

Cultural Values, Service Quality Expectations and Customer Satisfaction:  
Evidence from Generational Cohorts in Malaysia

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by  
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## Table of Contents

List of Figures.....	iv
List of Tables.....	v
Abbreviations.....	vii
Acknowledgements.....	x
Statement of Originality.....	xi
Abstract.....	xii
1.0 Chapter One: Preliminary Study Overview.....	2
1.1 Introduction.....	2
1.2 Research Background.....	2
1.3 Research Problem and Justification.....	13
1.4 Research Model, Objectives and Hypotheses.....	20
1.5 Research Methodology.....	23
1.6 Major Findings.....	24
1.7 Theoretical and Practical Implications.....	25
1.8 Structure of the Dissertation.....	28
2.0 Chapter Two: Literature Review and Conceptual Framework.....	30
2.1 Introduction.....	30
2.2 Service Quality.....	30
2.2.1 Perspectives of Quality.....	31
2.2.2 Service Quality Expectation.....	34
2.2.3 Service Quality Dimensions.....	37
2.3 Factors Influencing Service Quality Expectations.....	44
2.4 Concepts of Cultural Values.....	47
2.5 Linking Cultural Values to Service Quality Expectations.....	54
2.6 Defining Generations and Generational Theory.....	57
2.7 Service Quality Expectations Across Generations.....	64
2.8 Service Quality Expectations Across Ethnicities.....	65
2.9 Service Quality Expectations Across Genders.....	67
2.10 Hypotheses Development.....	70

2.11	Conceptual Research Model.....	80
3.0	Chapter Three: Research Methodology and Design.....	82
3.1	Introduction.....	82
3.2	Research Design and Framework.....	83
3.3	Methodology Framework.....	84
3.4	Criteria Identification and Construct Measurement Instrument.....	85
3.5	Identification of Interview Items by Industry Authority.....	89
3.6	Questionnaire Design.....	90
3.7	Pre-Test and Pilot Study.....	93
3.8	Research Method (Collection of Data).....	94
3.9	Sampling Design/ Selection.....	95
3.10	Data Analysis.....	97
3.11	Common Method Variance or Bias.....	99
3.12	Pre-Analysis of Data.....	101
3.13	Research Analysis Instrument of Choice.....	109
	3.13.1 Structural Equation Modelling.....	110
	3.13.2 SEM Concepts.....	111
	3.13.3 Components of a Structural Equation Model.....	114
	3.13.4 Structural Equation Modelling Construction.....	116
	3.13.5 SEM and other Multivariate Applications.....	121
	3.13.6 Advantages and Limitations of SEM.....	117
3.14	SEM Analysis.....	122
	3.14.1 Measurement Model.....	123
	3.14.2 Structural Model.....	130
3.15	Reliability.....	131
3.16	Construct Validity.....	132
3.17	Multi-Group Analysis.....	133
3.18	Ethical Issues.....	135
4.0	Chapter Four: Research Analysis.....	137
4.1	Introduction.....	137
4.2	Research Survey Process.....	138

4.3	Research Sample.....	138
4.4	Pre-Analysis.....	143
4.4.1	Reliability Statistics.....	143
4.5	Common Methods Variance.....	151
4.6	Structural Equation Modeling Analysis.....	152
4.6.1	Measurement Model.....	152
4.6.2	SEM Analysis for Model A.....	155
4.6.3	SEM Analysis for Model B.....	161
4.6.4	SEM Analysis for Model C.....	165
4.6.5	SEM Analysis for Model D.....	170
4.7	SEM Analysis Results.....	175
4.8	Analysing the Moderating Variables.....	178
4.9	Results Summary.....	183
5.0	Chapter Five: Results.....	185
5.1	Introduction.....	185
5.2	Research Questions and Findings.....	185
5.2.1	Discussion for RQ1 and its corresponding hypotheses, H1 &.....	185
	H1a to H1f.....	182
5.2.2	Discussion for RQ2 and its corresponding hypothesis, H2.....	187
5.2.3	Discussion for RQ3 and its corresponding hypothesis, H3.....	188
5.2.4	Discussion for RQ4 and its corresponding hypothesis, H4.....	188
5.2.5	Discussion for RQ5 and its corresponding hypothesis, H5.....	189
5.2.6	Discussion for RQ6 and its corresponding hypothesis, H6.....	189
5.2.7	Summary of Research Findings.....	190
5.3	Theoretical Contribution.....	191
5.4	Practical Implication.....	195
5.5	Limitations and Directions for Future Research.....	197
5.6	Conclusion.....	200
	References.....	202
	Appendix 1: Survey Questionnaire.....	223
	Appendix 2: HREC Certificate of Approval.....	225

## List of Figures

Figure 1: Growth Trajectory of the Service Sector (Globally and Malaysia).....	18
Figure 2: Conceptual Research Model and Hypothesized Relationships.....	21
Figure 3: Factors Influencing Customer Expectations of Services.....	36
Figure 4: Conceptual Research Model and Hypothesised Relationships.....	80
Figure 5: Research Methodology Framework.....	84
Figure 6: Methodology Framework towards Data Analysis.....	98
Figure 7: Conducting Factor Analysis.....	105
Figure 8: A Conceptual Illustration of a Structural Equation Model.....	115
Figure 9: Model Identification Flow Summary.....	117
Figure 10: Proposed Measurement Model for Six Dimensions of Cultural Values.....	124
Figure 11: Proposed Structural Model for the Relationships between SQ, CS and CV.	131
Figure 12: Steps in the Analysis of the Data.....	137
Figure 13: Scree Plot with Eigenvalue Determination.....	147
Figure 14: Reconfigured Measurement Model after EFA.....	153
Figure 15: Measurement Model A.....	156
Figure 16: Measurement Model B.....	162
Figure 17: Model C's Structural Model of CV Dimensions, SQ and CS.....	167
Figure 18: Model D's Structural Model of CV, SQ and CS.....	172

## List of Tables

Table 1: Differing Perspectives of Quality.....	31
Table 2: SERVQUAL Dimensions for Measuring Service Quality.....	38
Table 3: SERVQUAL's Dimensions in an Adapted Application.....	39
Table 4: Dimensions Employed by Customers to Evaluate Service Quality.....	41
Table 5: SERVQUAL Criteria Identification.....	86
Table 6: Hofstede Criteria Identification.....	88
Table 7: Statistics Associated with Factor Analysis.....	104
Table 8: Definition of Variables.....	108
Table 9: Basic SEM Configurations.....	115
Table 10: Different Types of Goodness-of-Fit Tests.....	126
Table 11: Descriptive Data on the Gender of Respondents.....	139
Table 12: Descriptive Data on the Generational Cohort of Respondents.....	139
Table 13: Descriptive Data on the Ethnicity of Respondents.....	140
Table 14: Descriptive Data on the Marital Status of Respondents.....	140
Table 15: Descriptive Data on the Education Level of Respondents.....	141
Table 16: Descriptive Data on the Profession of Respondents.....	141
Table 17: Descriptive Data on the Monthly Income of Respondents.....	142
Table 18: Descriptive Data on the Respondents' Visits to a Hospitality Firm.....	142
Table 19: Cronbach's Alpha Reliability Test on All Items.....	143
Table 20: Cronbach's Alpha Reliability Test on the Three Constructs.....	144
Table 21: Cronbach's Alpha If Item Deleted Statistics on all Variables.....	145
Table 22: Kaiser-Meyer-Olkin Measure of Sampling Adequacy & Bartlett's Test.....	146
Table 23: Total Variance Explained.....	148
Table 24: Rotated Factor Matrix with Factor Loading Values & Cronbach's Alpha.....	148
Table 25: The Five Groups of Factors with Respective Items & Item Descriptions.....	150
Table 26: Abbreviation and Descriptions of Model A's Variables.....	156
Table 27: Model A's Goodness-of-Fit Test Results.....	157
Table 28: Model A's Modification Indices.....	159
Table 29: Model A's Parameter Estimates.....	160
Table 30: Model A's Standardized Estimate of Correlation (Multicollinearity).....	161
Table 31: Model B's Goodness-of-Fit Test Results.....	163

Table 32: Model B's Modification Indices.....	164
Table 33: Parameter Estimates of Model B.....	165
Table 34: Model C's Goodness-of-Fit Test Results.....	168
Table 35: Parameter Estimates of Model C.....	169
Table 36: Model D's Goodness-of-Fit Test Results.....	172
Table 37: Parameter Estimates of Model D.....	174
Table 38: Results on Hypothesis.....	176
Table 39: H4's Chi-Square Value Difference.....	179
Table 40: H5's Chi-Square Value Difference.....	180
Table 41: H6's Chi-Square Value Difference.....	182

## Abbreviations

ACSI	American Customer Satisfaction Index
ADF	Asymptotically Distribution-Free
AGFI	Adjusted Goodness-of-Fit Index
AMOS	Analysis of Moment Structures
ANCOVA	Analysis of Covariance
ANOVA	Analysis of Variance
AVE	Average Variance Extracted
BB	Baby Boomers
CA	Cronbach's Alpha
CEI	Customer Experience Impact
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CIA	Central Intelligence Agency
CMIN	Model Chi-Square
CMIN/DF	Chi-Square to Degrees of Freedom Ratio
CMV	Common Method Variance
CR	Composite Reliability
CR	Critical Ratio
CS	Customer Satisfaction
CS/D	Customer Satisfaction/ Dissatisfaction Model
CV	Cultural Values
df	Degree of freedom
DOSM	Department of Statistics Malaysia
ECVI	Expected Cross-Validation Index
EFA	Exploratory Factor Analysis
EPU	Economic Planning Unit
FedEx	Federal Express
GDP	Gross Domestic Product
Gen X	Generation X
Gen Y	Generation Y
GFI	Goodness-of-Fit Index
GLS	Generalized Least Squares



H	Hypothesis/ Hypotheses
HREC	Human Research Ethics Committee
HSBC	Hong Kong and Shanghai Banking Corporation
HSF	Harman's Single Factor Test
IC	Individualism/ Collectivism Index
IDV	Individualism vs Collectivism Index
IFI	Incremental Fit Index
ILO	International Labour Organization
IND	Indulgence/Restraint Index
IR	Indulgence/ Restraint Index
KL	Kuala Lumpur
KMO	Kaiser-Meyer-Olkin
KV	Klang Valley
LISREL	Linear Structural Relations
LTO	Long Term/ Short Term Orientation
MANOVA	Multivariate Analysis of Variance
MAS	Masculinity/ Femininity Index
MF	Masculinity/ Femininity Index
MI	Modification Indices
MIER	Malaysian Institute of Economic Research
MITI	Ministry of International Trade and Industry
ML	Maximum Likelihood
NC	Normed Chi-Square
NFI	Normed Fit Index
NNFI	Non-Normed Fit Index
ns	Not Significant
p	Probability Value
PAF	Principal Axis Factoring
PCA	Principal Component Analysis
PD	Power Distance Index
PDI	Power Distance Index
RM	Ringgit Malaysia
RMSEA	Root Mean Square Error of Approximation
RO	Research Objectives

RQ	Research Questions
SD	Standard Deviation
SE	Standard Error
SEM	Structural Equation Modeling
SPSS	Statistical Package for Social Science
SQ	Service Quality
SQE	Service Quality Expectations
SRMR	Standardized Root Mean Square Residual
SRS	Simple Random Sampling
SRW	Standardised Regression Weight
TLI	Tucker-Lewis Index
UA	Uncertainty Avoidance Index
UAI	Uncertainty Avoidance Index
UNESCO	United Nations Educational, Scientific and Cultural Organization
UON	University of Newcastle
UPS	United Parcel Service
USA	United States of America
USD	United States Dollar
WI	Walker Information Inc.

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**Su Ching, Chee**

**February 2020**

## STATEMENT OF ORIGINALITY

I hereby certify that the work embodied in the thesis is my own work, conducted under normal supervision. The thesis contains no material which has been accepted, or is being examined, for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made. I give consent to the final version of my thesis being made available worldwide when deposited in the University's Digital Repository, subject to the provisions of the Copyright Act 1968 and any approved embargo.

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February 2020

## **Abstract**

In today's rapidly evolving, highly connected and fast-paced world, businesses need to be in touch with their customers as well as their expectations and perceptions. This means the necessity to be aware of the importance in embracing a proactive stance, rather than a reactive position, when dealing with their customers so as to ensure customer satisfaction. Therefore, effective and competent managers are inclined to continuously seek, identify and develop the factors, as well as areas, within the business in order to enable superior performance that renders quality, meet expectations and attain customer satisfaction. Nevertheless, most studies only consider the dimensional viewpoint of consumerism rather than the precursor elements.

Consequently, this study was developed with the focus on the antecedent angle or perspective of consumer behaviour in relation to the service quality expectation and customer satisfaction constructs in the high-contact service-based hospitality industry in Malaysia. The antecedent factors evaluated are cultural values, generational cohorts, ethnic and gender. In the study, the cultural dimensions were evaluated as a direct antecedent component whereas the remaining three variables, generational cohorts, ethnic and gender, were considered as moderating factors between cultural values and service quality expectations. Literature has found these precursor variables to influence or shape consumer behaviour, perception, expectations and satisfaction in varying degrees and manner. As such, consumer thoughts, perception and behaviour contrast and diverge in different societies and nations. Since these underlying factors may directly or indirectly affect a consumer's consideration as well as decision making behaviour, therefore, this study endeavour to keep the marketers up to date and in touch with any development that may occur with the changing times.

The study adopted a quantitative research methodology whereby a total of 420 primary data were collected, quantified and evaluated with the aid of the SPSS and AMOS SEM statistical tools. There were a total of twelve hypotheses tested in this paper and the findings indicate that nine of the hypotheses were supported whereas three were rejected. On a whole, the cultural value construct confirms a positive and significant influence on service quality expectations. However, out of the six individual cultural value dimensions, the short term/ long terms dimension, had to be dropped due to unanticipated shortcomings or inadequacy in the measurement scale. Nevertheless, the remaining sub construct dimensions; power distance,

individualism/ collectivism, uncertainty avoidance and indulgence/ restraining dimensions independently support a positive correlation to service quality expectation with the masculinity/ femininity cultural dimension fulfilling the expected position of having no significant correlation to the service quality expectation construct. In addition, service quality expectation is positively linked to customer satisfaction though only partially mediating the relationship between cultural values and customer satisfaction. In terms of the moderating variables, only the generational cohort demographic variable moderates the relationship between cultural values and service quality whereas ethnicity and gender were found to be insignificant as a moderating variable between cultural values and service quality.

Additionally, the study's findings postulated an array of theoretical contribution and practical implications as well as the limitations within the study and directions for future research. The findings from the cultural value research model were able to support and validate many of the past literature though it also indicate that the variables may interact contrarily as moderating factors. The generational cohort moderating factor was found to significantly influence the relationship between cultural values and service quality expectations which, in the process, reduced the strength and impact of the cultural value construct on the service quality expectation construct. Another theoretical input found Malaysia to exhibit conflicting traits and attributes that defied its Hofstede cultural classification. For example, Malaysia is a high power index nation but the study found its consumers to behave akin to consumers from a low power index society. Similarly, Malaysia is a collectivist nation but behaved like consumers from individualistic nations. The study also contributed to the limited literature on Hofstede's newest dimension of indulgence and restraint as an antecedent as well as the demographic variable, gender, as a moderating factor. Based on this study's findings, the indulgence/ restraint dimension strongly influences service quality expectations in Malaysia's hospitality industry whilst gender was found to be irrelevant as a moderating factor between the cultural value and service quality constructs. With these finding, these aspects of the study are able to contribute to building the foundation for future research. On the practical side, managers are encouraged to adopt customized strategies that incorporate the antecedent factors such as culture and generational cohorts as part of the marketing policies and stratagems. In addition, the findings enable businesses within industries of similar high-contact establishments to benchmark against better performing businesses of the same typology. Finally, these contributions and the study's limitations give way to invaluable insights for future researches, managerial and marketing strategies on the enhancement on consumer behavior.

# CHAPTER ONE

## Introduction

## **1.0 Chapter One: Preliminary Study Overview**

### **1.1 Introduction**

This section aims to establish the motivation of the dissertation and research questions through a discussion on the research background and the subsequent research gaps encountered. In summary, this dissertation consists of five chapters and commences with Chapter One presenting a synopsis of the paper. The preliminary chapter overview comprises of eight subsections with Section 1.1, this section, providing the introduction to the overall chapter. This is followed by Section 1.2 which describes the background and setting of the study whilst Section 1.3 ruminates the justifications of the research project. Next, the research questions and objectives, along with the accompanying hypotheses and proposed model are stated in Section 1.4. The subsequent Section 1.5 considers the dissertation's methodology pathway, tools and instruments that the researcher undertook in the determination of this study's research model fit whereas Section 1.6 presents the research project's analytical results and findings. This is thereafter followed by a subsection on the theoretical and practical implications under Section 1.7. Lastly, Section 1.8 provides a concise mention on the structure and flow of the dissertation.

### **1.2 Research Background**

Literature propose that multiple factors influence an organization's success (Zeithaml et al, 2009; Hoyer and MacInnis, 2010; Kotler and Armstrong, 2013; Lovelock et al, 2014; Guesalaga et al, 2016). Numerous researchers posit that the economic standing and performance of a company hinges on their proficiency in creating superior value and experience to the market (Hoyer and MacInnis, 2010; Kotler and Keller, 2012; Lovelock et al, 2014) whereas firms that are not in touch with their consumers may very likely perform unsatisfactorily (Schiffman et al, 2008; Kotler and Armstrong, 2013; Lovelock et al, 2014). Evidently, one of the foremost constituents that can impact the health of an organisation are its consumers as they significantly contribute towards the survival and fiscal wellbeing of a business. As such, businesses are encouraged to continually strive to ascertain and develop the



factors and zones within the firm so to enable superior performance that renders quality, meet expectations and attain customer satisfaction (Hoyer and MacInnis, 2010; Lovelock et al, 2014; Guesalaga et al, 2016).

Consumers are naturally drawn to entities that instils and offers quality. Regardless of the product being tendered, businesses that successfully espouse quality are generally viewed in a positive and favourable manner. In the context of services marketing, considerable research has been done on service quality spanning over a period of almost four decades (Parasuraman et al, 1985; Lehtinen and Lehtinen, 1991; Grönroos, 2000; Zeithaml et al, 2009, Kotler and Armstrong, 2013; Lovelock et al, 2014) and this has included the various aspects covering the modelling, measurements, managements of service quality constructs and its corollaries. These researchers agree that service quality is a fundamental characteristic of service marketing and marketing needs, as well as, a key trait to enabling businesses to meet customer expectations and satisfaction.

Grönroos (1984) first characterised service quality as either technical or functional whereby technical quality refers to the actions received by the customers and functional quality denotes the delivery manner of the service. However, in more recent times, Grönroos (2000) put forward service quality as a term to represent and possess the following attributes; credibility and dependability, accessibility and flexibility, behaviour and attitudes, skills and professionalism, trustworthiness and reputation, as well as, to refer to the servicescape and service recovery option availability. On the other hand, Lehtinen and Lehtinen (1991) propose three aspects of service quality; corporate, physical and interactive, with the latter dimension being deemed as stemming from the service provider and customer interface. This stance was subsequently further bolstered by Svensson (2006) who additionally highlighted the importance of a customer-centric and focused perspective of service quality paradigm.

Service quality is imperative when it comes to drawing, maintaining and retaining customers (Parasuraman et al, 1985; Grönroos, 2000; Kotler and Armstrong, 2013; Lovelock et al, 2014; Davis et al, 2017). According to Siu and Cheung (2011), service quality has long been considered a critical stratagem towards enriching the customers' shopping experience, in addition, to enabling competitive advantage. Service quality also plays a vital and significant role in meeting marketing needs as well as fulfilling customer expectations and securing

customer satisfaction (Parasuraman et al, 1985; Grönroos, 2000; Zeithmal et al, 2009; Lovelock et al, 2014). From the company's standpoint, service quality is a marketing strategy that improves their market position and market share which then translates to higher profitability (Hoyer and MacInnis, 2010; Kotler and Keller, 2012; Lovelock et al, 2014). Businesses that offer superior and quality services tend to gain a sustainable competitive advantage, improve productivity as well as attain notable differentiation when compared to its competitors (Ladhari, 2009; Salazar et al, 2010; Agarwal et al, 2010; Lovelock et al, 2014; Davis et al, 2017). On the flipside and as expected, businesses that fail to meet expectations of its consumers or proffer inadequate service delivery tend to receive negative feedback and experience service failure (Bhandari et al, 2007; Kotler and Armstrong, 2013; Lovelock et al, 2014). Since the performance of any service is closely linked to the satisfaction levels of its customer, it is crucial and imperative that businesses make it a point to evaluate their service offerings' quality levels (Yang and Chen, 2000; Kotler and Armstrong, 2013; Lovelock et al, 2014). Furthermore, managers are regularly confronted with the demand to "enhance service quality by every means so that not only existing customers remain loyal but also new customers will become existing ones" (Yang and Chen, 2000, p.275). Lovelock et al (2014) encourage and urge businesses to adopt a proactive rather than reactive approach towards providing quality service which will be effective in the retention of customers, win new consumers as well as increase profitability and enhance market share.

Researchers concur that service quality plays a crucial role and is a central antecedent when trying to achieve customer satisfaction (Parasuraman et al, 1985; Zeithmal et al, 2009; Siu and Cheung, 2011; Kotler and Armstrong, 2013; Lovelock et al, 2014). In turn, satisfied customers tend to exhibit loyalty traits that continually supports as well as positively refer the company to others through various modes (Zeithmal et al, 2009; Siu and Cheung, 2011; Kotler and Armstrong, 2013; Lovelock et al, 2014). Satisfied customers are inclined to act as valuable advocates for the company and are usually eager to endorse the company's products by disseminating affirmative references through positive and encouraging word-of-mouth interactions (Grönroos, 2000; Siu and Cheung, 2011; Lovelock et al, 2014). Cronin et al (2000) posit the opinion that the consumers' satisfaction level corresponds to the service performance and execution that meet the customers' expectations resulting in a pleasing retail or service experience whereas Kotler and Keller (2012) postulate satisfaction as relating to the sentiments conveyed by the consumers that occurs after assessing a purchase experience in relation to their expectations. By the same token, Kim et al (2010, p.483) suggest customer satisfaction as being

the “outcome of complex information which is generated from a comparison of the customers' experiences and their expectations” whereas Ha et al (2010) perceive satisfaction as the extent of the consumer's enjoyment and pleasure following their procurement or service encounter. Fundamentally, customers experience satisfaction when their expectations are fulfilled (Howcraft et al, 2002; Ha et al, 2010; Siu and Cheung, 2011).

