the service even if they intervened thereby indicating there is a negative relationship between these two constructs and the hypothesis is as follows:

[H5:] Locus of control has a direct negative impact on customer participation.

4.3.6 Customer Participation and Perceived Service Quality

Kelley et al., (1990) have contended that in a lot of services, the customer is required to participate in the form of contributing information or effort before the service transaction can be consummated; the quality of the service delivered is influenced by that information or effort. Bettencourt (1997) also expresses this opinion, where he stated that customers often contribute to their own service quality perceptions. Such comments insinuate a positive relationship between the two constructs. Ennew and Binks (1998) explained the rationale behind this suggestion; customers who actively participate in service delivery may expect to receive a service that is more appropriate to their needs and of better quality because the provider has a clearer understanding of their needs and circumstances. Bitner et al., (1997) have debated that effective customer participation increases the likelihood that needs are met and that the benefits the customer is seeking are actually attained. Ennew and Binks (1998) also empirically demonstrated a positive relationship between the two constructs. Empirical findings from Cermak et al., (1994) have also discovered a positive relationship between customer participation and perceived service quality. In light of the evidence presented, it is necessary to reexamine whether the suggested positive relationship between these two constructs still holds. Therefore the next hypothesis is:

H6: Customer participation has a direct positive impact on perceived service quality.

4.3.7 Perceived Service Quality and Behavioural Intentions

Gremler and Brown (1996) have stated that an area that remains rather

underdeveloped is the relationship between evaluations of service quality and loyalty despite the fact that loyalty is vital for survival. Struebing (1996) shares a similar view, service quality can greatly affect someone's likeliness to recommend a product or service, which has a direct impact on the attraction of new customers and ultimately the long-term success of a company.

Cronin and Taylor (1992) have empirically examined the relationship between service quality and individual service loyalty dimensions where they considered only repurchase intentions. In their study, they operationalised repurchase purchase intentions as a single-item measure and their results demonstrated that service quality did not appear to have a significant positive relationship on repurchase intentions. However, work done by Boulding et al. (1993) on the relationship between service quality and repurchase intentions as well as willingness to recommend, found a significant positive relationship between service quality and these two kinds of behavioural intentions. Zeithaml et al. (1996) developed a more comprehensive battery of behavioural intentions instrument that also covered unfavourable behavioural intentions. The study of Zeithaml et al. (1996) demonstrated empirically that improving service quality could increase favourable behavioural intentions such as positive word-of-mouth, recommending the service company, paying premium prices for the service and remaining loyal. The evidence presented above suggests the likelihood of a positive relationship between perceived service quality and behavioural intentions, therefore, this hypothesis is worded as:

[H7:] Perceived service quality has a direct positive impact on favourable behavioural intentions.

4.4 Chapter Summary

This chapter has provided an overview of the models that will be tested in the research along with some arguments on the possible relationships between the individual constructs. However, it is essential to bear in mind that the amount of literature on customer participation is somewhat limited at this point in time due to the lack of empirical studies that have been conducted. However, arguments have also been presented for the rationale behind some of the relationships between the other constructs in the study. The models will all be tested in the research and assessment of which model is best fitting will be discussed and the results presented in the data analysis section for the main data. However, before progressing to the data analysis, it is essential to clearly define the methodology that will be employed in order to conceptualise each of the constructs as well as how they will be treated and how the models will be tested. This is provided in the next chapter, which is on the research method behind the research.

Chapter 5 RESEARCH METHODOLOGY

5.1 *Introduction*

This section of the thesis will delve into the areas of the operationalisation of the constructs measured, the sample and the services examined, the types of statistical techniques that were used as well as their justification in greater detail.

The research involved some scale development work to construct a measuring instrument for customer participation as well as some survey work to examine the relationships between customer participation and the other constructs in the study. In this chapter, firstly, a detailed description of the scale development process will first be given as this was one of the first obstacles that had to be overcome in order for the research to proceed to a further level. The second part of this chapter will cover the method employed, issues related to the sample used, as well as the operationalisation of measures for the overall research.

5.2 *Research Design*

As all the issues related to customer participation and the other constructs that will be investigated are typically measured from the consumer perspective, the level of analysis is at the individual level. To address the research issues, the study has utilised a multi-method approach of combining techniques that are of a qualitative and quantitative nature. The first phase of the research involves the use of focus groups in an exploratory manner to find out more about the immediate construct of customer participation. It also serves to cross validate any items that were previously obtained from the literature review. The focus group allows the

respondents to discuss their knowledge about what customer participation constitutes as well as the effect of other key variables that are examined in the research. The second phase of the study is uses a cross-sectional mail survey, in the form of a self-reported self-administered questionnaire. The questionnaire contains items pertaining to the finalised customer participation scale as well as items pertaining to the other key constructs in the study. The purpose of the questionnaire was to provide a large set of data with which it would be possible to test the relationships between the constructs.

The target respondents for the mail questionnaire had to be people who had experience in using either one of the services under study: namely, self-organised travel or telephone banking. In Hong Kong, self-organised travel (also known as Foreign Independent Tours) is often a more expensive alternative to travelling to a destination than a group-organised tour. This was a fact that a lot of focus group respondents were quick to point out. Therefore, travelers that consume such a service will most probably have a higher income than the average worker. Therefore, it was regarded that individuals who worked as professionals would fit into this category where they had greater disposable income to spend on such a travel option. In the phone banking situation, findings from the focus group suggested that respondents felt that this service would be used again by professionals as they often worked long hours and did not have the time to queue in a branch to carry out particular transactions such as transfer of funds. Also at the time when the actual data collection was performed, phone banking was one of the relatively newer methods of banking available and was often only provided when customers held special accounts designated for individuals with a large amount of deposits. Therefore, once again, this provided the justification to examine professionals who

often earned higher salaries and would be most likely to have such accounts with telephone banking facilities.

Therefore, in summary, this study employs both qualitative and quantitative methods that Snow and Thomas (1994) have argued, provides a basis of triangulation, where a combination of methods are used to study the same phenomenon. Snow and Thomas (1994) have also contended that using a multi-method approach is advantageous in that the particular limitations of a given method will be compensated by counterbalancing the strengths of another.

5.3 Scale Development for Customer Participation

Due to the lack of comprehensive information about the measurement of customer participation, the need arose to develop a scale for the study. Examinations of previous studies that have attempted to measure customer participation in some way are rather inconclusive. Cermak et al. (1994) have stated that customer participation was operationalised as one overall variable. However, Churchill (1979) warned against the use of single-item measures as these are sometimes regarded as typically having considerable measurement error and they may produce unreliable responses. Ennew and Binks (1998; 1999) have attempted to measure customer participation to examine customer relationships in the UK banking sector; utilised behavioural measures, which they declare strangely enough as being "...not designed with the intention of measuring this specific construct". Ennew and Binks (1998; 1999) utilised secondary data in their study, which may imply a lack of control over measurement scales. The types of items that Ennew and Binks (1998; 1999) employed to measure customer participation were confined to mainly customer perceptions of their bank manager's behaviour towards them. Little

endeavour has been put into finding out what participation is composed of. The work of Bitner et al. (1997) has not provided any insight into how customer participation was measured in their study. Furthermore, much of their study is conceptually based and no hypothesis testing was undertaken. Given the deficiencies of the current literature, there was urgent need to investigate the domain of customer participation and generate a scale that allowed for its measurement. The development of a scale would permit further study of the construct as well as its relationship with other key constructs in the field of services marketing.

The scale development procedures employed follow the guidelines set out by Hinkin (1998) and Hinkin et al. (1997). Basically, according to these researchers, the scale construction process is comprised of the following stages, which will be elaborated upon in the following sections:

- Item generation
- Content adequacy assessment
- Questionnaire administration
- Factor analysis
- Internal consistency assessment
- Construct validity
- Replication

5.3.1 Item Generation

The first stage of the scale development process begins with the creation of items to assess a construct under examination (Hinkin et al., 1997). In this study, the deductive approach has been used; items have been derived based on a theoretical definition of customer participation. Extensive literature review was conducted at this stage to understand and extract items that pertained to customer participation.

Items were then selected based on the extant theory surrounding customer participation as well as some similar fields such as service involvement, perceived control, customer contact and the partial employee theory. From the theory, a list of items were developed that reflected customer participation. The items were then developed into statements. Each item addressed a single issue at one time and “double-barreled” items were avoided as suggested by Hinkin et al. (1997). All statements were also positively worded. At this stage in the process of scale development, the total number of items obtained was 11 items. These 11 items were derived from the areas of perceived control, perceived effort and task complexity. Hinkin et al. (1997) have stated that adequate internal consistency reliability can be attained with four or five items per scale and have further argued that a quality scale comprised of four to six items could be developed for most constructs. Therefore, at this stage the number of items is deemed to be acceptable.

Churchill (1979) mentioned that focus groups can also be used to advantage at the item generation stage of scale development. Focus groups are a qualitative technique allowing for “the explicit use of group interaction to produce data and insights that would be less accessible with the interaction found in a group (Morgan, 1997). Threlfall (1999) has argued that generally unexplored or new topic areas benefit from focus group inquiry. Stewart and Shamdasani (1990) have mentioned that one of the major advantages of conducting focus groups is that the rich body of data collected is expressed in the respondent’s own words and context, and further proclaim that such responses have a certain ecological validity. Stewart and Shamdasani (1990) have also stated that focus groups are often a useful starting point for the design of survey questionnaires because they provide a means for exploring the ways potential respondents talk about or feel about objects and events,

thereby highlighting their role for exploratory research. They are especially useful during this stage of research as rather little is known about the phenomenon of customer participation, thus strengthening the need to use this technique as a prerequisite to scale development. The focus group can serve not only as a venue to obtain possible items but also to cross validate any items that were found in the literature to see whether they are applicable in another context. Morgan (1997) has contended that focus groups can contribute to the creation of survey items by (a) capturing all the domains that need to be measured in the survey, (b) by determining the dimensions that make up each of the domains, and (c) by providing item wordings that effectively convey the researcher's intent to the survey respondent.

In this part of the scale development process, a total of four focus groups were conducted. The purpose of the focus groups was to serve as a means of validation to the items that had been extracted from the literature review to assess whether or not respondents felt they were relevant and also to see whether certain items from the literature review were applicable given the different context. The focus groups also provided important information into the linkage between customer participation and other constructs such as perceived risk. Such linkages are also found in the literature; so once again, the use of the focus group in this situation served to cross validate previous ideas and concepts. The findings and specific details of the focus groups conducted are discussed in Chapter 6.

5.3.2 Content Adequacy Assessment

Hinkin et al. (1997) have argued that this is a stage that is often overlooked in scale development, they have debated that this stage is essential prior to final questionnaire development and provides support for construct validity as it allows the deletion of items that may be conceptually inconsistent. Hinkin et al. (1997)

discussed the use of exploratory factor analysis to quantitatively assess the content adequacy of items at this stage in the scale development process. At this point in the process, a pilot study was undertaken on 79 subjects. The aim of the pilot study was to determine the number of latent variables that was present in the set of items used to measure customer participation (Devellis, 1991). Besides being a technique that allows for the identification of dimensions within the data, it also serves as a data reduction technique (Stewart, 1981) without great loss of information. Churchill (1979) also recommends the assessment of coefficient alpha or Cronbach alpha as it is sometimes called. This provides a measure of the internal consistency of the set of items, and Churchill (1979) strongly advocated that coefficient alpha should absolutely be the first measure one calculate to assess the quality of the instrument. A low coefficient alpha indicates that the sample of items performs poorly in capturing the construct (Churchill, 1979). Furthermore, the calculation of coefficient alpha can also provide some insight into which items need to be eliminated as Churchill (1979) explained that items which possessed near zero correlations and those which produce a substantial or sudden drop in the item-to-total correlations would be recommended for removal. For basic research a coefficient alpha of about 0.70 is deemed acceptable (Nunnally, 1978). Hinkin et al. (1997) have clarified that although such techniques can't guarantee a content valid scale, they can however, provide evidence that the items represent a reasonable measure of the construct under examination and reduce the need for subsequent scale modification.

The pilot test contained items for not only the construct of customer participation but also for the other constructs of interest in the study too. The findings of the pilot study are also presented in Chapter 6 of the thesis.

5.3.3 Questionnaire Administration

In this part of the process, the retained items are then presented to an appropriate sample. Also at this point, the items for customer participation were administered with other established scales for the other constructs. Once items have been finalised, the format of the scale can then be determined. According to Malhotra et al. (1996), they recommend the use of scales that are free of cultural biases when applied to research using different cultural groups. The semantic differential scale and Likert scales have been widely used in cross-cultural research (Yu et al., 1993). However, for this study, the Likert scale will be chosen as it allows the measurement of a property quantitatively rather than qualitatively (Spector, 1992).

With regards to the number of scale points, Churchill & Peter (1984) have found that the greater the number of scale points, the better the reliability of the measure. This may be due to the fact that more scale points allow greater precision. However, another consideration that must be taken into account is the tendency of respondents to respond around the midpoint and avoid the end points. This may be even more evident in some Asian cultures that emphasise moderation and neutrality. Therefore, it is suggested that an even number of scale points be used as according to Yu et al. (1993), even numbers force a definite choice whereas odd number scale points will allow the respondent to take a neutral position. As Spector (1992) stated, it is acceptable that Likert scales have between 4 to 7 points.

In regards to the sample size for the study, some authors such as Schwab (1980) have argued for the ratio of respondents to items as 10:1 while others such as Hair et al. (1995) have posited that a ratio of 5:1 is suitable for carrying out most types of multivariate analyses. However, it is also essential that since data is collected from a total of three cultural groups for comparative purposes, the size of

the groups should be roughly equivalent to facilitate this. The total sample (useable questionnaires) is 503. The total number of items employed in the questionnaire for main data collection was 65. Of the 65 items, 10 pertained to the construct of customer participation. Although the total ratio of respondents to items in the study falls short of Schwab's 10:1 criteria, it does meet the criteria set out by Hair et al. (1995). The issues surrounding the sample and other items such as response rate and non-response bias are not elaborated upon in this part of the methodology chapter but are discussed later on in the chapter under section 4.5 of this chapter.

5.3.4 Factor Analysis

The data obtained from the pilot study was used for exploratory factor analysis and the data obtained from the main data collection was reserved for confirmatory factor analysis where items retained in the exploratory were then a priori specified to load on a particular factor and goodness of fit was assessed. Hinkin (1995) has expressed that due to the potential difficulties caused by common source/ common method variance, it is inappropriate to use the same sample both for scale development and for assessing construct validity. Krystofiak et al. (1988) have also contended that another consequence of doing this is that the factors are sample specific and inclined toward high reliability. By using another sample, to the extent that the hypotheses using the measure are confirmed, confidence in its construct validity will be increased (Hinkin, 1995).

Prior to conducting factor analysis, the correlation matrix of the items was examined and any variable as one of the assumptions of factor analysis is that the variables studied must have some correlation with each other (Kim and Mueller (1978).

Exploratory factor analysis using principal components with oblique rotation

was conducted on the pilot study data for the customer participation construct. According to Ford et al. (1986), the components model is appropriate when the research is interested in maximising the ability to explain the variance of the observed variables. It is also useful when there is primary concern about prediction or the minimum number of factors needed to account for the maximum portion of the variance represented in the original set of variables (Hair et al., 1995). Oblique rotation is more general than orthogonal rotation as it does not arbitrarily impose the restriction that factors be uncorrelated (Kim and Mueller, 1978). Oblique rotation does allow the factors to be correlated. However, Kim and Mueller (1978) have posited that complexity arises in the interpretation of factor analysis with the introduction of correlations among factors; they further claim that one may have to assume higher-order factorial causation to explain correlations among the factors. Despite the complexity that is instigated into the research, Ford et al. (1986) have cited Harman (1976) in support of the use of oblique rotation as it more accurately represents the complexity of the examined variables because constructs in the real world are rarely uncorrelated. Only factors with eigenvalues greater than one as well as the use of the scree plot were used as criteria for factor retention. For item retention, the 0.40 criterion level seemed to be one of the most commonly used in judging factor loadings as meaningful. The findings from the exploratory factor analysis on the customer participation scale are presented in Chapter 7.

Confirmatory factor analysis was conducted using LISREL 8 (Jöreskog and Sörbom, 1996), this technique allows for the assessment of the quality of the factor structure by statistically testing the significance of the overall model and the item loadings on factors (Hinkin, 1995). One of the first steps taken in this part of the process was to convert the raw data into a covariance matrix using PRELIS 2

(Jöreskog and Sörbom, 1996) which is a preprocessor for LISREL. It also has the added advantage of providing data screening too. The use of the covariance matrix in estimation has the advantage of providing valid comparisons between different populations or samples, something that is not possible when models are estimated using the correlation matrix (Hair et al., 1995). Furthermore, Hair et al. (1995) have specified that researchers should employ the variance/ covariance matrix any time a “test of theory” is being performed as the variance/ covariances satisfies the assumptions of the methodology and are the appropriate form of the data for validating causal relationships. Maximum likelihood estimation was utilised and Anderson and Gerbing (1988) have argued that in theory testing and development, this is an approach which holds several relative strengths. Maximum likelihood is a full-information method, which provides parameter estimates that best explain the observed covariances and they also provide an overall test of model fit; and are suitable as they are theory-oriented, and emphasise the transition from exploratory to confirmatory analysis (Anderson and Gerbing, 1988). Chou and Bentler (1995) have proclaimed that the estimation procedure of maximum likelihood has been the most commonly used approach in structural equation modeling; and that estimates using this procedure have been found to be quite robust to violations of normality. Hence, Chou and Bentler (1995) have debated that the estimates are good estimates, even when the data are not normally distributed. The results for the confirmatory analysis on the customer participation scale based on the data collected in the main data collection stage are provided in Chapter 7.

A two-stage process of structural equation modeling was implemented where the measurement model was first estimated, followed by the estimation of the structural model. The rationale of this approach is that accurate representation of the

reliability of the indicators is best accomplished in two stages to avoid the interaction of measurement and structural models (Hair et al., 1995). Anderson and Gerbing (1988) have stated that the potential for interpretational confounding is minimised by prior separate estimation of the measurement model because no constraints are placed on the structural parameters that relate the estimated constructs to one another. In order to carry out such a two-stage approach, the measurement model is estimated first and then the measurement model is “fixed” in the second stage when the structural model is estimated (Hair et al., 1995).

5.3.5 Internal Consistency Assessment

Hattie (1985) has stressed the importance of unidimensionality; that a set of items forming an instrument all measures just one thing in common is a most critical and basic assumption of measurement theory. However, Hattie (1985) stated that one of the major problems in assessing unidimensionality is that it has often been confused and used interchangeably with other terms such as reliability, internal consistency and homogeneity. Unidimensionality can be defined as the existence of one latent trait underlying the data (Hattie, 1985). Gerbing and Anderson (1988) have proclaimed that confirmatory factor analysis affords a stricter interpretation of unidimensionality than can be provided by more traditional methods such as coefficient alpha, item-to-total correlations, and exploratory factor analysis. Hinkin et al., (1997) have also accented the importance of establishing unidimensionality prior to the assessment of internal consistency. Gerbing and Anderson (1988) have reasoned that this is necessary as computation of coefficient alpha, a common indicator of internal consistency assumes that (1) the items already form a unidimensional set and (2) the items have equal reliabilities. Hattie (1985) has stated that it is probable that indices based on the goodness-of-fit measures of data in

confirmatory factor analysis may be effective indices of unidimensionality.

Reliability can be broadly defined as the degree to which measures are free from error and therefore yield consistent results (Peter, 1979). Reliability can be calculated in various ways, but the most commonly accepted measure in assessing a scale's internal consistency is Cronbach's alpha, which tells how well the items measure the same construct (Hinkin et al., 1997). Nunnally (1978) has presented some guidelines for the interpretation of the Cronbach or coefficient alpha. Nunnally (1978) has stated that a large alpha (such as 0.700 for exploratory measures) provides an indication of strong item covariance or homogeneity and suggests that the sampling domain has been adequately captured. Examining the composite reliability as well as the variance extracted can also assess reliability. The variance extracted measure reflects the overall amount of variance in the indicators accounted for by the latent construct (Hair et al., 1995). The recommended thresholds for composite reliabilities and variance extracted are over 0.60 and over 0.50 respectively (Bagozzi and Yi, 1988). As mentioned before, these results are also presented in Chapter 7.

5.3.6 Construct Validation

Hinkin (1998) expressed that up until this point in the scale development process, the research can be relatively assured that the new scales possess content validity and internal consistency reliability. Thereby, in order to gather more evidence of construct reliability, it is essential to examine convergent and discriminant validity. According to Anderson and Gerbing (1988), convergent validity can be assessed from the measurement model by determining whether each indicator's estimated pattern coefficient on its posited underlying construct factor is significant (twice its standard error). Discriminant validity can be assessed for two

estimated constructs by constraining the estimated correlation parameter between them to 1.0 and then performing a chi-square difference test on the values obtained for the constrained and unconstrained model (Anderson and Gerbing, 1988). Bagozzi and Phillips (1982) have mentioned that a significantly lower chi-square value for the model in which the correlation is not constrained to unity would indicate that the traits are not perfectly correlated and that discriminant validity is achieved.

5.3.7 Replication

In this part of the process, Hinkin et al. (1997) stated that it is necessary to collect another set of data from an appropriate sample and repeat the scale-testing process with the new scales. However, Krzystofiak et al. (1988) have argued that if the sample is large enough it can be split with the other half of the sample performing confirmatory factor analysis, assessment of internal consistency reliability and construct validation. Data was not collected again due to time constraints. However, in the interest of further research, it would be best if data were collected again to see whether the same findings would emerge.

5.4 Operationalisation of Measures

This section will delve into the specific measures used to measure all constructs examined in the research in detail.

5.4.1 Participation

The scale used to measure customer participation will be that developed for this study. The customer participation scale is comprised of 10 items. The details about how the scale was developed and the items that constitute it will not be elaborated upon in this part as this has already been covered previously in this

chapter. The specific results of work on the scale are available in chapter 6. As stated earlier, the participation items were measured on a 6-point scale with 1 representing strongly disagree and 6 representing strongly agree. The reason for the use of a 6-point scale being the need to recognise that there may be the tendency for Asian respondents to answer around the mid-point; therefore to counteract this occurrence, Yu et al. (1993) have suggested using even number scales forces a definite choice. Below, in Table 5 is a description of the scale items used to measure customer participation as well as the item labels they have been assigned, these item labels will be referred to extensively in later sections. Only the scale item wording used for the telephone banking service is shown, as the tourism version is very similar so repetition will be avoided. Copies of both versions of the questionnaire are available in Appendix A and Appendix B.

<i>Customer Participation Dimension</i>	<i>Item Label</i>	<i>Scale Item Wording</i>
Perceived Effort	energy	I need to exert a lot of energy to use this service.
	persistent	I need to be persistent to use this service.
	time	I need to spend a lot of time to use this service.
	intellectual	Too much intellectual effort is needed when using this service.
Task	steps	The use of this service involves many steps and stages.
	prior knowledge	I need to have prior knowledge of this service in order to understand how to use it.
	easy	This is an easy service to use.
Information-Seeking	service situation	I have searched for information on what this service offers.
	service task	I have searched for information on where this service is available.
	service role	I have searched for information on how to use this service.

Table 5: The Customer Participation Battery

5.4.2 Culture

The measurement of culture is quite a controversial issue. The most famous piece of work on measuring values was conducted by Hofstede (1980); however, critics such as The Chinese Culture Connection (1987) have expressed concerns that Hofstede's four dimensions may be culture bound. This is due to the fact that social science is Western in origin and so these may have cultural limitations when applied to other cultures such as Asians. In response to the shortcomings of Hofstede's dimensions, the Chinese Value Survey (CVS) was developed in order to study the culture of China. Although the instrument was only used to study the Chinese, it can also be extended to study other Asian cultures since some share very similar cultural roots that undoubtedly influence values. The Chinese Culture Connection (1987) also used this instrument in researching other countries in Europe, Asia and the Americas. The CVS has also demonstrated high reliability. Ralston et al. (1992) have even proclaimed that the CVS is comparable to Western based value instruments while at the same time offering a dimension that is not incorporated into Western instruments, namely the dimension of "Confucian Work Dynamism".

Researchers of the CVS have found that some of their dimensions overlap with the dimensions identified by Hofstede (1980). The three dimensions common to the CVS and the Hofstede dimensions are the ones that refer to three types of expected social behaviour: behaviour toward seniors or juniors, toward the group, and as a function of one's sex (Hofstede and Bond, 1988). Hofstede and Bond (1988) have further stipulated that these represent cultural choices so fundamental to any human society that they are found regardless of whether the values surveyed were designed by a Western or an Eastern mind. They are universal human traits in the sense that all societies possess the same problems, but different societies have evolved formulated different solutions to these problems (Hofstede and Bond, 1988).