Customer satisfaction has more and more become a crucial corporate strategy as well as trade indicator due to its positive association to commercial activity, economic returns and corporate success. For example, the American Customer Satisfaction Index (ACSI, 2017) has been able to consistently predict the shifts in the Gross Domestic Product (GDP) of the United States of America with its Customer Satisfaction Index. The fluctuations registered in its measurements of customer satisfaction unfailingly correlates with the changes in the GDP, which currently accounts for approximately seventy percent (70%) of the country's economic output. Additionally, ACSI (2017) strengthens the determinant that customer satisfaction is a leading indicator of an organisation's wellbeing and can reliably gauge, as well as affect, a firm's profitability, stock performance and corporate growth. This was echoed by numerous researchers who present customer satisfaction as one of the main factors that sustains and contributes to a firm's continual growth and success (Gilbert and Veloutsou, 2006; Bhandari et al, 2007; Chen, 2009; Gounaris et al, 2010; Seiler et al, 2013). As such, customer satisfaction has remained incessantly as a measure of excellence and performance whereas Kelsey and Bond (2001) argue that the customer satisfaction construct is considered “an industry focus for some time as a measure of managerial strength and company profitability.”

Correspondingly, this line of reasoning was additionally supported by Bernhardt et al (2000) after they organised and ran a longitudinal study on the link between customer satisfaction and corporate success and established an important correlation between the two observed variables. Furthermore, Lovelock et al (2014) supports the premise that customer satisfaction can be considered as a reliable predictor of a business' potential growth, earnings and success. Bhandari et al (2007) and Chen (2009) similarly posit customer satisfaction as a fundamental component towards the factoring of positive customer relationships and repeat visits. Mittal and Katrichis (2001) and Ha et al (2010) equate customer satisfaction to customer loyalty and retention that contributes to a stable fiscal standing. As such, there are increasing awareness amongst managers on the magnitude of continual comprehension and fulfilment of the customer's needs and wants since corporate performance and survival depends profoundly on

the customer's experience of satisfaction (Kim et al, 2002; Ahmed et al, 2007; Kueh and Voon, 2007; Vrontis & Thrassou, 2007; Kotler and Keller, 2012; Lovelock et al, 2014). Similarly, Zokaei and Broad (2006) is a proponent of the viewpoint on the importance for firms to ascertain the customer's desires and needs and to surpass their expectations. On the other hand, Gilbert and Veloutsou (2006) considers the measurement of customer satisfaction as a predominantly post-consumption evaluation by the customer. Still, researchers collectively opine that when businesses make it a point to consistently and dependably gratify their customer's expectations, these firms improve their corporate reputation and position as well as bolster their market competitive advantage (Cronin et al, 2000; Kueh and Voon, 2007; Liu et al, 2008; Lovelock et al, 2009, 2014). Walker Information Inc (2013) predicts the years ahead will see more firms channeling their resources towards enhancing the customer's experience so as to maintain their competitive edge in addition to minimising their risk failure.

To be able to satisfy a customer, businesses first need to identify and understand the customer's expectations. According to Hamer et al (1999) and Lovelock et al (2014), customer expectation can be a challenging variable as it entails and comprises of the customer's individual development and progress which may be influenced by various sources. Despite criticisms on the inclusion and application of the expectation construct in studies measuring service quality (Cronin and Taylor, 1992; Teas, 1994; Cronin et al, 2000; Teas and DeCarlo, 2004), customer expectations have been widely accepted as highly relevant element in service quality evaluation studies (Kalamas et al, 2002; Zeithaml et al, 2009; Siu and Cheung, 2011; Lovelock et al, 2014). As such, it is additionally necessary for firms and businesses to comprehend the precursor factors that influences and mould these expectations and perceptions. Researchers note that a customer's expectations may be derived from pre-conceived ideas and images, as well as, past experiences (Fisk et al, 1990; Clow et al, 1998; Gunawardane, 2010; Lovelock et al, 2014). This premise was further validated by more recent literature that support the notion of the customer's past forming a dynamic influence on the expectation construct (Bosque et al, 2009; Gunawardane, 2010; Siu and Cheung, 2011). Hence, considering that one's past are able to influence their future expectations, researchers need to consistently examine and investigate the antecedent or causal factors so as to better grasp the cognitive operations of the consumers.

Zeithaml et al (2009) puts forward that services are not perceived in a one-dimensional manner. Rather, there are numerous elements that influences the customer's assessment of service quality which includes the customer's individualistic and societal expectations and perceptions.

As such, many factors influence a customer's expectations, perceptions and considerations of quality. When ruminating the antecedents of consumer expectations, one fundamental component that affects a consumer's deeds and actions is the individual's cultural aspects, background and history (Winsted, 1997; Liu et al, 2001; Bouzaabia et al, 2013). Likewise, marketers need to identify the similarities or differences in the individuals or groups when attempting to come up with relevant marketing stratagems (Pires and Stanton, 2005; Kotler and Keller, 2012; Bouzaabia et al, 2013; Lovelock et al, 2014). The differences in the consumers' behaviour may be culturally influenced as individuals are inclined to conform to their respective collective and common cultural norms. As such, a person tend to consciously or unconsciously form expectations and behave according to the cultural attributes and qualities that they were exposed to since young (Winsted, 1997; Liu et al, 2001; Bouzaabia et al, 2013). Culture takes into consideration the faction's use of space and time, human characteristics, individual position in society, their relationships as well as their perceptions of all that is around them (Kluckholm and Strodtbeck, 1961). On the other hand, Schwartz (2004, p.43) equates culture as inclusive of "the rich complex of meanings, beliefs, practices, symbols, norms, and values prevalent among people in a society" with cultural values shaping and justifying the collective group, as well as the individual's, beliefs, actions, and goals. Correspondingly, Schiffman et al (2008, p.636) posit culture as "the sum total of learned beliefs, values and customs that serve to regulate the behaviour of members of a particular society" whereas Hofstede et al (2010, p.6) defines culture as "the collective programming of the mind that distinguishes the members of one group or category of people from others." This was additionally supported by UNESCO (2002) under the organisation's Universal Declaration on Cultural Diversity banner with the declaration that culture is "the set of distinctive spiritual, material, intellectual and emotional features of society or a social group, that encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs." As such, individuals within the same cultural group who identify with the culture's collective accepted norms may share similar views, traits and general comportment (UNESCO, 2002; Schiffman et al, 2008; Hofstede, 2003, 2010).

Consistent with these definitions are the robust and implicit reflexion that demonstrates the influence of culture on the consumers' opinions, expectations and belief systems which is then followed by their behaviour. In short, culture also drives their idea of norms as well as their actions. Furrer et al (2002) contend that the consumer's perception of quality, as well as its significance, are deeply linked to their belief and values which may vary as the cultures differ.

In the business context, the cultural values of the consumers are able to sway and impact their perceptions and expectations of the product or service, and hence, their procurement selection and purchase behaviour. Corporations that overlook this factor inevitably risk facing challenges in penetrating markets as well as face difficulties in expending the activities of the business beyond the local borders (Jabnoun and Khalifa, 2005). Consequently, it is imperative that businesses consider the cultural facets of their customers when creating, producing and marketing their wares and services so as to enable them to effectively serve their customers.

On a similar basis, amongst the numerous marketing researchers that attempted to make light and comprehend the consumers' expectations, inclinations, attitudes and behaviours, a number employed the use of generational differences (Armstrong, 2009; Yang and Lau, 2015; Guesalaga et al, 2016; Stauss, 2016; Davis et al, 2017). This is due to the consideration that generational cohorts have a tendency to demonstrate parallel behavioural traits that reflects their "similar formative experiences, technologies, and adaptation to cultural and environmental changes" (Soares et al, 2017, p. 521). Therefore, these individuals generally exhibit comparable beliefs and core values which will influence, shape and mould, to a large extent, their outlooks, approaches as well as behaviours (Zemke et al, 2000; Brosdahl and Carpenter, 2011; Gardiner et al, 2013). When considering the business context, these generational variations may very likely induce or shape the consumer's procurement choices and selection as beliefs and values have the robust ability to influence one's service experience perceptions (Gurău, 2012; Gardiner et al, 2013; Guesalaga et al, 2016).

Based on the literary research papers, the generational cohorts may be demarcated by various birth year groupings: (1) the Silent Generation from years 1925 to 1945, (2) the Baby Boomers from years 1946 to 1964, (3) the X Generation from years 1965 to 1980, and (4) the Y Generation from years 1981 to 1997 (Zemke et al, 2000; Berkowitz and Schewe, 2010; Brosdahl and Carpenter, 2011; Davis et al, 2017). Note that the Y Generation group as are also known by several other labels such as the Millennials or digital natives, as compared to the generations before whom are considered as digital immigrants (Prensky, 2001a, 2001b). Of late, the same researchers also designated the Z Generation as those from birth year 1998 onwards. Nevertheless, there are some variations to the exact starting and end years of the respective generational groupings as not all the researchers subscribe to the same delineation, despite the numerous studies made.

According to Berger (2008) and Guesalaga et al (2016), the consumers from the X and Y Generations represent the more significant market pool of the global populace with active dominance in the consumption of the various services as well as products. The individuals from these respective generational factions forms a homogenous identity with the formation of their individuality within the age range of fourteen to twenty years (Berger, 2008). It is during these formative period that the individuals' personality and characteristics establishes itself thus fashioning a generation with similar or comparable behaviour, attitudes, perception and expectation configurations (Zemke, 2000; Rogler, 2002; Dries et al, 2008). As such, researchers continuously encourage additional studies to be conducted so as to better comprehend the consumer's retail experience, expectations and satisfaction criterias between these generational cohorts. According to Gurău (2012), knowledge and insights on the preferences and behaviours of the generational cohorts, as well as any other intertwining facets of society, enable the marketers to conceive marketing strategies that may better reach out to the generations collectively.

Corporations need to realise that the generations exhibit differing consumer behaviour and traits and strategise accordingly. Numerous researchers have discerned the distinctly unique and dissimilar predilections and preferences of Generation X and Generation Y individuals (Zemke et al, 2000; Wong et al, 2008; Benckendorf et al, 2010; Brosdahl and Carpenter, 2011; Gurău, 2012; Giovannini et al, 2015). For example, Generation X consumers tend to place emphasis on the shopping experience as compared to other generational counterparts (Brosdahl and Carpenter, 2011). In addition, they also have a tendency to remain steadfast and devoted to their preferred brands (Reisenwitz and Iyer, 2009; Gurău, 2012). This contrasts with the Generation Y consumers who are known for changing brands without regards and possessing less brand loyalty (Reisenwitz and Iyer, 2009; Gurău, 2012; Giovannini, 2015). Nevertheless, members of Generation X and Y also share the desire and expectations for high levels of quality service, as well as superior quality product offering (Yang and Lau, 2015). As such, businesses need to be receptive to these groups of consumers due to their significant number collectively which inadvertently translates into substantial current as well as future procurement might (Reisenwitz and Iyer, 2009; Gurău, 2012; Gardiner et al, 2013). It is to the companies' detriment to disregard these generational aspects as comprehension of their psyche may be key to the successful or failure of any market capture strategies that the company may develop (Schiffman et al, 2008).

Furthermore, a customer's notion of a satisfactory or unsatisfactory experience is derived from their personal and respective perception of the quality received from the firm. These ensuing opinions and assessments shape their memories and drive their allegiance which subsequently guide future behaviours. Past literature has demonstrated that notable customer satisfaction correlates to the quality of services delivered during interactions with the customers (Munhurrin et al, 2010; Salazar et al, 2010; Siu and Cheng, 2011; Lovelock et al, 2014). The experiences of the customers during their service encounter processes shapes their assessment of service quality and this includes the degree of satisfaction gained (Munhurrin et al, 2010). In summary, customers highly value great consumer experiences and customer satisfaction and service quality are robust indicators of a great customer experience.

According to a 2012 Customer Experience Impact (CEI) Report commissioned by Oracle Corporation in 2011, up to eighty six percent (86%) of consumers are willing to fork out more for a superior customer experience. Similarly, an American Express 2017 Survey on Global Customer Service Barometer revealed that eight out of ten participants were prepared to splurge when dealing with firms that they deemed provided outstanding customer service. The survey additionally announced that almost eighty percent (80%) of consumers made no qualms about aborting their intention to purchase due to deficient service experience with sixty percent (60%) considering the firm's competitors for a better service experience.

This was further corroborated by a study entitled Customer 2020 by Walker Information Inc (2013) stating that customers will place greater priority on their retail experience which will surpass price as the influencing purchase decision differentiator by the year 2020 and ACSI (2017) who reported quality as being perceived more important in the satisfaction of customers as compared to pricing factors in almost all the measured industries. Price-related promotions may be persuasive in influencing the consumer's procurement consideration but firms are unable to adopt nor sustain such measure in the long term. Hence, corporations that espouse and emphasize on quality improvements tend to perform much more positively in the long run in relation to customer satisfaction and affirmative behavioural intentions as compared to corporations whose marketing strategies are on price cuts.

The aforementioned factors play a noteworthy role in influencing the disposition of the consumer's future procurement behaviour and inclinations (Gounaris et al, 2010; Siu &



Cheung, 2011; Kotler and Armstrong, 2013; Lovelock et al, 2014). Numerous literatures found that both the service quality and customer satisfaction constructs are key indicators of positive consumer behaviour and intentions (Gounaris et al, 2010; Ha et al, 2010; Hsu et al, 2010). This was further supported by Salazar et al (2010) who put forward that the consumers' procurement behaviours are subject to the quality of the services experienced with Siu and Cheung (2011) additionally postulating service quality as a major predictor of affirmative purchase behaviour. Correspondingly, Ha et al (2010) advised that customer satisfaction is a fundamental precursor and determining factor of all consumer behaviour.

This means that failure to provide positive customer experience will result in the customers feeling frustrated. Firms should be aware that businesses generally only hear from a fraction of their disgruntled customers with over ninety percent (90%) choosing to keep mum and just selecting another firm for future or subsequent transactions (American Express, 2017). Furthermore, the actions and the decisions made by the consumers may be terminated or altered at any juncture due to external influences, limitations or conditions (Pritchard et al, 2009; Lovelock et al, 2014) considering the challenges involved in controlling and retaining consumer allegiance (Papasoloumou and Vrontis, 2006; Gurău, 2012; Lovelock et al, 2014). As indicated, the consumers may display differing behavioural mannerisms and inclinations that may positively or negatively impact a business' corporate wellbeing and profitability (Saha & Theingi, 2009). Therefore, considering the constructs' established relationships, organisations need to consciously evaluate, determine and scrutinise the service quality afforded to their customers in addition to monitoring their satisfaction levels so as to ascertain and constructively induce affirmative consumer behavioural intentions (Siu & Cheung, 2011; Gurău, 2012; Kotler and Keller, 2012; Lovelock et al, 2014).

To put it simply, a happy and satisfied customer will continue to do business with the firm as well as share positive procurement intentions and behaviours such as repeat visits, affirmative word of mouth and recommending the firm's product or services to others. Therefore, firms need to prioritize the fact that no customer appreciate being disregarded or treated poorly and that losing a customer can be costly. The Oracle CEI (2012) reports customer retention as imperative and, hence, should not be overlooked by firms as a mere two percent (2%) can offset costs by up to ten percent (10%). Furthermore, it can cost the firm between six to seven times more to attract a new customer as opposed to conserving the current customer. As such, it is crucial that customers are provided the level of quality service that they deem impeccable and

pleasing so as to induce customer satisfaction that leads to loyalty plus favourable consumer behavioural intentions. Regardless of the business, enhancing the customer's retail or service experience is fundamental to generating customer satisfaction, increasing customer retention and improving the fiscal bottom line.

Lastly, the research will be conducted in Malaysia. As Malaysia progresses from its current developing nation status towards becoming a developed nation, the service sector has been accorded significant prominence to further propel the growth and advancement of the country's economy. In the last decade, the services sector in Malaysia has grown and outpaced all other industries including the booming manufacturing industry, as well as the country's GDP growth, to become the main driver of the economy (Economic Planning Unit, 2018; Malaysian Institute of Economic Research, 2018). Looking back at the country's GDP records, the contribution of the services sector was merely thirty one percent (31%) in 1960 and have risen to contribute over sixty percent (60%) of the nation's GDP as of 2017 (Economic Planning Unit, 2018). The 11<sup>th</sup> Malaysian Plan, spanning from 2016 to 2020, had aimed towards a more service-oriented economy and was focusing for the service industry to grow at an average real annual rate of over seven percent (7%) till the end of the economic plan period (Economic Planning Unit, 2018). This raised the sector's contribution towards the country's GDP from fifty five percent (55%) in 2014 to significantly above sixty percent (60%) at the end of the 11<sup>th</sup> Malaysian Plan in 2020. This growth is in tandem with the global contribution and growth of the services sector worldwide.

In addition, MITI (2018) attributes the services industry as the principal sector to create jobs and provide steady employment opportunities in the Malaysian economy, supplying over half the total employment in the country. Correspondingly, the government of Malaysia recognises the services sector as the largest contributor to the country, not just the nation's GDP but in ensuring low national unemployment rate, which makes the sector the primary driver of the country's economic growth as well (DOSM, 2018; Economic Planning Unit, 2018; MITI, 2018). As of 2017, the services sector contribute approximately almost seventy percent (70%) of the total employment availability (Economic Planning Unit, 2018). This escalating and steady contribution from the service industry to the nation's coffers and wellbeing indicate the industry's significance towards the economy of Malaysia. As such, in line with the initiatives to encourage and bolster the services sector, the Malaysian government proposed and adopted "regulatory reforms initiatives through various programmes, including progressive

liberalisation of the services sub-sectors” to support the development and growth of the sector (DOSM, 2018; MITI, 2018). Due to the sector’s track performance in recent years as well as the robust support towards its future development, it is foreseeable that the services sector will continue to lead Malaysia’s fiscal and economic advancement. As such, studies need to continually examine the relationships between the constructs in this fast growing sub-sector of the service industry considering the fact that the hospitality sector is a lucrative segment of the ever growing service industry. The necessity to constantly update the literature covering these constructs indicate a possible literary gap that should be further explored so as to enable marketers to further improve their understanding of the ever evolving consumer sentiments.

### **1.3 Research Problem**

Despite the abundance of literature on service quality and customer satisfaction, the constant mutability and capriciousness of today’s consumers warrants the need to persistently investigate alongside the evolution of the consumers’ priorities, needs and wants (Ha et al, 2010; Wang and Lo, 2012; Lovelock et al, 2014; Guesalaga et al, 2016). In addition, the rise in the usage of the Internet as well as the popularity of social media allows consumers to connect with each other and share views and experiences at wildfire speed which can make or break a business. This advent of consumer influence and collective domination was not possible just a decade before. As such, this creates an atmosphere of heightened awareness and increased demand as more and more consumers exert their expectations for quality and satisfaction through their online voices and purchase behaviour. Hence, studies need to be conducted on an ongoing basis to verify, clarify and update the masses as well as the literary realm.

Secondly, most research conducted lacks consideration with regards to its antecedents and places most of its focus on its consequences. Based on the construct of service, there is a dual approach in the study of service quality, that is, the antecedent angle or the dimensional perspective. Nevertheless, majority of academic researchers have mostly focused on the dimensional approach and hence neglected the antecedent approach. A quick look at the research papers available confirms this general direction amongst many researchers (Cronin et al, 2000; Ladhari, 2009, 2011; Strandberg et al, 2012; Wang and Lo, 2012; Felix and

Braunsberger, 2016). Furthermore, this trend is particularly apparent in relation to the aspects of culture or ethnicity with most research fixated on a single culture, ethnicity or nationality (Malhotra et al, 2005; Kueh and Voon, 2007; Soye, 2012). In fact, a number of researchers have even totally disregarded these highly critical components (Malhotra et al, 2005; Felix and Braunsberger, 2016). Nevertheless, one's ethnicity and cultural background certainly and inadvertently shapes one's consumer perception and procurement behaviours (Haque, 2003; Fontaine and Richardson, 2005; Schneider et al, 2011; Soye, 2012; Felix and Braunsberger, 2016). The cultural make up of one's society drives the individual's thoughts, norms and actions. As such, it is imperative that businesses ascertain the parallels or variances in their consumers so as to be able to create exceptional, rigorous and encompassing marketing strategies (Pires and Stanton, 2005; Kotler and Keller, 2012; Bouzaabia et al, 2013; Lovelock et al, 2014). Therefore, it plays a fundamental role in the comprehension of the precursors or antecedents of consumer behaviour and perception.

Despite the abundance of literature on consumer behaviour, service quality and customer satisfaction, too few researchers consider these constructs in an environment with ethnic and cultural multiplicity. Furthermore, most research on culture in the marketing context tend to focus only on a single national culture such as Anselmsson and Johansson (2014) on Sweden, Munhurrin et al (2010) on Mauritius, Stamekov and Dika (2015) on Republic of Macedonia, Polska et al (2013) on China, Guiry et al (2013) on USA, Davis et al (2017) also on the USA, Kum and Vinh (2015) on Singapore and Imrie (2013) on Taiwan. A few did conduct a comparison of two or more differing nations' cultural influences, for example, Sabote et al (2012) on the Spanish and British, and, Bouzaabia et al (2013) on Romania and Tunisia. However, this consideration is even more prevalent in a country like Malaysia whereby its unique ethnic compilation and cultural diversity may present an exacting challenge to marketers and service providers. Furthermore, Guesalaga et al (2016) notes that contemporary literature advocates the evaluation of cultural variations and their impact on the consumer's assessment and expectations of service quality from a local perspective but for some reason or another, does not pursue nor advance upon further examining the research concern. As such, this research will consider the different cultural entities within this one unique country.