Overlapping dimensions would suggest that the dimensions so identified were universal in the sense of being derivable from a variety of cultures (Chinese Culture Connection, 1987). The Chinese Culture Connection (1987) found that the CVS dimension of Integration and Moral Discipline each correlated with Hofstede's (1980) Power Distance and Individualism. They also found a sizeable correlation between the CVS dimension of Human Heartedness and Hofstede's (1980) masculinity-femininity; and have argued that common to both dimensions is the opposition between human-centered as opposed to task-centered consideration informing collective activities. However, one dimension from Hofstede's study is missing from the CVS; the dimension of Uncertainty Avoidance. Hofstede and Bond (1988) have debated that one reason for this finding is that Uncertainty Avoidance may be one uniquely Western dimension. The dimension of Confucian Work Dynamism did not match any of the Hofstede (1980) dimensions and Hofstede and Bond (1988) have argued that this is one uniquely Eastern dimension. Likewise, it is also worth mentioning that Hofstede's (1980) dimensions have been compared in a similar fashion to the dimensions of the Rokeach Value Survey. It was also found that some of the Hofstede dimensions align closely with some of the values found in the Rokeach Value Survey. Ralston et al. (1992) asserted that these similarities enhance the robustness of the CVS as a measure of cultural variation and provide an alternative to Western-based survey instruments.

Unlike the Rokeach Value Survey, the CVS is much more convenient to administer, as it only needs to be done once. The Rokeach Value Survey on the other hand, needs to be administered twice over a 12-week period in order to perform test-retest reliability procedures. Churchill (1979) suggested that test-retest reliability is not dependable. Also, completion of the CVS should be faster than that

for the Rokeach Value Survey in which respondents are required to rank items in order of importance. The CVS is a 40-item scale that is measured on 9-point Likert scales. Previous value instruments such as the Rokeach Value Survey were ranked and academics have argued that when ranking is used, scores become ipsative and so this is a drawback (Hofstede and Bond, 1984).

Although the CVS will be used, not all of the four factors will be needed. Upon closer examination of the CVS, it was found that only the dimensions of Integration and Confucian Work Dynamism were relevant to the study. Values in these two dimensions are perhaps more relevant when studying behaviour in the service encounter. The dimension of “Integration” contains items that pertain to how individuals conduct themselves in a group setting. The dimension of “Confucian Work Dynamism” contains values that are central in certain Asian cultures, it is believed that these will affect the types of behaviours that individuals exhibit in the service process. The other two factors of Human-Heartedness and Moral Discipline are not too relevant to the area of customer participation in services therefore the exclusion of these two is a sensible move. Therefore, the number of items used to measure “Integration” and “Confucian Work Dynamism” is 19. These items will be measured in the same way as they are in the CVS, namely with a 9-point Likert scale where respondents are asked to indicate how important each of the values is to them personally. A score of 9 represents “supreme importance” and a score of 1 represents “no importance at all”.

below provides a summary of the different values and the dimensions that they belong to.

CVS 1: INTEGRATION <ul style="list-style-type: none"> • Tolerance of others • Harmony with others • Solidarity with others • Non-competitiveness • Trustworthiness • Contentedness • Being conservative • Close, intimate friend • Filial piety • Patriotism • Chastity in women 	CVS 2: CONFUCIAN WORK DYNAMISM <ul style="list-style-type: none"> • Ordering relationship • Thrift • Persistence • Sense of shame • Reciprocation • Personal steadiness • Protecting one's face • Respect for tradition
CVS 3: HUMAN HEARTEDNESS <ul style="list-style-type: none"> • Kindness • Patience • Courtesy • Sense of righteousness • Patriotism 	CVS 4: MORAL DISCIPLINE <ul style="list-style-type: none"> • Moderation • Keeping oneself disinterested and pure • Having few desires • Adaptability • Prudence

Table 6: The Dimensions of the CVS and their Values (Chinese Culture Connection, 1987)

Although, an initial glance of the two dimensions of Integration and Confucian Work Dynamism may reveal some items that are not relevant to the service process, such as “chastity in women” and “filial piety” for example, it may seem logical to remove these from the study from the beginning. However, in order to avoid bias of any sort, it is perhaps a better approach at this stage in the research to leave these items in the instrument. These will only be eliminated with quantitative evidence when analysis is conducted with the pilot test data, which serves as a vehicle for instrument refinement.

5.4.3 Perceived Risk

The measurement of perceived risk has also been another area that has sparked considerable debate over the years. Although risk is commonly seen as a two factor structure of uncertainty and consequences, a lot of research in more recent

years have utilised a component approach to the measurement of risk (Garner, 1986; Garner & Thompson, 1985; Mitchell & Greatedorex, 1993; Ho & Ng, 1994; George & Tsou, 1984; Mitra et al., 1999, Stone & Grønhaug, 1993). The component approach to measuring risk partitions risk into six types, namely: social, time, financial, performance, physical and psychological (Jacoby and Kaplan, 1972; Roselius, 1971). George and Tsou (1984) have speculated that a component approach to studying risk has important advantages as it allows for the identification of different aspects of risk and the scale is also much more flexible, allowing for the measurement of risk at both the brand and category level. Furthermore, the use of the component approach has been successfully cross validated in a follow up study (Kaplan et al., 1974) which has served to establish a degree of construct validity that is lacking in other perceived risk measures. Stone and Grønhaug (1993) also favoured the use of the component approach to the measurement of risk and added that the six types of risk all contribute to overall risk but the amount varies. More importantly, some research conducted into measuring perceived risk in services have also utilised the component approach (Garner, 1986; Garner & Thompson, 1985; Mitchell & Greatedorex, 1993; Ho & Ng, 1994; George & Tsou, 1984; Mitra et al., 1999).

Therefore, given the weight of the supporting evidence, the component approach will be used to measure risk in the two services studied in this research. One of the problems with risk research is the lack of published scales available. Therefore, the items that formed this scale were derived from Stone and Grønhaug (1993), where they used a multi-item scale to measure each of the six components. However, the work of Stone and Grønhaug (1993) was based on the risk associated with the purchase of a personal computer, so therefore, a lot of the wordings of this particular scale had to be adapted to incorporate the two types of services studied.

Risk Dimension	Item Label	Scale Item Wording
Social	soc1	I would be held in higher esteem by my colleagues at work if I used this service.
	soc2	I would be thought of as foolish by my friends if I used this service.
Time	time1	I need to spend a lot of time learning how to use the service beforehand.
	time2	Using this service leads to an efficient use of time.
Financial	finan	There is a risk of having my PIN misused, which would result in financial loss with this service.
Performance	perf	I am worried that the service may not perform as it is supposed to.
Physical	phys	I am concerned about the potential physical risks of using this service.
Psychological	psych1	The use of this service gives me a feeling of anxiety.
	psych2	The use of this service makes me feel psychologically uncomfortable.

Table 7 : The Perceived Risk Battery

Furthermore, some of the items were not relevant in a service context and so were eliminated. Some of the adapted wordings of the items were derived from the focus group data where respondents articulated some of the risks they felt they might incur as a result of consuming the particular service. This serves to make the wording of the particular item more relevant and perhaps more real to the type of risk that the customer could face. The final list of items drawn up to measure risk for the study is composed of 9 items. Analysis on these 9 items reveals that a one-factor structure is most suitable and so this was regarded as a unidimensional construct. Details of the analysis done on this scale are available in Chapters 5 and 6. As before, all 9 items were measured using a 6-point Likert scale ranging from 1 representing “strongly disagree” and a value of 6 representing “strongly agree”. Table 7 gives a summary of the scale items used to measure the different facets of

risk in the study, as before only the version for telephone banking is given to avoid repetition. Some of the wordings have been adapted specifically for this service.

5.4.4 Locus-of-Control

The scale that will be used to measure locus-of-control is that created by Lumpkin (1985). The Lumpkin locus-of-control scale was developed as a result of some of the shortcomings of the original Rotter I-E scale. The Lumpkin scale is composed of a total of 6 items, three of which are “internal” items and the remainder being “external” items. The Lumpkin scale was also initially tested on a large sample with a good spread of age in the sample, this provided the findings with generalisability, previously not possible (Lumpkin, 1985). This is markedly different from some previous works on locus-of-control scales, where there was a tendency to collect data from a particular age group or occupation such as Duffy et al. (1977). The six-item scale exhibits a Cronbach alpha of 0.68, which compares favourably with the alpha for Rotter’s I-E Scale (1966) which fared 0.66. Results from Lumpkin (1985) have demonstrated that this brief locus-of-control scale compares favourably with the much longer I-E scale (Rotter, 1966). The scale items used to measure locus-of-control are provided in Table 8 below. In this case, the item wordings for this construct are the same in both the banking and tourism versions of the questionnaire.

<i>Locus of Control Dimension</i>	<i>Item Label</i>	<i>Scale Item Wording</i>
Internals	LOC1	When I make plans, I am almost certain that I can make them work.
	LOC2	Getting people to do the right things depends upon ability, luck has nothing to do with it.
	LOC3	What happens to me is my own doing.
Externals	LOC4	Many of the unhappy things in people's lives are partly due to bad luck.
	LOC5	Getting a good job depends mainly on being in the right place at the right time.
	LOC6	Many times I feel that I have little influence over the things that happen to me.

Table 8: The Lotus of Control Battery

5.4.5 Service Quality

The measurement of service quality has been in debate over the last decade or so. One of the more noted instruments to measure service quality is SERVQUAL, designed by Parasuraman, Zeithaml & Berry (1988), which measures service quality as perceived by the customer. The theoretical foundation of SERVQUAL lies in the authors' definition of service quality; which was perceptions minus expectations. In their work, Parasuraman, Zeithaml & Berry (1988) indicated that the SERVQUAL instrument contained five dimensions, namely: Reliability, Assurance, Tangibles, Empathy and Responsiveness. A questionnaire containing 22 items measured these five dimensions; each item being rated on a 7-point scale. According to Armstrong et al. (1997) the results from SERVQUAL led the authors to argue that it was a generic instrument with high reliability and a consistent factor structure which could be used in many other service settings just by adapting the wordings of the items.

However, SERVQUAL has not been without criticism from several academics as discussed in the literature review section. To summarise, these criticisms surround the use of the disconfirmation paradigm as a theoretical case

(Cronin & Taylor 1992); the measurement of expectations and the problems associated with that (Teas, 1993); the use of difference scores (Babakus and Boller, 1992); as well as the dimensionality issue (Carman, 1990).

As stated earlier, in order to overcome some of the drawbacks of SERVQUAL, performance-only measures were developed; the most notable being SERVPERF. The main distinction between SERVQUAL and SERVPERF is that the latter measures performance only. Basically, SERVPERF has kept the 22 items of the SERVQUAL perceptions battery, as Cronin and Taylor (1992) believe that "...these 22 performance items adequately define the domain of service quality and we use the same performance items to examine the proposed alternative to the SERVQUAL scale". Carman (1990) has also found that the 22 items of the perceptions battery of SERVQUAL do hold reliability. This has also been verified by Asubonteng et al. (1996) who have found that the Cronbach's alpha reliability coefficients for the five SERVQUAL dimensions are similar across studies. Also, in the 1992 study done by Cronin & Taylor, where they compared both SERVQUAL and SERVPERF, it was found that the five-factor structure was not supported. Hence, in SERVPERF, the unidimensionality of the 22 items is assessed instead. Only one item from the 22 was dropped as it loaded poorly on both SERVQUAL and SERVPERF. That particular item related to the amount of personal attention that employees of the service firm gave the customer. They also found that SERVPERF demonstrated unidimensionality. Armstrong et al. (1997) and Suh et al. (1997) have also agreed that the overall evaluation of service quality is more of a function of service performance, which means that it is not necessary to calculate expectations and so the SERVPERF instrument would be more suitable.

Therefore, the SERVPERF instrument will be used to measure service

quality, as it is able to use half of the number of items found in SERVQUAL and yet at the same time be more efficient. Also SERVPERF is more convenient as it only needs to be administered once since it measures performance only. Furthermore, the SERVPERF scale is able to capture more of the variation in service quality than other alternative measures (Cronin and Taylor, 1992). However, the items that relate to the “Tangibles” element of the perceptions battery will not be included as they are not relevant to customer input into the service encounter. Therefore, the number of items that will be used to measure service quality in the research is 18. Again, these will be measured on a 6-point Likert scale ranging from 1 representing strongly disagree to 6 representing strongly agree. Table 9 shows the actual scale items used to measure perceived service quality as well as their assigned item labels for easy referral. Again, only the items used in the banking version of the questionnaire are provided as both versions are similar.

<i>Service Quality Dimension</i>	<i>Item Label</i>	<i>Scale Item Wording</i>
Reliability	psq1	When the bank promises to do something by a certain time, it does so.
	psq2	When I have problems, the bank is sympathetic and reassuring.
	psq3	The bank is dependable.
	psq4	The bank provides its services at the time it promises to do so.
	psq5	The bank keeps its records accurately.
Responsiveness	psq6	The bank tells its customers exactly when the services will be performed.
	psq7	Prompt service is received from the employees of the bank.
	psq8	Employees of the bank are always willing to help customers.
	psq9	Employees of the bank are too busy to respond to customers' requests promptly.
Assurance	psq10	You can trust the employees of the bank.
	psq11	You can feel safe in your transactions with the bank's employees.
	psq12	Employees of the bank are polite.
	psq13	Employees get adequate support from the bank to do their jobs well.
Empathy	psq14	The bank gives you individualised attention.
	psq15	Employees of the bank give you personal attention.
	psq16	Employees of the bank know what your needs are.
	psq17	The bank has your best interests at heart.
	psq18	The bank has operating hours convenient to all its customers.

Table 9: The Perceived Service Quality Battery (adapted from SERVQUAL)

5.4.6 Behavioural Intentions

As mentioned in Chapter 3, the scope of behavioural intentions that will be examined include the intention to repurchase, the intention to recommend the service to other people as well as the intention to purchase other related services from the same service provider. The majority of previous studies that have investigated the various types of behavioural intentions have often utilised single-item measures to

capture the item such as Bitner (1990), Cronin and Taylor (1992) and Woodside et al. (1989) to mention a few. However, the number of studies that have examined the impact of service quality on behavioural intentions have been few (Liljander and Strandvik, 1995). Hence there is limited literature on the reliability of such measures.

The measures used in the study to measure the three types of behavioural intention have mostly been derived from the battery of items designed to measure loyalty by Zeithaml et al. (1996). However, their battery of items have been designed to measure a vast range of behavioural intentions, some of which are not covered in this study so only specific items have been selected. Intention to recommend the service has often been categorised under the broad label of word-of-mouth. Zeithaml et al. (1996) have measured this item in the form of a statement pertaining to the intention to recommend the particular service firm to other people. Boulding et al. (1993) have also used a similar item to assess this intention and have also asked the respondent how likely they would recommend the particular service firm to their friends.

The intention to repurchase the same service from the service firm was measured using the item developed from Zeithaml et al. (1996) which pertained to the intention of the respondent to do more business with the particular service firm in the next few years. A similar measure employed by Headley and Miller (1993) has also asked respondents of their intention to return to the same service provider for that particular service.

The intention to use a related or complimentary service from the service provider served as an indication of how willing the customer might be to enter into a relationship with the service firm by purchasing other services from them too. In the

literature, there is a lack of a scale to measure this particular aspect of behavioural intentions so customers were asked in a very straightforward manner how willing they were to purchase other related services from the same service firm. As before, all these items are also measured on a 6-point scale anchored with 1 representing “strongly disagree” and 6 representing “strongly agree”. Below in Table 10 is a summary of the actual scale items used to measure behavioural intentions, only the banking version is provided here.

<i>Behavioural Intention</i>	<i>Item Label</i>	<i>Scale Item Wording</i>
Recommend	Recom	I will recommend the bank to someone who seeks my advice.
Related Service	Relate	If the bank offered a related service, I would consider enrolling in it.
Repurchase	Repurch	I will continue to use the services of the bank in the next few years.

Table 10: The Behavioural Intentions Battery

5.5 *Sample Selection and Methods of Data Collection*

5.5.1 *Samples for the qualitative research*

Stewart and Shamdasani (1990) have claimed that the limitations on the generalisability of focus group results have the advantage that convenience sampling can be used and coincidentally is also the most common method for selecting participants in focus groups. Many types of focus groups require only very generally defined groups of individuals (Stewart and Shamdasani, 1990). Morgan (1997) has also expressed the same view regarding the lack of emphasis on generalisability signals the shift away from random sampling toward purposively selected samples. Random sampling is seldom of use in focus groups as the number of participants is small, which makes it highly unlikely that a sample size of say, 40 or so is

representative and secondly, a randomly sampled group is unlikely to hold a shared perspective on the research topic and may not even generate meaningful discussion (Morgan, 1997). In light of the evidence, convenience sampling was employed to recruit participants for a total of four focus groups. Furthermore, Morgan (1997) has claimed that it is a common rule of thumb that the number of focus groups consists of three to five groups; hence there is also fulfillment of this.

Of the four focus groups conducted, all of them utilised part-time students at a local university. These part-time undergraduate students were all studying for a degree in Public Policy and Administration and were all working various full time jobs. All the individuals in these groups were acquaintances. There has been much controversy over the decision to use acquaintances or strangers, however, Fern (1982) has found that there is no significant difference. The literature also suggests that a mix of ages is appropriate for focus groups (Stewart and Shamdasani, 1990) and this is prevalent among part-time students. As all the groups were composed of part-time students pursuing the same degree, this was a common thread that ran through the groups and provided a basis of compatibility in terms of being in the same course. Stewart and Shamdasani (1990) have also argued in favour of having some sort of compatibility in the groups as compatibility has implications for effective group performance and group satisfaction.

5.5.2 Samples for the quantitative research

It was noted earlier that at the target respondents for this research were professionals as it was believed that it was this group of individuals who would have experience in using the services of foreign independent travel as well as telephone banking. One of the reasons for this being that foreign independent travel is a more expensive travel option than say, organised group tours and the service of telephone

banking was previously first offered to customers that had significant deposits as a complementary service. These two services were chosen as it was often reflected in the focus groups that these forms of service delivery required more participation from the customer than the group tour or conversely traditional branch banking. In both these services, the customer makes relatively more input into the service process through the provision of effort or information.

According to statistics provided by the Hong Kong SAR Government in 1998, professionals and associate professionals represent approximately 21% of the working population of Hong Kong. Most professionals in Hong Kong as in other international cities, often are members of certain professional societies such as societies specifically for Certified Public Accountants, for instance. Therefore, the sampling frame utilised for the study were the membership directories of these professional societies or associations that were publicly available. Although there are numerous professional societies in Hong Kong, the majority of them does not publish or make their list of membership available to the public. Furthermore, some of the lists do not have complete data on their members. For example, some directories only provided the name of the member and no address or any contact details. Therefore, in order to be of use for the research, the directory not only had to be publicly available but also had to have complete contact information on the members including at a minimum a correspondence address and more optimistically telephone or fax numbers that could be used for follow up purposes if necessary. Eventually, several lists were compiled including directories of doctors, dentists, and lawyers as well as top managers of foreign companies in Hong Kong. These lists were utilised for the main data collection. Based on these lists, systematic sampling was used to select individuals. Systematic sampling is defined as a sampling

procedure in which an initial starting point is selected by a random process, and then every n th number on the list is selected (Zikmund, 1997). Conversely, for the small pilot study, convenience sampling was employed and those that were selected for the sample were secondary school teachers. Teachers are also often considered as professionals and so this was deemed suitable for the pilot test.

As one of the main purposes behind this research is to examine the effect of culture on these constructs, data was collected from different cultural groups. This is required if cultural effects are to be seen. Therefore, it was decided to collect data from three different cultural groups. The three groups chosen were Hong Kong Chinese, Japanese and British. It was perceived that these three groups contained significant differences due to the diversity of cultural backgrounds.

There is no straightforward answer regarding the sample size required. However, various guidelines can be incurred based upon various rules of thumb as well as the minimum sample size needed to perform various multivariate techniques. Generally, sample size is an important issue, as adequate sample size is required to appropriately conduct tests of statistical significance (Hinkin, 1995). Schwab (1980) has also stated that the results of many multivariate techniques can be sample specific and increases in sample size may ameliorate the problem. Generally as a rough guide, it is recommended by Hair et al. (1995) that the ratio of responses to items is 5:1. Following this guideline, the survey with a total of 65 items therefore requires a sample size of not less than 325 observations. Hinkin (1995) has pointed out that in most cases a sample size of 150 observations is appropriate when using techniques such as exploratory factor analysis, which will be used in this study. Again, a sample size of 325 is adequate to cover this. Recommended sample sizes when using confirmatory factor analysis and other structural equation modeling is

usually about 200 (Hoelter, 1983). Once again, a sample size of at least 325 is sufficient to fulfill this criterion.

5.5.3 Methods of Data Collection

All the focus groups were conducted by the author and each of the focus groups lasted for approximately one hour. The questions and discussions raised at the focus group were based on an interview guide developed for the purpose. All focus groups were tape-recorded with the participants' permission and were subsequently transcribed to allow for further analysis.

For the pilot tests, a self-completed, self-administered questionnaire was used. These were distributed to staff at the school selected for the pilot study and were collected two weeks later. No follow up was needed. For the main data collection phase, again, the revised instrument was sent by mail to the selected individuals with an explanatory cover letter explaining the reason for the study, whom it was conducted by and the objectives behind it. The questionnaire contained sufficient guidance for respondents in terms of how to complete the questionnaire. The letter also assured the confidentiality of the identity of the respondent. A self-addressed stamped return envelope was also enclosed with each questionnaire. After the first mailing, a second round of questionnaire mailing was undertaken for non-respondents in the form of a polite reminder about two weeks after the initial mailing. Once again, the questionnaire with cover letter and self-addressed stamped enveloped were provided to the respondent. The cover letters and questionnaires are displayed in the Appendix.

As data was collected from the different cultural groups, in order to facilitate data collection, the questionnaires were translated from English into a Chinese version as well as a Japanese version. This was done using the back-translation

technique as suggested by Brislin (1980) to ensure instrument equivalence and functional equivalence of the questionnaire, which ensures that the items mean the same thing across the different translations. Back-translation of translated questionnaires to the original language version (which in this case is English), is important to demonstrate equivalence, otherwise differences due to non-equivalent questionnaires might confound the results (Malhotra et al., 1996).

5.6 *Methods of Data Analysis*

5.6.1 *Data Analysis of Qualitative Research*

All the information obtained from the focus group was as previously mentioned all tape-recorded and transcribed. Transcription facilitates further analysis as well as establishes a permanent record of the events (Stewart and Shamdasani, 1990). The transcripts were then coded in the unit of sentences and phases. A coding scheme was worked out and all units were assigned a code. This followed a procedure recommended by Stewart and Shamdasani (1990). After coding the documents the sentences and phases were sorted out according to their categories and the various pieces of transcribed materials were used as supporting material and incorporated within an interpretive analysis (Stewart and Shamdasani, 1990). Such sorting allowed for the recognition of areas that participants felt belonged to the area of customer participation and also served as a means of verifying whether certain items were appropriate given the different context.

5.6.2 *Data Analysis of Quantitative Data*

This constitutes the bulk of the research and so therefore, is a much more extensive process. After collecting the data, examination of the data is crucial, as multivariate techniques require rigorous examination of the data as the influence of

outliers, violations of assumptions, and missing data can be compounded across several variables to have quite substantial effects (Hair et al., 1995). In order to examine the data, descriptive frequencies as well as frequency distributions were used with SPSS 9.0 for Windows. This also allows for checking of any errors that were made during input of data.

Exploratory factor analysis using principal components was performed on the pilot data as it establishes the dimensions within the data and serves as a data reduction technique (Stewart, 1981). In all the factor analyses conducted, rotation was employed usually varimax with the exception of oblique for the construct of perceived service quality and customer participation; and factors were extracted based on the commonly used criterion that eigenvalues exceed one. This criterion was also used in conjunction with the scree plot.

To assess the significance of the factor loadings, Hair et al. (1995) have suggested that factor loadings greater than 0.300 are considered to meet the minimal level, loadings of 0.400 or above are more important and loadings of 0.500 and greater are regarded as being practically significant. The cut-off point utilised in this study is common point of 0.400 on a factor is considered significant (Ford et al., 1986; Hinkin, 1995; Velicer et al. 1982). From this, the items would be modified if necessary and the same procedures repeated again until a clear factor structure emerged.

Confirmatory factor analysis is a more rigorous technique that involves the specification of both the number of dimensions and the specific items that are hypothesized to load on the dimensions (Schwab, 1980). This technique was used on the construct of customer participation using the main sample data. Confirmatory factor analysis makes use of only the measurement model component of the general

structural equation model (Hoyle, 1995). It has the added advantage of being able to assess the quality of the factor structure by testing the significance of the overall model and of item loadings on factors (Hinkin, 1998). This technique was performed using LISREL 8 for Windows (Jöreskog and Sörbom, 1996).

It is often recommended that confirmatory factor analysis be conducted using the item variance-covariance matrix computed from the data (Hinkin, 1998). Hair et al. (1995) have explained the rationale behind this is that when theory is tested, the variance/ covariances satisfy the assumptions of the methodology. In order to prepare the data for confirmatory factor analysis the preprocessor program for LISREL 8, called PRELIS 2 (Jöreskog and Sörbom, 1996) was used. PRELIS allows for the screening of data prior to the conducting of any analyses as well.

The maximum likelihood (ML) estimation procedure was used for all work on the measurement and structural models. The use of ML is desirable for theory testing and development as this full-information method has several relative strengths such as being able to provide parameter estimates that best explain the observed covariances and that they provide an overall test of model fit (Anderson and Gerbing, 1988). Furthermore, ML provides consistently efficient estimation of parameters under the assumption of multivariate normality and is relatively robust against departures from it (Diamantopoulos, 1994). Chou and Bentler (1995) also support this view and have debated that ML estimates are good estimates, even when the data are not normally distributed. Steenkamp and Trijp (1991) and Hair et al. (1995) have stated that this condition is only relevant when the sample size exceeds 100, which in this case it does. Anderson and Gerbing (1988) have contended that under the assumption of normal distribution of the observed variables, ML estimators have the desirable asymptotic properties of being unbiased, consistent,

and efficient.

Bagozzi and Yi (1988) have advised that one of the first things that should be done to assess overall model fit is to look for anomalies; the most common anomalies include correlations greater than one, extremely large parameter estimates and negative error variances. Furthermore, Bagozzi and Yi (1988) have stated that such findings point to model specification errors, input errors, or identification problems. Bryne (1998) has mentioned that the parameter estimates should be significant based on the *t*-statistic which is usually at the level of .050, therefore the test statistic needs to be $> \pm 1.960$.

Other indicators of fit can also be utilised to assess model fit. Bagozzi and Yi (1988) have explained that a long standing indicator of overall goodness-of-fit of any model can be obtained with the chi-square test; the chi-square test is a likelihood ratio statistic for testing a hypothesised model against the alternative that the covariance matrix is unconstrained. However, Gerbing and Anderson (1993) have debated that based on this statistic alone, in large samples, good fitting models were rejected on the basis of trivial misspecification, and in small samples, the test lacked power, as it was too forgiving of important misspecifications. This test is very sensitive to sample size, as it has been found that sample size increases, the chances of rejecting the model whether true or false also increases (Bagozzi and Yi, 1988). La Du and Tanaka (1989) have also expressed that a further shortcoming of this test is its sensitivity to data nonnormality.

In response to these problems, a number of alternative overall fit indices have been developed including the goodness of fit (GFI) and the adjusted goodness of fit (AGFI) indices (Jöreskog and Sörbom, 1986); the normed fit index (NFI) by Bentler and Bonnett (1980), comparative fit index (CFI) by Bentler (1990) to name a few.

Bollen and Long (1993) have urged researchers not to solely rely on the chi-square statistic but report multiple fit indices representing different types of measures such as the RMSEA, and incremental fit indices such as the CFI and Tucker-Lewis Index (TLI).

In addition to examining the goodness of fit of model, there are also measures such as the root mean square residual (RMR) measure (Bollen, 1989) and the root mean square error of approximation (RMSEA) measure (Browne and Cudeck, 1993; MacCullum et al., 1996) which address the lack of fit of the model. Byrne (1998) has proclaimed the RMSEA to be one of the most informative criteria in covariance structure modeling. Browne and Cudeck (1993) have stated that the RMSEA assesses the discrepancies between the covariance matrices. The root mean square residual statistic represents the average residual value derived from the fitting of the variance-covariance matrix for the hypothesised model to the variance-covariance matrix for the sample data (Byrne, 1998).

Besides the assessment of goodness of fit, confirmatory factor analysis on the measurement models can also enable the assessment of convergent and discriminant validity, which in turn are essential to achieve construct validity. Anderson and Gerbing (1988) have explained that convergent validity can be assessed from the measurement model by determining whether each indicator's estimated pattern coefficient on its posited underlying construct factor is significant (greater than twice its standard error). Discriminant validity can be assessed for two estimated constructs by constraining the estimated correlation parameter between them to 1.0 and then performing a chi-square difference test on the values obtained for the unconstrained and constrained models (Jöreskog, 1971). A significantly lower chi-square value for the unconstrained model would indicate that the traits are not

perfectly correlated and that discriminant validity is achieved (Bagozzi and Philips, 1982).

Furthermore, reliability can be computed to summarise how well the constructs are measured by their indicators (Baumgartner and Homburg, 1996). This can be done for all measures of a given construct jointly through the calculation of composite reliability and average variance extracted. Baumgartner and Homburg (1996) have also urged authors to report these statistics as reliance on Cronbach alpha alone is insufficient as they have argued that Cronbach alpha is an inferior measure of reliability since in most practical cases, it is only a lower bound on reliability.

The causal relationships between the various constructs will be examined using path analysis in LISREL 8 for Windows. Given the sheer complexity of the model, the overall models will be tested using a partially aggregated model approach Bagozzi and Heatherton (1994). When conducting this type of covariance modeling, a two-stage approach to estimation as recommended by Anderson and Gerbing (1988) will be used. The two-stage approach involves the separate estimation of both the structural and measurement model; the measurement model is first estimated, and then it is fixed when estimating the structural model. The rationale behind this method is that accurate representation of the reliability of the indicators is best accomplished in two stages to avoid the interaction of measurement and structural models (Hair et al., 1995). Anderson and Gerbing (1988) have also contended that the potential for interpretational confounding is minimised by separate prior estimation of the measurement model as no constraints are placed on the structural parameters that relate the estimated constructs to one another.

The final part of analysis will utilize the technique of multigroup analysis and

look at the overall model by splitting up the data into firstly the respective service type and secondly by cultural group to assess the impact of participation on the other constructs in the study and also to enquire about the stability of the model across samples (Bagozzi and Yi, 1988).

5.7 *Limitations of the methodology*

All studies are faced with limitations and this research is of no exception. There are various areas where limitations are encountered. Firstly, the sample is limited only to professionals; the reason behind this has already been discussed in an earlier section. However, given the fast pace of development and the widespread introduction of phone banking by other banks in the period after data was collected, phone banking is now a readily available service offered to most customers, sometimes even free. Therefore, the findings of this research are based upon a sample that consists primarily of professionals.

5.8 *Chapter Summary*

Basically, the research involves both a qualitative and quantitative element. Qualitative research is used for an exploratory means and involves the use of focus group interviews to facilitate the scale development. Quantitative analysis is also conducted at an early stage in the pilot testing as well as in the examination of the factor structure of the constructs and the relationships between them, as well as to assess for significant differences between the different cultural groups.

This chapter has also discussed in detail the targeted sample as well as the rationale behind this selection. It has also covered the exact techniques that are used

in the analysis as well as the justifications and assumptions of their use. The research design and data analysis strategies are illustrated diagrammatically in Figure 5-1 and provide an outline on how the research will proceed. Following this outline, the next stage of the research, the results from the qualitative analysis as well as some of the initial findings from the pilot study are provided in the following chapter.

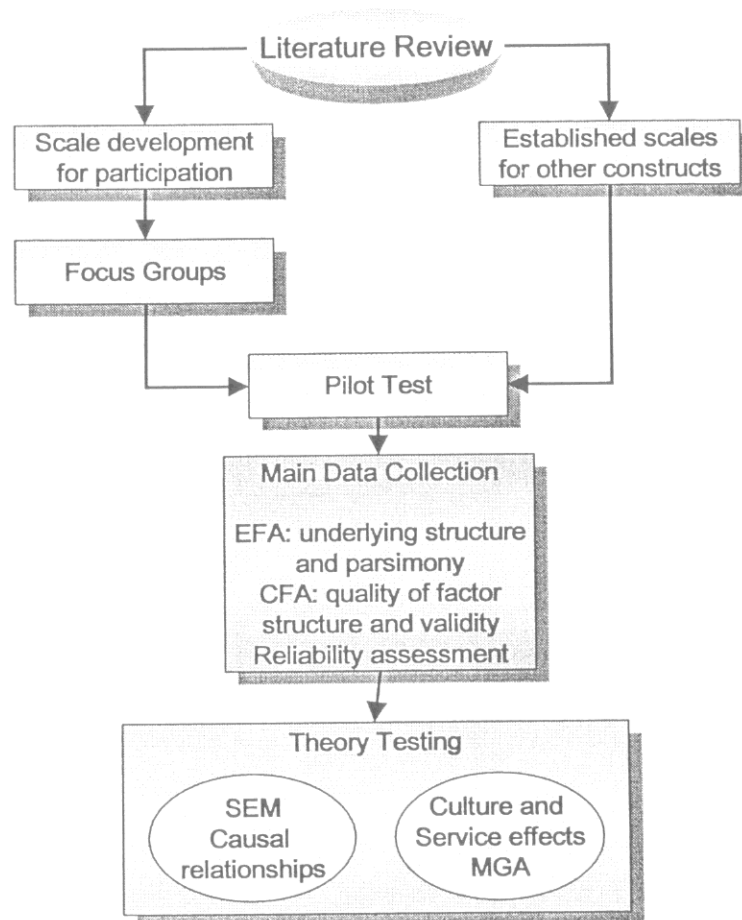


Figure 5-1 : An Overview of the Research Design and Data Analysis Strategies

Chapter 6 DATA ANALYSIS: FOCUS GROUPS AND PILOT TEST

6.1 *Introduction*

This chapter will cover the findings that emerged from the four focus groups that discussed telephone banking and the FIT option of travel. Focus groups served an exploratory nature as well as a means of validating some of the items that had been theoretically derived since no actual published scale on participation was available for use. Furthermore, this section will also briefly delve into the results obtained from the pilot test.

6.2 *Results of the Focus Groups*

6.2.1 The FIT (Tourism) Focus Groups

Two focus groups were conducted around the FIT theme. The purpose of the focus groups was to find out the experiences, perceptions and attitudes of the participants towards different travel options such as the FIT as well as organised group travel. In both focus groups, respondents were recruited on the basis that they had experienced some sort of travel option in the prior 12 months. Each focus group interview lasted for approximately 60 minutes.

In these sessions, respondents noted the stark differences between group tours (organised group tours) and the FIT option. Many of the statements made concerned the ability of the individual to control the itinerary on the trip due to the lack of constraints presented in the FIT option. Participants also strongly advocated that the FIT option involved much more planning and was more time consuming than taking part in a group tour; basically they felt that the former involved greater

participation than the latter. Participants felt that in a group tour situation, there were too many restrictions placed upon the individual such as having to take part in activities that they disliked. Participants expressed that in group tours the itinerary was already fixed and that there would be some standard activities the group would do together such as singing, playing games, to which some expressed a strong disliking to. Evidence of this is given is illustrated below in the following statements:

“In group tours you always have to do everything with all the group members like singing and stuff. Also, the other people in the group can be quite troublesome.”

“In a group tour, what you can and cannot do is constrained, everything is already set out.”

“On a group tour, the places I think are interesting to visit may not be covered in the package and likewise, some of the places that the group tour visits, I may not find interesting.”

“When you make your own travel arrangement, you have freedom.”

“If I make my own arrangements I can do whatever I want and whenever I want.”

“I join a tour because I don’t have time to prepare for a trip on my own.”

Throughout the duration of the focus groups, it was agreed in both that the FIT option would require more effort on behalf of the consumer than would a group tour. More effort is required to look for information of the destination, and even once the consumer reaches the destination, they often exert more effort to reach

particular places of interest compared to customers of a group tour. In the group tour situation, participants revealed that in order to go to places of interest, they simply had to board a coach that was all pre-arranged that would take them to a particular place. However, the FIT customer on the other hand, may have to exert more effort in order to reach a site as they may have to ask for directions to a train station for instance, or read up on which station they should go to or even exert more effort to find out about the cost of the different modes of transportation to reach a site. Some of these issues are reflected below.

“Making your own arrangements is very troublesome and time consuming, if you join a group tour, then the travel agency does everything and I don’t have to bother with details.”

“If you want to have a really good trip then you have to spend time to look for the relevant information.”

“Of course there is an opportunity cost. If you want to have a really good trip then you will have to spend more time looking for information.”

“I join a tour because I don’t have the time to prepare for a trip on my own.”

From the statements above, it was clear that participants associated the FIT option, which inevitably involved greater participation to be a time consuming process as they needed to exert effort to go to the right channels for advice or instructions. However, many of the participants, although quick to point out the benefits of the FIT option claimed that the amount of time they had for holidays often meant that it prohibited them from using the FIT option as they could only take brief holidays and wanted to do and see as much as possible during this short space

of time, hence they often resorted to the group tour option.

Participants also expressed that the use of the FIT option often entailed the need to search for information from various sources. This information searching process would often be considered quite lengthy too. It was found that FIT users tended to obtain information from sources such as the Internet, the newspaper, travel programmes on local television, advice from travel agents as well as destination guide books. Some even went as far as contacting the overseas tourist offices of the host country here in Hong Kong to obtain information on all aspects of the travel experience including visa application, accommodation, sights as well as cultural events. Some of the participants, who were group tour users, often only obtained information from one or two sources, namely the travel agent and advertisements of group tours placed in local newspapers. The amount of time spent in searching for information regarding the travel experience itself was often considerably less. This is described in the statement below:

“I get information from the travel agents only.” – Group tour user

“I get information from tourist information offices, and the library. If I were to go somewhere quite far, then I think it is worth it to go to a bookshop and spend money on some good guidebooks about the destination. I would also go to a travel agent to get some brochures.” – FIT user.

“It takes me about two hours to look for all the information I need.” – Group tour user.

“I just go to the travel agency only for information. Usually I take a selection of itineraries from various travel agencies and then compare their attractiveness. I would also consider the route that the tour takes and the

amount of time spent in each city or town.” – Group tour user.

“I would approach the concierge at the hotel where I am staying to help me out with places of interest to visit; the concierge can also provide me with some information or booklets.” – FIT user.

The focus group sessions on tourism were interesting as they provided the customer perspective and their opinions on the different travel options and what they entailed. It was very clear from the tourism focus groups that participants recognised that the former involved greater effort to be exerted not only in the planning of the trip but also during the trip. It was also very clear that participants felt that using the FIT option would pertain to much more extensive information searching about not only the destination but also sometimes what they had to do in order to reach a particular site of interest or basically the procedures required to perform a task such as booking a room at a hotel.

6.2.2 The Telephone Banking Focus Groups

Two focus groups were conducted on the area of retail banking. During these focus group interviews, respondents discussed the various types of banking options they were faced with including the human teller, Automatic Teller Machines (ATM) as well as telephone banking. As before, each of these interviews lasted approximately 60 minutes.

One of the issues that was raised during these sessions was the fact that most respondents felt that the use of phone banking was a much more efficient method of carrying out transaction when compared to the teller. Some people stated that they preferred telephone banking because it was much more efficient and basically they could do it anywhere so long as they had a touch-tone phone. This is reflected in the

following statements:

“I use phone banking because I am the type of person who doesn’t like to waste time by going directly to the bank. Besides, I can just pick up the phone and state my account number and have the transaction done right away.”

“I hardly use the teller because I hate queuing up in line.”

“The reason why I prefer to use telephone banking is because I can do my own personal banking whenever and where ever I want.”

“I prefer to use phone banking because it is a much faster method.”

Although they were quick to point out the advantages of speed and convenience associated with the use of this service, some participants expressed that the use of this service entailed some effort and to some it was even regarded as a complex service as illustrated below:

“I don’t like to use phone banking because I have to remember a lot of numbers.”

“I think that phone banking is quite complicated and I prefer to keep things simple which is why I just stick to the ATM and the teller.”

Usage of phone banking in the group was not widespread so there was some impetus to find out the possible reasons behind this. It was revealed that some participants found telephone banking of little use due to the types of transactions they carried out. Some found the need to listen to the voice activated response

system in order to obtain a list of instructions tedious. Others felt that they would make a mistake or not use the service correctly as described below:

“For people like me who just perform simple transactions like withdrawal...phone banking is not really necessary.”

I don’t use phone banking because I don’t like to wait to listen to which number I have to press for which service.”

I don’t use phone banking because I don’t like to listen to a whole list of instruction before I know what number to press.”

“Telephone banking offers a lot of functions which are not of much use to me as I only use services like withdraw, deposit and transfer of funds.”

“I am afraid [with telephone banking] that I will key in the wrong number.”

During the focus groups, it was found that some of the participants felt that the use of the telephone banking option was much more time consuming and involved more effort than the other two options of ATM and human teller. There was some consensus on the fact that the use of phone banking required more time and input from the customer than the other banking options. Some of these statements are given below:

“Sometimes, it takes quite a while to key in all the numbers and then to wait for the confirmation of the number that you input.”

“I think that it can be quite troublesome having to punch in all the numbers yourself and listen for the correct option.”

“I must admit that there are a lot of numbers that you have to remember.”

“I have never used the option where I can speak to the customer service representative ...usually I will just punch in all the numbers myself and do everything myself.”

One interesting finding that emerged from the telephone banking focus groups was that unlike the tourism groups the participants did not engage in extensive information search about the service. They stated that very often the bank gave them the service when they applied for certain accounts. Some of the participants claimed that they were offered incentives by the banks to use this service such as waived annual fee. These statements are given below:

“When you apply for a credit card they will ask you if you want phone banking service as well.”

“ Usually phone banking comes as part of a package.”

“The teller also tried to sell phone banking service to me with the incentive of a waived annual fee.”

“They [the Bank] offered incentives if you applied for phone banking service.”

As can be seen, the respondents often engaged in little information searching to do with the service or how they could use the service. A possible reason for this is that they are readily presented with the information, hence there is little need for them to search. Also, with telephone banking, many of the instructions are provided in the voice activated response system. The customer simply has to just wait and listen to find out which key to press in order to carry out particular transactions.

6.3 Pilot Test Results

The pilot test obtained a total sample size of 79. For the pilot test, only exploratory factor analysis was performed on the data. Given the fact that the total sample size is only 79, which falls short of the recommended level of at least 100 by Hair et al. (1995), it is essential that the statistics be interpreted very carefully. Little effort was made here to delete too many items due to the concern of the reliability of the results given the small sample size. A summary of the findings will be described under each construct. It is essential to remember that with such a small sample to conduct exploratory factor analysis, caution must be taken in interpretation as in many of the cases there is weak sampling adequacy. Given this situation, little effort has been made to delete too many items as perhaps it would be better to wait till a larger sample is available as the results would be more reliable. Hence, only items that are truly not correlated with the other items or very weakly correlated are candidates for removal.

6.3.1 Customer Participation

During the pilot test stage of the research, customer participation was captured by ten items. After the data was collected, these ten items were then subjected to exploratory factor analysis with oblique rotation. The rationale behind using oblique rotation has been previously noted and so will not be repeated here. Factors were extracted on the criteria that eigenvalues exceeded one. Items were deemed significant if their loading was greater than the commonly accepted threshold of .400 (Velicer et al., 1982). Initial analyses revealed a four-factor structure. However, one of the factors was made up of the item classified as “task – required knowledge” alone. Examination of the correlation matrix also revealed that this particular item was negatively correlated with all the other items in the

participation scale. This is an indication that this item perhaps does not belong in the domain with the other items. Hence, this item was removed and factor analysis was once again performed. After the removal of this item, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy improved and was at .780. This time a three-factor solution emerged, which accounted for about 73.5% of cumulative variance. This time there was a clear loading of the items onto the factors. All the items that pertained to measuring the effort exerted loaded together on factor 1 with the exception of the item "intellectual effort" which cross-loaded with the items that pertained to the task definition. However, although this item cross-loaded, it did not make sense to delete it, therefore at this stage it was kept. One striking finding was that throughout the two runs of exploratory factor analysis, the scree plot in both instances seemed to indicate a two-factor structure existed in the items. The actual factor loadings are provided in the table below.

Item	Mean	SD	FACTOR		
			Effort	Task	Information
energy	4.101	1.194	.832	.108	.101
persistent	4.038	1.091	.860	.130	-.145
time	4.190	1.231	.807		.192
intellectual	3.532	1.269	.512		.489
steps	4.127	1.181	.247		.609
prior knowledge	4.406	1.092	-.345	.246	.742
easy	3.595	1.266	.168		.835
service situation	4.582	1.128		.896	
service task	4.468	1.119	.101	.917	
service role	4.273	1.140		.761	

*Loadings less than 0.100 have been omitted.

Table 5.1 Customer Participation Exploratory Factor Analysis Loadings

6.3.2 Culture

Given the immense amount of work conducted on the CVS, exploratory factor analysis was only utilized to examine whether items were suitable. In the pilot test stage, culture was composed of a total of 19 items that belonged to the dimension of Confucian Work Dynamism and Integration of the Chinese Value

Survey (Chinese Culture Connection, 1987). Although it was initially expected that these 19 items would load onto two factors, it turned out quite differently. Initial exploratory factor analysis on the 19 items revealed a six-factor structure that was difficult to interpret. Upon initial examination of the correlation matrix it was found that the items of “reciprocation”, “non-competitiveness” and “conservative” had extremely low correlations with all the other items in the scale, therefore it was deemed suitable to remove these items.

The items of “filial piety”, “patriotism” and “chastity in women” loaded together. These items were removed on the basis of face validity as they had little to do with the context of research. Furthermore, examination of the correlation matrix revealed that these three items had very low correlations with all the other items, often well below 0.300. This also is a basis to support for its removal as factor analysis assumes that there is at least some correlation among the variables, however, in this case these three variables are very weakly correlated with the others.

Therefore, the second run of exploratory factor analysis proceeded without these items, but only on the remaining 13. This time a four-factor solution emerged which accounted for approximately 62% of the cumulative variance. Only the item of “solidarity” cross loaded. Although it cross-loaded, it was not removed as it was felt that this was an important value which would impact the way in which individuals would interact with other parties. Although a four-factor solution emerged, a priori culture will still be taken as a two-factor construct as it has been intended, namely as Integration and Confucian Work Dynamism. Nevertheless, the factor loadings are provided below for reference only.

Item	Mean	SD	FACTOR			
			Factor 1	Factor 2	Factor 3	Factor 4
Ordering relationships	5.608	1.977		.303	.726	
Thrift	5.911	1.554		.712	.269	.143
Persistence	7.051	1.270	.205	.862		.116
Shame	6.671	1.670	.142	.644	.319	-.224
Steadiness	6.873	1.079	.288	.203		.774
Face	5.709	1.681	-.103	.129	.776	-.124
Respect for tradition	5.570	1.482		.461		.315
Tolerance	6.848	1.350	.762	.202	-.312	
Harmony	7.354	1.075	.757	.127		.168
Solidarity	6.628	1.528	.557	-.125	.527	.269
Trustworthiness	7.760	1.232	.613	.158	-.305	.247
Contentedness	6.885	1.502	.178			.810
Close friend	7.103	1.455	.658		.240	.120

* Loadings of less than 0.100 have been omitted.

Table 5.2: Culture Exploratory Factor Analysis Loadings

6.3.3 Perceived Risk

As with culture, the work that has been conducted on perceived risk has been extensive therefore exploratory factor analysis here only serves as a screening process to pick out relevant items. The perceived risk construct was measured by 9 items designed to capture the six risk types including social, time, financial, performance, physical and psychological risk. Exploratory factor analysis with varimax rotation revealed a three-factor structure. However the item labeled “time2”, denoting time risk 2 and “psych1”, denoting psychological risk 1 cross-loaded onto other factors. These two items were subsequently removed and factor analysis run again on the remaining 7 items. The resulting KMO was at 0.662 and the cumulative variance explained by these items accounted for roughly 63%. A two-factor structure emerged from the data. The factor loadings are provided in the table below:

Item	Mean	SD	FACTOR	
			Factor 1	Factor 2
Soc1	3.077	1.440	-.107	.897
Soc2	1.974	.932	.149	.605
Time1	3.821	1.520	.255	.680
Finan	3.180	1.335	.781	-.149
Perf	3.513	1.335	.755	.229
Phys	3.410	1.312	.799	.276
Psych1	2.897	1.373	.634	.582

Table 5.3: Perceived Risk Exploratory Factor Analysis Loadings

6.3.4 Locus of Control

Locus of control was measured using the scale of Lumpkin (1985). It is composed of six items that are supposed to capture both internal and external locus of control. Exploratory factor analysis with varimax rotation yielded a clear two-factor structure. Factors were once again extracted with the eigenvalues greater than one criterion. The items “LOC1”, “LOC2”, and “LOC3” loaded together and the remainder items of “LOC4”, “LOC5”, and “LOC6” loaded together. This is comparable to the findings of Lumpkin (1985). The two-factor structure is also further supported by the scree plot, which clearly shows a two-factor structure underlies the items. The two factors accounted for about 54% of the variance.