Consumer thoughts, perception and behaviour differ in varying manners in different societies (Haque, 2003; Fontaine and Richardson, 2005; Schneider et al, 2011; Soye, 2012; Felix and Braunsberger, 2016) and Malaysia is a developing Asian nation whose highly distinct populace

possesses enormous purchasing power (CIA, 2015; The World Bank, 2017, 2018). Malaysia's approximate thirty two million strong population, and hence consumers, consists of various ethnic factions who multi-culturally prosper and intermingle with one another on a daily basis. This presents a non-homogenous society that yields additional challenges to the marketers and service providers of such a colourful and dynamic environment (Haque, 2003; Fontaine and Richardson, 2005; De Run et al, 2010). Furthermore, Malaysia is deemed a culturally diverse nation with Fontaine and Richardson (2005) describing the national society as a potentially complicated and delicate mingling of cultural sensitivities due to its population diversity whilst Asma (2001) pointed out the ethnic and racial composition as a minefield of challenges. According to Schneider et al (2011) and Soyeze (2012), such a multi-religion, multi-ethnic and multi-cultural environment constantly generate dissimilar procurement patterns which again vary depending on the type of consumer product. This is even more apparent in terms of religion which have been shown to significantly mould its "tribe" or group's behaviours, attitudes, concerns and values (Schneider et al, 2011; Soyeze, 2012; Felix and Braunsberger, 2016). Since these underlying factors may directly or indirectly affect a consumer's consideration as well as decision making behaviour, and as such, any current study in such an environment may reveal morsels of information that may keep the marketers up to date and in touch with any development that may occur with the changing times.

Thirdly, a number of researchers agree that the different groupings of generational cohorts give rise to the necessity for firms to come up with appropriate market penetration strategies so as to effectively reach out to the desired or selected markets (Zemke et al, 2000; Beck, 2001; Benckendorff et al, 2010; Brosdahl and Carpenter, 2011; Gurău, 2012; Gardiner et al, 2013; Giovannini et al, 2015; MacKenzie and Scherer, 2019). According to past literature, much can be gleaned from the comparison of the different generations. For example, the Gen Y cohort experience a world that is very involved and entangled in online social media as compared to the earlier generations. As such, the consumers of these different generations display distinctive and unique personalities generic to their respective age clusters with imperceptible connexions of shared mutual experiences. Furthermore, the market consideration by these generational cohorts differ in an Asian society as compared to their Western counterparts (Reisenwitz and Iyer, 2009). This may be further compounded by cultural factors as indicated in the previous paragraphs. Examples include how the attributes and paradigms of uncertainty avoidance, power distance and collectivism ranks high amongst the Asian societies as compared to their counterparts in the Western societies (Hofstede, 2003, 2010, 2017). There has been

considerable investigation into comprehending the expectations and perceptions of these consumers but most of these research limited their studies to examining only a particular generation. Kueh and Voon (2007) and later, Gurău (2012), put forward the recommendation in conducting additional research as well as generational comparisons so as to effectively apprehend the exact factors towards developing consumer loyalty, affiliation and satisfaction. Additionally, MacKenzie and Scherer (2019) support the utilisation of comparison groups when conducting generational research so as to avoid deriving limited conclusions that may impede insights on the individual generational traits. As the efforts of catering sales promotions and tailoring personnel conducts have been shown to persuasively influence the satisfaction levels of the consumers, therefore in the same breadth, the adoption of knowledge on collective generational behaviours may contribute towards conceiving a much more effectual and successful market strategy that is more encompassing (Moschis et al, 2011; Giovannini et al, 2015).

The research available thus far on the comparisons of generational variations and disparities on consumer quality expectations and perceptions within the context of the Asian milieu seems rather scarce. More so in a unique country such as Malaysia with its added multifaceted cultural sensitivities and intricately woven social environment. To be able to exist and persist efficaciously, businesses cannot afford to ignore this additional layer of intelligence and perspective. Currently, both the X and Y Generations are deemed a market force to be reckoned with due to their collective purchasing power with the clout to make or break a business (Soares et al, 2017; Zhang et al, 2017). Firms that vigorously investigate and consider the generational behaviour patterns will be in a far better position to envisage the upcoming consumer trends and crazes as well as better prepared to act upon it (Hess et al, 2003; Brosdahl and Carpenter, 2011; Gardiner et al, 2013). Failure to do so may cause the businesses to disconnect from their consumers which then inadvertently affects the firms' fiscal health and wellbeing. Malaysia, with her social and cultural intricacies and along with the added layer of generational consideration, will prove to be a noteworthy and fascinating case study.

Fourthly, past literature concur that service quality perceptions and expectations are inclined to vary across the demographic classifications, and therefore, businesses have had to adapt accordingly to cater to their customers' expectations and demands (Meng and Elliott, 2009; Gupta and Bansal, 2011; Kim et al, 2013; Seiler et al, 2013). In the marketing context, demographic variables, such as gender, is considered as a description of the clientele that may

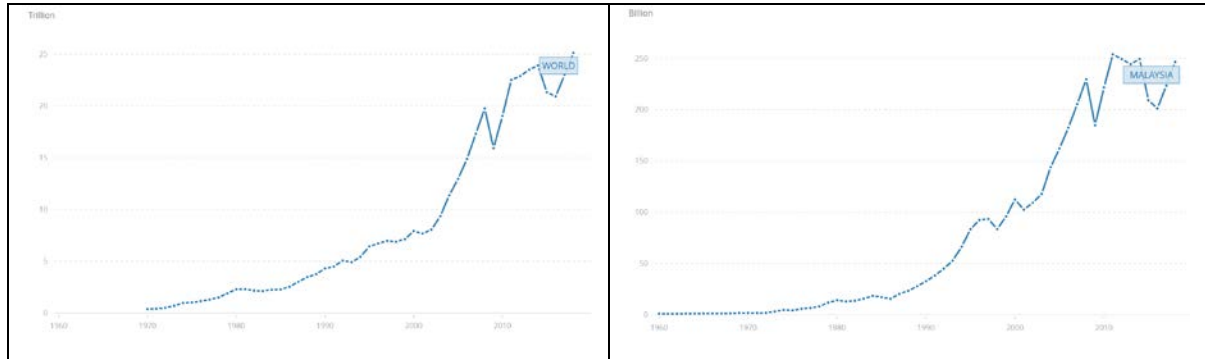
be simply identifiable thereby making this particular demographic indicator a factor that may be incorporated into marketing strategies (Havinal and Sirigeri, 2013; Kim et al, 2013). Numerous researchers observe men and women exhibiting differing gender traits and behaviour subject to the circumstances and environment as well as ethnicity or cultural background (Hart et al 2007; Gruber et al, 2009; Meng and Elliott, 2009; Gupta and Bansal, 2011; Parham et al, 2015). For example, male consumers tend to take less time shopping as compared to their female counterparts (Hart et al, 2007). As such, Hoyer and MacInnis (2010) observe the gender variable as significantly affecting the procurement evaluation stages.

Parham et al (2015) posit that the viewpoint and resulting outcome variances due to gender differences are sufficiently significant for the demographic variable to be regarded as a distinct subculture as well. Researchers concur that the incorporation of this demographic identity on the assessment of service quality may generate additional data and clarity on consumer expectation, perception and behaviour (Munusamy et al, 2010; Lal et al, 2014). This was additionally validated by other researchers encouraging managers to consider demographic variables in the formulation of sales and marketing strategies in order to be more effectual towards the enticement, management and retention of their customers (Gupta and Bansal, 2011; Havinal and Sirigeri, 2013; Kim et al, 2013; Seiler et al, 2013).

Next in line, the service industry has gained momentum to become one of the fastest expanding sector in the global market and, as such, is evolving into one of the fundamental impetus for the development of global economy. Since as far back as fifty years ago, the global economy has gradually moved and transformed towards a service based economy with the services sector's contribution towards the GDP increasing as the economy develops and this has been evident in both developed and developing nations (Kotler and Keller, 2012; Lovelock et al, 2014; The World Bank, 2017, 2018). According to The World Bank (2017, 2018), the services industry has been on the rise at a staggering ascending trend and hence dominates the global economy. This is supported by the climbing percentage of service-related commerce that has already dominated over two thirds of the US economy with the numbers consistently high and steadily rising (Kotler and Keller, 2012; The World Bank, 2017, 2018). As of 2018, the service sector collectively sustain up to almost seventy percent (70%) of the Gross Domestic Product (GDP) globally (CIA, 2015; The World Bank, 2017, 2018). Similarly, Malaysia's service sector clocked comparable figures indicating that this industry shares the same uptick trajectory

and pathway (The World Bank, 2018). Figure 1 illustrates the analogous growth of the service sector globally as well as in Malaysia.

**Figure 1: Growth Trajectory of the Service Sector (Globally and Malaysia)**



Source: The World Bank (2018)

The sixth rationale justifies for the study to be carried out to ascertain the consumers' expectations and perception of quality as well as their behavioural aspects with regards to the high contact industry in Malaysia. The high contact industry encompasses people-based businesses that are continually interacting with their customers throughout the service delivery (Taylor and Davies, 2004; Kusluvan et al, 2010) as well as being labour-intensive (Erkutlu and Chafra, 2008; Xu and Chan, 2010). Examples of a high contact service industry includes the hospitality, medical and wellness industry and includes hotels, dining establishments in addition to hospitals. Consequently, service is deemed as a highly crucial and necessary component in the high contact industry (Erkutlu and Chafra, 2008; Lovelock et al, 2009; Xu and Chan, 2010) and the quality of the service is able to increase the customer's sense of pleasure and satisfaction (Grönroos (2000); Lovelock et al, 2014; Stauss, 2016). Customers tend to view businesses that provide quality services positively (Lysonski et al, 2003; Lovelock et al, 2009; 2014; Davis et al, 2017) and this inevitably leads to favourable behavioural considerations (Bhandari et al, 2007; Ladhari, 2009; Gounaris et al, 2010). Conversely, firms experience a high probability of their customers ditching the establishment when they feel that the services has failed to reach their expectations (Bhandari et al, 2007). Considering the acknowledged connections between service quality, customer satisfaction and behavioural intentions, it is therefore vital for organisations in any high-contact service industry to assess, gauge and monitor the levels of service quality and satisfaction with the viewpoint to inspire and guide their customers' behavioural directions. (Saha & Theingi, 2009; Hsu et al, 2010; Salazar et al, 2010; Lovelock et al, 2014).



According to Parasuraman et al (1985) and Kusluvan et al (2010), the hospitality industry exhibits the typical traits of a service industry such as inseparability between production and consumption, as well as, intangibility of the product offering that occurs in a high-contact and robust interpersonal interface between the service providers and its consumers. According to Kokkranikal et al (2013), service quality is regarded with utmost importance in the hospitality industry and its role is emphasized in the success of the hospitality establishment. Furthermore, Bharwani and Matthews (2016) note that the hospitality industry has been customising experiences to cater to the individual tastes and expectation of the customers in their attempt to convey service quality, especially in the emerging experience economy. Prairie (2012) notes that the hospitality sector is a dynamically rigorous and evolving industry segment that is currently undergoing a sustainability awakening phase. This corresponds to the paradigm shift in the consumers' perspectives of value expectations (Bosque et al, 2009; Lovelock et al, 2014). The hospitality patrons of today are increasingly in search of a more superior, distinctive and culturally-infused hospitality experience (Salazar et al, 2010; Xu and Chan, 2010; Bharwani and Matthews, 2016). Therefore, it is fundamental for the hospitality service providers to comprehend the customer's expectations so as to be able to develop competitive advantages and provide distinctive customer experiences.

Furthermore, there has been increasing awareness and interest in the hospitality services in Malaysia. The hospitality sector has been considered as one of the more rapidly expanding industry and make up of over one third of the overall services trade worldwide (ILO, 2010). As such, the hospitality commerce is observed as one of the most promising sectors in the USA (Gallén, 2009; ILO, 2010) with the Asia-Pacific region generating a significant annual average growth rate of 7.2 per cent (ILO, 2010). In 2008, the hospitality industry in Asia-Pacific was estimated to be a burgeoning billion-dollar industry of over USD11 billion making it the third largest market in terms of revenue (ILO, 2010). Likewise, Malaysia has seen similar positive growth in recent years. According to Malaysia's Trade and Industry Ministry (MITI, 2018), the number of hospitality establishments in Malaysia has grown by almost ten-fold since 2000 despite the industry still being at the infancy stage. In addition, Malaysia is a modern emerging nation with well-developed infrastructure and as such, Malaysia's environment is deemed to be conducive with tremendous room for growth as the industry is relatively young by global standards (DOSM, 2018; MITI, 2018). This validates the justifications for updated studies to

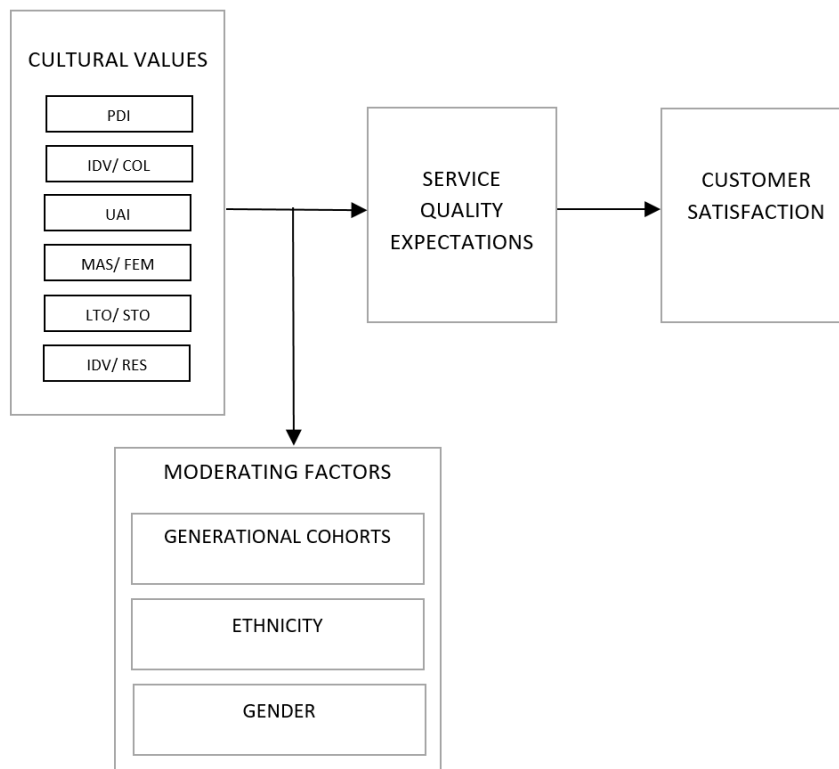
be conducted in the hospitality service industry that takes account of the differing variables of the human facets, especially in a country like Malaysia whose population is highly diverse.

Finally, this study aspires to aid managers to better comprehend the behavioural expectations, motivations and intentions of consumers in a rigorously demanding and competitive service-based industry and thereby effectively and efficiently reach out to their target market. In addition, the study attempts to demonstrate that the links involving all the constructs may be typology specific, and as such, industries sharing similar typology may demonstrate parallel relationship attributes. Therefore, such knowledge will enable managers of other similarly high-contact industry to benchmark against superior performing organisations sharing analogous typology. Nevertheless, customer satisfaction may also be influenced by other factors such as range, type, and price of services, reputation of the establishment, accessibility, and other factors not necessarily related to service quality. However, as such factors are too numerous to include in this study, they are treated as control factors and their effects are not considered in the conceptual model and framework.

#### **1.4 Research Model, Objectives and Hypotheses**

As indicated in the previous sections, the abovementioned factors invariably affect and influence one another to produce a variety of outcomes. Since service quality expectations, perceptions and customer satisfaction are conceived in varying degrees and manner, the effects of the following antecedent cultural variables have been considered as the basis of this study along with several additional moderating factors such as generational cohorts, ethnicity and gender. Figure 2 below illustrates the conceptual research model that was developed based on an integrative framework to demonstrate the projected relationships between the variables centered on the research project and discussion above. The model encompasses the constructs that will be discussed in Chapter Two's literature review section.

**Figure 2: Conceptual Research Model and Hypothesized Relationships**



With reference to the conceptual research model above as well as the research hypotheses justifications in Chapter Two, the proposed research questions (RQ) and corresponding research objectives (RO) as well as the hypotheses (H) that will be examined for this research study paper are as follows:

RQ1. How does cultural values influence service quality expectations?

RO1. To examine the relationship between cultural values and service quality expectations.

RQ2. How does service quality expectations influence customer satisfaction?

RO2. To examine how service quality expectations influence customer satisfaction.

RQ3. Does service quality expectations mediate the relationship between cultural values and customer satisfaction?

RO3. To examine if service quality expectations mediates the relationship between cultural values and customer satisfaction.

RQ4. Does generational differences moderate the relationship between cultural values and service quality expectations?

RO4. To examine how generational differences influences the relationship between cultural values and service quality expectations.

RQ5. Does ethnicity moderate the relationship between cultural values and service quality expectations?

RO5. To examine how ethnicity influences the relationship between cultural values and service quality expectations.

RQ6. Does gender moderate the relationship between cultural values and service quality expectations?

RO6. To examine how gender influences moderate the relationship between cultural values and service quality expectations.

H1. Cultural values has a positive and significant effect on service quality expectations.

H1a. The power distance cultural dimension has a significant influence on service quality expectations.

H1b. The individualism/ collectivism cultural dimension has a significant influence on service quality expectations.

H1c. The masculinity/ femininity cultural dimension has no significant influence on service quality expectations.

H1d. The uncertainty avoidance dimension has a significant influence on service quality expectations.

H1e. The short term/ long term orientation dimension has a significant influence on service quality expectations.

H1f. The indulgence/ restraining dimension has a significant influence on service quality expectations.

H2. Service quality expectation has a positive and significant effect on customer satisfaction.

H3. Service quality expectation mediates the relationship between cultural values and customer satisfaction

H4. Generational differences moderates the relationship between cultural values and service quality expectations.

H5. Ethnicity moderates the relationship between cultural values and service quality expectations.

H6. Gender moderates the relationship between cultural values and service quality expectations.

## **1.5 Research Methodology**

The study adopts a quantitative research methodology whereby the primary data are collected, quantified and evaluated with the aid of statistical tools. As this research deals with the customers' expectations and perceptions, descriptive research was deemed apt as this research design is able to determine the perceptions of the service characteristics as well as the degree of its variable associations (Bryman and Bell, 2007; Malhotra, 2014). In addition, despite the study being conducted in Malaysia which is a multilingual country with numerous ethnicities speaking multiple languages, the research project was wholly managed, conducted and presented in the English Language.

This study's questionnaire comprised of three sections. Section A covers the information on the demographic profile of the respondents while Section B and Section C house the measurement items on the constructs. In Section B, the research questionnaire adopted Parasuraman et al's SERVQUAL quality index performance measurement scale to assess and evaluate the investigated service quality construct. Numerous literature illustrates SERVQUAL as an effective, invaluable and established instrument for measuring service quality related attributes (Szwarc, 2005; Schiffman et al, 2008; Ladhari, 2009; Kumar et al, 2010). The SERVQUAL dimensions adopted consisted of the following established components: (1) tangibles, (2) reliability, (3) responsiveness, (4) assurance and (5) empathy. Section C, on the other hand, contains an adaptation of the measurement instrument on cultural dimensions by Hofstede to measure the respondents' cultural values. Similarly, the Hofstede cultural dimension index is widely perceived as a current and constructive measurement instrument (Donthu and Yoo, 1998; Furrer et al, 2002; Schneider et al, 2011; Soyeze, 2012; Felix and Braunsberger, 2016). The Hofstede cultural dimensions adopted will comprise of the following

established components: (1) power distance, (2) uncertain avoidance, (3) individualism/collectivism, (4) masculinity/ femininity, (5) long-term/ short-term orientation and the recently added dimension, (6) indulgence/ restraint. Furthermore, industry experts were solicited to further assist in the assessment, correction and refinement of the measurement items as well as advise on the applicability of the items specific to the industry. This step was undertaken to fulfil the criteria towards the development of a measurement instrument that is able to explicitly evaluate the researched hospitality industry.

Upon the research project receiving the green light from the Human Research Ethics Committee (HREC), a pilot study was conducted to test all parts of the survey questionnaire as well as pre-test all the statements listed in the questionnaire to ensure the adequacy as well as further safeguard the validity and reliability of the scale items in the survey instrument. Subsequently, a total of five hundred (500) questionnaires were distributed via purposive sampling. The data collection and data input phase undertook a period of approximately three months. The following stage then has the researcher monitoring the research study and employing statistical programs such as the Statistical Package for Social Science (SPSS) and Analysis of Moment Structures (AMOS) programs to analyse the raw data collected through the survey questionnaire. The SPSS program tested the descriptive and pre-analysis data whereby the input collected from the survey was coded, analysed and interpreted with the aid of the SPSS software, to test the hypothesized relationships between pairs of variables that make up the service experience and its antecedents: service quality, customer satisfaction and the respondents' cultural values. This was consequently followed by the AMOS program which was utilized to analyse the structural equation model along with confirmatory factor analysis and testing of the hypotheses. Chapter Three presents a comprehensive assessment of the research methodology undertaken in this dissertation.