Item	Mean	SD	FACTOR	
			Factor 1	Factor 2
LOC1	4.177	.997	.681	
LOC2	3.392	1.213	.798	
LOC3	3.833	1.091	.708	-.128
LOC4	3.405	1.225	.132	.773
LOC5	4.443	.859	-.177	.725
LOC6	3.215	1.094	-.496	.449

* Loadings of less than 0.100 have been omitted.

Table 5.4: Locus of Control Exploratory Factor Analysis Loadings

However, examination of the correlation matrix revealed that items “LOC4”, “LOC5” and “LOC6” had very weak correlations with all the other items in the scale and may be deemed unsuitable for factor analysis which assumes some level of correlation between the items. Therefore, it was decided that these 3 items would be

omitted from subsequent analyses. It should also be noted that the 6 items were originally derived from Lumpkin (1985) but in later work conducted by Lumpkin and Hunt (1989), they too dropped the items “LOC4”, “LOC5” and “LOC6” and measured locus of control with the remaining items instead.

6.3.5 Perceived Service Quality

Perceived service quality was measured using the SERVPERF (Cronin and Taylor, 1992) instrument. Only four of the five service quality dimensions were used, only Tangibles was excluded as it was not relevant to the context of study. Initial exploratory factor analysis with oblique rotation using the Direct OBLIMIN procedure of SPSS 9.0 revealed a five-factor structure. The items did not load together as expected and therefore lends support to an increasing line of research that has pointed out that items from the SERVQUAL instrument rarely load on the factors they are supposed to. It was found that the item labeled as “psq9” in the correlation matrix was negatively correlated with all the items. This item is in the form of the statement “Employees of the (travel agency/ bank) are too busy to respond to customers’ requests promptly”. Therefore, this item was deleted in the following run of exploratory factor analysis.

The items “psq4” “psq11” and “psq16” were also subsequently removed due to their low correlations with other variables, often falling well below 0.300. Therefore, the remaining number of items for the perceived service quality scale was 14. These 14 items produced a three-factor solution, however, the actual factor solution is not of vital importance as SERVPERF is used and it is assumed that perceived service quality is a unidimensional construct; therefore, factor analysis here merely serves as a data reduction technique. The table below nevertheless provides the factor loadings for reference.

Item	Mean	SD	FACTOR		
			Factor 1	Factor 2	Factor3
psq1	3.760	1.016	.927	-.106	.210
psq2	3.734	.843	.820		
psq3	3.772	.891	.891		
psq5	3.848	.988	.623	.149	-.107
psq6	3.494	1.131	.665		
psq7	3.608	.926	.645	.140	-.145
psq8	3.899	.955			-.872
psq10	3.590	1.055	.481		-.367
psq12	4.025	.832			-.873
psq13	3.845	.818	.156	.178	-.548
psq14	3.392	1.091		.820	-.149
psq15	3.418	1.008	-.102	.723	-.360
psq17	2.949	.946	.101	.800	
psq18	3.385	1.293		.782	.175

* Loadings of less than 0.100 have been omitted.

Table 5.5: Perceived Service Quality Exploratory Factor Analysis Loadings

6.3.6 Behavioural Intentions

The three types of behavioural intentions were subject to exploratory factor analysis. Factors were extracted using the eigenvalues greater than one criterion. The results suggest a one factor solution and the three components all loaded strongly on that one component with factor loadings all greater than 0.700. The scree plot also supports this result. Hence, all three of these items were retained for use in the main data collection phase of the study. The factor loadings are provided in the table below.

Item	Mean	SD	FACTOR
			Loading
recom	3.525	.912	.743
relate	3.085	1.004	.765
repurch	3.763	.806	.740

Table 5.6: Behavioural Intentions Exploratory Factor Analysis Loadings

6.4 Chapter Summary

The focus groups conducted on the services of telephone banking and FIT tourism seemed to reflect that the participants felt that these two types of services

had more customer participation in them than other similar alternatives such as the use of the ATM or organised group travel. Therefore, this provided some strength into the use of these services as it would be possible that participation was much more obvious and required in order to obtain the service. The focus groups also seemed to reflect that participants often considered customer participation in terms of the effort they exerted or in terms of the amount of information searching on the service that was required. This is perhaps the first indication that customer participation may in fact be better conceptualised from the consumer point of view as being made up of these two facets. However, this needs to be empirically tested and is done in the pilot test. Also, interestingly, participants demonstrated that information searching for tourism was much more extensive than for phone banking. Although this may seem as no surprise, it is an indication that customer participation differs with the type of service being examined.

The pilot test results have shown that customer participation is captured as a two-factor construct made up of a behavioural component and an information-searching component. This reflects the sentiment found in the focus groups. Other constructs such as culture, perceived service quality and perceived risk were also streamlined with the removal of certain items. Lastly, the constructs of locus of control and behavioural intentions were also captured satisfactorily. Therefore, the pilot stage has purified the measurement instrument and it is this purified version of the research instrument that will be used in the collection of the main data. The results from the data analysis on the main data are provided in the next chapter.

Chapter 7 DATA ANALYSIS: MAIN DATA

7.1 *Introduction*

This chapter will cover the data analysis that has been conducted for the main data collection phase. The following sections of this chapter will delve into the results obtained from the descriptive statistics, the sample composition, exploratory factor analysis, confirmatory factor analysis, structural equation modeling and finally the multigroup analysis results.

7.2 *Descriptive Statistics*

After modifying the questionnaire, it was sent out with a covering letter and self-addressed paid postage envelope. The mailing of the questionnaires was conducted in two phases. In total, the questionnaire was mailed to a total of 2420 respondents. These 2420 individuals were obtained from the directories as hitherto mentioned in previous sections. The final usable sample size was 503 which represents a response rate of approximately 21%. This percentage of response rate is greater than that reported by Keown (1985) when he found that the response rate without the provision of an incentive in Hong Kong was at 13%. Therefore, the response rate achieved for this study fares relatively well in comparison. The number returned was greater than this as questionnaires were screened for completeness, as well as in the phone banking case, whether the respondent was a user or not. Only users for the phone-banking questionnaire were retained, as it would be meaningless to ask non-users for their perceptions of the amount of participation they exert if they have not even encountered this service before.

Completeness of survey was also screened for, questionnaires which had excessive questions unanswered were not used. Also, questionnaires that were found to have the same response number circled excessively (e.g. all questions are answered by circling the number "1") were also not used as they often indicated that the respondent had not seriously answered the questions. Therefore, this yielded a final sample size of 503.

Of the 503 respondents, 182 were Hong Kong Chinese; 176 were Japanese; and 145 were British. This makes the three cultural groups roughly comparable in size. Just over 46% of the sample were over the age of 40 years. In terms of their education level, over 94% of the sample had a tertiary education background. Close to 59% of the sample worked in a professional occupation and close to 36% worked at a managerial level. Most of the questionnaires that were returned were of the tourism category (306) and telephone banking had a total of 197 questionnaires. Again, the composition of the sample is probably what would be expected given that the target sample is professionals. A possible reason for the larger number of tourism questionnaires than telephone banking can be supported by the fact as was mentioned previously that at the time of data collection, telephone banking service was not very widespread as it is with other types of banking today. A complete profile of the respondents is provided in Table 11.

		Nationality			Total
		Chinese	Japanese	British	
Sex	Female	77 (15.31%)	17 (3.38%)	53 (10.54%)	147 (29.22%)
	Male	105 (20.87%)	159 (31.61%)	92 (18.29%)	356 (70.78%)
Age (yrs)	20-25	1 (0.20%)	2 (0.40%)	2 (0.40%)	5 (0.95%)
	26-30	31 (6.16%)	8 (1.59%)	7 (1.39%)	46 (9.15%)
	31-35	63 (12.52%)	15 (2.98%)	42 (8.35%)	120 (23.86%)
	36-40	41 (8.15%)	29 (5.76%)	29 (5.76%)	99 (19.68%)
	40 plus	46 (9.15%)	122 (24.25%)	65 (12.92%)	233 (46.32%)
Education Level	secondary	3 (0.60%)	-	2 (0.40%)	5 (0.95%)
	matriculated	8 (1.59%)	8 (1.59%)	4 (0.80%)	20 (3.98%)
	tertiary	170 (33.80%)	168 (33.40%)	136 (27.04%)	474 (94.23%)
Occupation	clerical	3 (0.60%)	10 (1.99%)	-	13 (2.58%)
	manager	5 (0.95%)	157 (31.21%)	18 (3.58%)	180 (35.79%)
	professional	172 (34.19%)	4 (0.80%)	120 (23.86%)	296 (58.85%)
	self-employed	2 (0.40%)	-	5 (0.95%)	7 (1.39%)
	student	-	-	2 (0.40%)	2 (0.40%)
	unemployed	-	2 (0.40%)	-	2 (0.40%)
	other	-	3 (0.60%)	-	3 (0.60%)
Survey Type	banking	86 (17.10%)	61 (12.13%)	50 (9.94%)	197 (39.17%)
	tourism	96 (19.08%)	115 (22.86%)	95 (18.89%)	306 (60.83%)

Table 11 : Profile of Sample Composition

7.3 Assessment of Nonresponse Bias

The mail survey method of data collection has often been criticised for nonresponse bias. One of the approaches to the nonresponse problem is to estimate the effects of nonresponse bias (Armstrong and Overton, 1977) using extrapolation methods. Extrapolation methods are based on the assumption that subjects who respond less readily are more like nonrespondents, in this case Armstrong and Overton (1977) have defined “less readily” as answering late, or requiring more prodding to answer.

The way in which this assessment is actually carried out has been replicated by Dorsh et al. (1998) and Bansal and Taylor (1999) whereby the measured variables are were regressed on the date when the completed questionnaire was received. The returned questionnaires were split up into a category that constituted early returns with a specific time period and any period outside of this was classified as late returns. In the analysis, of the 61 variables that were retained for the main data collection phase, 17 related significantly ($\alpha = .05$) to the date of return of the completed questionnaire. Hence, approximately 72.1% of the measured variables showed no statistically significant relation to the questionnaire return date. As a substantial amount of data do not relate to the time of response, it perhaps suggests that nonrespondents are not likely to be very different in their responses on the measured variables than the people who did respond. Therefore, in light of all this, it may be fair to suggest that nonresponse bias is not likely to be a critical issue in this study.

Also, the nonresponse bias tests were conducted on the data before it was subject to any form of exploratory factor analysis, so after exploratory factor analysis is performed, some variables may be removed if deemed necessary.

7.4 *Assessment of Normality of the Data*

The bulk of the analysis on the data utilises structural equation modeling. Structural equation modeling is sensitive to the distributional characteristics of the data, particularly the departure from multivariate normality or a strong kurtosis (skewness) in the data (Hair et al., 1995). Hair et al. (1995) have also explained that a lack of multivariate normality is particularly troublesome because it substantially inflates the chi-square statistic and creates an upward bias in critical values for determining coefficient significance. Furthermore, Bollen (1989) has noted that use of the maximum likelihood estimation function, which bases estimates on the covariance matrix is very dependent on the sample covariance matrix, which may yield poor estimates for distributions with high kurtosis.

Before proceeding with any analysis in structural equation modeling, the data were examined for normality with checks for skewness, kurtosis and outliers with PRELIS 2 (Jöreskog and Sörbom, 1996); the preprocessor for LISREL 8. The skewness and kurtosis of the observed variables were computed to test for conditions of high non-normality. The skewness values for the culture construct were in the range of -1.771 to -0.005 while the kurtosis values were in the range of -0.776 to 1.909 with the exception of one variable labeled “trustworthiness” with a kurtosis value of 5.017 which violates the suggested value of not exceeding ± 2.580 . For the customer participation construct, the skewness values lay in the range of -0.608 to 0.459 while kurtosis values were from -1.054 to -0.531 . For the perceived risk construct, skewness values were in the range of -0.376 to 1.342 , and kurtosis values in the range of 0.998 to 1.660 . For the locus of control construct, the skewness values were from -0.486 to 0.394 while kurtosis values were in the range of -0.706 to -0.060 . Skewness range for the perceived service quality construct lay in the

range of -0.484 to 0.280 and kurtosis in the range of -0.650 to 0.330 . Lastly, skewness values for the behavioural intentions construct were in the range of -0.535 to -0.183 and kurtosis values from -0.366 to 0.394 . Only one variable out of all of the observable variables was extreme for kurtosis, therefore the data set was not considered as having serious departures from normality and the possibility of a non-normal distribution did not seem likely. Therefore, the data set was deemed suitable for the conducting of further analyses.

7.5 Exploratory Factor Analysis Results

EFA using the main sample data was only conducted for the construct of Customer Participation as the construct is still very new and little research has been actually conducted on it.

7.5.1 Customer Participation

Although this construct had been factor analysed with the pilot data, given that this is a new construct merits it to be factor analysed with the main data to check the dimensionality. With the pilot data, the factor analysis yielded a three-factor construct however, the scree plot seemed to indicate that it was a two-factor construct; therefore some clarification is required by subjecting the main data to EFA.

The variable “prior knowledge” failed to load significantly on any factor in the initial run of EFA and was therefore removed and EFA rerun again. The results of the EFA of the main data give a Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was recorded at 0.823 and Stewart (1981) has proclaimed that a values

over 0.800 for this statistic to be meritorious. Again, the scree plot clearly shows a two-factor structure underlying the data. Examination of the pattern matrix reveals a two-factor structure in the data. The information seeking items all loaded highly together to form the other factor. Since factor 1 is composed of the perceived effort and task items, it was labeled as “Behavioural Oriented” as all these items reflected actual behaviours and factor 2 was labeled as “Information Oriented” as it encompasses only the information seeking items. The overall reliability of this scale yielded a Cronbach alpha of 0.848. The factor loadings are provided in Table 12.

<i>Item</i>	<i>Mean</i>	<i>SD</i>	<i>Factor</i>	
			<i>Behavioural Oriented</i>	<i>Information Oriented</i>
energy	3.136	1.486	.835	
persistent	3.454	1.446	.815	
time	3.292	1.431	.900	
intellectual	2.773	1.358	.731	.161
steps	3.807	1.386	.761	-.112
service situation	4.102	1.499		.888
service task	3.751	1.512		.950
service role	3.652	1.477		.884

*Loadings of less than 0.100 have been omitted.

Table 12: Customer Participation Factor Loadings

7.6 Confirmatory Factor Analysis Results

In accordance with recommendations made by Anderson and Gerbing (1988), confirmatory factor analysis on the measurement model of each construct should be performed prior to the estimation of any structural parameters. However, given the extensive work that has been conducted on the Chinese Value Survey, confirmatory factor analysis will not be required on this construct in the interest of preserving content validity. In each case, the covariance matrix is analysed and maximum likelihood estimation is used. Finally, the results for all the constructs

will be summarised in a table.

7.6.1 Customer Participation

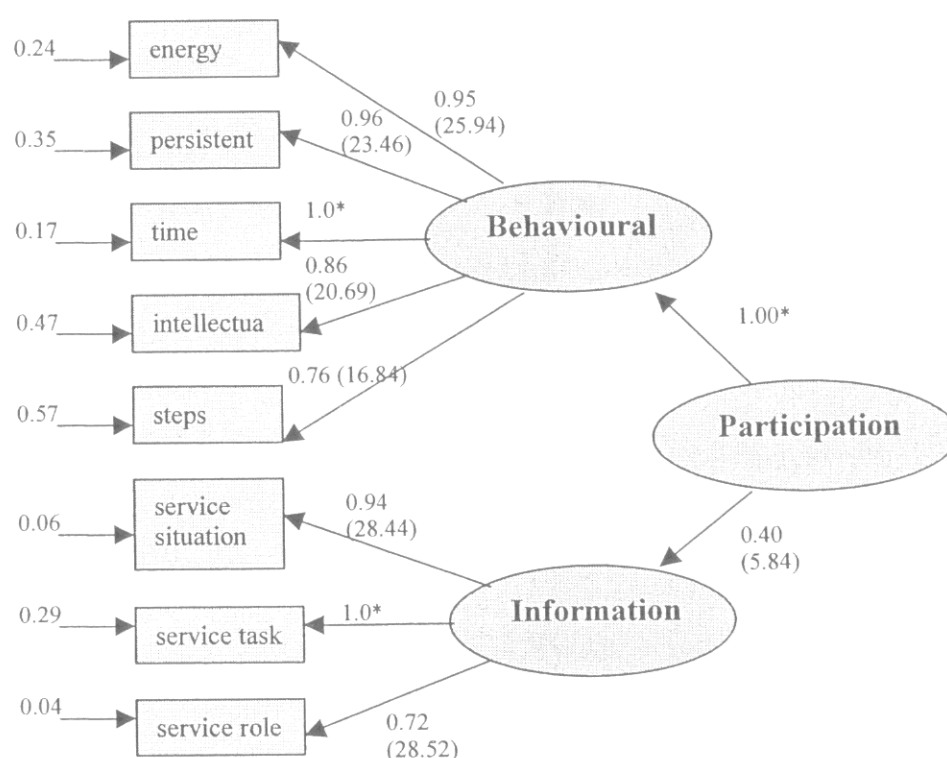
The exploratory factor analysis left eight items to measure this construct. These eight items were then subjected to confirmatory factor analysis (CFA). Initial estimates showed all of the factor loadings were significant at a level of $p = .05$ Bagozzi and Yi (1988). The factor loadings at the second order level of this construct were also significant. The squared multiple correlations for the items ranged from 0.42 to 0.97. The chi-square stood at 88.44 19 d.f. ($p = 0.0$). The fit statistics of the model are encouraging, the Goodness of Fit Index (GFI) was 0.96 and the Comparative Fit Index (CFI) was at 0.97, which meets the recommended threshold, suggested by Bentler and Bonett (1980). However, the Root Mean Square Error of Approximation (RMSEA) still exceeds the recommended threshold of 0.08 slightly at 0.084 and the Root Mean Square Residual (RMR) was at the recommended level of 0.05 for a well-fitting model (Bryne, 1998). The results for the measurement model are illustrated in Table 13.

Measure Parameter Estimates	Standardised Estimate	Standard Error	t-value
Behavioural on energy ($\lambda_{1,1}$)	0.95	0.04	25.94
persistent ($\lambda_{2,1}$)	0.96	0.04	23.46
time ($\lambda_{3,1}$)	1.0	*	*
intellectual ($\lambda_{4,1}$)	0.86	0.04	20.69
steps ($\lambda_{5,1}$)	0.76	0.05	16.84
Information on service situation ($\lambda_{6,2}$)	0.94	0.03	28.44
service task ($\lambda_{7,2}$)	1.0	*	*
service role ($\lambda_{8,2}$)	0.72	0.03	28.52
Participation on Behavioural ($\beta_{1,1}$)	1.0	*	*
Participation on Information ($\beta_{2,1}$)	0.40	0.06	5.84

Fit Statistics: Chi-square = 88.44 ($df = 19, p = 0.00$); GFI = 0.96; Normed Fit Index (NFI) = 0.97; CFI = 0.97.

* this parameter was constrained to 1.0 for purposes of identification.

Table 13: Confirmatory Factor Analysis Results for Customer Participation



All standardised loadings reported, t-values in parentheses.

* This parameter was constrained to 1.0 for identification purposes.

Figure 7-1 : Customer Participation Measurement Model

At this stage in the research, it is necessary to examine reliability of the scale. Reliability is a preliminary necessity to that is essential for validity (Peter, 1979); therefore, reliability of the scale will first be examined followed by validity.

Gerbing and Anderson (1988) have posited that reliability of a scale should be taken after unidimensionality has been established. Reliability is assessed using Cronbach's alpha. It is important that reliability be assessed at this stage as Gerbing and Anderson (1988) have stated the use of alpha already assumes that the items form a unidimensional set and that the items have equal reliabilities. Cronbach's alpha on the two dimensions for customer participation, namely "Behavioural Oriented" and "Information Oriented" yielded standardised values of 0.87 and 0.89 respectively. Again, both of these values have exceeded Nunnally's recommended 0.70 level. Reliability can also be assessed by calculating the composite reliability and average variance extracted. Bagozzi and Yi (1988) have stressed that average variance extracted values of 0.5 or greater are adequate and composite reliability values greater than about 0.6 are desirable. The composite reliabilities for "Behavioural" and "Information" are 0.90 and 0.95 prospectively, which well exceed the recommended 0.6 level. Average variance extracted for "Behavioural" is 0.64 and for "Information" is 0.87. Both these statistics have demonstrated reliability of the scale. Table 14 gives a summary of the information on the reliability of the measures for the customer participation scale.

<i>Factor</i>	<i>Measure</i>	<i>Individual Item Reliability</i>	<i>Composite Reliability</i>	<i>Average Variance Extracted</i>
Behavioural	energy	0.72	0.90	0.64
	persistent	0.64		
	time	0.83		
	intellectual	0.55		
	steps	0.43		
Information	service situation	0.71	0.95	0.87
	service task	0.97		
	service role	0.71		

Table 14 : Reliability of Customer Participation Measures

To assess convergent validity Anderson and Gerbing (1988) have

recommended that this can be determined by whether each indicator's estimated pattern coefficient on its posited underlying construct factor is significant. Anderson and Gerbing (1988) have defined "significant" in this situation as being greater than twice its standard error. For all items, this was found hence, the presence of convergent validity. As a test of discriminant validity, the procedure recommended by Anderson and Gerbing (1988) in which the correlation between each pair of constructs was constrained to be equal to one. A chi-square difference test is performed on the values for the constrained and unconstrained model. A significantly lower chi-square value for the unconstrained model would then indicate that the constructs are not perfectly correlated and discriminant validity is achieved (Bagozzi and Philips, 1982). The chi-square on the unconstrained model was 89.98, 18 d.f. ($p = 0.00$); while the chi-square on the constrained model was 104.15, 25 d.f. ($p = 0.00$). The difference between these two yields a chi-square of 14.17, 7 d.f. which is significant at the $p = 0.05$ level. This has demonstrated that there is a significant difference between the unconstrained and constrained models, which highlight the presence of discriminant validity.

The average variance extracted can also be used to examine discriminant validity (Fornell and Larcker, 1981). The average variance extracted for each construct should be greater than the squared correlation between the construct and any other construct. The average variance extracted for "Behavioural Oriented" was 0.64 and for "Information Oriented" was 0.87. The squared correlation between the factors of "Behavioural" and "Information" is .12, which is less than the average variance extracted for both these factors, thereby supporting the presence of discriminant validity.

7.6.2 Perceived Risk

The results from the exploratory factor analysis left the number of items that comprise this scale as seven. CFA was performed by specifying this as a one-factor construct. The overall fit of this model was quite good and produced a significant chi-square. The chi-square value was 82.98, 14 d.f., $p = 0.00$. The GFI is 0.96, the CFI is 0.93 and the Normed Fit Index (NFI) is 0.92. All three of these fit indices exceed the 0.90 level and are indicative of quite a good fitting model. However, the RMSEA is slightly high at 0.09 and the RMR stood at 0.06

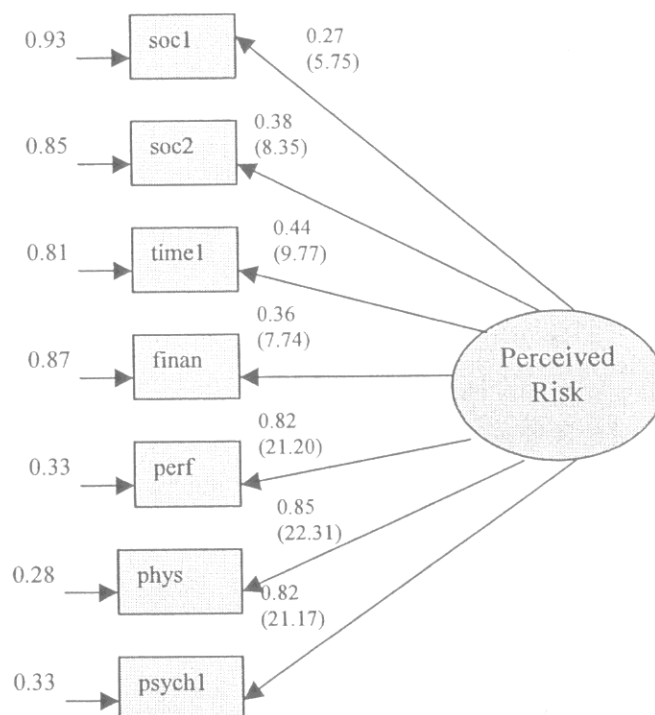
All of the factor loadings were significant however; some of them did not meet the level of 0.50 recommended by Bagozzi and Yi (1988). The loading for social risk 1 (soc1) was rather low at 0.27 (standardised) but all the other loadings were close to or exceeded 0.50. Squared multiple correlations for the seven variables ranged from 0.07 to 0.72. Squared multiple correlation for social risk 1 (soc1) was the lowest at 0.07 and the value for financial risk (finan) was also rather low at 0.13. This finding contradicts the findings of Mitchell and Groatorex (1990) where they found that financial risk appeared to explain consistently more overall risk than other losses. However, Mitchell and Groatorex (1990) also stated that for services and convenience durable goods, that psychosocial (these authors combined social and psychological risk) explained most variance here. From the results, this notion is partially supported as both items that measure psychological risk explain the most variance and have the highest squared multiple correlations. In a study by Murray and Schlacter (1990) on perceived risk in services, they found little support for the previously commonly held conception of the importance of financial risk. Murray and Schlater's (1990) finding supports the finding achieved in this research, where they declared that services possessed greater psychological risk. Stone and Grønhaug (1993) have explained the importance of psychological risk in terms of its

mediating function that it plays on other types of risk. Interestingly, performance risk also played a part in explaining the risk construct. A possible explanation for this finding may be due to the fact that participation in the selected services requires the customer to actually perform some actions. Customers may feel embarrassed if they perform the service task wrong, hence the importance of performance risk in this context. The results for the confirmatory factor analysis on the perceived risk construct are shown in Table 15 and a diagram of the construct is in Figure 7-2.

<i>Measure Parameter Estimates</i>	<i>Standardised Estimate</i>	<i>Standard Error</i>	<i>t-value</i>
Soc1	0.27	0.05	5.75
Soc2	0.38	0.05	8.35
Time1	0.44	0.05	9.77
Finan	0.36	0.05	7.74
Perf	0.82	0.04	21.20
Phys	0.85	0.04	22.31
Psych1	0.82	0.04	21.17

Fit Statistics: Chi-square = 82.98 ($df = 14$, $p = 0.00$); GFI = 0.96; Normed Fit Index (NFI) = 0.92; CFI = 0.93.

Table 15 : Confirmatory Factor Analysis Results for Perceived Risk



All standardised loadings reported, t-values in parentheses.

Figure 7-2 : Perceived Risk Measurement Model

Reliability for this scale gave a Cronbach alpha of 0.73, which exceeds the

recommended 0.70 level. The composite reliability for this measure is quite high at 0.78. However, the average variance extracted is below the recommended threshold of 0.50 and was recorded at 0.34. This finding may reflect that there is still room for improvement in the reliability of the scale. Below, in Table 16 is a summary of the reliability of the measures of this construct.

<i>Factor</i>	<i>Measure</i>	<i>Individual Item Reliability</i>	<i>Composite Reliability</i>	<i>Average Variance Extracted</i>
RISK	Soc1	0.07	0.78	0.34
	Soc2	0.15		
	Time1	0.19		
	Finan	0.13		
	Perf	0.67		
	Phys	0.72		
	Psych1	0.37		

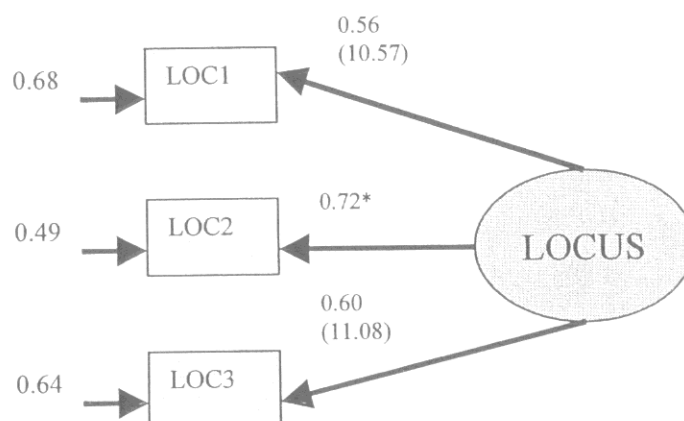
Table 16 : Reliability of Perceived Risk Measures

Convergent validity is demonstrated by whether or not the factor loadings are significant and are at least, twice their standard error. Examination of the results from the confirmatory factor analysis for this construct reveal that in all the variables, the standard error is very low and all variables are greater than twice their standard error, hence convergent validity is established. Discriminant validity is not examined with other constructs here given the stark differences that are present between them, hence it would not be of use to test whether they are different.

7.6.3 Locus of Control

After the exploratory factor analysis stage, it was decided and justified that only the three items of “LOC1”, “LOC2” and “LOC3” would be used to measure locus of control. Therefore, these three items were specified to load on a factor labeled simply as “LOCUS” as shown in Figure 7-3. The overall fit of this model yielded a saturated fit so, model fit was perfect, i.e. 1.0. Examination of the factor loadings showed that all of them were significant and over the level of 0.50.

Squared multiple correlations are from 0.32 to 0.51. CFA results are also shown below.



All standardised loadings reported, t-values in parentheses.

* This parameter was constrained to 1.0 for identification purposes

Figure 7-3 : Locus of Control Measurement Model

<i>Measure Parameter Estimates</i>	<i>Standardised Estimate</i>	<i>Standard Error</i>	<i>t-value</i>
LOCUS on LOC1	0.56	0.05	10.57
LOC2	0.72	*	*
LOC3	0.60	0.05	11.08

Fit Statistics: Perfect Fit

* this parameter was constrained to 1.0 for purposes of identification

Table 17 : Confirmatory Factor Analysis Results for Locus of Control

Reliability of the three-item scale gave a standardised Cronbach alpha of 0.62, which just falls short of the recommended 0.70 level. Churchill (1979) has stated that a low coefficient alpha indicates the sample of items performs poorly in capturing the construct. Hinkin (1995) has argued that a possible reason for a low alpha is that the scale may be comprised of too few items. However, in comparison to Lumpkin and Hunt, (1989) where the same scale was used, the alpha for this study is in fact higher than the alpha obtained by Lumpkin and Hunt (1989) where alpha was recorded at 0.617. The composite reliability for these three items is 0.66 and achieves the minimum of 0.60 specified by Bagozzi and Yi (1988). However, the

average variance extracted falls short of the 0.50 level and was recorded at 0.40. This signals the need for further work into developing items that adequately capture the domain of locus of control, however, there is no consensus today on a preferred instrument for its measurement. Reliability of the measures is shown in Table 18.

<i>Factor</i>	<i>Measure</i>	<i>Individual Item Reliability</i>	<i>Composite Reliability</i>	<i>Average Variance Extracted</i>
LOCUS	LOC1	0.32	0.66	0.40
	LOC2	0.51		
	LOC3	0.36		

Table 18 : Reliability of Locus of Control Measures

The measures possess convergent validity from the examination of their standardised estimate and the fact that the estimates are greater than twice their standard error and the t-values are also significant.

7.6.4 Service Quality

The EFA results left a total of fourteen items to measure the construct of service quality. These fourteen items were treated as a unidimensional construct as done by Cronin and Taylor (1992). Initial results showed that the construct yielded only moderate results with a chi-square value of 1111.64, 75 d.f., $p = 0.00$. The RMSEA was very high at 0.17 and the GFI failed to meet the 0.90 suggested level and was at 0.76. The CFI was slightly higher at 0.84 and the RMR was reasonable at 0.06. Examination of the factor loadings showed all were significant at the 0.05 level. Squared multiple correlations ranged from 0.47 to 0.71.

However, the standardised residuals seemed to indicate some misspecification of the model with the item “psq18”. The item “psq18” had very large negative standardised residuals (over 4.0) with other items in the same factor.

Anderson and Gerbing (1988) have argued that items that are misspecified on a particular factor will tend to have large a pattern of large negative normalized residuals with other indicators of the factor to which it was assigned. This item also had the lowest squared multiple correlation. Examination of the modification index also showed that this variable had large modification indices with other items in the same factor. However, allowing these items to correlate would not make sense theoretically. A possible explanation for this occurrence can be attributed to the item itself. This item pertained to whether the operating hours of the service firm were convenient to its customers and was assigned under the Empathy dimension of service quality. When examining the other items measuring “Empathy”, it can be seen that item “psq18” is starkly different from the other items that have some sort of emotional element to them. It could be possible that respondents do not attribute or regard this particular item as belonging to this dimension of service quality, hence its lack of explanatory power.

<i>Measure Parameter Estimates</i>	<i>Standardised Estimate</i>	<i>Standard Error</i>	<i>t-value</i>
psq1	0.73	*	*
psq2	0.80	0.06	18.07
psq3	0.81	0.06	18.42
psq5	0.84	0.06	19.09
psq6	0.71	0.06	15.88
psq7	0.80	0.06	18.07
psq8	0.84	0.06	18.95
psq10	0.79	0.06	17.81
psq12	0.78	0.06	17.47
psq13	0.79	0.06	17.75
psq14	0.68	0.06	15.30
psq15	0.78	0.06	17.47
psq17	0.74	0.06	16.59
psq18	0.71	0.06	15.88

Fit Statistics: Chi-square = 1111.64 ($df = 75$, $p = 0.00$); GFI = 0.76; Normed Fit Index (NFI) = 0.83; CFI = 0.84.

* this parameter was constrained to 1.0 for purposes of identification

Table 19: Confirmatory Factor Analysis Results for Perceived Service Quality

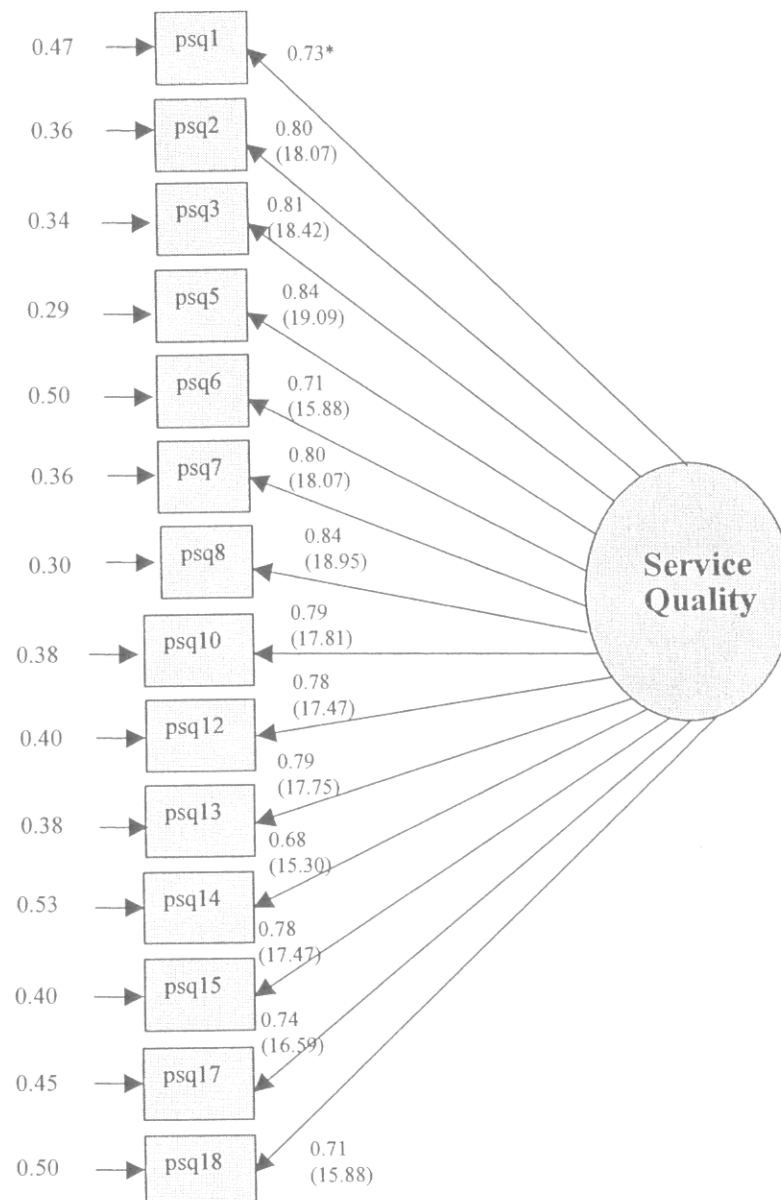
Reliability of the perceived service quality scale with Cronbach's alpha gave

a value of 0.93 which is quite good. The composite reliability for this construct was very high at 0.95 and this reflects good reliability in the instrument. The average variance extracted for this construct stood at 0.60 and this value exceeds the recommended threshold of being at least 0.50 (Bagozzi and Yi, 1988). A summary of the reliability of measures is in Table 20.

<i>Measure</i>	<i>Individual Item Reliability</i>	<i>Composite Reliability</i>	<i>Average Variance Extracted</i>
psq1	0.53	0.95	0.60
psq2	0.64		
psq3	0.66		
psq5	0.71		
psq6	0.50		
psq7	0.64		
psq8	0.70		
psq10	0.62		
psq12	0.60		
psq13	0.62		
psq14	0.47		
psq15	0.60		
psq17	0.55		
psq18	0.50		

Table 20: Reliability of Perceived Service Quality Measures

Convergent validity was examined by looking at the factor loadings and whether or not they are at least twice the size of their standard error. Again, this can be inferred from Table 19 where it can be seen that this particular criterion holds, hence the presence of convergent validity in the measure.



All standardised loadings reported, t-values in parentheses.

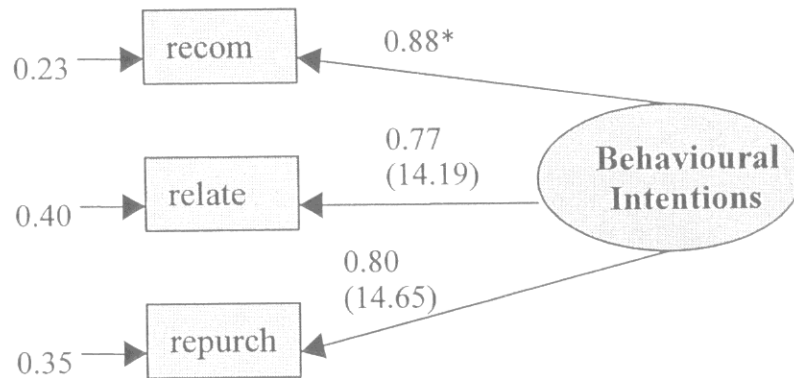
* This parameter was constrained to 1.0 for identification purposes

Figure 7-4 : Service Quality Measurement Model

7.6.5 Behavioural Intentions

The three behavioural intention types revealed a single factor structure from the exploratory factor analysis, hence the quality of this factor structure was tested with CFA. The overall model fit showed a saturated model so model fit was perfect at 1.0. Factor loadings were highly significant and all in the expected direction.

Squared multiple correlations ranged from 0.60 to 0.77 and are quite high. The diagram of the construct is illustrated below.



All standardised loadings reported, t-values in parentheses.

* This parameter was constrained to 1.0 for identification purposes

Figure 7-5 : Behavioural Intentions Measurement Model

<i>Measure Parameter Estimates</i>	<i>Standardised Estimate</i>	<i>Standard Error</i>	<i>t-value</i>
BEHINT on recom	0.88	*	*
relate	0.77	0.06	14.19
repurch	0.80	0.06	14.65

Fit Statistics: Perfect Fit

* this parameter was constrained to 1.0 for purposes of identification

Table 21 : Confirmatory Factor Analysis Results for Behavioural Intentions

Reliability of the behavioural intentions scale is quite high with a standardised Cronbach alpha of 0.83. Composite reliability is at 0.86 and is also encouraging. The average variance extracted is also good at 0.67. Overall, the reliability of this scale seems justified. The reliability of the measures are summarised below in Table 22. The construct behavioural intentions has been abbreviated to “BEHINT”.

<i>Factor</i>	<i>Measure</i>	<i>Individual Item Reliability</i>	<i>Composite Reliability</i>	<i>Average Variance Extracted</i>
BEHINT	recom	0.77	0.86	0.67
	relate	0.60		
	repurch	0.65		

Table 22 : Reliability of Behavioural Intentions Measures

Examination for convergent validity shows that all factor loadings are significant and are at least twice their standard error. Therefore, it is fair to suggest that these items are measuring the same construct. As with some of the previous construct, behavioural intentions is made up of only one factor and it would not be necessary to test whether it is distinctly different from the other constructs given the differences that they inherently possess in terms of what they are measuring.

7.7 Overall Models

After the completion of confirmatory factor analysis on the measurement models for all constructs, this part deals with the examination of the structural paths between the latent constructs in the various forms of the overall models used in the study and an assessment of which model is most suitable. In this section, only results are shown, discussion on the possible reasons for the findings can be found in Chapter 7.

Due to the vast number of variables involved in the assessment of the overall model of the research, testing of the overall model will use a partial aggregation model (Bagozzi and Heatherton, 1994) in order to provide an overview of the structural relationships between the various constructs. With the partial aggregation model, the various indicators of a dimension are summated together to form the idea of a single underlying factor. The construct can then function as a predictor or

predicted variable in a structural equation model while taking into account measurement error in the measures of the construct (Bagozzi and Heatherton, 1994).

7.7.1 Overall model 1

In this model, culture was treated as an antecedent to both perceived risk and locus of control. The results for this structural model are shown in the diagram below.

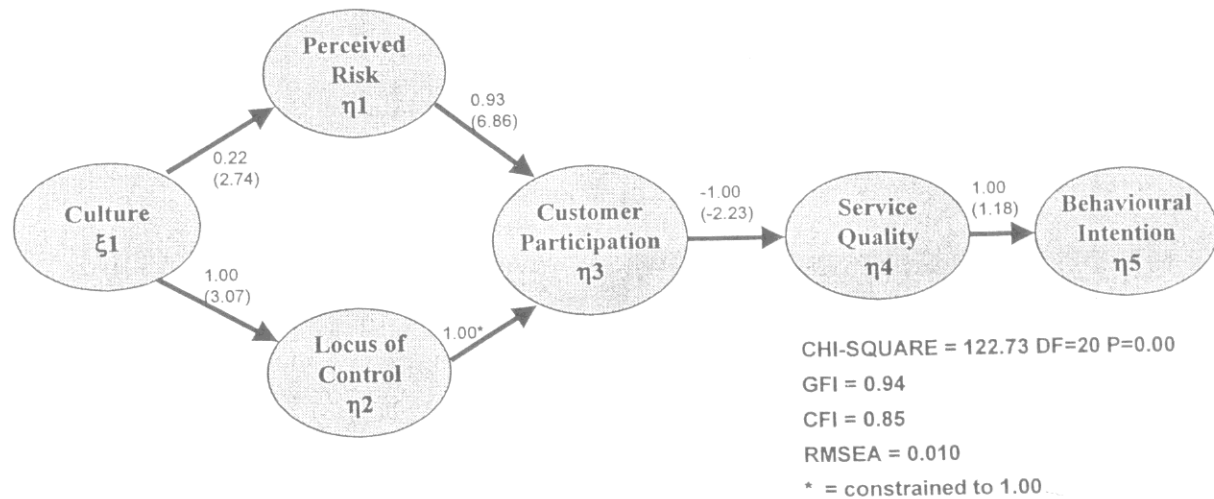


Figure 7-6: Results for Overall Model 1

This model yielded a chi square statistic of 122.73, 20 d.f. and $p = 0.00$. The GFI for this overall model is 0.94, which exceeds the recommended levels but the CFI falls short of this and is recorded at 0.85. The RMSEA was recorded at 0.010 which is slightly higher than the accepted level. In the overall model, all structural parameters are significant. All parameters in the model are significant except for the path from Service Quality to Behavioural Intentions. Also the path marked with an “*” denotes that this parameter was constrained to one to obtain a solution. Generally from this model, most of the expected directions of relationships between the constructs are confirmed with the exception of the path from Customer Participation to Service Quality, which has turned out to be negative.

7.7.2 Overall Model 2

In this model, culture was treated as a mediator to both perceived risk and locus of control. The results for this structural model are shown in the diagram below.

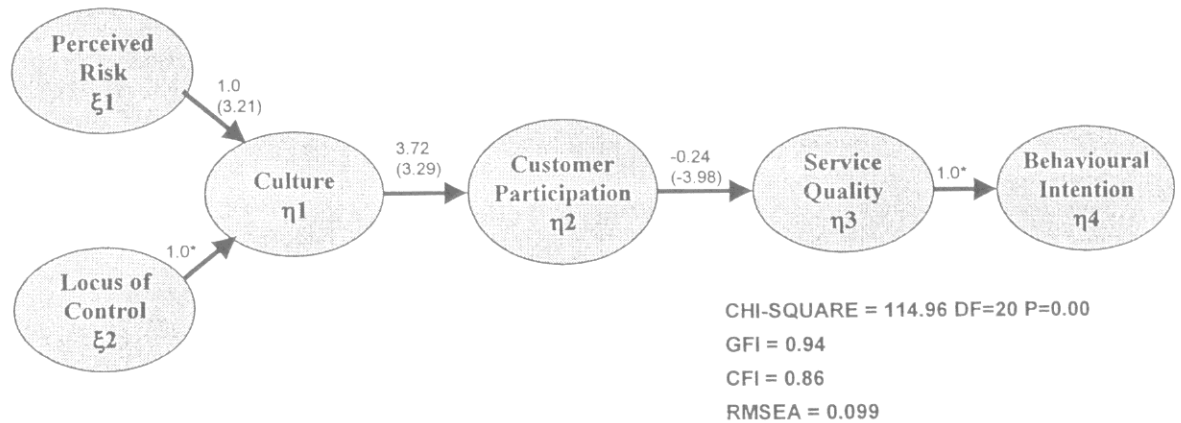


Figure 7-7: Results for Overall Model 2

This model yielded a chi square statistic of 114.96, 20 d.f. and $p = 0.00$. The GFI for this overall model is 0.94, which exceeds the recommended levels but the CFI falls short of this and is recorded at 0.86. The RMSEA was recorded at 0.099 which is slightly higher than the accepted level. In the overall model, all structural parameters are significant. Again as in the previous model the direction of the relationship between Customer Participation and Service Quality has turned out to be significantly negative, again refuting the previous suggestion that the relationship between these two was positive.

7.7.3 Overall Model 3

In this model, culture was treated as a moderator to both perceived risk and locus of control. To test this model, the dataset was divided firstly for those that possessed high and low levels of Integration values and also those with high and low Confucian Dynamism values. The reason for doing this is to test whether there are any difference between those with high Integration and low Integration on the path between Perceived Risk or Locus of Control and Customer Participation and also the same for high and low Confucian Work Dynamism. Therefore, there are four diagrams to show the results of these four tests.

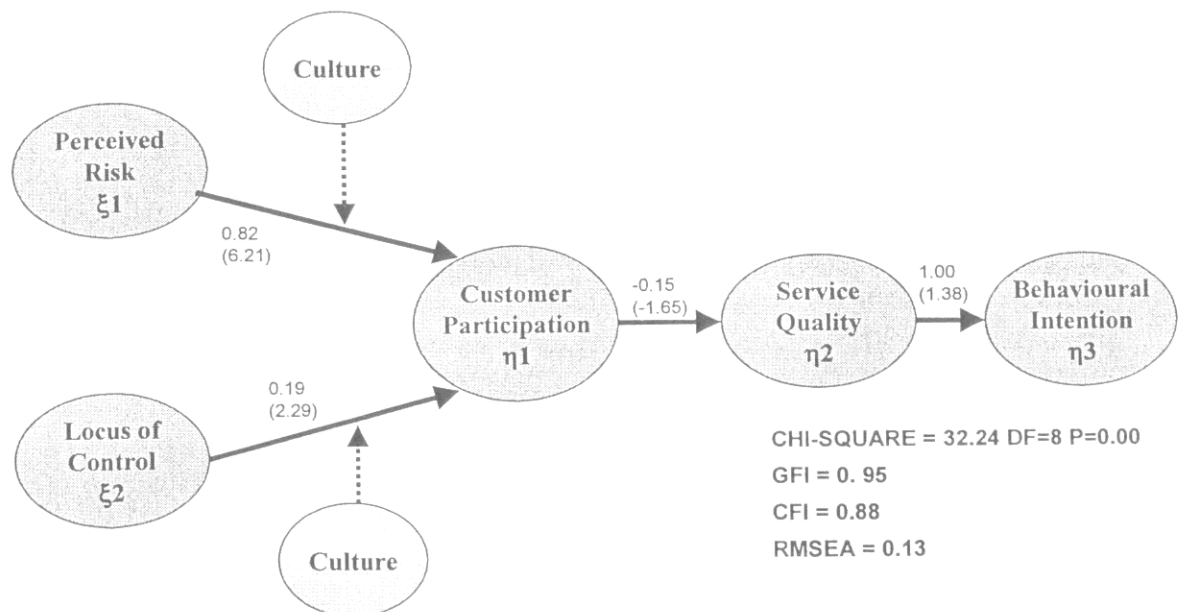


Figure 7-8: Results for Overall Model 3 (Low Confucian Work Dynamism)

This model yielded a chi square statistic of 32.24, 8 d.f. and $p = 0.00$. The GFI for this overall model is 0.95, which exceeds the recommended levels but the CFI falls short of this and is recorded at 0.88. The RMSEA was recorded at 0.013, which is higher than the accepted level. In the overall model, all structural parameters are significant. All parameters in the model are significant except for the path from Service Quality to Behavioural Intentions and the path from Customer

Participation to Service Quality.