## **1.6 Major Findings**

There were a total of twelve hypotheses tested in this paper. Out of the twelve hypotheses proposed, three were rejected. The research's findings are as summarised. On a whole, the cultural value construct confirms a positive and significant influence on service quality expectations (H1). However, out of the six individual cultural value dimensions, the short term/

long terms dimension, had to be dropped due to unanticipated shortcomings or inadequacy in the measurement scale (H1e). Nevertheless, the remaining sub construct dimensions; power distance (H1a), individualism/ collectivism (H1b), uncertainty avoidance (H1d) and indulgence/ restraining (H1f) dimensions independently support a positive influence on service quality expectation with the masculinity/ femininity cultural dimension (H1c) fulfilling the expected position of having no significant influence on the service quality expectation construct. In addition, service quality expectation is positively linked to customer satisfaction (H2) though only partially mediating the relationship between cultural values and customer satisfaction (H3). In terms of the moderating variables, only the generational cohort demographic variable moderates the relationship between cultural values and service quality (H4) whereas ethnicity (H5) and gender (H6) were found to be insignificant as a moderating variable between cultural values and service quality. As such, hypotheses H1, H1a, H1b, H1c, H1d, H1f and H3 are supported whereas hypotheses H1e, H4 and H5 were not supported with hypothesis H2 only partially supported.

## **1.7 Theoretical and Practical Implications**

The results arising from this study nominated a number of theoretical and practical considerations. Theoretically, the research's findings were able to support and validate many of the past literature which additionally indicates the relevance of the factors in the Malaysian high contact service-based hospitality industry. Nevertheless, the study also refutes a selection of literature and hence revealing that the variables may interact contrarily and depending on a multitude of factors.

From a macro perspective, the study ratifies the hypothesis that the overall cultural value construct significantly influences the service quality expectation construct. However, the generational cohort factor was able to notably moderate the relationship between cultural values and service quality expectations which, in the process, diminished the influence and bearing of the cultural value construct on the service quality expectation construct. On the other hand, the ethnicity and gender demographic variables were not able to moderate the relationship between cultural values and service quality expectations. This is despite the indication that the ethnicity variable is positively linked to service quality expectations.

Comparatively, past literature suggests that the gender demographic variable fluctuates depending on the context.

Another theoretical input found Malaysia exhibiting cultural characteristics and behaviour that contradicts its Hofstede cultural classification. Despite Malaysia being classified as a high power distant nation, this study demonstrates that Malaysia behaves parallel to a low power distance nation in the context of the high contact hospitality industry. In a similar vein, Malaysia is classified as a collectivist nation but the findings revealed Malaysians displaying individualistic traits in the hospitality sector. In summary, Malaysians have no qualms in expressing their expectations, in addition to, being less restrained when encountering service providers in a hospitality setting.

Next, the study also contributed to the limited literature on Hofstede's newest dimension of indulgence and restraint as an antecedent as well as the demographic variable, gender, as a moderating factor. As indicated by this study's findings, the indulgence/ restraint dimension strongly influences service quality expectations in Malaysia's hospitality industry. Hence, it is noteworthy to document Malaysia as a Muslim nation that is dissimilar to her sister Muslim nations such as Pakistan or Egypt due to her fairly indulgent attributes and qualities that demand high levels of quality service. Conversely, gender was found to be irrelevant as a moderating factor between the cultural value and service quality constructs in the study. This particular hypothesis was conceived to fulfil the research gaps, as called for by other researchers, on the incorporation of demographic variables in moderating or mediating roles. The findings led to the interpretation that Malaysian consumers are more inclined towards value-perceived service offerings rather than gender centered engagements. Correspondingly, these aspects of the study are able to contribute towards building deeper insights of nations like Malaysia for future literary research.

Adding on to the theoretical implications, this study further replicated the adoption of the service quality expectation construct in a mediating role between cultural values and customer satisfaction. Though the study does not profess this input as a major theoretical contribution, it does suggest that the direct effect of the cultural value construct on customer satisfaction decreases when the service quality expectation construct enters the model as a mediator variable. Finally, this study undertook to address the cultural fusion occurring within this



regional populace as an updated and current research on this country will promote the knowledge and comprehension of the constantly growing and evolving population amalgam.

On the practical side, managers are encouraged to adopt customized strategies that incorporate the antecedent factors such as culture and generational cohorts as part of the marketing policies and stratagems. The study's findings indicate that such an approach is effective towards the attainment of customer satisfaction which inevitably brings about affirmative procurement behaviour, positive allegiance and a development of a more efficient resource allocation, coordination and management. In an example involving the cultural aspects, Malaysian consumers exhibit a culture of indulgence, and as such, value positive experiences that may be offered via customer-oriented service experiences. Malaysian managers may also train their service personnel to treat customers with utmost care, respect, patience and good-naturedness so as to leave a memorable and emotional impact on their customers.

Similar to the cultural factors, it would be astute for the service managers to take into consideration the generational traits and characteristics that their customers may belong to and offer corresponding service offerings. For example, Gen Y consumers are deemed as rather liberal with less care concerning costs and lean towards memorable procurement experiences. As such, managers that are able to create and inject a service experience that will leave a favourable impression may appeal to the Millennials. Such sensitivity orientation towards the customer will further endear the service provider to their customers. In this time and day of immense and intense ongoing competition, the business owners need to be constantly aware and seize all opportunities to create and leave a memorable impression amongst their customers. By the same token, businesses will also be encouraged to embrace a compliant and amenable stance in recognising and identifying the variations or deviations that may occur with the respective cultural values or generational cohorts.

Last but not least, this study was conducted on the hospitality industry which is a high-contact industry. As there are a wide spectrum of high-contact service organisations, service managers in a similar or other high-contact industry may adopt the same customer management concepts and strategies since industries in the same typology tend to present analogous relationship characteristics. As such, this will enable businesses within industries of similar high-contact establishments to benchmark against better performing businesses of the same typology. In doing so, the proactive firms may be able to increase market share effectually, enhance their

rapport with their clientele and develop robust growth performance as well as competitive advantage in their respective industry.

## **1.8 Structure of the Dissertation**

There are a total of five chapters in this project paper. The structure presented is as indicated below:

- (a) Chapter 1 comprises of the current section which gives its readers an overview of the research project. This chapter provides a summary of the background as well as the rationale for the research, the methodology adopted and the subsequent findings for the research. This includes a concise synopsis of the theoretical and practical implications.
- (b) Chapter 2 ploughs through the relevant literature and evaluates the different constructs from the broad view of the marketing subject and narrowed it down to the consumer's behavioural intentions in the selected high contact industry. This chapter also provides the justification for all the hypotheses in this paper.
- (c) Chapter 3 looks at the methodology that was adopted in this dissertation and discusses the manner and justification in which the paper was conducted at every level as well as the statistical tools utilized towards the analysis of the data.
- (d) Chapter 4 covers the results of the data analysis, which includes the descriptive data as well as the model fit and research results.
- (e) Chapter 5 accounts the project research's findings and deliberates the theoretical contributions, practical implication, limitation and platform for future research.

# CHAPTER TWO

## Literature Review and Conceptual Framework

## **2.0 Chapter Two: Literature Review and Conceptual Framework**

### **2.1 Introduction**

In this section, preceding studies will be analysed to identify the gaps significant to this study. In addition, this section will also observe the literature to ascertain the related theories and concepts relevant to this paper. This chapter is divided into two parts whereby the first section encompasses the identification, assessment and review of literature pertinent to this study whereas the second section examines the development of the hypotheses covering service quality expectations with culture as the antecedent factor and its moderating factors. The literature review premieres with a consideration and evaluation on the concepts of service quality which includes an analysis of the service and quality constructs on an individual basis. The review then continues with a discussion on the consumers' expectations of service quality whilst taking into account the different dimensions existing in the service quality construct through an analysis of the quality measurement tool, SERVQUAL. In the following sections, the theoretical underpinning and empirical evidences on the factors influencing service quality expectations are explored and discussed. The discussion includes literary examination and review on the theories and concepts of cultural values as well as the generational dimensions, ethnicity and gender acting as moderating factors. All these constructs are then linked to the service quality expectation paradigm as antecedent variables. Subsequently, the chapter concludes with the hypotheses developed and posited for this paper along with the presentation of the conceptual framework model.

### **2.2 Service Quality**

The quality of the services provided by any organisation attributes to the firm's success. As such, service quality has been extensively considered a fundamental marketing instrument that firms and vendors can adopt to enrich the consumer's shopping experience (Siu & Cheung, 2011; Lovelock et al, 2014; Davis et al, 2017). Moreover, it is also accepted as an essential factor in achieving success as well as competitive advantage (Henning-Thurau et al, 2001; Siu & Cheung, 2011; Lovelock et al, 2014). Nevertheless, there are increased challenges when attempting to define and delineate service quality as compared to product quality due to the

lack of obvious tangible characteristics that a service experience may possess (Schiffman et al, 2008; Lovelock et al, 2014). Lovelock et al (2014) posit service quality to possess subjective traits that is generally established and determined by the consumers. As such, firms need to identify, recognise and regularly assess the quality of the services they provide so as to effectively retain their customers as well as endure positively in an increasingly competitive business environment.

### 2.2.1 Perspectives of Quality

Numerous researchers share the view that the quality of any service provided plays an imperative role in satisfying and retaining the customers. (Parasuraman et al, 1985; Schiffman et al, 2008; Siu & Cheung, 2011; Lovelock et al, 2014). Nevertheless, the term ‘quality’ refers to multiple differing views and meanings and is subject to the context of reference. Garvin (1988) lists the diverse perspectives on quality to include the transcendent view, the manufacturing-based approach, the user-based definitions and the value-based classifications, as indicated in Table 1 below.

**Table 1: Differing Perspectives of Quality**

Perspectives of Quality	
Transcendent	This perspective advocates that consumers recognises and comprehend quality through repetitive exposure to such experiences with the viewpoint generally applied to visual and performing arts.
Manufacturing-based	This perspective is supply-based and generally covers the operations, manufacturing and engineering practices with the focus on meeting internally developed standards to increase productivity and decrease costs.
User-based	This outlook views quality through the perspective of the individual and is considered subjective and demand-oriented as customers express varying needs and wants.
Value-based	This viewpoint is also known as “affordable excellence” and looks at quality in terms of price and value with consideration on the exchange between the cost incurred and the benefits received.

These diverse interpretations and viewpoints of the term ‘quality’ may result in conflict and discord within a firm’s various functional departments. For the purpose of this paper, the term quality will be discussed from the user or consumer’s definition angle as meeting or surpassing the customer’s expectations. According to Parasuraman et al (1994), the user-based perspective of quality is defined as conforming to the customer’s conditions and specifications whereas Munhurrin et al (2010) posit such consumer-based viewpoint of quality as meeting the requirements of the consumer or providing procurement experiences that exceed the customer’s expectations. In the explicit context of the service industry, Lovelock et al (2014) conveys quality as the evaluation provided by the customers on the business’ service delivery. This corresponds to Svensson (2004)’s preceding proposition that service quality is a phenomena that is experienced during the interaction between the customer and the firm. Delivery of quality service is deemed a vital function in the development, maintenance and retention of a thriving relationship between the firm and its customers. Service firms that are adept in successfully inculcating superior and quality service into the operational processes are able to increase efficiency and enhance their competitive advantage through differentiation from its competitors (Ladhari, 2009; Gounaris et al, 2010; Ha et al, 2010; Salazar et al, 2010; Lovelock et al, 2009, 2014). This will further produce rewarding customer behavioural actions and behaviours.

On the other hand, service quality failure ensues when the service delivery does not meet expectations or is deemed inadequate (Bhandari et al, 2007; Kotler and Keller, 2012; Kotler and Armstrong, 2013; Lovelock et al, 2014). All firms inevitably encounter glitches and problems, especially service firms (Bhandari et al 2007; Kotler and Keller, 2012; Kotler and Armstrong, 2013; Lovelock et al, 2014). Many service providers have undertaken to streamline their service delivery processes with the aim of achieving a consistent, efficient and high quality service performance in every service encounter (Kotler and Keller, 2012; Kotler and Armstrong, 2013). However, services are unlike products whereby it is possible to tweak the merchandise’s production and assembly line to the desired outcomes. Service quality is susceptible to variations and deviations due to the real time interface between the customers and the service personnel (Kotler and Keller, 2012; Kotler and Armstrong, 2013; Lovelock et al, 2014). According to Lovelock et al (2014), service-related oversights and errors can befall

upon any service encounter, such as a delayed delivery or flight or even an overdone steak, as the service is typically executed in the presence of the customers. As such, service firms need to adopt and adapt recovery strategies when encountering a dissatisfied customers for a genuine and worthy recovery can convert an upset customer into a loyal one and further generate additional goodwill that may not have been present prior to the incident (Kotler and Keller, 2012; Kotler and Armstrong, 2013; Lovelock et al, 2014). According to Kotler and Keller (2012), service quality is also measured by customer retention and that service firms should aim to encourage support as well as to instil customer loyalty. Therefore, service firms need to ensure that they provide, not only, quality service but to implement appropriate recovery measures as well so as to conserve the customer's perception of service quality, sustain the customer's satisfaction with the firm and encourage positive future customer behavioural intentions (Lovelock et al, 2014).

Services are also a lot more complex than goods, and as such, defining services can be rather challenging (Lovelock et al, 2014). Services do not possess the apparent tangible cues and characteristics of goods. As such, consumers may find it rather challenging when trying to appraise and evaluate service quality as compared to product quality. This is due to the intangibility characteristic of services, their variability, their perishability and their immediate production and consumption traits (Parasuraman et al, 1985; Schiffman et al, 2008; Lovelock et al, 2014). Consumers can compare a product side-by-side but this is not possible when one need to compare services. There are no physical consideration such as packaging, description label or colour choices, nor is it a solid matter that can be held and fiddled with in one's hands (Parasuraman et al, 1985). For that reason, consumers seek alternative cues and indicators that indicate quality when attempting to evaluate services (Schiffman et al, 2008; Lovelock et al, 2014). For example, a hospitality or wellness establishment may be assessed by their amiable and competent service personnel, the splendour of the reception and treatment areas plus the number of awards won whereby these factors will combine to influence the consumer's perception of service quality. Nevertheless, a firm's service personnel need a common platform when addressing matters concerning service quality, such as its construct measurement, tracing the roots of quality-related issues as well as strategy proposal, execution and remedial measures (Lovelock et al, 2014). However, Lovelock et al (2014) also added that the management of service quality can be rather challenging and arduous. Parasuraman et al (1985, 1988, 1991, 1994) have conducted much research in the area of the service quality construct and have isolated ten dimensions most commonly adopted by consumers in their assessment of service

quality, after which, was further reduced to five broad dimensions in their subsequent research studies. The dimensions are (1) tangibility, which refers to the facade of tangible elements; (2) reliability, which refers to accurate and dependable performances; (3) responsiveness, which refers to helpfulness and timeliness; (4) assurance, which refers to security, courtesy, competence and credibility; and lastly (5) empathy, which refers to accessibility, customer comprehension and agreeable communication skills (Parasuraman et al, 1985, 1988, 1991, 1994; Schiffman et al, 2008). The sections below will further expand on the aforementioned dimensions of service quality.

As service quality performance is highly linked to customer satisfaction which then translates to giving the firm a competitive advantage, it is therefore crucial as well as of major consideration to evaluate a business' service delivery and processes (Yang & Chen, 2000). In addition, organisations are continually confronted with immense demands to “enhance service quality by every means so that not only existing customers remain loyal but also new customers will become existing ones” (Yang & Chen, 2000, p.275). Simply said, the quality of the service affects the customer's level of satisfaction, which in turn influences the customer's behavioural and spending or buying intentions. Lovelock et al (2014) suggest businesses to earnestly focus on delivering superior services so as to stand out in the eyes of the consumer and encourage positive consumer behavioural intentions. Firms that make it a point to provide quality services will be able to effectively win and retain their customers in addition to enhancing their profitability and market share.

### **2.2.2 Service Quality Expectation**

All consumers have expectations that they impose onto their daily interactions and activities. Though often considered as a complex factor, customer expectations play a crucial role in moulding the consumer's behaviour. Parasuraman et al (1988, p.12) define expectations as the consumers' desires and wants, that is, “what they feel a service provider should offer rather than would offer.” On the other hand, Lovelock et al (2009, p.42) view consumer expectations as the “desired service” whereby the “customers hope that they will get service based on the personal needs and what they think is possible.” Literature on customer satisfaction propose expectations as “predictions made by customers about what is likely to happen” during an

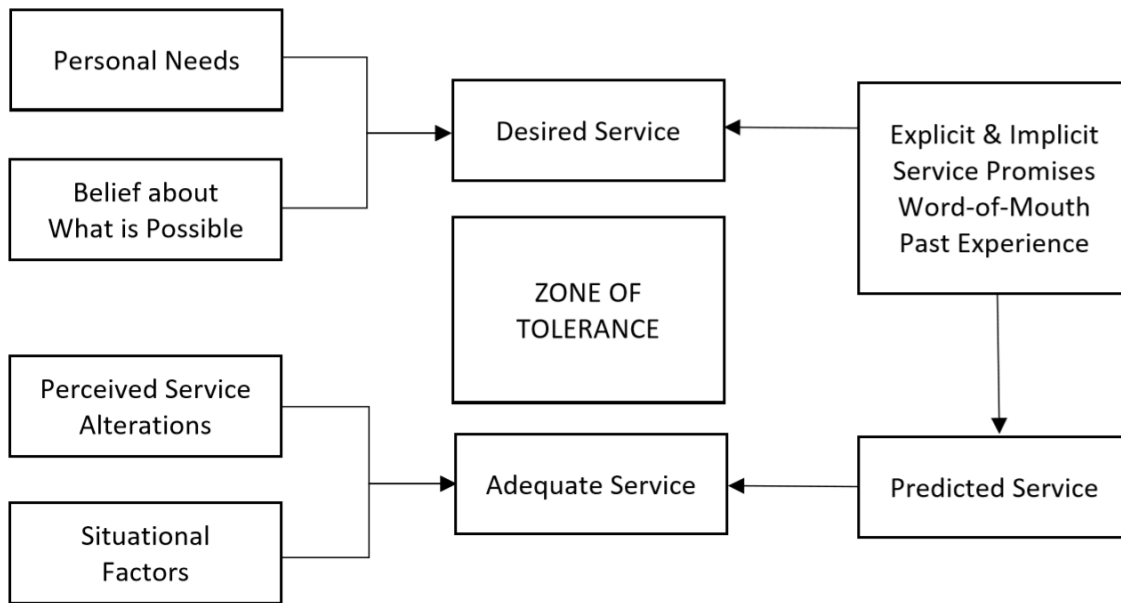


impending transaction or exchange (Zeithaml et al, 1993, p.2). Parasuraman et al (1988) and Grönroos (2000) posit the expectations construct as a fundamental factor in the evaluation of service quality by the customers.

According to Lovelock et al (2014), consumers develop expectations as to the product or service's performance while they are assessing the product or service's attributes and risks. The consumers can derive these information and likely performance standards from a number of intrinsic and extrinsic cues such as their own past procurement experiences, word-of-mouth advice from family members and friends as well as information and promises from the businesses themselves (Kotler and Keller, 2012). If the customer deem the attributes to be significant in the selection of the product or service, the expectations will be determined, inflexible and firm (Zeithaml et al, 1993). This is apparent in the case of many customers who have procured a costly product or service. These customer will not hesitate to express their dissatisfaction if the product or service does not live up to their expectations. For example, a customer who has paid premium rates for a hotel room in a five star establishment will have high expectations of the whole facility and will be upset if the bathroom is filthy or if there are no room service. Likewise, a customer who has paid a premium for a direct flight so as to save time will not be pleased if there are any unscheduled transit or flight delays.

As a consumer's expectations are developed and shaped at some point in their pursuit of the appropriate product or service, Lovelock et al (2014) notice that these expectations can also be situation specific. For example, customers tend to understand that service delivery may not be as smooth or efficient during a peak period, as opposed to a non-peak period. As such, expectations are generally higher when the business is not busy. In addition, expectations may evolve over time as they are prone to influences from service provider controlled elements such as pricing, promotional activities, new innovation and updated technologies (Schiffman et al, 2008; Kotler and Keller, 2012; Lovelock et al, 2014). Lastly, increased Internet access as well as online social interactions and activities have further altered the consumers' expectations. Consequently, consumers are able to make educated decisions and may wish to play a more active role in the procurement process, such as when seeking health care (Lovelock et al, 2014). Figure 3 illustrates the components of consumer expectations and indicates the influencing factors at the varying stages.

**Figure 3: Factors Influencing Customer Expectations of Services**



Source: Lovelock et al (2009, p.42)

With reference to Figure 3 above, there are several levels of service expectations. The *desired service* is the level of service that the customer wishes for. According to Lovelock et al (2014), consumers aspire to receive the level of service that will correspond to their individual need as well as “what they think is possible.” The consumers’ individual past experiences and word-of-mouth encounters as well as the service providers may generate explicit and implicit insinuations that further influence the desired level of service (Kotler and Keller, 2012; Lovelock et al, 2014). Nevertheless, majority of the consumers are generally pragmatic and are aware that they may not be able to attain the desired level of service that they wish for. However, they usually do impose a minimum level of expectation which is labelled adequate service and predicted level of service (Zeithaml et al, 1993).

According to Lovelock et al (2009, p.42), *adequate service* refers to “the minimum level of service that customer will accept, without being dissatisfied” whereas *predicted service* is “the level of service that the customers actually anticipate receiving.” Predicted service can additionally be influenced by the consumers’ past and word-of-mouth experiences as well, in addition to the promises from the service providers themselves. The adequacy of the service is closely linked to the consumer’s anticipation of the predicted service level whereby expectations of the adequate service level will be higher when the consumer predicts good service and vice versa (Zeithaml et al, 1993).

On the other hand, Figure 3's *zone of tolerance* refers to "the extent to which customers are willing to accept variation in service delivery" whereby the service provider personnel may be unable to deliver their services in a constant manner and service delivery may even differ and fluctuate from one service performance to another (Lovelock et al, 2009, p.42). Customers are usually aware of this and hence do not nitpick over the performance of the services at this stage. However, the service providers may need to seriously consider the superiority of the service performance when the zone of tolerance is comparatively minimal or narrow, such as in a high-end spa centre or five-star hotels. Conversely, the zone of tolerance is generally higher or wider when dealing with establishments in the low-end range or if there are lack of alternatives for the consumer to consider (Lovelock et al, 2009). Bitner et al (1992) and Zeithaml et al (1993) indicate the occurrence of failure in the service delivery and performance when customers perceive that the service is not fulfilled according to expectations or if it drops below the zone of tolerance.