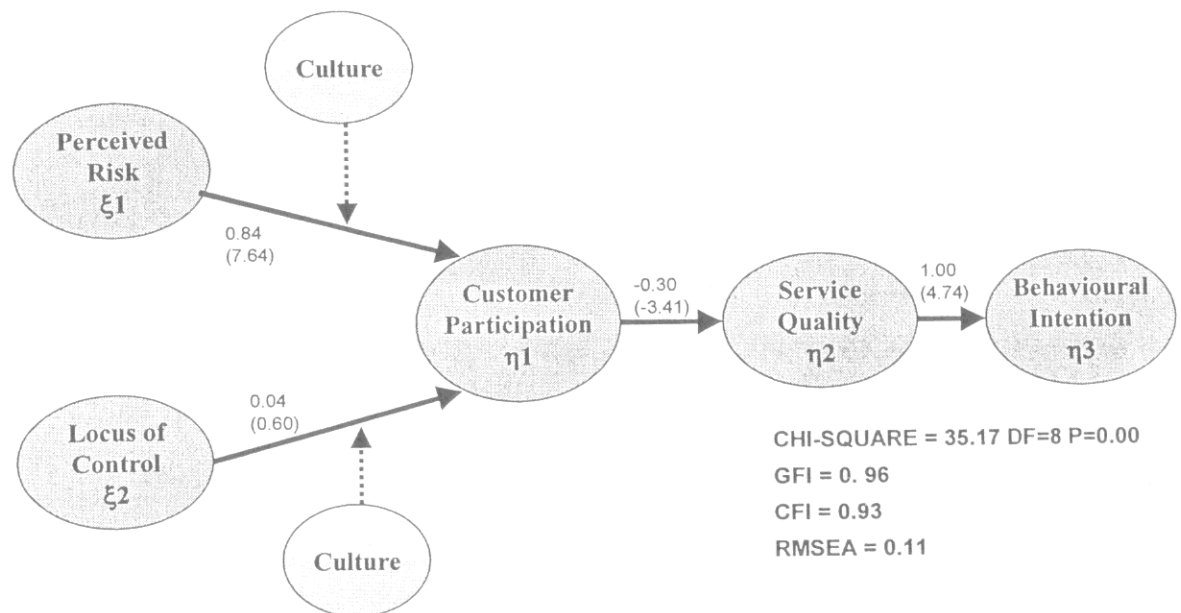


Figure 7-9: Results for Overall Model 3 (High Confucian Work Dynamism)

For the above model, which is for the high Confucian Work Dynamism group, the fit of the model is acceptable with a chi-square of 35.17, 8 d.f. and $p = 0.00$. The GFI for this overall model is 0.96, and the CFI is 0.93, which exceeds the recommended level. The RMSEA was recorded at 0.011, which is higher than the accepted level. The main difference between these two models is noticeably the moderating effect of culture on the path between Locus of Control and Customer Participation. However, there is little effect on the path between Perceived Risk and Customer Participation. Again in both of these models the path from Customer Participation to Service Quality is negative.

The following two models show the results for low and high Integration values.

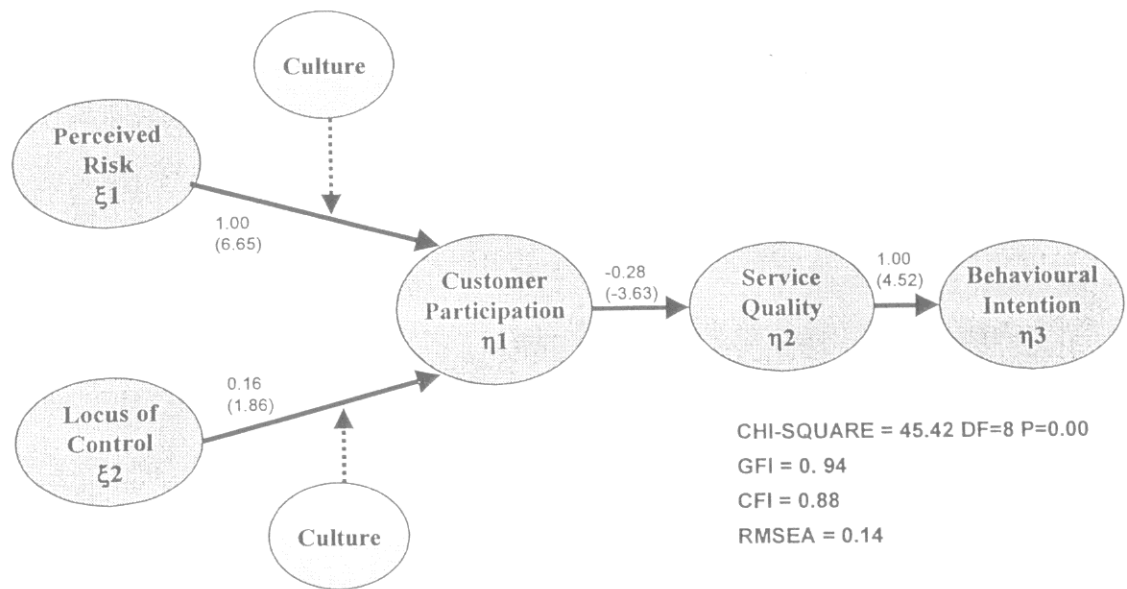


Figure 7-10; Results for Overall Model 3 (Low Integration)

The fit of the model not as good as the previous two models with a chi-square of 45.42, 8 d.f. and $p = 0.00$. The GFI for this overall model is 0.96, while the CFI is below the acceptable level at 0.88. The RMSEA was recorded at 0.014, which is higher than the accepted level. All parameters are significant with the exception of the path from Locus of Control to Customer Participation.

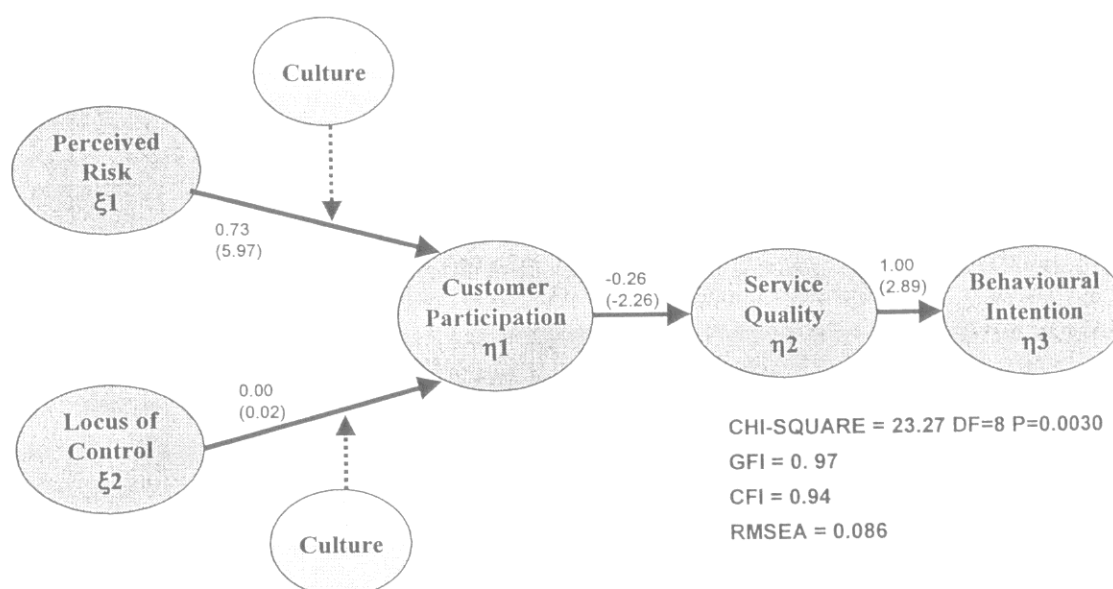


Figure 7-11: Results for Overall Model 3 (High Integration)

The fit for this model is better than the previous one slightly with a chi-square of 23.27, 8 d.f. and $p = 0.00$. The GFI for this overall model is 0.97 and the CFI is at 0.94, which is quite good. The RMSEA was recorded at 0.086, which is about acceptable. However, as before, all paths are significant with the exception of the one from Locus of Control to Customer Participation and in this case, the path coefficient is even zero.

7.8 Selecting the Most Appropriate Model

Based on the results provided in the tests of the various forms of the overall model, it seems that Model 1 is better, given its support also from theoretical foundations. The main exception to this is the result for the effect of Customer Participation on Service Quality. This has consistently been a negative relationship in all the forms of the overall model. This is an important finding as it seems to be quite a stable one too and refutes some of the theoretical arguments behind the

relationship between these two. Models 2 although, also quite good was not selected as a lot of the model had to be fixed in order to derive a solution. Culture as a moderator (overall model 3) has not revealed any significant results and so this is not deemed as a suitable overall model. Therefore, it seems that culture is best described in the context of this study as an antecedent to perceived risk and locus of control.

7.9 Structural Relationships between Constructs in Overall Model 1

The results of the relationships between the various constructs covered in Model 1 will be highlighted in the following sections. Detailed explanations on the findings will be provided in the next chapter.

7.9.1 Culture and Perceived Risk

The finding for this path is that a significant positive relationship exists between these two constructs as predicted. The reason for this is that individuals that score high on cultural variables would tend to adhere to the value dimensions of Integration and Confucian Work Dynamism more and therefore probably have a less tolerance for risk and would not be inclined to partake activities that may be deemed “risky”.

7.9.2 Culture and Locus of Control

Again the finding here supports the original proposition of a positive relationship between these two constructs. This may be attributable to the fact that customer that rate highly in the cultural values may prefer to partake in fewer activities in the service encounter and prefer to maintain status quo may also hold a mentality that a lot events and activities are outside of their control and therefore tend to be more externally focused in terms of locus of control.

7.9.3 Culture and Customer Participation

This study has shown that culture is more suitably described as having an indirect relationship on customer participation and that its effects are felt through the constructs of perceived risk and locus of control. However the findings seem to indicate that instead of the original proposition of a negative relationship, there is a positive relationship between these two constructs.

This finding is rather interesting and deserves examination into the possibilities behind such a result. Looking from the viewpoint of the Integration dimension, and its emphasis on maintaining harmony it could be likely that the customer may view that both the service provider and themselves share a common goal, namely a smooth service encounter and a resulting favourable service outcome. Therefore, they may be inclined to participate with the objective of achieving such a goal. Alternatively, due to the sharing of a mutual goal, the customer may view the service employee as being part of a group and therefore would participate in order to achieve a favourable service outcome. Such a finding may also be attributed to the value of the need to be tolerant. The customer may not decline or refuse to perform certain aspects of the service if asked as they may feel that it is required of them to ensure the achievement of the common goal. Therefore, in such instances the customer may be content to participate with certain service tasks.

From the viewpoint of Confucian Work Dynamism values and its emphasis on the need for ordering relationships; it could be possible this may influence the customer to participate in the service encounter due to the existence of an imbalance in power. It may be perceived by the customer that the service employee possesses a more dominant role in the service encounter as they are familiar with the service and direct the customer towards certain actions or tasks they need to fulfill.

The need to maintain face and avoid loss of face is an important value in

Confucian Work Dynamism. Customers may be more inclined to participate in order to achieve a favourable outcome and avoid loss of face for both sides that would occur if service failure were to occur. Perhaps, some customers would be embarrassed or experience shame should service failure occur as failure may be attributed to their actions or lack of actions. It may also be likely that in the interest of maintaining steadiness that the customer performs certain service tasks in order to avoid extreme or adverse consequences thereby leading to a positive relationship between these two.

7.9.4 Perceived Risk and Customer Participation

The positive relationship between these two constructs has been verified by the empirical results. A possible reason behind this finding is that as services are usually seen as being more risky and its outcome difficult to determine, customers may thereby participate more in the process to reduce the magnitude of adverse consequences and increase the chances of a positive outcome (File et al., 1992).

7.9.5 Locus of Control and Customer Participation

A negative relationship was proposed between these two constructs. However, empirical work seems to indicate that the relationship between these two is positive. The Locus of Control construct has proved difficult and very often there is a need to fix this particular path value to one in order to obtain a solution. A possible reason for this occurrence could be that customers that are externally controlled may obey more readily certain instructions or tasks they are asked to perform whereas those that are internally controlled may not be so obedient.

7.9.6 Customer Participation and Perceived Service Quality

It was proposed that there would be a positive relationship between these two but the empirical results have consistently refuted this and instead report mainly a

significant negative relationship. Again, this is an interesting finding and deserves to be examined to uncover the possible reasons for this occurrence.

It may be likely when customers participate in the service process that they attribute the success of the service encounter to their own actions rather than the quality of service of the actual service provider. The customer may feel that the reason for the outcome is because of the extent of the input they contributed therefore, they would be more inclined to view the outcome as being their own hard work and effort rather than that of the service provider.

Another possibility for such an outcome in the study may also be related to the choice of services that were studied; therefore, caution should be exercised in extending such findings to other types of services that may be vastly different. The study asks respondents to rate their level of participation in the services of phone banking and tourism. In both these services, especially with phone banking there is little face to face interaction with the service employee, as the customer performs most of the tasks, therefore, under such circumstances it is plausible that a customer would attribute the outcome to themselves rather than the service provider.

It should also be noted that measurement of perceived service quality in the research was done using SERVPERF. However, closer examination of this instrument would reveal that some of the items actually ask the customer to assess certain elements of the service encounter including the service employee. However, it may be possible that for some of the sample, the use of these services entailed very minimal contact with service employees therefore, it may be possible that as a result of this, the importance of perceived service quality was somewhat reduced leading to the finding of a negative relationship between the two constructs.

7.9.7 Perceived Service Quality and Behavioural Intentions

The research originally proposed that a positive relationship between perceived service quality and behavioural intentions exists and this is also confirmed by the empirical results of the study, which indicate that. This finding is important in that it is an area that Gremler and Brown (1996) have argued as being relatively unexplored. The finding is also important in that unlike previous studies that have usually only considered one dimension of behavioural intentions such as Cronin and Taylor (1992), this study has shown that perceived service quality has a positive impact on intentions including repurchase intentions, intention to recommend the service as well as the intention to use or purchase related services from the service provider.

7.10 Multigroup Analysis Results

This part of the analysis will be based on using Overall Model 1 and involves examining whether the structural models operates in the same way when the sample is broken up into the various cultural groups and service types. Basically, it examines whether the structural model is equivalent across the various sub-groups. In order to perform multigroup analysis, it is first essential to establish the baseline model for the various subgroups before they are simultaneously tested for invariance. In the following sections, the baseline models for each of the subgroups will be illustrated and then the discussion on the multigroup analysis results for invariance testing will be provided. Elaborate discussion on the findings will be provided in the following chapter.

The testing of invariance of the structural models follows the procedures recommended by Byrne (1998) in that three hypotheses are considered: (i) the

number of underlying factors is equivalent; (ii) the pattern of factor loadings is equivalent; and (iii) that structural relations among the constructs are equivalent. First illustrated in the following diagrams are the baseline models for each cultural group and service type and their results.

7.10.1 Chinese Cultural Group

The diagram below shows the model as well as the estimates of the structural parameters of the model.

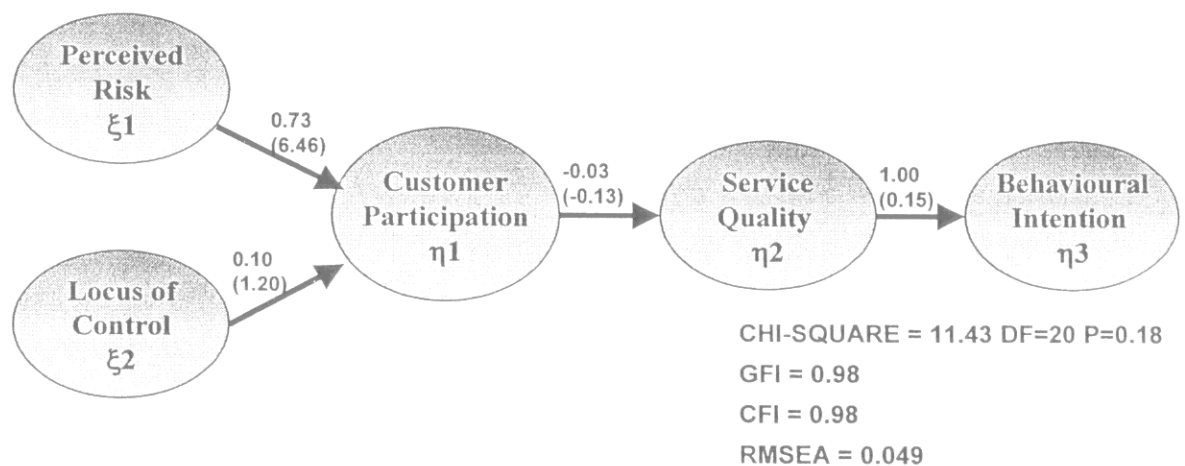


Figure 7-12: Chinese Cultural Group Structural Model

This model yielded a good fit with a chi square statistic of 11.43, 20 d.f. and $p = 0.18$. The GFI for this overall model is 0.98 and the CFI at 0.98, which exceed recommended levels. The RMSEA was recorded at 0.049. However, in this model the only parameter that is significant in the expected direction is Perceived Risk to Customer Participation. All the others are not significant.

7.10.2 Japanese Cultural Group

The diagram below shows the model as well as the estimates of the structural parameters of the model for the Japanese cultural group.

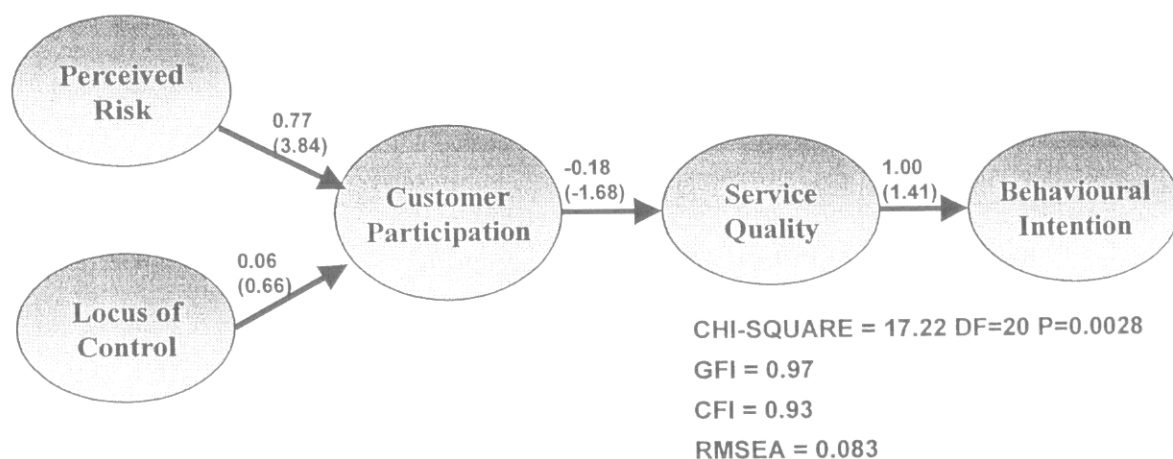


Figure 7-13: Japanese Cultural Group Structural Model

This model also yielded quite a good fit with a chi square statistic of 17.22, 20 d.f. and $p = 0.0028$. The GFI for this overall model is 0.97 and the CFI at 0.93, which exceed recommended levels. The RMSEA was recorded at 0.083. However, in this model the parameter estimates are not significant with the exception of the parameter estimate from Perceived Service Quality to Behavioural Intentions.

7.10.3 Western Cultural Group

The diagram below shows the model as well as the estimates of the structural parameters of the model.

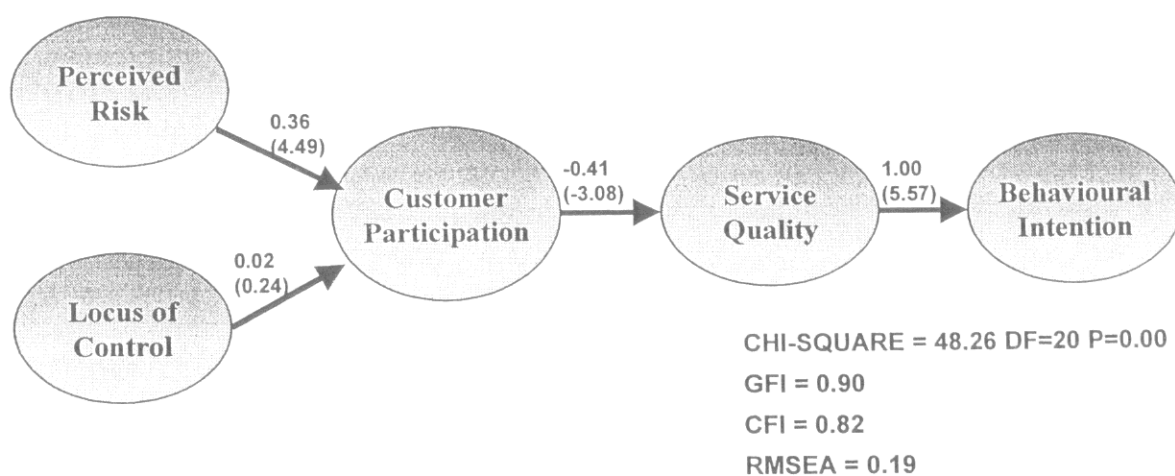


Figure 7-14: British Cultural Group Structural Model

This model yielded quite a moderate fit with a chi square statistic of 48.26, 20 d.f.

and $p = 0.00$. The GFI for this overall model is 0.90 and the CFI at 0.82 which falls below acceptable levels. The RMSEA is very high at 0.19 indicating a certain amount of error in this model. All parameter estimates are significant with the exception of the path from Locus of Control to Customer Participation.

7.10.4 Banking Service

The diagram below shows the model as well as the estimates of the structural parameters of the model.

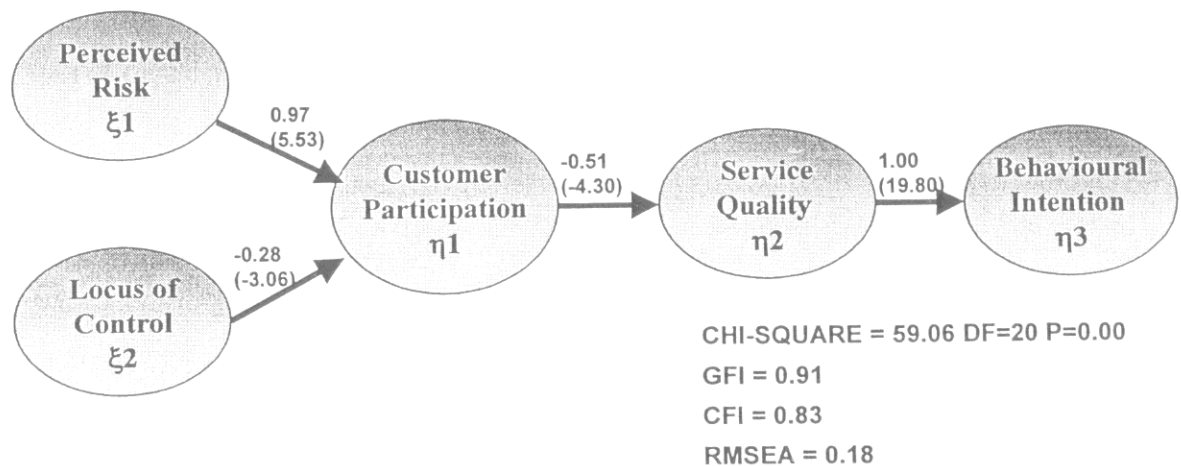


Figure 7-15: Banking Service Structural Model

The fit statistics for this model are moderate with a chi square statistic of 59.06, 20 d.f. and $p = 0.00$. The GFI for this overall model is 0.91 and the CFI at 0.83 which falls below the expected level and RMSEA is also quite high at 0.18 indicating significant error in the model. All parameters in the model are significant and in the expected direction with the exception of Locus of Control to Customer Participation and from Customer Participation to Service Quality.