### **2.2.3 Service Quality Dimensions**

There are numerous research models that evaluate and measure consumer behavioural constructs within the service industry. According to Kang and James (2004), the study of service quality and its associated constructs has led to two distinct perspectives; namely the European and American viewpoints. The Europeans advocate factors beyond the service delivery process in their scrutiny of service quality whereas the American spotlights on the functional aspects of service quality. A proponent of the European angle, Grönroos (1982, 1984), propose service quality to comprise of several customer-perceived dimensions: functional (the service delivery process), technical (the resulting experience and outcome) and image (perception of the establishment). Grönroos (1982, 1984) pioneered the development of an early measurement scale, the Customer Satisfaction/ Dissatisfaction (CS/D) model (also known as The Nordic Model), to quantify and explain service quality. On the other hand, Parasuraman et al (1985) popularised the American angle with the identification of ten determining factors of service quality, resulting in the development of the two-part instrument, SERVQUAL or The Gap Model (Parasuraman et al, 1988), of which were then further refined into a five dimension instrument (Parasuraman et al, 1991). Considerable research in service

quality has adopted both of these quality methodology to measure its constructs whilst adapting either one or both to suit the current research needs (Szwarc, 2005; Kumar et al, 2008, 2010). Despite the sizeable exponents of both perspectives, researchers are advised to employ either one of the widely accepted framework when conducting a study in this area (Cronin et al, 2000).

Multiple quality measurement scales have emerged to fulfil this study research criteria. One popular and widely adopted quality measurement tool is Parasuraman et al (1988, 1991)'s revised SERVQUAL instrument that measures service quality based on the customer's quality perception and expectation disparity. SERVQUAL originated as the Disconfirmation or Gap Model and initially utilizes ten inter-related service quality gauges adopted by customers to rate the quality of their service experience, to measure the discrepancy (gaps) between the customers' service expectation and the service they perceived to have actually received from the service provider (Parasuraman et al, 1985, 1988). These preliminary ten decisive factors are (1) understanding and knowing the customer, (2) competence, (3) courtesy, (4) security, (5) credibility, (6) responsiveness, (7) reliability, (8) tangibles, (9) access and (10) communication. Subsequently, these ten components were further refined and was whittled down to the following five dimensions: (1) reliability, (2) responsiveness, (3) assurance, (4) empathy and (5) tangibility (Parasuraman et al, 1985, 1988, 1991, 1994; Schiffman et al, 2008). SERVQUAL's rudimentary structure comprises of twenty-one perception statements in addition to expectation items that have been identified as fundamental factors in the analysis of service quality and the five dimensions (Parasuraman et al, 1994, Lovelock et al, 2009, 2011). Table 2 lists the characteristics of the five dimensions that correspond to the customers' assessment of any service experience.

**Table 2: SERVQUAL Dimensions for Measuring Service Quality**

Reliability	<ul style="list-style-type: none"> <li>• Performs the service as agreed</li> <li>• Performs the service at the agreed time</li> <li>• Performs the agreed service correctly</li> <li>• Providing solutions to problems dependably</li> <li>• Providing updated information</li> </ul>
Responsiveness	<ul style="list-style-type: none"> <li>• Providing prompt and timely services</li> <li>• Show commitment in helping the customers</li> </ul>

	<ul style="list-style-type: none"> <li>• Attend to customer requests immediately</li> </ul>
Assurance	<ul style="list-style-type: none"> <li>• Instill and inculcate customer confidence</li> <li>• Ensure patrons feel secure when completing their transactions</li> <li>• Employees to be consistent, attentive and courteous</li> <li>• Employees are well-trained and knowledgeable</li> </ul>
Empathy	<ul style="list-style-type: none"> <li>• Employees show care and empathy towards the customers</li> <li>• Employees who comprehend the needs of the customers</li> <li>• Employees are attentive towards the customers</li> <li>• Employees are sensitive towards the customers' interests</li> </ul>
Tangibility	<ul style="list-style-type: none"> <li>• Up-to-date equipment in the premises</li> <li>• Visually appealing facilities in the premises</li> <li>• Visually appealing materials in the premises</li> <li>• Employees present professional demeanor and appearance</li> <li>• Operating hours that are convenient and appropriate</li> </ul>
Source: Parasuraman et al (1994, cited in Schiffman et al, 2008, p.166)	

For example, DHL Express (DHL) is just another shipping company that offers similar core service as their established competitors, FedEx (previously known as Federal Express) and United Parcel Service (UPS). However, in 2014, DHL started utilizing helicopters to significantly cut down the delivery time between popular routes (Bloomberg Business, 2014). This enables the company to achieve a better process and outcome in the responsiveness dimension to exceed customers' expectations as clients are able to have their parcels and documents delivered within a much shorter period. Similarly, in another example, a wellness company that has an outlet with tasteful décor and an immaculate setting will score highly amongst their customers' expectations in the tangibility dimension. Table 3 illustrates the adaptation of SERVQUAL's five dimensions in a high-contact wellness industry.

**Table 3: SERVQUAL's Dimensions in an Adapted Application**

Dimension	Application
Reliability	<ul style="list-style-type: none"> <li>• The customer is attended to immediately upon arrival</li> <li>• Services are rendered promptly or at the agreed time</li> <li>• The services provided meet the customer's expectations</li> <li>• Customer's problems are attended to and rectified immediately</li> </ul>

	<ul style="list-style-type: none"> <li>• The customer is informed at every level of the service phase</li> </ul>
Responsiveness	<ul style="list-style-type: none"> <li>• Pleasant disposition and eagerness to assist the customers</li> <li>• Rapidly responding to any requests or queries</li> <li>• Provide adequate information regarding the services provided</li> <li>• Handling the customer's issues and problems in a sincere and serious manner</li> </ul>
Assurance	<ul style="list-style-type: none"> <li>• Being speedily served by the first-tier and respective service personnel</li> <li>• Being attended to by the correct person-in-charge</li> <li>• Strengthening the customer's trust and confidence</li> <li>• Qualified, capable and efficient employees</li> <li>• Articulate and respectful communication with the customers</li> </ul>
Empathy	<ul style="list-style-type: none"> <li>• Friendly and pleasant employees and service personnel</li> <li>• Personnel that are naturally empathetic and understanding of customer needs</li> <li>• Service employees are attentive and focus on the customers during their respective service sessions</li> </ul>
Tangibles	<ul style="list-style-type: none"> <li>• The service landscape (servicescape) is appealing and spotless</li> <li>• The service facilities are up-to-date and clean</li> <li>• The equipment used are modern and technologically relevant</li> <li>• Additional information readily available</li> <li>• Service personnel looks immaculate and tidy</li> <li>• Availability of quality complementary products, for example, towels, robes, etc.</li> </ul>
Source: Adapted from Atilgn et al (2003) and Schiffman et al (2008, p.167)	

The SERVQUAL scale and dimensions has been adopted in a number of research studies since its inception and multiple researchers agree that service shortfalls can be identified, isolated and corrected after assessing the quality of the firm's service delivery through SERVQUAL's measurement scales (Szwarc, 2005; Schiffman et al, 2008; Ladhari, 2009; Kumar et al, 2010). However, there has been much intense discussion on the adequacy and suitability of the perception/ expectation approach as compared to the merely perception slant. Cronin and Taylor (1992) note that SERVQUAL's empirical findings did not fully nor precisely correlate

to the five components that the SERVQUAL instrument was formulated to measure. Another critique was the observation of inter-correlation between the dimensions. Cronin and Taylor (1994) then raised further concerns as to the necessity to measure the customers' expectations and whether the 'gap' method is able to accurately explain the evolution of consumer expectations and perceptions with regards to service quality. An interesting example is the consumers' intrepid evaluation of a bank. The bank may perform and fulfil its functions as expected of a financial institution but may still receive a negative evaluation from its customers. Parasuraman et al (1994) responded to the critiques by proposing a set of research pathway to deal with the ambiguity raised. Additionally, the statements' terminology were amended to increase respondent understanding and clarity as well as to further improve the measurement scale reliability and validity. Table 4 describes the characteristics of each dimensions as well as list the possible queries by customers in relation to the particular dimension.

**Table 4: Dimensions Employed by Customers to Evaluate Service Quality**

Dimensions		Characteristics	Queries
Tangibles		Appearance of literature, personnel, equipment and physical facilities	Is the premise's decor appealing? Are the staff dressed suitably? Are the literature materials easy to read? Is the invoice or bill easily understood?
Reliability		Capability in carrying out the services accurately and dependably	Was the service delivery smooth? Do the staff return calls as promised? Is the statement error-free? Was the item correctly repaired?
Responsiveness		Willingness to provide assistance to the customers and deliver the service promptly	Does the firm solve problems speedily? Is the staff keen in answering queries? Is the delivery guy prepared to abide by a specified time of arrival?
Assurance		Honesty and trustworthiness of the service provider	Does the firm have an upright reputation? Does the salesperson impose pressure to buy? Will the repairer offer work guarantee?
*	Credibility		
*	Security		
*	Competence		
*	Courtesy	Friendly, considerate, respectful and polite contact personnel	Does the steward have a pleasant attitude? Will the staff attend to my calls politely? Is the mechanic respectful and friendly?
Empathy		Ease of contact and approachability	How easy is it to talk to the manager if there is a problem? Is the outlet in a convenient location? Does the firm provide an emergency contact number to call?
*	Access		

*	Communication	Listen well, keep customers informed and communicate effectively	Does my dentist avoid using technical medical terms? Will the staff listen when I complain? Will the plumber inform of changes to a scheduled appointment?
*	Customer Understanding	Knowing their customers and trying to comprehend their expectations and needs	Does the outlet personnel recognise me as a regular patron? Is my banker one who tries to understand my financial objectives? Is the delivery person agreeable to changing the delivery time?
Source: Lovelock et al, 2009, p.369-370			

The debates subsequently led multiple researchers such as Bolton and Drew (1991) and Cronin and Taylor (1994) to propose an alternate service quality measurement models. The more prevalent Cronin and Taylor (1994) developed the SERVPERF scale which solely focuses on the consumers' perceptions of performance instead. Consumers assess service quality either via the outcome dimension or the process dimension whereby the outcome dimension centres on the core service's delivery reliability and the process dimension spotlights on the delivery manner of the core service (Schiffman et al, 2008). The process dimension enables the service provider to transcend the expectations of the customers (Schiffman et al, 2008). For example, HSBC Bank Malaysia (HSBC) is just one of the many financial institutions offering banking services as their core business. HSBC conscientiously provides superior current account services by taking the initiative to contact the customers directly if account funds are insufficient and in some cases, even allowing the cheques to go through and be processed despite the lack of funds in the checking account. This outstanding process dimension has exceeded many customers' expectations and that consequently gave HSBC immense competitive advantage over their competitors that provide the same core service. Cronin and Taylor posit that it is sufficient for SERVPERF to utilize only performance data based on the postulation that consumers rate their perceptions of performance automatically along with the performance expectations. As such, SERVPERF theorize that the consumer's quality perception is derived from the service performance and considers the direct measurement of performance expectation as unnecessary and a futile exercise (Cronin and Taylor, 1994). Nevertheless, Jain and Gupta (2004) view the SERVPERF measurement scale as lacking the capability to identify and isolate the sections of the service progression that may be underperforming due to the absence of the gaps.

Despite the emergence and development of a variety of service quality measurement scales by a number of researchers, the SERVQUAL and SERVPERF scales are the ones most



popularly adopted to measure service quality (Gilmore and McMullan, 2009). To recap, Parasuraman et al (1988)'s SERVQUAL is based on the discrepancy between the consumer's perception of performance and their expectations whereas Cronin and Taylor (1992)'s SERVPERF is solely based on the performance of the service. The abundant literature and citations on both the SERVQUAL and SERVPERF scales indicate no clear consensus on the distinctive superiority of either model (Cronin and Taylor, 1994; Jain and Gupta, 2004; Gilmore and McMullan, 2009; Ladhari, 2009). However, Cronin and Taylor (1994) and Ladhari (2009) note that SERVQUAL is the more regularly used quality measurement scale as compared to SERVPERF and has been utilized in numerous research studies. The application of SERVQUAL in multiple service quality measurement research studies in various industries include the following: dental industry (Carman, 1990; McAlexander et al, 1994), education industry (Carman, 1990), fast food industry (Cronin and Taylor, 1992), hospitality industry (Olorunniwo et al, 2006; Ladhari, 2009), physiotherapy (Curry and Sinclair, 2002), retail chains (Teas and DeCarlo, 2004), vehicle retail industry (Carman, 1990), airline industry (Pakdil and Aydın, 2007), telecommunication (Negi, 2009), banking industry (Kumar et al, 2010), healthcare industry (Mohsin and Ernest, 2010). The SERVPERF scale has also received considerable scrutiny but much less compared to SERVQUAL. Nevertheless, research studies that adopted the SERVPERF scale covered the following industries: public services (Bigné et al, 2003); banking (Høst and Knie-Andersen, 2004; Zhou, 2004), hospitality industry (Nadiri and Hussain, 2005), transport industry (Perez et al, 2007), airline industry (Saha and Theingi, 2009) and fast food industry (Qin et al, 2010). Correspondingly, the above researchers recommend further research in unexplored industries and situations with these existing models. Lovelock et al (2014) note that a number of researchers who employ SERVQUAL modify and amend the scale items by adjusting, adding or removing the statements to suit the context of their research industry which indicate the challenging nature of measuring the customer's perceptions of service quality. For example, Olorunniwo and Hsu (2006) and Olorunniwo et al (2006) tailored the survey questions to fit their research on the hospitality industry which were then adopted and further revised by Qin and Pyrbutok (2009) for their own research in the fast food industry. Oliver (1993) view the SERVQUAL measurement scale and dimensions as the superior template for the measurement of service quality. Parasuraman and his fellow researchers have played key roles in the identification of critical causal factors in the study of service quality. Nevertheless, there remains the need to alter and adapt the measurement scales and dimensions to suit the research context accordingly (Parasuraman et al, 1991, 1994).

### **2.3 Factors Influencing Service Quality Expectations**

Accordingly, one of the more significant variable that business managers and retailers need to comprehend are the dynamics of the consumers' expectations as it would invariably account for the consumer's cognitive and behavioural progression from before, throughout, as well as after, the service experience (Parasuraman et al, 1994; Webb, 2000; Zeithaml et al, 2009). Despite criticisms on the usage of the expectation construct in studies involving service quality (Cronin and Taylor, 1992; Teas, 1993; Ekinci et al, 2000), these dissenting views are comparatively marginal when compared to the proponents that have relentlessly applied the expectation construct in numerous fields, especially in marketing and service quality (Parasuraman et al, 1994; Kalamas et al, 2002; Zeithaml et al, 2009; Lovelock et al, 2014). Considering the value of expectations in service evaluation processes within an individual, hence, it is imperative that businesses understand the factors that influence and shape this construct.

Consumers perceive service quality in a multi-dimensional manner (Parasuraman et al, 1994; Lovelock et al, 2009; Zeithaml et al, 2009). As mentioned in the previous sections, there are numerous factors that influence a consumer's service quality expectations. Zeithaml et al (1993) ascertained and categorized the following antecedent factors as those that shapes one's expectations: (a) personal needs; (b) self-perceived service role; (c) perceived service alternatives; (d) past experiences with the service; and (e) situational factors beyond the service provider's control. Correspondingly, subsequent research by Webb (2000) on the formation of expectations arrived at four similar antecedent expectation variables, that is: (a) experience with the experience; (b) familiarity from the experience; (c) role comprehension; and (d) value of the role. According to Webb (2000), the "experience" factor denotes the information one attains when dealing with the service provider whereas the "familiarity" factor refers to the knowledge derived from one's exposure to indirect information. The remaining two, role comprehension and role value, are role-dimensional constructs which occur during the consumer's service experience with "role value" indicating the consumer's perception of benefits gained from the service experience (Webb, 2000).

This was further supported by Lovelock et al (2014) who proposed the following antecedents to consumer expectations: (a) personal needs, (b) belief about what is possible, (c) perceived service alterations, and (d) situational factors. Lovelock et al (2014) is of the view that expectations are developed when the consumer is making the search for the desired item or service and throughout the decision making process. The consumer's expectations may be situation specific, such as prices or rates during a sale or non-sale period. Expectations may also evolve with time and are shaped or inspired by numerous other service provider controlled factors such as pricing, advertising, service innovations as well as new technologies (Lovelock et al, 2009; 2014). Furthermore, social trends such as internet-related communication or social media has influenced a consumer's expectations by allowing one to be better informed and exposed. As an example, tourists admitted to having expectations that were influenced by preconceived ideas, advertisements, word of mouth communication, as well as, prior experiences, if any (Bosque et al, 2009; Guiry et al, 2013). Nevertheless, researchers recurrently share the view that expectations evolve due to its dynamic characteristics that are influenced by one's past experiences (Fisk et al, 1990; Clow et al, 1998; Gunawardane, 2010; Bouzaabia et al, 2013; Lovelock et al, 2014). As such, considering that one's life experiences influences expectations, consumers are expected to possess varying service quality expectations.

Expectations are also influenced by the consumer's socioeconomic status, cohort effects and cultural background (Clow et al, 1998; Dash et al, 2009; Gunawardane, 2010; Li and Cai, 2012; Bouzaabia et al, 2013; Lovelock et al, 2014). Similar to one's past experiences, these factors brings about differing service quality expectations and these differences are more apparent when ruminating the consumers' backgrounds. According to a number of researchers in the fields of marketing and consumer behaviour, culture has been identified as a significant variable of consumer conduct (Liu et al, 2001; Li and Cai, 2012; Bouzaabia et al, 2013; Guesalaga et al, 2016; Stauss, 2016; Hofstede, 2017). Li and Cai (2012) and Bouzaabia et al (2013) note that cultural elements strongly influences a consumer's acceptance, approval and adoption of any products and services. Since culture is one of the main causal factor of one's individual behaviours, consequently dissimilar cultures would display differing value orientations, action and conduct (Dash et al, 2009; Hofstede et al, 2010; Bouzaabia et al, 2013; Stauss, 2016). Congruently, numerous research have found that culture is a major determinant that impacts one's service quality expectations (Furrer et al, 2000; Dash et al, 2009; Li and Cai, 2012; Bouzaabia et al, 2013). For example, based on Hofstede's culture classification, low

power distance consumers tend to display higher service quality expectations, demanding responsiveness and reliability (Donthu and Yoo, 1998). In comparison, though consumers who are individualistic may also be inclined towards high service quality expectations, however, they tend to prioritise towards a sense of assurance and empathy received during the service experience. On the other hand, high uncertainty avoidance index consumers are inclined to emphasize on robust procedures and controls in terms of quality whilst long-term cultural index consumers are less concerned of instant quality gratification, especially when they embrace the vision of long-term developments and improvements (Kettinger et al, 1995, Donthu and Yoo, 1998). Furrer et al (2000) and Dash et al (2009) further supported the influences of culture on service quality expectations in the finance and banking industry whereas Bouzaabia et al (2013) bolstered the importance of cultural values in the retail logistical sector.

Moreover, factors that influence service quality expectations such as price, communication, inclusive of one's competitive natures, further varies amongst the different cultures and this allows researchers to consider evaluations of consumer expectations through multiple alternative perspectives and contexts (Donthu and Yoo, 1998; Malhotra et al, 2005; Agarwal et al, 2010; Bouzaabia et al, 2013). Malhotra et al (2005) called for studies that considered the disparities and variations on the evaluation of service quality between cultures within developed nations and its less developed counterparts whilst contending the hypotheses that one's socio-cultural and economic standing may further alter and shape consumer expectations. Researchers were also able to conclude that cultural values enables the explanation in the variations within the consumers' service quality expectations and perceptions (Liu et al, 2001; Gounaris et al, 2010; Bouzaabia et al, 2013; Guesalaga et al, 2016). However, Winsted (1997) notes that similarities in consumer expectation is no indication of parallel antecedent factors which may diverge considerably. Therefore, a consumer's service quality expectations will vary depending on these antecedents and causal orientations. Nevertheless, this suggests that researchers may anticipate and foresee the consumers' expectations and perceptions when their cultural differences are taken into consideration (Malhotra et al, 2005; Bouzaabia et al, 2013; Guesalaga et al, 2016; Stauss, 2016; Davis et al, 2017; Hofstede, 2017).

## 2.4 Concepts of Cultural Values

Culture can be deemed enigmatic due to its intangible characteristics and properties. Keesing (1974, p. 89) defined culture as “a person's theory of what his/ her fellows know, believe, and mean, his/ her theory of the code being followed, the game being played, in the society into which he/ she was born”. Based on this depiction, individuals within any given society act accordingly in the manner that is expected in their culture in regards to any interaction with any other individuals. Hofstede (1984, 2003) went on to suggest culture as the totality of the collective behavioural patterns and norms displayed by a society. On the other hand, Usunier (1993) posit to view the community from separate cultures as possessing differing behavioural norms. Hofstede et al (2010) consequently proposed culture to consist of two core elements, namely values and practice, of which he went on to define the former as “broad tendencies to prefer certain states of affairs over others” and the latter as “ways of behaving.” This has led to the beliefs that businesses from another culture may not be able to relate effectively to the expectations of clienteles with dissimilar cultural backgrounds. As such, researchers has continually attempted to explain and delineate culture as well as examine the stimuli and influences that one’s culture may incur to propel the individual’s choices and decisions throughout their lifetime (Riddle, 1986; Hofstede et al, 2010; Schneider et al, 2011; Soyeze, 2012; Felix and Braunsberger, 2016).

The study of cultures involves looking at the respective society’s use of space and time, human characteristics, individual position in society, their relationships in addition to their perceptions of their surroundings (Riddle, 1986; De Run et al, 2010; Hofstede et al, 2010; Bouzaabia et al, 2013). Schwartz (2004, p.43) views culture as encompassing “the rich complex of meanings, beliefs, practices, symbols, norms, and values prevalent among people in a society” whereas Schiffman et al (2008) express culture as the collective sum of learned customs, values and beliefs that acts to synchronise the particular society’s general conduct and actions. Hofstede (2003) described it succinctly when he mentioned, “culture is how you were raised” as its development occur as one progresses and matures in life. Hofstede then adopted the “computer metaphor” whereby “culture is the software of one’s mind” that is required to be shared so as to enable effective communication. As such, culture exists in a form that is shared with others and is not to be mistaken as one’s distinctive personality (Hofstede, 2003). Hofstede et al (2010, p.6) subsequently defines culture as “the collective programming of the mind that distinguishes the members of one group or category of people from others.”

The “cultural distance” construct was initially derived from the works of Hall (1976) and Hofstede (1999, 2003). Later, anthropologically slanted contention of Riddle (1986)’s work on cultural values made specific links between culture and services. All the three researchers mentioned agree that one may measure the cultural proximity of differing cultures or even nations based on the indicator values assigned (Hall, 1976; Riddle, 1986; Hall and Hall, 1990; Hofstede, 1999, 2003). Hall (1976), being the proponent of “high and low communication context” cultures, posit that “high context” cultures as one adopting implicit messages through non-verbal communication and in the surrounding environment as opposed to the “low context” cultures which acts based upon specified and explicit form of messages. Therefore, the consumers of a higher context cultural faction will show increased appreciation when the physical environment is prioritised as part of conveying quality by a business due to the value placed on non-verbal cues as compared to those from a lower context cultural group who prefer specific interactions. As such, firms lacking in such cultural awareness may lose out on businesses when management inadvertently employ personnel from the culture that differs from the cultures of their customers causing unnecessary miscommunication or misinterpretation of information (Hall and Hall, 1990).

The study of cultural values and tenets through varying dimensions was pioneered by Hofstede who then proposed the following cultural dimensions to measure culture on a national level: power distance index (PDI), individualism vs collectivism index (IDV), uncertainty avoidance index (UAI), masculinity vs femininity index (MAS), long term orientation vs short term orientation (LTO) (Hofstede, 1999, 2003) and indulgence vs restraint (IND) (Hofstede et al, 2010).

- **Power Distance Index (PDI):** Hofstede (2003) defines PDI as “the extent to which the less powerful members of organizations and institutions (like the family) accept and expect that power is distributed unequally.” This dimension evaluates the distribution of affluence and wealth and considers the perceptions from the members of the lower rungs of society on authority and inequality. Although inequality exists in all societies, some societies experience higher levels of disparity as compared to others. Nations ranking high on the index denotes that the notion of status or hierarchy is firmly entrenched and accepted with little to nil resistance or questions. Challenging the leadership is frowned upon and discouraged. On the other end of the index spectrum, people from nations scoring low on

the index exhibit lower levels of inequality, have no qualms in questioning authority and endeavour to align towards a more balanced distribution of power (Hofstede, 1984, 1999, 2003). The power distance scale indicates that Arab, African, Asian and Latin nations as possessing high power distance tendencies whereas the Anglo and Germanic countries rank low on the PDI. For example, Malaysia, who ranked 104, is one of the highest on the index with Austria and Denmark scoring 11 and 18 respectively, placing them on the other end of the index spectrum with more equality. For comparison purposes, the United States of America is ranked at 40 and Australia at 38, placing these nations somewhat at midpoint (Hofstede, 2017).

- Individualism vs. Collectivism (IDV): This index represents “the extent to which people feel independent, as opposed to being interdependent as members of larger wholes” and hence considers the “degree to which people in a society are integrated into groups” (Hofstede, 2003). Hofstede went on to clarify that individualism does not refer to egoism but relates more to personal choices and decisions while collectivism does not imply closeness but is more suggestive of “knowing one’s place in life” as socially determined. Societies that are individualistic places emphasis on the “I” and “me” versus the “we” or “us” and exhibit less restraints whilst maintaining ties mainly to their immediate family. In contrast, the collectivist societies tend to uphold and preserve tightly knit familial relationships that may encompass their extended family members as well as other others that they considered are part of their group. Members within such alliances display and accord great show of allegiance and support towards one another should any controversy or dispute arises with a differing faction (Hofstede, 1984, 1999, 2003). Businesses need to note that the individualistic societies tend to expect service providers to adapt and cater to their expectations and needs. Hofstede observes that westerners tend to take pride on being individualistic with Asian and Arab individuals being more inclined towards being a part of a more collectivist society. As an example, Malaysia scored closer to the collectivist range at 26 and China at 20 on this index, along with other Asian countries, as compared to Australia which ranked high at 90 and Canada at 80 which is within the individualistic range. However, Japan was set in the middle at 46 (Hofstede, 2017).
- Uncertainty Avoidance Index (UAI): The uncertainty avoidance dimension refers to “a society’s tolerance for uncertainty and ambiguity” (Hofstede, 2003). The UAI has naught

correlation to avoidance of risks or obeying rules and regulations but is more concerned with the wariness and apprehension that arises when in an unfamiliar or different situation with a preference for the norm and the known. Hence, UAI relates to the level of ease and comfort in one's ability to handle or avoid an experience that may be new, unforeseen or does not conform to the status quo. Nations that rank high in the UAI may impose rigid rules, relations and directives to control and diminish divergent thoughts and ideas while generally adopting "a belief in absolute Truth; there can only be one Truth and we have it" sort of mentality (Hofstede, 2011). Conversely, countries that score low in the UAI demonstrate a more accepting posture towards variances in opinions and thoughts. As such, these societies does not enforce as many rules and boundaries with higher tolerance for ambiguity whilst encouraging a more open, relaxed and liberating environment (Hofstede, 1984, 1999, 2003). With reference to the business aspects, consumers from high ranking UAI nations could possibly face distress when placed in a situation that does not conform to their orientation patterns and norms on freedom. Nevertheless, few countries possesses low uncertainty avoidance scores with Malaysia ranking one of the lower scores at 36, just after Great Britain at 35. Both Japan and Belgium rank high on this index at 92 and 94 respectively (Hofstede, 2017).

- **Masculinity vs. Femininity (MAS):** The masculinity dimension is defined as "the extent to which the use of force is endorsed socially" with "a preference in society for achievement, heroism, assertiveness and material rewards for success" whereas the femininity dimension corresponds to "a preference for cooperation, modesty, caring for the weak and quality of life" (Hofstede, 2003). As such, both aspects exhibit differing emotives, roles and values as compared to the other in nations of the two opposing dimensions. Societies that lean towards the masculinity indicator expect their group members, both males and females, to be tough and competitive, though the females are not required to be as emphatic or forceful as their male counterpart. On the other hand, the dimensional traits are more emotionally tied whereby they are encouraged to communicate their views in the feminine societies. Unlike in the masculine societies which endorses competitive nature, the feminine nations discourages displays of competition with open shows of support for the underdogs. Note that these two dimensions does not apply to individuals within the respective societies but refers more to the accepted emotive roles and responses. Hofstede (2003) note that highly masculine societies view the traits adopted by the feminine society with disdain and thus, are more clearly gendered. Nevertheless, women are still recognised as the weaker sex in



both the dimensions in this index. (Hofstede, 1984, 1999, 2003). In the business reference, consumers from a masculine faction may not appreciate ambiguous gender roles and functions as they are accustomed to highly defined male/female tasks and positions. In this index, Malaysia scores 50 placing the nation somewhat in the middle out of the 76 countries collated. The Nordic countries' scores were rather low with Norway at 8 and Sweden at 5 whereas Japan scored very high at 95, making it one of the most masculine countries in the world. Other masculine countries include Austria at 79 and Hungary at 88. Interestingly, China and Great Britain share that same score of 66 indicating that these two nations are comparatively more masculine than Malaysia (Hofstede, 2017).

- Long-Term Orientation vs. Short-Term Orientation (LTO): Hofstede (2003) classify long-term orientation as the dimension that is concerned with change whereby the past may influence present day behaviours, as well as, future conducts and activities. Long-term orientated societies adopt the viewpoint that the world is constantly in a fluid and mutable state and hence, one needs to adapt, plan and organise for their future as well as be skilled in resolving issues and overcoming hurdles. On the other end of the spectrum, short-term oriented societies embrace the belief that “the world is essentially as it was created” and thus the past is deemed as a reliable and expected indicator of acceptable present behaviours, i.e. traditions, in addition to being set as guidelines for future conduct and actions. Hofstede (2003) notes that impoverished short-term oriented countries tend to be economically gloomy with minimal potential for progress whereas long-term oriented nations seem to demonstrate the capability to continually advance (Hofstede, 1984, 1999, 2003). This dimension index sees Malaysia scoring 41 which is comparatively lower to other nations such as Singapore at 72, China at 87 and Japan at 88. European countries such as Italy and France scored moderately at 61 and 63 respectively (Hofstede, 2017).
- Indulgence vs. Restraint (IND): This is one of the newer dimensions. Hofstede et al (2010) defines this dimension as concerning “the good things in life” and the freedom to do as one wishes. Hofstede added this dimension to measure happiness and the fulfilment of desires that brings about joy. An indulgent nation refers to “a society that allows relatively free gratification of basic and natural human desires related to enjoying life and having fun” whereas restrained nations view the need for “a society that controls gratification of needs and regulates it by means of strict social norms” (Hofstede, 2011, p.15). An indulgent

society broadcast that “it is good to be free” and as such, perceives positively the ability to act as per one’s whims and fancies. One is in control of one’s emotions and life path. In addition, friendships are valued and revered in an indulgent society. Comparatively, the conventional state of mind in a restrained culture share the belief that life is arduous and grilling with little freedom and the expectation to be duty bound. They accord less responsibility in matters of their own lives as they feel that external factors influence and determine their life path as well as their emotions (Hofstede, 2011). Data on this dimension is not as extensive as per the other five dimensions due to its recent addition into the list. In this dimension, Malaysia scored 57 which is the same score received by Finland and Belgium. Indulgence traits are seen in numerous westernised countries such as Great Britain at 69, Australia at 71 and Sweden at 78. Restrained nations include Muslim countries such as Pakistan and Egypt at 0 and 4 respectively (both highly restrained) and East Asian nations such as Hong Kong at 17 and China at 24 (Hofstede, 2017).

On the other hand, in the business setting, Riddle (1986) looks at culture based on the society’s activities, relationships, time and achievement orientations in relation to service and commerce. Cultures with stringent activity orientation may find it challenging to gratify consumers who places higher importance on the aesthetics of the surroundings or social relationships but less so on activities. Likewise, if the consumer perceive inferiority on the part of the service provider, the consumer may explicitly express their sentiments and thus causing a rift between themselves and the service personnel. One’s orientation towards time brings about differing evaluations and expectations of time measures, be it waiting time, views towards punctuality as well as swiftness of services. In such a context, a consumer with a relaxed orientation towards time will feel frustrated in an environment that adheres to strict or meticulous schedules. Lastly, Riddle’s consideration of the consumer’s orientation towards achievement implies the inclination of the consumer in holding the service providers accountable in ensuring quality, regardless of the circumstances (Riddle, 1986).

The consideration of culture within numerous disciplines has been ongoing with a number of researchers deeming the studies as fragmentary and subjective (Baldwin et al, 2006; Ladhari et al, 2011; Guesalaga et al, 2016; Stauss, 2016). This is due to the observation that majority of the literature produced interpret culture on a national context whereby consumers are distinguished based on their country of origin (Baldwin et al, 2006; Guesalaga et al, 2016). However, for the purpose of this study, the cultural perspective examined will comprise of the

different groups of people within the same country as homogeneity occurs and exists in smaller pockets of society within a single nation. Winsted (1997) identify these societal clusters as possessing unique individual cultures with Shenkar (2001, p.525) coining the term “intra-cultural” to label the groups’ diversities and variations. These factions generally share similar indications, values, faiths and dogmas with cultural variance occurring amongst the different clique levels (De Run et al, 2010; Sabiote et al, 2012; Brewer and Venaik, 2014). Therefore, a nation such as Malaysia contains an assortment of non-homogenous sub-groups subsisting mutually in the society which results in a dynamic and vibrant environment (Haque, 2003; Fontaine and Richardson, 2005; De Run et al, 2010). It has been noted repeatedly that numerous research studies have analysed the influences of an overall culture from a national perspective on a multitude of aspects but limited have assessed the bearings of collective intra-cultural differences within one nation on the business aspects (Haque, 2003; Fontaine and Richardson, 2005; Jabnoun and Khalifa, 2005; Schneider et al, 2011; Soye, 2012; Felix and Braunsberger, 2016). As such, despite the abundance of literature on consumer behaviour, service quality and customer satisfaction, insufficient studies were conducted on the impact of an intermingling intra-cultural society in regards to their disparity and dissimilarity on their varying expectations as well as perceptions and how they may wholly affect the marketing stratagems a firm may adopt.

This was observed from numerous empirical research based on Hofstede’s cultural values framework as well as ensuing research literature on the topic. Hofstede (1984, 2003) regarded the countries as homogenous cultural entities with numerous subsequent researchers adopting his cultural milieu whilst advancing the concept by identifying and categorizing the culture as per the country (Anselmsson and Johansson, 2014; Davis et al, 2017; Guiry et al, 2013; Imrie, 2013; Kum and Vinh, 2015; Polska et al, 2013; Munhurrin et al, 2010; Stamekov and Dika, 2015). As such, one general culture per country with its overall scores on the respective dimensions. Some literature focused on the cultural differences between two or more countries (Armstrong, 2009; Bouzaabia et al, 2013; Sabiote et al, 2012). This is despite the indications of high levels of cultural values differences existing within the populace of a single country by Hofstede himself (Hofstede, 1984, 2003; Fontaine and Richardson, 2005; Jabnoun and Khalifa, 2005; Hofstede et al, 2010; Schneider et al, 2011; Soye, 2012; Felix and Braunsberger, 2016).

## 2.5 Linking Cultural Values to Service Quality Expectations

Today's business environment is an increasingly competitive market that is fraught with challenges which requires constant effort just to maintain the firm's market share. As such, comprehension of the consumers' psyche and behaviours is imperative to ensure that business firms are on the right track in their formulation of any marketing strategies and programs so as to be able to effectively reach the maximum range of customers. Most firms treat their customers as a homogenous group with little regards to their backgrounds or other influencing factors. However, that is not a wise decision as indicated by Hofstede et al (2010) after conducting numerous and extensive research spanning over decades. According to Hofstede et al (2010), a consumer's cultural background and upbringing directly and indirectly impacts every aspect of their cognitive and behavioural processes, including their expectations, perceptions as well as procurement choices and habits. Furthermore, Li and Cai (2012) and Guesalaga et al (2016) observe that one's cultural origins and upbringing heavily impacts a consumer's consideration, appreciation and acceptance of products and services. Additionally, service encounters comprises of social interactions whereby its rules and expectations vary and diverge across cultures (Malhotra et al, 2005). Hence, culture has been deemed as one of the crucial determinants that influences one's service quality expectations (Gunawardane, 2010; Li and Cai, 2012; Guesalaga et al, 2016; Stauss, 2016; Davis et al, 2017).

Numerous other researchers share the position that culture has been widely recognised as a crucial factor that influences consumer behaviour (Li and Cai, 2012; Bouzaabia et al, 2013; Cai and Luo, 2015). Therefore, they join the ranks that posit a consumer's cultural background as an imperative determinant that can affect their perceptions and expectations of service quality (Furrer et al, 2000; Armstrong, 2009; Dash et al, 2009). Correspondingly, researchers have placed much focus on the study of satisfaction and expectations amongst consumers across various nations (Furrer et al, 2000; Polsa et al, 2013; Stauss, 2016; Davis et al, 2017). These researchers also observe that consumers of varying cultures exhibit differing perceptions and expectations of service quality. For example, German respondents value better service as compared to their Japanese counterparts (Ueltschy et al, 2007, 2009). However, in another study, the German respondents had lesser service expectations when contrasted with the American participants (Witkowski and Wolfinbarger, 2002). On the other hand, the Japanese consumers were noted to be less generous in the designation of quality service when compared to the Americans and Canadians (Laroche et al, 2004). Various studies have shown that a

person's values are derived from their mental, emotional, outlook and behavioural evolution and processes, and hence, it is a combination of these factors that shape one's consumer expectations, decisions and behaviours (Armstrong, 2009; Bouzaabia et al, 2013; Cai and Luo, 2015). As such, this is also applicable to a consumer's values and habitual patterns learned from cultural experiences, customs and even traditions.

Given the considerable diversity between the different cultures and environment, consumers of varying cultural backgrounds inadvertently expect and perceive service quality dissimilarly. As such, more researchers are now considering the correlation between culture and consumer expectations and perceptions on service quality through the study of how culture influences a consumer's value beliefs and behaviours (Li and Cai, 2012; Bouzaabia et al, 2013; Guesalaga et al, 2016; Stauss, 2016; Davis et al, 2017). These researchers maintain the rationale that the affective and cognitive processes of consumers contrast across differing cultural societies and correspond to their respective score or ranking on Hofstede's cultural dimensions index, as well as Hall's high and low communication context. Since the perception of quality occurs commonly during the consumers' interactions with the service providers, therefore it is crucial for businesses to differentiate between the various levels and types of service encounters that brings about positive or negative consumer emotions and reactions (Gounaris et al, 2010; Guesalaga et al, 2016; Stauss, 2016; Davis et al, 2017). As cultural values influence perception as well as the services provided due to their fluidity and intangible characteristics, it is vital for businesses to comprehend the cultural causality dynamics and factors.

Inevitably, these elements inadvertently form the dynamics of one's personality that subsequently moulds their respective perceptions, expectations and behavioural intentions as a consumer. Furthermore, Schwartz (2004, p.521) maintains that "values are desirable, trans-situational goals, and varying in importance, that serve as guiding principles in people's lives" and hence, values are deemed as the collectively accepted, and even desired, social paradigms in any given culture. A number of studies have been conducted on values in a cultural setting from the perspective of the consumer to the trade and commerce context. This can be viewed from the past researchers' works through the employment of various cultural dimensions and value scales such as Rokeach's (1973); Kahle et al's (1986), Schwartz's (1992), Hofstede's (2003) and Lages and Fernandes' (2005) measurement instruments on the following subject areas: consumer attitudes (Rokeach, 1973); consumer behaviours from the perspective of tourists (Kahle, 1994; Li and Cai, 2012); service quality (Stauss and Mang, 1999; Hofstede,

2003; Dash et al, 2009; Polsa et al, 2013; Stauss, 2016); service quality perceptions (Kahle, 1994; Ladhari et al, 2011); service expectations in tourism (Kahle, 1994; Bosque et al, 2009); service value (Lages and Fernandes, 2005); consumer loyalty (Lages and Fernandes, 2005) and shopping mall consumer behaviour (Schwartz, 1992; Cai and Luo, 2015).

It has been noted that a majority of the past literature has adopted macro level cultural models to investigate these values. According to Schwartz (2004), the cultural measurement scales above are popular amongst many researchers when attempting to examine human values. Nevertheless, a high number of the literature in this subject matter are inclined to adopt Hofstede's cultural scales as the measurement instrument of choice. This became more apparent and prevalent after researchers such as Donthu and Yoo's (1998) study espousing that Hofstede's cultural dimensions correlates to consumer behaviour and quality expectations. As an example, Polsa et al (2013) note that Hofstede's power distance index represents a reliable and consistent predictor of service quality perceptions and expectations. Likewise, Furrer et al (2000) came up with the Cultural Service Quality Index by merging both Parasuraman's (1985) and Hofstede's (2003) respective research measurement instruments in his analysis of service quality in the retail banking sector as a mean to evaluate service quality dimensions through cultural values. This was additionally supported by Dash et al's (2009) determination that the country's national culture affects the banking industry consumer's service quality expectations. Similar research frameworks have further considered cultural values in regards to the variations of service quality perceptions and expectations (Liu et al, 2001; Gounaris et al, 2010; Guesalaga et al, 2016).

Since cultural denominations affects various aspects within a service encounter such as the attitudes, behaviours and skills of both the consumers as well as the service providers (Bouzaabia et al, 2013; Guesalaga et al, 2016; Stauss, 2016), it is unavoidable that the consumer's individual cultural values are inexplicably entwined and woven into their evaluations of the service providers' quality which then inadvertently impacts their evaluation, perception and memory of the procurement experience. Therefore, the consumer's cultural upbringing, context and background is one of the most significant variable that results in the consumers assessing and valuing the varying levels of service quality differently. According to Li and Cai (2012) and Polsa et al (2013), consumers routinely express unhappiness and dissatisfaction with business practices that do not observe or adhere to their personal cultural beliefs and expectancies. The last couple of decades have seen researchers displaying interest

in the associations between culture and service quality with studies conducted seeking to observe the correlation between cultural values and service quality dimensions. A number of these researchers have found that culture does have a causal effect on the consumers' evaluation, perception and expectations of service quality (Li and Cai, 2012; Polska et al, 2013; Guesalaga et al, 2016; Stauss, 2016; Davis et al, 2017). Based on the additional justifications above, it is undeniable that the consumers are influenced by one's cultural background and values.

## **2.6 Defining Generations and Generational Theory**

A plethora of research studies have looked into the underlying causal factors of the consumers' expectations, motivations and behavioural patterns through the lens of their cultural traits and attributes (Armstrong, 2009; Yang and Lau, 2015; Guesalaga et al, 2016; Stauss, 2016; Davis et al, 2017). This is due to the inevitable influences of one's culture on their individual actions, deeds and activities, as described in the previous sections. However, according to Yang and Lau (2015), diversities within the varying cultures are analogous to generational variances though few studies have considered both the cultural and generational angle simultaneously. Brosdahl and Carpenter (2011) and Gardiner et al (2013) share the view that data through studies on generational cohorts is notable in matters of social sciences. According to MacKenzie and Scherer (2019), much information and insights can be derived from the ever progressing generational research. This has resulted in a continual gap that led researchers to call for further and updated research on generational perspectives that extend beyond generalised age demographics. Generational cohorts are dissimilar to mere age groupings and provide additional information due to the inclusion of influences from similar living experiences, mutual socio-economic outlook and decisive life events (Zemke et al, 2000; Beck, 2001; Benckendorff et al, 2010; Gardiner et al, 2013; MacKenzie and Scherer, 2019). Each generational cohort reveals distinctive beliefs, ideals, standards and values that were derived over their lifetime, and hence, may retain unique personalities and attributes that is not easily replicated by their other generational counterparts (Zemke et al, 2000; Beck, 2001; Benckendorff et al, 2010; Brosdahl and Carpenter, 2011; Gurău, 2012; Gardiner et al, 2013; Giovannini et al, 2015; MacKenzie and Scherer, 2019).