7.10.5 Tourism Service

The diagram below shows the model as well as the estimates of the structural parameters of the model.

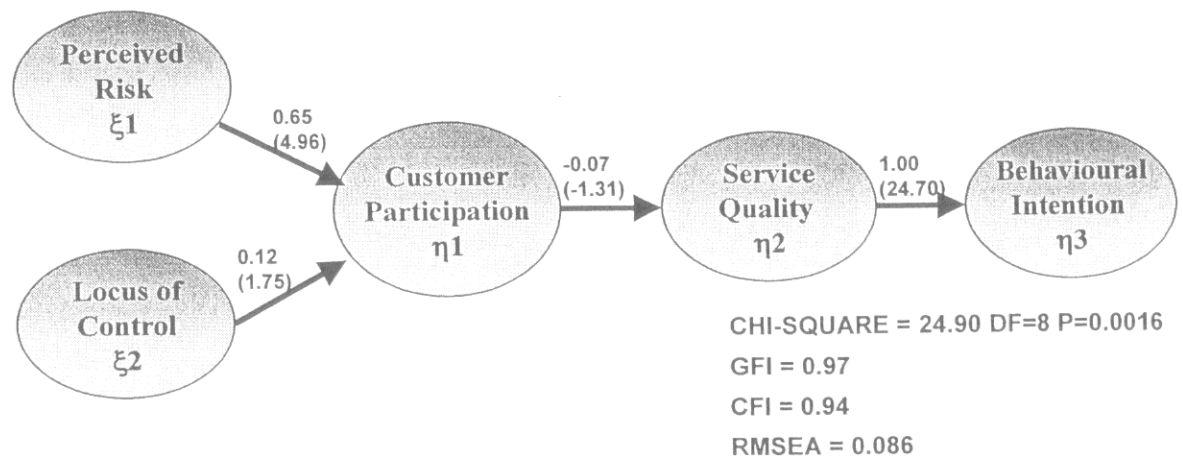


Figure 7-16: Tourism Service Structural Model

Compared with the previous model for banking, the tourism baseline model yields a better fit with a chi square statistic of 24.90, 8 d.f. and $p = 0.00$. The GFI for this overall model is 0.97 and the CFI at 0.94. The RMSEA was recorded at 0.065 and is slightly higher than recommended levels. In this baseline model the parameters are significant with the exception of Locus of Control to Customer Participation and Customer Participation to Service Quality.

7.11 Testing of Invariance in the Cultural Groups

Multigroup analysis was conducted to explore whether the structural models would be the same across the different cultural groups. The procedure used to conduct this analysis has been outlined by Byrne (1998). With multigroup analysis, certain parameters in the structural model are sequentially constrained to be equivalent across the various groups of data. By examining the differences in chi-square and whether the difference is significant gives an indication as to the areas where there are significant differences in the structural models between the various groups.

The findings for the multigroup analysis on the cultural groups are detailed in the table below:

Model	χ^2	D.F.	$\Delta\chi^2$	$\Delta D.F.$	ECVI	RMSEA	GFI	CFI
1	76.92	18	-	-	0.34	0.14	0.90	0.89
2	81.24	26	4.32	8	0.31	0.11	0.90	0.90
3	6898.43	36	6817.19**	10	1.79	0.37	0.11	0.85
4	1387.87	40	-5510.56**	4	0.67	0.19	0.83	0.83

* Significant at $p=0.05$

** Significant at $p=0.01$

Model 1 = Baseline Model

Model 2 = Testing equivalence of underlying factors

Model 3 = Testing equivalence of factor loadings

Model 4 = Testing equivalence of structural relations

D.F. = degrees of freedom

ECVI = Expected Cross Validation Index

RMSEA = Root Mean Square Error of Approximation

GFI = Goodness of Fit Index

CFI = Comparative Fit Index

Table 23: Multigroup Analysis Results for Cultural Groups

From the results, it was found that there are significant differences only in the pattern of factor loadings and in the structural paths. This indicates that there is difference between how the different cultures view Customer Participation, hence strengthening the need to consider this concept in light of cultural differences. However, when examining the actual coefficients, it can be seen that the values of these coefficients for the Chinese and Japanese groups are quite close and differ quite a bit from the British group. Although the actual values of these coefficients differ, there are some commonalities between the three cultural groups; such as the paths from Perceived Risk and Customer Participation are all significantly positive, Locus of Control to Customer Participation is not at all significant indicating that perhaps this is not a construct that affects the level of Customer Participation. It should also be noted that in all three cultural groups, the relationship between Customer Participation and Service Quality is a negative one, indicating that more

participation would mean a lower perception of quality. It has also been found that the path from Service Quality to Behavioural Intentions is only significant in the British group thereby providing further evidence to support the theory between these two based on Western subjects may not always be applicable to other cultures.

7.12 Testing of Invariance in the Service Types

The findings for the multigroup analysis based on service type are detailed in the table below:

Model	χ^2	D.F.	$\Delta\chi^2$	Δ D.F.	ECVI	RMSEA	GFI	CFI
1	83.96	12	-	-	0.29	0.15	0.97	0.88
2	1066.44	16	4	982.48**	0.85	0.30	0.81	0.79
3	1121.72	21	5	55.28**	1.21	0.32	0.84	0.77
4	-	-	-	-	-	-	-	-

* Significant at $p=0.05$

** Significant at $p=0.01$

Model 1 = Baseline Model

Model 2 = Testing equivalence of underlying factors

Model 3 = Testing equivalence of factor loadings

Model 4 = Testing equivalence of structural relations

D.F. = degrees of freedom

ECVI = Expected Cross Validation Index

RMSEA = Root Mean Square Error of Approximation

GFI = Goodness of Fit Index

CFI = Comparative Fit Index

Table 24: Multigroup Analysis Results for Service Type

Based on the findings, it can be seen that there are significant differences at the pattern of factor loadings and the underlying factor structure indicating again there are differences not only in the loadings but also perhaps the types of construct at play in the different service types. It was found during the formation of these baseline models that telephone banking seemed to have higher factor loadings for the various constructs in comparison to tourism. A probable reason could be the complete lack of human interaction in the phone-banking situation, which ultimately means that the

customer will perform the majority of the service task.

Another major difference was the sign of the relationship of the path from Locus of Control to Customer Participation. In the banking service, this was a negative relationship while in the tourism service it was a positive relationship. This could indicate that as customers were more externally oriented in terms of control, there would be less tendency to participate, this perhaps is feasible if fear of making mistakes when using the service could lead to financial loss, hence reluctance to use to service delivery mode. But the case for tourism is slightly different, tourism is a service type that is perhaps more of a high participation type (see Table 1 on page 35 for reference) thereby meaning that if a desirable outcome was preferable, it may mean that the customer will also have to actively take part in activities, making the relationship between these two constructs a positive one.

7.13 Chapter Summary

The results of the research have been interesting with the empirical findings with some being quite different from the original propositions of the research. However, the findings are still interpretable. It has been found that there are significant differences to the overall structural model according to cultural group as well as service type.

Lastly, the research has shown mixed findings to some of the theories that have been empirically or conceptually derived about customer participation and its supposed linkage to other constructs. The implications of the research findings will be discussed in the following.

Chapter 8 DISCUSSION AND IMPLICATIONS

8.1 *Introduction*

This research has attempted to construct a quantitative scale to measure the phenomenon of customer participation as well as examine some of the possible antecedents and consequences of customer participation and finally also to examine the role of culture on customer participation. Chapters 2 and 3 of the thesis covered the literature the broader body of literature as well as the narrowed literature when viewing participation for services only and served as a basis for development of the conceptual framework. Chapter 4 served to specify the models that would be tested as part of overall theory testing. The research methodology employed to conduct all phases of the research was extensively covered in Chapter 5 as well as the reasons for using certain techniques. Chapters 6 and 7 provide the results from the qualitative data and pilot test as well as the quantitative data respectively. Drawing to a near close, this section of the thesis aims to draw together in a logical framework, the findings from the research as well as present a discussion on the contributions of the research and also some of the limitation faced by this study. Finally, directions for future possible research and concluding remarks are also given.

8.2 *Overall Evaluation of the Research Objectives*

One of the research objectives in the study was to devise a way to measure the construct of customer participation in order to gain better understanding of this necessary part of the service process. Previous research on the area has been

hampered due to the unavailability of a published scale to measure customer participation. In cases where empirical work was conducted, participation was often operationalised as a single-item construct. Therefore, given that customer participation is a necessary part of the service process and it has potential benefits for both service provider and customer, one of the most preliminary steps that must be taken is to investigate what it is composed of, in order to fully understand its properties. These issues gave rise to the research objectives of the study, which are reproduced in the list below:

1. To develop an instrument to measure the construct of customer participation;
2. to examine the cultural effects on customer participation; and
3. to investigate the effect of customer participation on customer perceptions of service quality, and ultimately on behavioural intentions toward the service.

Each of these objectives and their attainment will be discussed in the following sections.

Research objective 1 has been achieved partially in the research with the end result being an eight-item scale that taps the two components of customer participation, namely, "Behavioural Oriented" and "Information Oriented". Although in the initial literature review work, customer participation was conceptualised as being made up of the three factors of perceived effort, task complexity, and information searching; empirical work has shown that a two-factor structure underlies the data. It was found that the factors of perceived effort and task

loaded together. One of the reasons given for this was perhaps that respondents could not distinguish between the two and regarded them as both possessing behavioural elements. Results on the scale seem promising and the scale has performed quite well in exploratory and confirmatory factor analysis. The work done here also signals that the scale could perhaps be extended for further research in examining customer participation in other service contexts.

In particular, the work has noted that perhaps there are certain elements that have not yet been captured in the scale that could also add further explanatory power. Such dimensions could include items pertaining to the knowledge level of the customer in using a particular service. This is important as it is likely that as a customer becomes more familiar with the service, they may not need to participate as much as they are well aware of their task and what is required of them. Another dimension that could be captured is that relating to whether the service is used out of choice. If a customer is forced to use a particular service delivery option, they may not be willing to exert much effort into performing a task, whereas those that choose to use a service type may be more participative as they would be more enthusiastic. A further dimension that could also be considered in future research is to examine the types of trade-offs or the benefits the customer derives from using a service option that entails greater customer participation. Therefore, the work on the scale at the moment represents a good start and there exists several dimensions that could be considered in order to make the scale better for further research.

The second research objective examines the effects of cultural differences on customer participation. One of the major reasons behind this objective was the suggestion by researchers such as Winsted (1997a; 1997b) who have argued that performance in the service encounter is often influenced by cultural values as these

impact the way in which socialisation among individuals occurs. One of the first things this research set out to do was to investigate the role of culture on customer participation. This gave rise to various overall models that considered the different roles of culture, namely as an antecedent, a mediator and a moderator. Results and theoretical support show that culture, as an antecedent is suitable for this research.

Based on the model of culture as an antecedent, investigations were also conducted to see whether there were significant differences between the three different cultural groups in terms of their intensity of customer participation. Findings at this stage have indicated that there are significant differences in the pattern of factor loadings as well as the structural coefficients, meaning that customer participation may be perceived differently from various cultural groups. The findings in this research have indicated the similarities between the Chinese and Japanese group and the difference between these two eastern cultures with the British group. A reason for this occurrence can be explained by the fact that both Chinese and Japanese cultures share a similar history in that both cultures have embraced the teachings of Confucius in their values. This is what distinguishes them from Western cultures.

The third research objective was also addressed in the research. It also covered previous empirically or conceptually derived arguments that customer participation affected service quality (Kelley et al., 1990; Ennew and Binks, 1999) and ultimately through service quality, affected behavioural intentions (File et al., 1992). Therefore, this objective of the research which served as the unveiling of some possible antecedents and consequences was also fulfilled as examination of these factors was all undertaken although the some results were not as expected. Perhaps the most surprising finding is that the relationship between Customer

Participation and Perceived Service Quality is not a positive one as proclaimed but proved to be a consistently negative relationship in all the models. Another finding is the failure of Locus of Control to provide any significant effects on customer participation. This could indicate that this is not a variable that has a large effect on customer participation and the need for future research to consider some other constructs that could be potential antecedents.

Therefore, all research objectives of the study have been covered and their findings as well as the reasons behind them are discussed in further detail in the next section.

8.3 *Summary of Research Findings*

This section is partitioned into the separate constructs and findings from the analysis will be discussed.

8.3.1 *Customer Participation*

The research has uncovered an eight-item scale, comprised of two first order factors of “Behavioural Oriented” and “Information Oriented” as well as a higher order factor labeled “Participation” to measure the construct of customer participation. The reliability and validity of this scale is quite good and remains suitable for further research to validate its properties.

The factor of “Behavioural Oriented” was formed by the merging of the conceptual factors of perceived effort and task. All of the items in this factor reflect behavioural actions that are taken by the consumer in the service process. The factor of “Information Oriented” is slightly different from the way information is used in traditional involvement theory. In traditional involvement theory, information has

been used in an evaluative capacity. However, one of the differences in the use of information in the service context here is the fact that information searching relates to looking for details about the service itself, and how to use the service. Perhaps, this is an area that involvement has been unable to capture when applied to a service context.

One of the most important findings of the study have been the negative relationship between customer participation and perceived service quality. It was originally hypothesized and also suggested in some literature that increased customer participation would lead to higher levels of service quality perception. The results yielded from this study have suggested otherwise. However, perhaps, one of the reasons for the negative relationship to service quality could perhaps be attributed to the fact that participation ultimately entails the consumer to perform some of the tasks. It could be possible that in the services examined, the customers often felt that much of the service process was carried out by themselves, therefore, they would attribute much of the success of the outcome of the service to themselves. This is a line of argument that has been suggested by Silpakit and Fisk (1985). Since service quality is an evaluation of the performance of the service provider, it could be possible that customers felt that most of the service was actually performed by them and not the service provider, which could be a possible reason for service quality not being significant and negative in the structural models. However, as before, this is also largely debatable as the findings here are of a preliminary nature.

As mentioned earlier, the work on the scale is preliminary and has revealed the possibility of other dimensions existing as part of participation. Some possible dimensions that could explain this construct include the knowledge level of the customer, the benefits and trade-offs the customer needs to make, and whether the

customer willingly uses a service delivery options that involves a higher level of participation.

8.3.2 Culture

Culture was measured using the 13 items that comprised of both Integration values and Confucian Work Dynamism values from the Chinese Value Survey. Due to the amount of work already conducted on this scale, the items were only subjected to exploratory factor analysis in the interest of item parsimony. However, it was found that many of the items that make up this scale had little correlation with each other and the items did not separate into the two factors as expected. This scale also had low reliability and signals that there may still be considerable work needed on this scale in order for it to be used in a stable manner across different research settings.

The work done in the research has shown that culture exerts a positive indirect effect on participation through the variables of perceived risk and locus of control. Although it was originally expected the relationship between culture and customer participation would be a negative one, the empirical results have shown the opposite. A possible reason for this could be the fact that ultimately the customer would like to a favourable service outcome and understands that they may be required to perform some tasks in order to achieve this. Conversely, some consumers may associate the act of participation as a means to maintain harmony in the service transaction and a way to preserve face for both the customer and service provider.

8.3.3 Perceived Risk

The final perceived risk scale was composed of seven items. These seven items tapped all six components of risk, and formed a unidimensional construct.

This approach constitutes what is known as the component approach to measuring risk. Although many previous risks studies (Mitchell, 1999; Dowling and Staelin, 1994) argued that a two-factor approach to conceptualising the construct of risk is suitable, it can be debated that this is not the case here. In the two-factor approach, risk is often regarded as being made up of uncertainty and consequences. However, with the component approach to measuring risk, the consumer is only asked to state their perception on the severity of the different types of risk consequences or losses. There is no attempt to measure the uncertainty component as there is often much confusion surrounding the precise definition of uncertainty. Besides, George and Tsou (1984) have argued that the component method is superior as it allows for the identification of the different aspects of risk.

In this study, perceived risk has been shown to exert a positive influence on customer participation as originally proposed. This further strengthens the argument that customer participation could be a method to reduce the level of perceived risk.

8.3.4 Locus of Control

Support from Lumpkin and Hunt (1989) justified the use of only the first three items to measure the construct of locus of control. Although the alpha obtained in this research compares favourably with the one obtained from the Lumpkin and Hunt (1989) study, there are still some reservations about this scale. The scale has achieved a very low Cronbach alpha that does not meet Nunnally's (1978) recommended level of 0.70. The lack of reliability needs to be dealt with as it also signifies that the three items do not adequately capture the domain of locus of control. Therefore, care should be exercised when interpreting any results using this scale. In this study the locus of control construct has not proved to have much explanatory power in terms of its effect on customer participation. In virtually all

models, the path from locus of control to customer participation has been insignificant and also in most cases positive as originally argued. However, the weakness of this scale needs to be taken into account.

8.3.5 Perceived Service Quality

Initial exploratory factor analysis on perceived service quality produced a three-factor solution. However, they were still used a priori as a unidimensional construct as has been done by Cronin and Taylor (1992). The fact that the number of dimensions is different from the work of Cronin and Taylor (1992) may also exemplify the fact that like its counterpart SERVQUAL, the number of dimensions may also be dependent on the type of industries being studied. In the structural model of the impact that perceived service quality had on behavioural intentions, complete support for the positive relationship as argued in the literature was found in all models regardless of cultural group and service type. Thereby indicating that high levels of perceived service quality result in favourable behavioural intentions.

8.3.6 Behavioural Intentions

The behavioural intentions scale used reflected only three of some of the more common types of behavioural intentions studied. Although each type of intention was measured using a single-item measure, this is a practice that has been used in numerous pieces of work in the area including Boulding et al., (1993); Cronin and Taylor, (1992); and Taylor et al. (1997).

In the research it was found that in most cases there was a significant positive relationship between perceived service quality and behavioural intentions, similar to arguments presented such as those by Dick and Basu (1994), who debated that often perceived service quality acts as antecedent to service loyalty. However, Taylor et al. (1997) have argued that the construct of customer satisfaction moderated the

relationship between perceived service quality and purchase intentions. Their research suggested that satisfaction judgments appear to operate by affecting the strength and nature of the relationship between quality attitudes and subsequent purchase intentions. Taylor et al. (1997) also urged that future research consider the argument that service quality and satisfaction may both exhibit multiple levels of aggregation. Furthermore, Taylor et al. (1997) stated that if it is true that both these constructs are exhibited at the transaction-specific as well as global evaluation levels, then alternative models of the formation of consumers' purchase intentions might be developed that appear more robust across service settings. This argument can also be considered in future research, however, its validity is unknown here, as customer satisfaction was not included within the scope of study, however, this remains an interesting suggestion.

8.4 *Contributions of the Research*

The main contribution of this research has been to uncover the role of culture in customer participation as well as understand some of the effects that culture can exert. It has also verified the need to consider certain constructs in light of cultural differences and to cautiously treat theories that have been formulated based on western subjects in a western context and "transplant" them into situations of other cultures such as eastern cultures in this case.

Another contribution is the construction of a tool to measure the construct of customer participation. This is necessary if we are to understand the potential benefits of this construct and the benefits for both customers and service providers to be reaped. It is simply not enough to be satisfied with one-item conceptualisations of customer participation as used in the past, which this research has demonstrated.

It is also a priority to discover the components of customer participation before making any assumptions of its effect on other constructs, thereby making potential contribution to theory building in this area. The first step towards construction of a scale has overcome a major barrier that has existed in the research on customer participation. Hopefully, the work here can act, as a platform for future research on the construct although the work here has revealed there could be other possible dimensions that could be part of this scale.

The research has taken the body of examined antecedents and consequences of customer participation and examined them in a way that has not been used before, namely with causal analysis, the examination of the structural paths between the latent constructs using real data. Past studies have not incorporated this method into their work and have often relied on methods such as regression. However, the use of structural equation modeling provides a much more powerful explanation as to the relationships and the direction of causality. The latent constructs were examined in an integrated framework, something that has not been common in past research. Past research has mainly looked at the relationship between two constructs, customer participation and usually another one such as perceived service quality.

The research has also taken customer participation theory one step further by examining it in a different service context. Past studies such as Cermak et al. (1994) have examined customer participation empirically in hospitals (Kellogg and Chase, 1995); the establishment of charitable trusts (Cermak et al., 1994); trust and estates planning (File et al., 1992). This study has examined customer participation in the more mainstream and common services of telephone banking and tourism. By looking at services that are more mainstream, it is hoped that the findings would be more applicable to larger groups of people unlike previous studies such as the ones

conducted by Cermak et al. (1994) and File et al. (1992) where they examined the setting up of trusts of at least US\$1 million. Obviously the findings from such research will be limited to be applicable to a very narrow segment of the population. Even Cermak et al. (1994) have admitted that their total population size (of people establishing charitable trusts in excess of US\$1 million) is probably only a few thousand. Therefore, the findings from their research are only relevant to a very small section. Although, professionals are used in the study for specific reasons, the percentage of professionals and associate professionals combined contributed 21% to Hong Kong's employed population. The size of the total employed population as of 1998 constituted 3.2 million (HKSAR, 1999). Therefore, although the findings from this research are based upon professionals and associate professionals, it is possible that the findings could be relevant to quite a substantial number of people unlike previous studies.

8.5 Research Implications

This discussion in this section will be split up into two types of implications, namely academic implications and managerial implications.

8.5.1 Academic Implications

The main implication of this research is the potential that it has provided in theory building and theory testing. The findings from the research are a reflection of the importance to consider the customer perspective in the service encounter as part of the quality that they receive from the service is attributable to the efforts they make in articulating their needs or how precisely they carry out certain service tasks. A lot of research in the past has centred on the importance of the service employee in creating service quality for the customer. It was along these lines of research that

topics such as employee empowerment have as a result become very popular over the past few years. The increasing awareness of the importance of customer participation brings the focus to the other side of the service dyad and is an important indication that the customer performs a vital input into the service process. The efforts placed in this research are only preliminary at this stage, however, the encouraging results should provide sufficient impetus into sparking more work into the area of customer participation to be conducted in order to bring into focus the important contribution that the customer makes. It is essential to bear in mind that the service encounter is a dyad composed of the service employee and the customer, it is simply not enough to just consider the employee perspective, but it is vital that both sides of the dyad be examined in order for the current boundaries of our knowledge to be expanded.

8.5.2 Managerial Implications

In terms of more practical implications of this study, the research still needs to be more refined in order to provide these accurately, however, some of the possible implications are provided.

The research has shown that services can be differentiated based on the amount of participation that is required by the customer. This presents possibilities for service providers in future new service development. In banking, for instance, some of the services they offer vary in terms of the amount of participation required. Branch banking with a human teller requires the least amount of customer participation as the teller performs most of the service tasks. On the other hand, use of the ATM for example requires high customer participation as the customer performs almost all service tasks. It would be possible for service providers to

consider the amount of customer participation required in their services when developing new ones. It is first essential, that service providers understand the participation preferences of their customers and develop new services accordingly.

It could also be possible for service marketers to segment their markets based on a preference of participation levels in order to better provide their markets with services that appeal to their preferred level of customer participation. By encouraging the customer to perform more service tasks through the use of automation in the context of retail banking for instance, the service provider could reap potential cost savings as well as enable the service to be accessed at anytime and increase its reach.

8.6 *Limitations of the Research*

Every research has limitations and this piece of research is of no exception. Below is a discussion of some of the areas that presented challenges and limitations to the research.

8.6.1 Further Scale Refinement for Participation

The work conducted so far has shown that one of the possible reasons that the findings have not been as expected could be that there are still additional dimensions of customer participation that could exist. So far, the research has suggested these could be knowledge of the customer, willingness to use the service and also study the benefits that could be derived by the customer. In the research that was done and some of the techniques that were used in the early stages, some items were deleted and it could also be possible that these items could have represented other possible dimensions of customer participation.

A limitation of the research is that there were no specific variables employed

to find out the knowledge of the customer towards the service task. It is possible that experienced customers would have a better idea or some form of expectation of the amount of participation that would be required from them in order to obtain a service.

Expectations were not measured and it is possible that this could be a determinant of the amount of effort that the customer is willing to put into the service process.

It may also be valuable to look into what motivates the use of options that involve greater customer participation such as examining time allocation and amount of resources that consumers have to spare. Looking into what types of benefits the customers derive as a result of participating could make the examination of the construct more complete, such as understanding whether intrinsic benefits are sought through participation; this could be in the form of higher self-esteem or a sense of accomplishment as a result of fulfilling certain service tasks. It will also involve looking at participation from a larger field of literature such as the home production function, which draws on foundations in economics. This should bring greater value when trying to generalize findings, if the theory can be fortified by theories in other established fields.

8.6.2 Measurement of Other Constructs

When considering the consistent result of the negative relationship between Customer Participation and Perceived Service Quality, a consideration of the underlying reason behind such an occurrence could well be due to the scale used to measure service quality itself. In the research, the SERVPERF scale was used, however, there are some items that may not be possible for respondents to answer properly given a lack of human interaction. This is particularly the case for the

phone banking service, where the majority of times, the transaction will be carried out by the customer unless they specifically select to use the customer sales representative. If most respondents do not encounter any human interaction in the service process, it may be difficult for them to properly evaluate the items that relate to the quality of service provided by the service employee.

Particular problems were also encountered with the locus of control construct and a possible reason for this is the weak scale, which had a very low coefficient alpha. This suggests that this scale is an area that needs to be refined.

8.6.3 Model Complexity

A lot of difficulty was encountered in generating solutions for the overall models due to the large number of variables. In order to overcome this barrier, analysis was conducted on an aggregated level through the use of partially aggregated models. In some cases, there was also a need to fix the covariances between variables to zero in order to reduce the number of data points that need to be estimated. Although this helped to alleviate the problem, it also is a limitation of the research. Perhaps, in future research it would be better to examine smaller sections of the model to fully capture the variables.

8.6.4 Sample

Another limitation of the research is the fact that data were obtained from only a specific segment of the population, i.e. professionals and associate professionals. The reasons for this have already been covered elsewhere and will not be repeated here. There is a possibility that in terms of generalisability of the results there may be some constraints. However, the work done here is still of value. It is possible that some of these findings may be generalised to other segments as services such as phone banking are now usually offered free of charge when a savings

account is opened, therefore, this type of service is no longer as exclusive as it once was.

8.6.5 Lack of large differences between cultural groups

This is a key insight obtained from the research. Originally it was expected that differences between the cultural groups would be quite large given the different intensity of values they held. However, the empirical work has shown the differences to be quite small among the groups. A possible explanation could be that developed countries like Hong Kong and Japan are to an extent quite westernized and are exposed to western influences and culture through different aspects of life such as food, entertainment and media. As these cultures are exposed to western influences, it could explain the narrowing differences between the cultural groups.

8.6.6 Types of Services Studied

In hindsight, perhaps the selection of the services for the study did not allow alternative options that differed significantly in terms of customer participation and also does not measure how willing customers are to use that particular option. In particular, although phone banking was considered even by members of the focus group to be a high participation service option in comparison to the ATM or the human teller, it may be possible that customers do not perceive a significant amount of variation between the different service options because even if they select phone banking, the process they go through is still rather standardised. The FIT option does fit the need for significant variation from the tour option; however, the package tour option may still be the prevalent choice given that most people often take short holidays and would like to squeeze in as much they can in the limited time. Also, it may be possible that those customers that do prefer the FIT option may tend to be more westernized as in western countries often the use of the FIT option is prevalent.

All these issues could give rise to a lack of large variation between the findings obtained from the three cultural groups. Therefore, in future research selection of services will have to undertaken very carefully to incorporate this.

8.7 Directions for Future Research

This research has paved the way for other avenues to be pursued later on. Firstly, as one of the limitations that were mentioned earlier was the lack of any variables employed to measure the knowledge or experience of the customer towards the service, it would be beneficial to future research to include such items. Furthermore, it may also be possible to partition customer participation into that which is required and also participation that is above and beyond what is necessary to complete the service task. Given the popularity of the Confirmation/Disconfirmation paradigm in the marketing field, it may also possible in future research to measure expectations of customer participation and to assess whether this has any effect on other constructs such as service quality or customer satisfaction with the service.

Other areas that need to be considered include understanding some of the cost and benefits customers' trade-off as a result of using the option that entails more participation. Perhaps some of the findings have not been as expected as in the services studied here, the option of higher service delivery also comes at a higher price, hence this could raise the expectation level of customers and make them less easy to satisfy and probably lead to a lower perception of quality. Unlike self-services which are usually cheaper the options studied here such as FIT option and the phone banking option come at a higher price than the group package and ATM or human teller option respectively.

It would also be beneficial to understand whether the use of the option was out of choice or not as this would impact the enthusiasm of the customer and ultimately the participation they would exert.

The service options that entail greater participation tend to be a more time-consuming choice than their other counterparts and it would be useful to understand some of the benefits the customer perceive they are receiving as a result of spending more time to obtain the service. This could bring greater understanding on what motivates customers to use high participation options.

It would be of great benefit to examine customer participation in other service types to further verify whether the same factor structure of customer participation holds. Testing on a variety of services could facilitate with generalisability and is important especially in Hong Kong, which is a service-based economy that contributes very significantly each year to GDP. Testing the scale in other contexts is essential to see if the findings still hold and would do the scale much benefit. Perhaps, it would be possible to someday eventually construct a service typology based upon levels of participation.

The scale and research should also be replicated in the other participative forms of service such as the advent of Internet banking. This is an important area for research due to the growing importance of the Internet in all sectors. Both banking and tourism are areas that have been services that are digitalised and are available on the Internet. This can be seen by the popularity of Internet Banking in Hong Kong. Tourism has also benefited from being online as witnessed by the popularity of sites such as Travelocity.com. When services are offered on-line, it necessarily entails that the customer participates more as they are required to make choices as in the case of the travelocity.com site, they are required to provide information and the

whole service process can be conducted online without the physical presence of the service provider. This perhaps, can be a signal of the growing importance of customer participation, with the advent of online services, and it seems that customer participation will become very much a fact of life when purchasing certain services online. With banking, as most other financial services such as stocks and shares purchasing, these are services that are easily converted to an online form, which relies very heavily on customer participation in order to create a transaction and the service offer. Therefore, customer participation should also be examined in these newer online services as it is perhaps viable to say that online services would probably require more customer participation than traditional services delivered in the actual service encounter between service provider and customer.

8.8 Chapter Summary

This study set out to examine the role of culture on customer participation and what customer participation was as well as some of the after effects of customer participation and its possible antecedents.

The findings in the context of this study have shown culture to be best described as an antecedent and that regardless of culture; the constructs in the overall model are equivalent although their intensity differs. Therefore, the structure of the overall model is stable. The findings also show that the results for the Japanese and Chinese groups are quite close and differ from the British group, a possibly underlying reason being that they share similar philosophies in their cultural values, stressing the need to be mindful of culture when examining marketing constructs in other cultural contexts.

The research has begun to uncover some of the unanswered questions in the

literature. It has also opened the door to other avenues of research and outlined some of the challenges that were encountered and how they can be overcome in future research initiatives. I hope that with this work, I have provided some insight into this recognised but relatively unexplored construct in the services marketing domain.

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APPENDIX A: ENGLISH VERSION OF BANKING QUESTIONNAIRE

Customer Participation in Services

**A survey on customer participation and
service quality**

**Department of Business Studies
Hong Kong Polytechnic University**

PART A: CULTURAL VALUES

Please read each item below and indicate the level of importance of each item to you personally by circling the appropriate number.

		no importance at all							of supreme importance	
		1	2	3	4	5	6	7	8	9
A.1	Ordering relationships by status and observing this order.	1	2	3	4	5	6	7	8	9
A.2	Thrift.	1	2	3	4	5	6	7	8	9
A.3	Persistence. (Perseverance)	1	2	3	4	5	6	7	8	9
A.4	Having a sense of shame.	1	2	3	4	5	6	7	8	9
A.5	Reciprocation of greetings, favours and gifts.	1	2	3	4	5	6	7	8	9
A.6	Personal steadiness and stability.	1	2	3	4	5	6	7	8	9
A.7	Protecting your "face".	1	2	3	4	5	6	7	8	9
A.8	Respect for tradition.	1	2	3	4	5	6	7	8	9
A.9	Tolerance of others.	1	2	3	4	5	6	7	8	9
A.10	Harmony with others.	1	2	3	4	5	6	7	8	9
A.11	Solidarity with others.	1	2	3	4	5	6	7	8	9
A.12	Non-competitiveness.	1	2	3	4	5	6	7	8	9
A.13	Trustworthiness.	1	2	3	4	5	6	7	8	9
A.14	Contentedness with one's position in life.	1	2	3	4	5	6	7	8	9
A.15	Being conservative.	1	2	3	4	5	6	7	8	9
A.16	A close, intimate friend.	1	2	3	4	5	6	7	8	9

PART B:

In this part of the questionnaire, please indicate the extent of your agreement or disagreement with the following statements about the particular type of service by circling the number that best describes your response.

Please use the following scale to indicate the strength of your agreement or disagreement with the following statements.

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6

B1) TELEPHONE BANKING

Do you use telephone banking services? ☐ yes ☐ no
(If you ticked "no" please proceed to section B1.3 on page 4)

		<u>strongly disagree</u>					<u>strongly agree</u>
		1	2	3	4	5	6
B1	I need to exert a lot of energy to use this service.						
B2	I need to be persistent to use this service.						
B3	I need to spend a lot of time to use this service.						
B4	Too much intellectual effort is needed when using this service.						
B5	The use of this service involves many steps and stages.						
B6	I need to have prior knowledge of this service in order to understand how to use it.						
B7	This is an easy service to use.						
B8	I have searched for information on what this service offers.						
B9	I have searched for information on where this service is available.						
B10	I have searched for information on how to use this service.						

PART C:

This section is related to the intensity of the various types of risk that can be found in this service. There are no right or wrong answers, please state the strength of agreement or disagreement to the following statements by circling the appropriate number.

		<u>strongly</u> <u>disagree</u>				<u>strongly</u> <u>agree</u>	
		1	2	3	4	5	6
C1	I would be held in higher esteem by my colleagues at work if I used this service.	1	2	3	4	5	6
C2	I would be thought of as foolish by my friends if I used this service.	1	2	3	4	5	6
C3	I need to spend a lot of time learning how to use the service beforehand.	1	2	3	4	5	6
C4	Using this service leads to an efficient use of time.	1	2	3	4	5	6
C5	There is a risk of having my personal identity number (PIN) misused which would result in financial loss with this service.	1	2	3	4	5	6
C6	I am worried that the service may not perform as it is supposed to.	1	2	3	4	5	6
C7	I am concerned about the potential physical risks of using this service.	1	2	3	4	5	6
C8	The use of this service gives me a feeling of anxiety.	1	2	3	4	5	6
C9	The use of this service makes me feel psychologically uncomfortable.	1	2	3	4	5	6

PART D:

In this section please indicate whether you agree or disagree with each statement. There are no right or wrong answers. Indicate your response by circling the number that most closely corresponds to the way you personally feel.

		<u>strongly disagree</u>				<u>strongly agree</u>	
D1	When I make plans, I am almost certain that I can make them work.	1	2	3	4	5	6
D2	Getting people to do the right things depends upon ability, luck has nothing to do with it.	1	2	3	4	5	6
D3	What happens to me is my own doing.	1	2	3	4	5	6
D4	Many of the unhappy things in people's lives are partly due to bad luck.	1	2	3	4	5	6
D5	Getting a good job depends mainly on being in the right place at the right time.	1	2	3	4	5	6
D6	Many times I feel that I have little influence over the things that happen to me.	1	2	3	4	5	6

PART E:

The following set of statements relates to your feelings about the retail bank that offers you the telephone banking service. For each statement, please show the extent to which you believe your bank has the feature described by the statement. Indicate the strength of your agreement or disagreement by circling the appropriate number.

		<u>strongly disagree</u>				<u>strongly agree</u>	
E1	When the bank promises to do something by a certain time, it does so.	1	2	3	4	5	6
E2	When I have problems, the bank is sympathetic and reassuring.	1	2	3	4	5	6
E3	The bank is dependable.	1	2	3	4	5	6
E4	The bank provides its services at the time it promises to do so.	1	2	3	4	5	6
E5	The bank keeps its records accurately.	1	2	3	4	5	6
E6	The bank tells its customers exactly when the services will be performed.	1	2	3	4	5	6

E7	Prompt service is received from the employees of the bank.	1	2	3	4	5	6
E8	Employees of the bank are always willing to help customers.	1	2	3	4	5	6
E9	You can trust the employees of the bank.	1	2	3	4	5	6
E10	You can feel safe in your transactions with the bank's employees.	1	2	3	4	5	6
E11	Employees of the bank are polite.	1	2	3	4	5	6
E12	Employees get adequate support from the bank to do their jobs well.	1	2	3	4	5	6
E13	The bank gives you individualised attention.	1	2	3	4	5	6
E14	Employees of the bank give you personal attention.	1	2	3	4	5	6
E15	Employees of the bank know what your needs are.	1	2	3	4	5	6
E16	The bank has your best interests at heart.	1	2	3	4	5	6
E17	The bank has operating hours convenient to all its customers.	1	2	3	4	5	6

PART F:

Please indicate the strength of your agreement or disagreement on the following statements regarding your overall satisfaction with the retail bank providing you with telephone banking service by circling the appropriate number.

		<u>strongly disagree</u>				<u>strongly agree</u>	
F1	I will recommend the bank to someone who seeks my advice.	1	2	3	4	5	6
F2	If the bank offered a related service, I would consider enrolling in it.	1	2	3	4	5	6
F3	I will continue to use the services of the bank in the next few years.	1	2	3	4	5	6

PART G: DEMOGRAPHIC DATA

Sex: ☐ female ☐ male

Age (yrs): ☐ 20-25 ☐ 26-30 ☐ 31-35 ☐ 36-40 ☐ 40 or over

Education: ☐ secondary ☐ matriculated ☐ tertiary

Occupation: ☐ clerical ☐ managerial ☐ professional
☐ self employed ☐ student ☐ unemployed
☐ blue collar ☐ other, please state _____

Nationality ☐ HK Chinese ☐ British ☐ American
☐ Japanese ☐ Korean ☐ Indian
☐ Other, please state _____

Would you like a statistical summary of the data one it has been aggregated?

☐ yes ☐ no

**-Thank you very much for your contribution-
Please return this survey in the attached stamped and addressed
envelope.**

APPENDIX B: ENGLISH VERSION OF TOURISM QUESTIONNAIRE

Customer Participation in Services

**A survey on customer participation and
service quality**

**Department of Business Studies
Hong Kong Polytechnic University**

PART A: CULTURAL VALUES

Please read each item below and indicate the level of importance of each item to you personally by circling the appropriate number.

		no importance <u>at all</u>								of supreme <u>importance</u>
		1	2	3	4	5	6	7	8	9
A.1	Ordering relationships by status and observing this order.	1	2	3	4	5	6	7	8	9
A.2	Thrift.	1	2	3	4	5	6	7	8	9
A.3	Persistence. (Perseverance)	1	2	3	4	5	6	7	8	9
A.4	Having a sense of shame.	1	2	3	4	5	6	7	8	9
A.5	Reciprocation of greetings, favours and gifts.	1	2	3	4	5	6	7	8	9
A.6	Personal steadiness and stability.	1	2	3	4	5	6	7	8	9
A.7	Protecting your "face".	1	2	3	4	5	6	7	8	9
A.8	Respect for tradition.	1	2	3	4	5	6	7	8	9
A.9	Tolerance of others.	1	2	3	4	5	6	7	8	9
A.10	Harmony with others.	1	2	3	4	5	6	7	8	9
A.11	Solidarity with others.	1	2	3	4	5	6	7	8	9
A.12	Non-competitiveness.	1	2	3	4	5	6	7	8	9
A.13	Trustworthiness.	1	2	3	4	5	6	7	8	9
A.14	Contentedness with one's position in life.	1	2	3	4	5	6	7	8	9
A.15	Being conservative.	1	2	3	4	5	6	7	8	9
A.16	A close, intimate friend.	1	2	3	4	5	6	7	8	9

PART B:

In this part of the questionnaire, please indicate the extent of your agreement or disagreement with the following statements about the particular type of service by circling the number that best describes your response.

Please use the following scale to indicate the strength of your agreement or disagreement with the following statements.

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6

B1) TOURISM

Please note that tourism here refers to when you make all your own travel arrangements such as choosing the destination, choosing your accommodation and **NOT** group tour packages/organised tours.

		<u>strongly disagree</u>					<u>strongly agree</u>
B1	I need to exert a lot of energy when making all my own travel plans.	1	2	3	4	5	6
B2	I need to be persistent to make my own travel plans.	1	2	3	4	5	6
B3	I have to spend a lot of time to make my own travel plans.	1	2	3	4	5	6
B4	Too much intellectual effort is needed when making my own travel plans.	1	2	3	4	5	6
B5	Making my own travel plans involves many steps and stages.	1	2	3	4	5	6
B6	I need to have prior knowledge in order to understand how to make my own travel arrangements.	1	2	3	4	5	6
B7	Making my own travel plans is very easy.	1	2	3	4	5	6
B8	When I make my own travel plans, I search for information on flights, accommodation and the destination itself.	1	2	3	4	5	6
B9	When I make my own travel plans, I search for information on how I can make reservations for flight and accommodation.	1	2	3	4	5	6

B10	When I make my own travel plans, I search for information on what I have to do or prepare in order to process reservations for flight and accommodation.	1	2	3	4	5	6
-----	--	---	---	---	---	---	---

PART C:

This section is related to the intensity of the various types of risk that can be found in travelling abroad on your own rather than using group tour packages. There are no right or wrong answers, please state the strength of agreement or disagreement to the following statements with regards to making your own travel arrangements by circling the appropriate number.

		<u>strongly disagree</u>				<u>strongly agree</u>	
C1	I would be held in higher esteem by my colleagues if I made my own travel arrangements.	1	2	3	4	5	6
C2	I would be thought of as foolish by my friends if I made my own travel arrangements.	1	2	3	4	5	6
C3	I need to spend a lot of time planning when I make my own travel arrangements.	1	2	3	4	5	6
C4	Making my own travel arrangements represents an efficient use of time.	1	2	3	4	5	6
C5	It is more costly to travel through making all my own arrangements than it is to travel on a group tour.	1	2	3	4	5	6
C6	I am worried that things during my trip do not turn out as expected when I make my own travel arrangements.	1	2	3	4	5	6
C7	I am concerned about the potential physical risks of travelling abroad when I make all my own travel arrangements.	1	2	3	4	5	6
C8	Making my own travel arrangements gives me a feeling of anxiety.	1	2	3	4	5	6
C9	Making my own travel arrangements makes me feel psychologically uncomfortable.	1	2	3	4	5	6

PART D:

In this section please indicate whether you agree or disagree with each statement. There are no right or wrong answers. Indicate your response by circling the number that most closely corresponds to the way you personally feel.

		<u>strongly</u> <u>disagree</u>					<u>strongly</u> <u>agree</u>
D1	When I make plans, I am almost certain that I can make them work.	1	2	3	4	5	6
D2	Getting people to do the right things depends upon ability, luck has nothing to do with it.	1	2	3	4	5	6
D3	What happens to me is my own doing.	1	2	3	4	5	6
D4	Many of the unhappy things in people's lives are partly due to bad luck.	1	2	3	4	5	6
D5	Getting a good job depends mainly on being in the right place at the right time.	1	2	3	4	5	6
D6	Many times I feel that I have little influence over the things that happen to me.	1	2	3	4	5	6

PART E:

The following set of statements relates to your feelings about the travel agency through which you make your reservations for your travels abroad. For each statement, please show the extent to which you believe your travel agency has the feature described by the statement. Indicate the strength of your agreement or disagreement by circling the appropriate number.

		<u>strongly</u> <u>disagree</u>					<u>strongly</u> <u>agree</u>
E1	When the travel agency promises to do something by a certain time, it does so.	1	2	3	4	5	6
E2	When I have problems, the travel agency is sympathetic and reassuring.	1	2	3	4	5	6
E3	The travel agency is dependable.	1	2	3	4	5	6
E4	The travel agency provides its services at the time it promises to do so.	1	2	3	4	5	6
E5	The travel agency keeps its records accurately.	1	2	3	4	5	6
E6	The travel agency tells its customers exactly when the services will be performed.	1	2	3	4	5	6

E7	Prompt service is received from the employees of the travel agency.	1	2	3	4	5	6
E8	Employees of the travel agency are always willing to help customers.	1	2	3	4	5	6
E9	You can trust the employees of the travel agency.	1	2	3	4	5	6
E10	You can feel safe in your transactions with the travel agency's employees.	1	2	3	4	5	6
E11	Employees of the travel agency are polite.	1	2	3	4	5	6
E12	Employees get adequate support from the travel agency to do their jobs well.	1	2	3	4	5	6
E13	The travel agency gives you individualised attention.	1	2	3	4	5	6
E14	Employees of the travel agency give you personal attention.	1	2	3	4	5	6
E15	Employees of the travel agency know what your needs are.	1	2	3	4	5	6
E16	The travel agency has your best interests at heart.	1	2	3	4	5	6
E17	The travel agency has operating hours convenient to all its customers.	1	2	3	4	5	6

PART F:

Please indicate the strength of your agreement or disagreement on the following statements regarding your overall satisfaction with the travel agency through which you make your reservations by circling the appropriate number.

		<u>strongly disagree</u>				<u>strongly agree</u>	
F1	I will recommend the travel agency to someone who seeks my advice.	1	2	3	4	5	6
F2	If the travel agency provides complimentary/ related services, I will consider using them.	1	2	3	4	5	6
F3	I will continue to use the services of the travel agency in the next few years.	1	2	3	4	5	6

PART G: DEMOGRAPHIC DATA

Sex: ☐ female ☐ male

Age (yrs): ☐ 20-25 ☐ 26-30 ☐ 31-35 ☐ 36-40 ☐ 40 or over

Education: ☐ secondary ☐ matriculated ☐ tertiary

Occupation: ☐ clerical ☐ managerial ☐ professional ☐ self-employed
☐ student ☐ unemployed
☐ other, please state _____

Nationality ☐ HK Chinese ☐ British ☐ American ☐ Japanese
☐ Korean ☐ Indian
☐ Other, please state _____

Would you like a statistical summary of the data once it has been aggregated?

☐ yes ☐ no



**-Thank you very much for your contribution-
Please return this survey in the attached stamped and addressed
envelope.**

APPENDIX C: SAMPLE COVER LETTER

«FirstName»

«Company»

«Address1»

«City»

«State»

«Country»

<<Date>>

Dear Mr. X,

The Department of Business Studies at the Hong Kong Polytechnic University is currently conducting research concerned with customer participation in services in order to bring about greater understanding of this concept to service quality in the Hong Kong service industry. We are currently searching for the opinions of members of the professional community, like you, to provide some input into this large-scale research. The general findings that emerge from the study after completion, will be recommended to the Hong Kong Coalition of Service Industries in order to provide some insight for them during the development of future projects within the service industry.

The project is directed by Dr. Sherriff Luk and Dr. Abhik Roy, both Associate Professors of the department, as well as Ms. Alison Lloyd who is working on the project with the aim of writing her doctoral thesis. This project is funded by University funds.

All responses in the survey will be kept strictly confidential and you can be assured that the information you provide will only be available to the research group working on this project. If you would like a statistical summary of all the responses after the data have been aggregated, we will arrange to provide it to you when the project is completed.

It is estimated that the survey can be completed in approximately ten minutes. Please answer all questions, as your contribution to this study is very important. Please answer all questions as accurately as possible.

When you have completed the questionnaire, please return it in the attached stamped and addressed envelope.

Thank you for your assistance with this important project for Hong Kong's service industry.

APPENDIX D: SAMPLE REMINDER LETTER**«FirstName»****«Company»****«Address1»****«City»****«State»****«Country»****<<Date>>****Dear Mr X,**

Please note: A few weeks ago we sent you a questionnaire for your completion. However, we have not received your reply since. It would be greatly appreciated if you could spare a few moments of your time to complete the attached questionnaire and help us with our research on the service industry in Hong Kong. If you have already completed and returned the questionnaire to us, please disregard this notice. Thank you for your co-operation and contribution.

The Department of Business Studies at the Hong Kong Polytechnic University is currently conducting research concerned with customer participation in services in order to bring about greater understanding of this concept to service quality in the Hong Kong service industry. We are currently searching for the opinions of members of the professional community, like you, to provide some input into this large-scale research. The general findings that emerge from the study after completion, will be recommended to the Hong Kong Coalition of Service Industries in order to provide some insight for them during the development of future projects within the service industry.

The project is directed by Dr. Sherriff Luk and Dr. Abhik Roy, both Associate Professors of the department, as well as Ms. Alison Lloyd who is working on the project with the aim of writing her doctoral thesis. This project is funded by University funds.

All responses in the survey will be kept strictly confidential and you can be assured that the information you provide will only be available to the research group working on this project. If you would like a statistical summary of all the responses after the data have been aggregated, we will arrange to provide it to you when the project is completed.

It is estimated that the survey can be completed in approximately ten minutes. Please answer all questions, as your contribution to this study is very important. Please answer all questions as accurately as possible.

When you have completed the questionnaire, please return it in the attached stamped and addressed envelope.

Thank you for your assistance with this important project for Hong Kong's service industry.