Researchers have widely established the need to address generational differences in order to better comprehend the underlying motivations and considerations of their customers (Benckendorff et al, 2010; Brosdahl and Carpenter, 2011; Gardiner et al, 2013; Yang and Lau, 2015; MacKenzie and Scherer, 2019). This is especially apt when dealing with multi-generational clientele that tend to exhibit varying perspectives and expectations. Researchers contend that there are apparent mental, behavioural and psychological disparities between the generations that needs to be identified and addressed by businesses to effectively market their offerings. As such, corporations which adopt a more cognizant approach to these generational differences and consciously adapt their product offerings and marketing strategies to accommodate and manage these diversities will inevitably be more successful in the long run. This would include taking into account the differences arising from the respective generation's inclination towards the adoption of technology and online activities such as social media and online procurement tendencies.

In one example, Wong et al (2008) notice the generations possessing lesser sense of optimism as compared to the preceding generations before them. In another example, the later generations tend to be very involved online and are inclined to chronicle their daily activities and events incessantly on social media (Benckendorf et al, 2010; Brosdahl and Carpenter, 2011; MacKenzie and Scherer, 2019). As such, marketers are facing with increasingly cynical and negative customers and note that businesses dealing with a multi-generational individuals will need to be aware of the variations in attitudes and approaches as well. However, not all researchers subscribe to the notion of distinctions in the different generations. According to Macky et al (2008), there were little evidence to support the generational differences with regards to motivation and work values whereas Hess and Jespen (2009) observe more parallels as compared to dissimilarities between the generational cohorts. Nevertheless, most of the research findings acknowledge variations amongst the generational cohorts at various dimensions.

Many researchers have endeavoured to input clarity into the concept of generational groupings (Kupperschmidt, 2000; Benckendorff et al, 2010; Brosdahl and Carpenter, 2011; Gardiner et al, 2013; Yang and Lau, 2015; MacKenzie and Scherer, 2019). Kupperschmidt (2000, p. 66) suggests generational cohorts as an "identifiable group that shares birth years, age, location and significant life events at critical developmental stages" whereas Benckendorff et al (2010) similarly propose generations as a faction of individuals who are alike in terms of their age,



residence which includes developmental and historical experiences. In this context, the term cohort likewise refers to a group of individuals sharing similar birth period and who were shaped by similar cultural and historical conditionings that may have occurred during that era (Beck, 2001; Benckendorff et al, 2010; Gardiner et al, 2013). Researchers have ascertained that the individual's development of personality which includes their idea of "Who I am?" and sense of identity that is separate from family members is established during their formative and impressionable teenage years of between fourteen to twenty years of age (Rogler, 2002; Berger, 2008). As such, one's life experiences determines the individual's identity which then primes the person's place and representation of the generation with parallel behavioural archetypes, considerations, attitudes and personage.

Currently, there are four generational groupings that are widely identified, recognised and accepted by researchers. These four generational cohorts range from the oldest to the youngest and are commonly referred to as: (1) the Veterans, (2) the Baby Boomers, (3) Generation X and (4) Generation Y or as they are popularly known, the Millennials. It has been noted that different studies did present dissimilar time frame to indicate each generation's period boundary as well as some of its descriptions and characteristics. However, despite the disparity between the various studies with regards to the exact year that signify each generational cohort's commencement and end period, most of the researchers are in agreement that there are four different generations worth noting thus far. Generation Z, which is the generation that comes after Gen Y, will not be considered just yet as the individuals of that generation are still young, with the oldest only at his or her adolescent years as of 2019, and thus, not much unique characteristics and traits can be ascertained to date comparatively.

Generational theory nominate to include the individual's developmental years, aside from age, which assert to shape one's outlook, mannerism and behavioural precedents (Gardiner et al, 2013). Additionally, scholars of sociology have long recognised the importance and value of generational studies and have enduringly strived to identify and classify the distinct qualities of the different generations though numerous research conducted mostly in developed nations. Nonetheless, despite the extensive research conducted on the differences amongst the generational cohorts, researchers have found further generational variances between the developed and less developed countries or countries of differing cultural backgrounds (Arlt, 2013). For example, Sirias et al (2007) observe the older Baby Boomer generation in a westernised developed nation exhibiting deep-seated social cues amongst themselves with time

spent shopping being regarded as a past-time that fosters societal relationships and affiliations. On the other hand, two generational cohorts, Generation X and Y, were found to significantly dominate retail store traffic in an Asian society as opposed to a Western society (Reisenwitz and Iyer, 2009). This could be due to the fact that the Asian and Western settings differ culturally whereby Asian cultures tend to rank higher in a number of dimensions such as power distance, uncertainty avoidance, masculinity and collectivism when compared to their Western nationals (Hofstede, 2003).

In addition, past research findings have also revealed insights that these generational groups present both similarities and dissimilarities, with the contrasts especially perceptible when assessing and comparing the youths of the respective generations (Zemke et al, 2000; Wong et al, 2008; Gurău, 2012). For example, one of the most apparent distinction that separates Gen Y from the preceding generations is due to their exposure to the Internet from birth (Benckendorf et al, 2010; Brosdahl and Carpenter, 2011). This has resulted in a vastly different communication approach, social environment and life experiences from growing up in a period when educational network and social media are easily and globally accessible. However, past research papers including literature in the previous sections (on culture) have indicated that generational cohorts may share some cultural-related morals, principles and values. Earlier research have also indicated that the oldest generation, the Veterans, prefers clear directions and personal contacts. On the other hand, the succeeding generation, the Baby Boomers tend to prioritize praise, recognition and even fame and do not mind sacrificing themselves with the aim for a life of abundance (Kogan, 2001). Conversely, the subsequent Generation X (Gen X) favours a more balanced lifestyle that caters to their individual needs and expectations, and as such, are less inclined to imitate their parents' footsteps. This is due to their observation that the sacrifices put in by their parents may not guarantee security in employment nor an enduring or committed family life. Gen Xers seek independence, flexibility, thought-provoking careers and professional growth. In contrast, the constituents of Generation Y (Gen Y) are deemed more socially and culturally diverse. Akin to their Gen X cohort, they are ambitious about doing well though they expect a more focused, meaningful and objective life. Hence, they think nothing of challenging decisions, confronting authority and rebelling against the norm (Tulgan and Martin, 2001; Benckendorf et al, 2010; Brosdahl and Carpenter, 2011; MacKenzie and Scherer, 2019). The following paragraphs will present a summary of the four generations, which include their respective characteristics, unique attributes as well as their contrasting qualities.

## Veterans

Members of the Veterans' generation are the oldest generation and have also been labelled as the Traditionalists, Silent, Moral Authority, Radio Babies and the Forgotten Generation. They are born between 1922 and 1945, and as of 2018, their ages range from between 73 years of age to 96 years of age (Zemke et al, 2000). The Veterans' generation experienced grim world events such as the Great Depression, the Korean and Japanese Wars as well as the Second World War. As such, they were raised by parents that survived these gloomy episodes and had to undergo hard times before experiencing prosperity. Consequently, Veterans desire job security and are devoted and dedicated workers with notable sense of ethics and are respectful of their leaders. They are enthused when their loyalty and experiences are valued (Kogan, 2001). Veterans also tend to dress and communicate in a formal manner which leads to military-like behaviour and demeanour, will conform regardless of the reason, are patriotic and focuses on the family (Lyons et al, 2007).

## Baby Boomers

The Baby Boomer generation are born between 1946 and 1964, and as of 2018, they would be aged between 54 years and 72 years (Zemke et al, 2000). This generation have also been called other names such as the Post War Babies and the Moral Authority Generation and "Me" Generation and were the first to be exposed to the world events through the screen of a television. They have also experienced wars, for example, the Vietnam War and the Cold War in Russia though the majority grew up after the Second World War when the global economy was recovering and bustling. As such, they developed an anti-war and anti-government posture and grew up to be the radicals of the seventies and the yuppies of the eighties. In the United States, these Baby Boomers were sold the idea of *The American Dream* and encouraged to pursue it resulting in the generation being seen as go-getters, materialistic and greedy (Lyons et al, 2007).

Work wise, the Baby Boomers are deemed as team players who are optimistic and willing to put in the extra effort necessary. They are also seen to possess superior communication aptitudes and are often considered as mentors due to their interpersonal capabilities (Kogan, 2001). However, the Baby Boomers also became the workaholic generation who are

competitive to the extent of affecting their private and personal lives. They view their work emotionally and reason has taken a backseat where this generation is concerned. Due to this plus the above viewpoint, the Baby Boomers also consequently focused less on the family unit, unlike their parents, which resulted in the generation with the highest divorce rate and second marriages in history (Sirias et al, 2007; Sullivan et al, 2009). The Baby Boomer's emphasis on their work life has allowed them to reach pinnacle positions of authority and influence (Zemke et al, 2000; Kyles, 2005) though they may attempt to hold on to that station longer to satiate their craving for personal satisfaction as well as due to financial frivolousness and inaptitude (Coleman et al, 2006).

## Generation X

Members of this generation consists of those born between the years 1965 and 1979 (Zemke et al, 2000) though some research extends that period to 1980. As such, based on Zemke et al (2000)'s period boundary, in the year 2018, the ages of this generation ranges from 39 years of age to 53 years. Other labels adopted by Generation X includes the Gen X, Gen Xers, The Doers, Post Boomers and the 13<sup>th</sup> Generation. The Gen Xers were the group that were exposed to the Watergate and Energy Crisis and had to contend with fears of Y2K as well as contributed to the rise in activism. They were also known as the first generation of the latchkey kids of dual-income working parents as well as single parents who were left to their own devices and have had to figure out a lot of things on their own. As such, Gen Xers are highly adaptable and are quick to embrace technology to improve their life. This generation grew up determined to devote their efforts on their own personal growth too instead of solely on their employers after having watched politicians lie, experiencing inflation and witnessing their parents losing their job security (Kogan, 2001; Lyons et al, 2007).

Members of Generation X are inclined to place emphasis on enjoyment and fulfilment of life after work hours so as to have a more balanced work and personal life. This is collectively due to their perceptions being shaped by the above reasons combined with many of them having divorced or separated parents from being unable to maintain a balanced work and family life (Kogan, 2001, Lyons, 2007). At work, Gen Xers adopt a realistic outlook and dispense a rather practical problem solving approach. As they tend to be adept in matters of technology, they are comfortable with adopting technology in relations to communication, thinking and learning. The Gen Xers consciously elect to seek jobs in organizations with a flatter structure as opposed

to a hierarchical work environment. Despite pursuing a more balanced life, Gen Xers are loyal to their employers and aspire to add value to the organization (Kogan, 2001, Lyons et al, 2007). When compared to their generational cohorts, the Gen Xers *work to live* whilst the Baby Boomers *live to work* (Sullivan et al, 2009). In contrast, Generation Y prefers to go on their own and espouse diversity and entrepreneurship goals instead (O'Bannon, 2001).

## Generation Y

Members of Generation Y are born between 1980 and 2001, and as of 2018, they would be aged between 17 years and 38 years (Zemke et al, 2000). This generation was tagged many other label which includes Millennials, Gen Y, Generation Next, Echo Boomers, 24/7s, Chief Friendship Officers and Me Me Me Generation. These Millennials, as they are also popularly known as, typically were raised by divorced parents and were nurtured in a child-focused era that kept them constantly occupied. They were the first generation of youngsters with schedules and lived in a very protected and sheltered environment, when compared to the preceding generations, as their parents attempt to shield them from “all things bad” in the world (Twenge and Campbell, 2008). Millennials are naturally technically savvy as compared to the previous generational cohorts due to being exposed to the Internet, video gaming and cell phones since at a very young and tender age. To them, reality TV is the norm and the number “11” is the sign for “pause”. This generation lives and breathes on online social and professional networks and maintain a very active presence in Twitter, Tumblr, Instagram, LinkedIn, Facebook as well as numerous other digital social media applications and networks. As such, they are well connected and well informed and partake in sharing information as well as their thoughts freely and easily (Junco and Mastrodicasa, 2007; Benckendorf et al, 2010; Brosdahl and Carpenter, 2011).

Additionally, Generation Y has been ascribed the following traits and qualities: they multitask well and are adaptable, are self-confident, independent and are ethnically diverse with a global outlook and perspective. On the flip side, Gen Ys have been attributed to be impulsive, predisposed to risk-taking and deemed lacking in loyalty as an employee, which leads them to frequently leave their job for another (Gale, 2007). Psychologically, these Millennials are seen to exhibit a lofty sense of personal admiration, self-regard, self-reverence and narcissism. However, they are prone to depression and anxiety due to their sheltered upbringing (Twenge and Campbell, 2008). Due to their early exposure to technology, Generation Y very likely had

access to a computer as well as the Internet and take for granted the sea of information at their fingertips (Benckendorf et al, 2010; Brosdahl and Carpenter, 2011; MacKenzie and Scherer, 2019). Hence, this generation evolved into a rather malleable, technical, resilient, innovative and visual learning individuals. On the other hand, they can also be blunt, disrespectful, disengaged, desensitized and impatient and will challenge anything and everything when they are in disagreement (Junco and Mastrodicasa, 2007; Benckendorf et al, 2010; Brosdahl and Carpenter, 2011). For this reason, they were also dubbed the “Why” Generation as they have no qualms in stating their opinions and concerns and do not see the need to conform to expectations and standards (Lyons et al, 2007).

## **2.7 Service Quality Expectations Across Generations**

In the open market, the members of these generational cohorts weave and merge as consumers with differing expectations, preferences, likes and dislikes. This may potentially negate any generic marketing strategy leading to a wasteful dissipation of resources if it is not well thought out to cater and reach out effectively to its target market. A business’ comprehension of the generational differences will allow its managers to understand, identify and manage the varying expectations successfully. As this research seek to comprehend how the generational cohorts from the varying cultures will relate to a specific consumption activity and experience, this will include a cross reference investigation of their consumption characteristics, attitudes and expectations in making their procurement decisions.

Marketing to differing generations can be complex and challenging. People, in general, exhibit diverse preferences due to their varying backgrounds, upbringing and experiences. However, it is possible to consider grouping individuals into generational alliances due to the similarities they may have experienced from growing up in the same era. According to Zemke et al (2000) and Dries et al (2008), members of the same generation have been shown to display parallel unique behavioural approaches, patterns and expectations. This is due to the national or global events, as well as the general mind-set, occurring within that period influencing and shaping their personal attitudes and perceptions. Consequently, this creates a group with a generally similar outlook and approach to life for that point in time (Zemke et al, 2000; Benckendorf et al, 2010; Brosdahl and Carpenter, 2011; Gurău, 2012). Accordingly, in relation to the consumer behavioural angle, these factions then predictably express comparable attitudes,

perspectives and expectation within their respective groupings towards the procurement, consumption and disposal of goods and services.

Researchers have noticed that the four generational cohorts present distinct psychographic and demographic characteristics. As such, with the different generational cohorts indicating varying characteristics and personalities, their respective wants, likes, dislikes and expectations contrast and vary as well (Zemke et al, 2000; Benckendorf et al, 2010; Brosdahl and Carpenter, 2011; Berkowitz and Schewe, 2011; MacKenzie and Scherer, 2019). According to Moore and Carpenter (2008), the procurement behaviour, and hence expectations, of consumers belonging to different generations is dissimilar due to the variations in age and experience as well as the product or service's quality and price. Preceding research observes the generational cohorts responding differently to varying marketing cues such as brand image and quality (Hess et al, 2003; Brosdahl and Carpenter, 2011; Gurău, 2012). According to Brosdahl and Carpenter (2011), Gen X consumers tend to exhibit heightened appreciation for the shopping experience and market mavenism as compared to the other generational cohorts. Similarly, Gurău (2012) notice Gen X and Gen Y consumers exhibiting significantly diverse expectations and behaviours in an assessment of brand loyalty programs. This calls for businesses to adopt highly customized marketing strategies that can cross all the generational cohorts or one that the target generation can relate to. It is imperative that businesses customize or adapt their brand's message when attempting to reach out to the different generations due to these variations in their cognitive and thought conditioning and processes to marketing stimuli. It is also necessary for researchers to further examine these generational cohorts' diversities so as to better comprehend the differences that will enable marketers to create effective marketing campaigns and strategies. Furthermore, with the advent of the Z Generation and the constant evolution of the interactions between the generations, this is a subject matter that requires researchers to continually keep track to be abreast of the progression and developments.

## **2.8 Service Quality Expectations Across Ethnicities**

Just like religion, ethnicity is intertwined as well as considered a sub-fragment and aspect of culture (Yinger, 1985; Pires and Stanton, 2005; Hofstede et al, 2010; Soye, 2012; Baskerville et al, 2014) and similarly to one's cultural background and religious inclinations, ethnic influences shape one's personal growth, direction, views and perceptions (Zeithaml et al, 1993;

Pires and Stanton, 2005; Hofstede et al, 2010; Soye, 2012; Baskerville et al, 2014; Parham et al, 2015). According to Pires and Stanton (2005), ethnicity is closely linked to culture as one's culture socialize their constituents based on their respective societal norms, customs and rules of conduct. Similarly, Yinger (1985, p.185) posit an ethnic faction as "a segment of a larger society whose members are thought, by themselves and/or others, to have a common origin and to share important segments of a common culture and who, in addition, participate in shared activities in which the common origin and culture are significant ingredients." Correspondingly, Fossen (1998) posit ethnicity as an important indicator of class relations, and as such, should be considered and investigated as a surrogate to one's culture as well. Policymakers and researchers have often described one's ethnicity as synonymous with one's race and have used the two terms interchangeably (Weber, 1922; Barth, 1969; Fossen, 1998). Ethnic diversity has been featured prominently in numerous research spanning over decades (Weber, 1922; Zeithaml et al, 1993; Fossen, 1998; Pires and Stanton, 2005; Soye, 2012; Baskerville et al, 2014; Parham et al, 2015).

Barth (1969) posit ethnicity as a population clique that is able to self-preserve biologically, possesses a unique interaction and communication language plus practise common cultural elements and values. Congruently, Weber (1992) refers to ethnicity as groups with common ancestry which includes custom and physical similarities, though these individuals may not necessarily be related or have any family ties. However, Weber (1992, p.391) concede that there may be "perceptible differences in the conduct of everyday life" that impacts their individual cognitive processes. Since ethnicity have been alternatively proposed as a sub-form of cultural identification (Weber, 1992; Barth, 1969; Pires and Stanton, 2005; Baskerville et al, 2014), it would be fractious and difficult to fully separate ethnicity from culture due to the intricate association between the two. Nevertheless, Fenwick (2010) observe ethnicity as transcending beyond the limits and boundaries of shared ancestry and culture but further encompass a sense of communal values, living and vocation.

In a multiracial nation such as Malaysia, these ethnic cohorts play a noteworthy part in influencing and determining the country's political and economic directions due to the distinctive legitimate and pecuniary standing of the respective ethnic groupings (Jesudason, 1989). According to Sendut (1991), the upshot of race and ethnicity plays a highly significant role in such a country like Malaysia with its unique and established population composition. For this reason, similar to cultural stimuli, people of different



ethnicity very often have differing needs and expectations as well (Webster, 1989; Winsted, 1997; Pires and Stanton, 2005). Zeithaml et al (1993) and Snow et al (1996) found clear and distinct differences amongst various ethnic groups with regards to how they rate, expect and value service quality. Correspondingly, Fenwick (2010) observe ethnic diversities influencing a consumer's disposition and inclinations in different manners. For example, Webster (1989) found that the Chinese ethnicity are inclined to prioritise on service quality as compared to the Hispanics and Anglos. Additionally, ethnic-related emotions and responsibilities impacts one's objectivity and judgement (Pires and Stanton, 2005; Baskerville et al, 2014; Parham et al, 2015).

In this globally evolving social environment, the comprehension of the parallels and disparities amongst the various ethnic groupings is imperative to the success of any service provider. As such, firms now acknowledge that different ethnicities have differing preferences, needs and consumption habits that necessitates further consideration (Zeithaml et al, 1993; Pires and Stanton, 2005; Fenwick, 2010). Service firms that are sensitive and comprehend their customers' expectations would be more able to provide services in an efficient, effective and encompassing manner. In addition, the interpersonal interaction between the service provider and their customers propels the customers' evaluation of their experience as well as the firm (Zeithaml et al, 1993; Bitner et al, 1992; Baskerville et al, 2014). Despite the marketing challenges that ethnicity may pose, service firms are encouraged to accommodate and adapt to the ethnic diversity that encompasses their customer base so as to enable the identification and delivery of service that meet expectations and satisfy customers (Zeithaml et al, 1993; Bitner et al, 1992; Ueltschy and Krampf, 2001; Fenwick, 2010; Baskerville et al, 2014).

## **2.9 Service Quality Expectations Across Genders**

Gender is considered a demographic variable and is also known as a customer characteristic that is easily recognisable and distinguished thus making gender a feature that may be factored into marketing strategies (Webster, 1989; Gruber et al, 2009; Gupta and Bansal, 2011; Havinal and Sirigeri, 2013; Kim et al, 2013). Nevertheless, research have indicated the blunders that may ensue when gender stereotyping are espoused, such as, making the traditional assumption that males are more assertive, tough and focused than females (Hart et al, 2007; Lee et al, 2011; Parham et al, 2015). Gender differences exist depending on the situation

and environment. As an example, male consumers generally prefer a speedy and efficient retail experience whereas female consumers tend to prefer not to have to rush through their shopping excursion (Hart et al, 2007). In another example with regards to service encounters, the male consumers were found to be less emotionally involved when compared to their female counterparts (Gruber et al, 2009). Therefore, these researchers were of the view that demographic characteristics are able to suggest the individuals' general cognizance whereby the various demographic factors uniquely fuse to influence and mould a consumer's outlook. This in turn impacts and shape one's conduct, viewpoint and expectations (Meng and Elliott, 2009; Gupta and Bansal, 2011; Kim et al, 2013; Parham et al, 2015). In summary, individuals produce varying combinations of demographic factors that generates diverse results and behaviours. As such, numerous researchers agree that gender is one of the demographic indicators that may influence one's perception and expectations of service quality (Webster, 1989; Meng and Elliott, 2009; Gupta and Bansal, 2011; Havinal and Sirigeri, 2013). Since consumers perceive, expect and experience service quality differently, businesses need to consider all factors that impacts these considerations so as to be more efficient and effective in approaching and retaining their customers. Countless researchers share the unequivocal opinion that service quality should be assessed across the various consumer demographics (Hart et al, 2007; Gruber et al, 2009; Munusamy et al, 2010; Lal et al, 2014).

Researchers have considered gender differences in a variety of circumstances. This include studies on discrepancies in shared proclivities (Eagly and Steffen, 1986), leadership (Eagly et al, 1995), banking industry (Stafford, 1996), knowledge sharing (Lin, 2006), repatronage (Hart et al, 2007), complaint management (Gruber et al, 2009), shopping orientation (Borsdahl and Carpenter, 2011), hospitality (Juwaheer, 2011), golfing industry (Lee et al, 2011); service quality perceptions (Stafford, 1996; Juwaheer, 2011; Lee et al, 2011; Mokhlis, 2012); guilt (Else-Quest, 2012), public services (Mokhlis, 2012), beauty industry (Kim et al, 2013) and assertiveness (Parham et al, 2015). However, in marketing, gender is a socio-cultural construct data that is regularly collected to enable the segmentation of the consumer markets for further analysis, contrast as well as for the development of business strategies (Wiertz et al, 2004; Hart et al, 2007; Bizri, 2014). According to Webster (1989) and Gupta and Bansal (2011), service quality expectations differ between genders, with female consumers generally asserting higher expectations. Similarly, female consumers also have higher expectations or demands in terms of service recovery as compared to the male customers (Hess et al, 2003;

Gruber et al, 2009). However, this assertiveness would depend on the consideration of one's other demographic makeup, of which cultural background, is included (House et al, 2002, Raven and Welsh, 2004; Parham et al, 2015). On the other hand, other studies have found contradictory findings that indicate male consumers as rating service quality higher when compared to their female counterparts (Gupta and Bansal, 2011; Juwaheer, 2011). Since, the perceptions and expectations of service quality diverge across varying cultures which act as the underlying antecedents to numerous diverse characteristics and behaviours (Kueh and Voon, 2007; Hofstede et al, 2010; Bouzaabia et al, 2013), as such, additional knowledge of demographic factors such as gender may engender further lucidity and information. Researchers have weighed the consequences of assessing demographic variables on the study of service quality and concur on the significance of the data it may disclose (Webster, 1989; Meng and Elliott, 2009; Munusamy et al, 2010; Havinal and Sirigeri, 2013; Lal et al, 2014).

Past research have indicated that service quality perceptions and expectations vary across the demographic factions, and as such, businesses have had to act accordingly to cater to their customers' expectations and demands (Meng and Elliott, 2009; Gupta and Bansal, 2011; Kim et al, 2013; Seiler et al, 2013). For example, differences between genders notably altered service dimensions of the banking industry (Stafford, 1996). This is demonstrated by banks now marketing and offering products and services specifically to their female clientele. However, researchers have also found that the gender variable does not significantly influence expectations of service quality in all sectors and hence indicate minimal dissimilarities in this aspect as compared to other demographic characteristics (Kueh and Voon, 2007; Chaker and Jabnoun, 2010; Bizri, 2014). Nevertheless, Raven and Welsh (2004) and Hoyer and MacInnis (2010) observe the gender variable as significantly affecting the procurement evaluation stages. This includes the dimensional aspects of SERVQUAL which is the measurement tool selected in this study to evaluate service quality expectations and perceptions. In the marketing context, Parham et al (2015) posit that the varied outlook and outcomes due to gender differences are sufficiently significant for the demographic variable to be regarded as a distinct subculture. Correspondingly, Kueh and Voon (2007) recommend future research involving gender so as to better comprehend its mediating effects and roles as well. This perspective was further supported by later researchers who called for additional studies on gender differences after observations on the sporadic and lack of current literature availability (Mokhlis, 2012; Seiler et al, 2013; Lal et al, 2014).

## **2.10 Hypotheses Development**

### **Cultural Values and Service Quality Expectations**

A number of researchers have observed the role of culture as a significant variable influencing consumer conduct (Hofstede et al, 2010; Li and Cai, 2012; Guesalaga et al, 2016; Stauss, 2016; Davis et al, 2017). Li and Cai (2012) propose that cultural elements robustly induce a consumer's acceptance, approval and adoption of any products and services. Considering that one's cultural background may mould and determine the individual's behaviours, as such, different cultures would exhibit dissimilar value orientations, actions and conduct (Dash et al, 2009; Hofstede et al, 2010; Stauss, 2016). Congruently, numerous research have found that culture is a major determinant that impacts one's service quality expectations (Furrer et al, 2000; Dash et al, 2009; Li and Cai, 2012). Researchers were also able to conclude that cultural values enable the explanation in the variations within the consumers' service quality expectations and perceptions (Liu et al, 2001; Gounaris et al, 2010; Guesalaga et al, 2016). Stauss (2016) suggests that researchers may anticipate and foresee the consumers' expectations and perceptions when their cultural differences is taken into consideration.

Since culture is able to influence and drive the individual's thoughts, norms and actions, therefore, it plays a fundamental role in the comprehension of the precursors of consumer cognition and behaviour. Literature concur that cultural values is a known antecedent of service quality expectations as one's cultural background inadvertently shapes one's consumer expectations, perception and procurement behaviours (Haque, 2003; Fontaine and Richardson, 2005; Schneider et al, 2011; Soyeze, 2012; Felix and Braunsberger, 2016). Correspondingly, researchers are of the view that expectations may vary due to its dynamic characteristics that are influenced by one's past experiences and upbringing (Fisk et al, 1990; Clow et al, 1998; Gunawardane, 2010). As such, considering that one's life and cultural experiences influences expectations, consumers are expected to possess varying service quality expectations. Malhotra et al (2005) called for studies that considered the disparities and variations on the evaluation of service quality between cultures within developed nations and its less developed counterparts whilst contending the hypotheses that one's socio-cultural and economic standing may further alter and shape consumer expectations. Guesalaga et al (2016) posits that researchers need to

constantly update literature in the evaluation of cultural variations and their impact on the consumer's assessment and expectations of service quality from a local perspective. Building upon these findings, the following hypothesis is proposed for this research paper:

H1. Cultural values has a positive and significant effect on service quality expectations

### **Power Distance Index and Service Quality Expectations**

The power distance index was adapted to measure “the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally” (Hofstede et al, 2010). Accordingly, societies that practices high power distance tend to expect and desire hierarchical order between people which inadvertently promotes inequality. In contrast, low power distance cultures are predisposed towards expecting to treat each other in a more equal manner and supports fairness and parity (Hofstede, 2003). According to Donthu and Yoo (1998), customers generally play a subservient role and view themselves as possessing less power when assessed and compared to the service provider or retailer. It seems that customers from such a society view the service provider as having a degree of power over them.

For example, food and beverage customers rely on the restaurant or eatery as an alternative source of sustenance. In this context, restaurant customers from a high power distance index environment, such as Malaysia, are accustomed to behaving in a more dependent manner towards the service providers (Donthu and Yoo, 1998; Kueh and Voon, 2007). As such, these individuals are inclined to be more respectful and considerate when interacting with the restaurant personnel as well as exhibit higher level of tolerance towards any shortcomings or weaknesses. This translates to lower levels of service quality expectations. On the other hand, customers from low power distance societies are on the other end of the spectrum and have loftier expectations of service quality (Kueh and Voon, 2007). Hence, the following hypothesis is proposed:

H1a. The power distance cultural dimension has a significant influence on service quality expectations.

### **Collectivism/ Individualism Index and Service Quality Expectations**

According to Hofstede et al (2010), culture may be additionally segregated into either a collectivist or individualistic society whereby one views themselves as an individual or a part of a faction. Collectivist societies, such as Malaysia, stress the importance for collective cooperation and interdependence within the clique and loyalty to the group is expected and demanded so as to ensure social coherence and harmony as well as to circumvent any discord or conflict. As such, customers from a collectivistic culture are inclined to be mutually supportive in social interactions which, in turn, makes them more agreeable with service providers (Hofstede et al, 2010). Additionally, these people tend to be easy going and tolerate faults and oversights with lower levels of expectations from service providers, unlike those from an individualistic society. In contrast, individualistic people pushes limits and are highly protective of themselves (Hofstede et al, 2010) which leads to higher levels of expectations. Hence, the following hypothesis is proposed:

H1b. The individualism/ collectivism cultural dimension has a significant influence on service quality expectations.

### **Masculinity/ Femininity Index and Service Quality Expectations**

According to Hofstede et al (2010), the masculinity and femininity dimensions refer to the respective society's division of emotive characteristics as well as the "dominant gender role patterns." This denotes the position, function and responsibility of the individual sexes and includes the expectations imposed on how a male or female may behave and conduct themselves. In a masculine society, the men are expected to be strong, ambitious, behave in an assertive manner and be the family's breadwinner (Hofstede, 2003). However, in the context of service quality expectation, Hofstede et al (2010) are of the perception that service related positions require the personnel to convey a soft and gentle approach, and as such, a feminine touch, regardless of the personnel's actual gender. On the other hand, several researchers surmise that the service provider's gender roles may not be deemed as relevant in all sectors when compared to the values expressed and delivered to the customer (Kueh and Voon, 2007; Chaker and Jabnoun, 2010; Bizri, 2014). For example, in the high-contact food and beverage industry, customers prefer the service provider to exhibit amiable and gentle mannerisms, such as, helpful, caring and friendly wait staff and servers despite their genders. As such, the general

expectations of this dimension may not be applicable in a country such as Malaysia and play a lesser influence on one's service quality expectations. Hence, the following hypothesis is proposed:

H1c. The masculinity/ femininity cultural dimension has no significant influence on service quality expectations.

### **Uncertainty Avoidance Index and Service Quality Expectations**

This index attempts to illustrate how individuals deals with unfamiliarity and discusses "the extent to which the members of a culture feel threatened by ambiguous or unknown situations" (Hofstede, 2003). Societies practicing high levels of uncertainty avoidance prefer to have rules, regulations and systems in place to lessen and limit uncertainty whilst placing emphasis on structure, set procedures and policies. As such, individuals from a high uncertainty avoidance index culture are inclined to have lower levels of tolerance with regards to any ideas or behaviours that do not conform to their norm. These people will also resist vicissitudes and changes. On the other hand, cultures with low uncertainty avoidance index are more relaxed, tolerant and deals with risks better. They are also less inclined to show their temper or express any emotions (Hofstede et al, 2010).

According to Kueh and Voon (2007), there is always an element of uncertainty in any future service transactions, and hence, anything may occur despite the attempt to enforce and maintain conformity. As such, in the context of a food and beverage industry, restaurants may face difficulty and challenges in upholding as well as sustaining consistency and uniformity in service quality. Though some aspects of service quality may be possible to preserve, such as the tangibility factors, the personnel and facility facets may prove to be challenging (Kueh and Voon, 2007). Therefore, customers may combine the different dimensions of service quality to determine the level of quality received. Customers within societies with high uncertainty avoidance are anticipated to have higher levels of expectations when it comes to service quality and conformity as compared to their counterparts from low uncertainty avoidance index cultures. Hence, the following hypothesis is proposed:

H1d. The uncertainty avoidance dimension has a significant influence on service quality expectations.

### **Long/ Short Term Orientation Index and Service Quality Expectations**

The long term orientation index looks into a culture's sense of discipline, thrift, tenacity and shame. It also refers to their levels of loyalty and commitment and was derived from the Chinese's Confucian values which were adapted for a research on students spanning twenty two countries (Hofstede, 2003). Societies which value long-term orientation emphasize on the adaptability, perseverance and future of their society and culture as well as sustained efforts (Hofstede et al, 2010). As such, long-term orientation customers tend to seek relatable testimonies prior to supporting the service provider which leads to higher levels of expectations in service quality (Kueh and Voon, 2007). Hence, the following hypothesis is proposed:

H1e. The short term/ long term orientation dimension has a significant influence on service quality expectations.

### **Indulgence/ Self-Restraining Index and Service Quality Expectations**

This is the newest Hofstede index, and as such, not much data is currently available on this index as compared to the previous indexes (Hofstede et al, 2010). Nevertheless, indulgent cultures are seen to place importance on friendship and leisure with emphasis on having friends and living a happy life. Families from this society also tend to focus on the "good things in life" and exhibit higher levels of satisfaction and health consciousness (Hofstede et al, 2010). Comparatively, the people from self-restraining cultures are more neurotic, cynical and pessimistic and have to abide by strictly defined gender roles (Hofstede et al, 2010). Strict rules and regulations are put into place to maintain the nation's order and this restricts and hampers the gratification of people living in such an environment. Suffice to say, there are lower percentage of happy people as compared to those living in an indulgent society. Hence, the following hypothesis is proposed:

H1f. The indulgence/ restraining dimension has a significant influence on service quality expectations.



## **Service Quality Expectations and Customer Satisfaction**

Numerous authors support the position that service quality is closely linked to the customer satisfaction construct (Cronin and Taylor, 1992; Parasuraman et al, 1994; Lovelock et al, 2009, 2011). These researchers posit service quality as occurring when the customers' expectations are met, which then results in the customers' satisfaction with the product or experience. Likewise, later researchers such as Ladhari (2009) and Munhurrun et al (2010) uphold the model that there is an affirmative correlation between customer satisfaction and service quality. Multiple researchers have looked into the relationship between these two constructs in various industries such as service (Cronin et al, 2000), fast food (Brady and Robertson, 2001; Qin and Prybutok, 2009), hospitality (Olorunniwo et al, 2006; Ladhari, 2009), e-repurchase (Ha et al, 2010), retail (Siu and Cheung, 2011) and telecommunication (Wang and Lo, 2012). However, there has been ongoing debates and considerations on the causal relationship order between both the service quality and customer satisfaction constructs, as to whether service quality is the antecedent or consequence of customer satisfaction (Cronin and Taylor, 1992; Parasuraman et al, 1994). Although there is no clear literary consensus on the causal direction between the two constructs, Cronin et al (2000) note a converging perception that support the SQ to CS causal order. Furthermore, service quality has long been deemed as the foremost factor that contribute towards the customers' procurement progression experience (Zeithaml, 2009; Ha et al, 2010; Kotler and Armstrong, 2013; Lovelock et al, 2014). Building upon these findings, the following hypothesis is proposed for this research paper:

H2. Service quality expectation has a positive and significant effect on customer satisfaction.

## **Service Quality as the Mediating Factor between Cultural Values and Customer Satisfaction**

According to Schwartz (2004), the cultural measurement scales are popular amongst many researchers when attempting to examine human values. Numerous studies advocate that cultural dimensions correlate to consumer behaviour (Donthu and Yoo, 1998; Furrer et al, 2000; Armstrong, 2009; Dash et al, 2009; Li and Cai, 2012; Bouzaabia et al, 2013; Cai and Luo, 2015). Researchers have placed much focus on the study of satisfaction and expectations amongst consumers across various nations with differing cultures (Furrer et al, 2000; Polska et

al, 2013; Stauss, 2016; Davis et al, 2017). Therefore, the consumer's cultural context and background is one of the main influences in the consumers' assessment and evaluation of service quality and satisfaction. Furthermore, Li and Cai (2012) and Guesalaga et al (2016) observe that one's cultural origins and upbringing heavily impacts a consumer's appreciation and acceptance of products and services. Li and Cai (2012) and Polsa et al (2013) note consumers routinely express unhappiness and dissatisfaction with business practices that do not observe or adhere to their personal cultural beliefs and expectancies. The last couple of decades have seen researchers displaying interest in the associations between culture, service quality and satisfaction and a number of literature have found that culture does have a causal effect on the consumers' evaluation, perception, expectations and satisfaction of service quality (Li and Cai, 2012; Polsa et al, 2013; Guesalaga et al, 2016; Stauss, 2016; Davis et al, 2017). Based on the justifications above, it is undeniable that the three constructs are inter-linked. As such, considering the service quality construct is an acknowledged antecedent of customer satisfaction but may be influenced by cultural values, it is acceptable for the researcher to recognise the mediating roles that service quality expectation may play between the other two constructs. Building upon these findings, the following hypothesis is additionally proposed for this paper:

H3. Service quality expectation mediates the relationship between cultural values and customer satisfaction

### **Generational Cohorts as the Moderating Factor between Cultural Values and Service Quality Expectations**

Out of the four established generational cohorts, majority of businesses are inclined to focus on Generation X and Generation Y. This is due to the fact that these two generational groupings represent the bulk of the consumer demographics of today as they represent a substantial sizeable percentage of the population (Berkowitz and Schewe, 2011; Gurău, 2012; Guesalaga et al, 2016). Both these generations wield the majority of the collective purchasing power and actively consume considerable variety of products and services. Members of Generation X and Y also share the desire and expectations for high levels of quality service, as well as superior quality product offering (Yang and Lau, 2015). Numerous researchers have discerned the distinctly unique and dissimilar predilections and preferences of Generation X and Generation Y individuals (Zemke et al, 2000; Wong et al, 2008; Benckendorf et al, 2010; Brodahl and

Carpenter, 2011; Gurău, 2012; Giovannini et al, 2015). According to Berkowitz and Schewe (2011), the period, history and socio-cultural, economic and political events occurring in one's lifetime era creates experiences that converts into similar needs, desires and requirements resulting in a homogenous market segment. As such, there exists an underlying bond cultivated through shared experiences as well (Berkowitz and Schewe, 2011; Gurău, 2012; Gardiner et al, 2013; Giovannini et al, 2015).

Numerous studies have been conducted on the expectations of quality service and consumer satisfaction in different countries. For example, Moschis et al (2011)'s research study looked into the expectation and satisfaction levels in relation to a US-based retail store and found that sales personnel and promotions highly influences the perspectives of its American consumers. Additionally, Strandberg et al (2012) investigated the service quality perceptions and expectations of bank customers in Sweden and observed the challenges of satisfying mass affluent banking clientele. However, most of the research study does not consider the generational perspectives (Ha et al, 2010; Strandberg et al, 2012; Wang and Lo, 2012; Stauss, 2016) or focuses only on a particular generation (Kueh and Voon, 2007; Giovannini et al, 2015; Soares et al, 2017) with limited researchers considering comparisons of the generational cohorts. Such comparative research is even less apparent in an Asian context. As such, researchers continuously encourage additional studies to be conducted so as to better comprehend the consumer's retail experience, expectations and satisfaction criterias between the generational cohorts.

This study will additionally consider the generational aspects in a multi-cultural and multi-religion country, Malaysia. Furthermore, Hall (1976) view Malaysia as a "polychronic" populace in terms of time orientation where human relations are prioritised above time related matters whereas Hofstede et al (2010) suggest Malaysians as a rather collectivistic society who are risk adverse and family oriented. As such, Malaysia offers an interesting study context as a developing nation with a very colourful history and vibrant mix of population. According to Gurău (2012), knowledge and insights on the preferences and behaviours of the generational cohorts, as well as any other intertwining facets of society, enable the marketers to conceive marketing strategies that may better reach out to the generations collectively. Yang and Lau (2015) notice that distinctions between the different cultures are comparable to generational variations though few studies have considered both the cultural and generational angle simultaneously. Furthermore, MacKenzie and Scherer (2019) posit that updated and continuing

generational research that utilizes comparison groups as imperative to derive additional insights and information on the generational cohorts' characteristics and attitudes. Based on the above, the following hypothesis is proposed:

H4. Generational differences moderates the relationship between cultural values and service quality expectations.

### **Ethnicity as the Moderating Factor between Cultural Values and Service Quality Expectations**

Numerous researchers concur that ethnicity is closely linked to one's cultural identification and background (Fossen, 1998; Pires and Stanton, 2005; Fenwick, 2010; Soye, 2012; Baskerville et al, 2014) whereby it has even been loosely adopted to describe one's race (Weber, 1922; Barth, 1969; Fossen, 1998). Ethnicity is a highly relevant factor in a greatly diverse nation such as Malaysia which has been renowned for its multiracial, multi-ethnic and multi-cultural population (Jesudason, 1989; Sendut, 1991). Pires and Stanton (2005) and Fenwick (2010) share the observation that ethnic diversities act as an underlying factor that may influence one's judgement, behavioural inclinations and disposition. As such, ethnicity has been regarded as a factor that may influence the consumer's service quality perceptions and expectations as well (Webster, 1989; Meng and Elliott, 2009; Gupta and Bansal, 2011; Havinal and Sirigeri, 2013). Therefore, firms are now conscious of the need to take into consideration the differences between the various ethnic groups as service providers that comprehend the nuances of their clientele would be able to strategise in a more effective manner so as to successfully meet the consumers' expectations (Zeithaml et al, 1993; Pires and Stanton, 2005; Fenwick, 2010; Baskerville et al, 2014). As an example, businesses in Malaysia makes it a point to create marketing strategies that incorporates the festivities of the main ethnic groups in the country such as Hari Raya themed promotional offers for the Malay ethnicity or Deepavali themed offerings for the Indian ethnic group. This in turn leads to higher profitability and corporate growth. In conclusion, service firms are encouraged to continually improve their understanding of their customers in this ever changing social climate and environment. Building upon these findings, the following hypothesis is additionally proposed for this paper:

H5. Ethnicity moderates the relationship between cultural values and service quality expectations.

### **Gender as the Moderating Factor between Cultural Values and Service Quality Expectations**

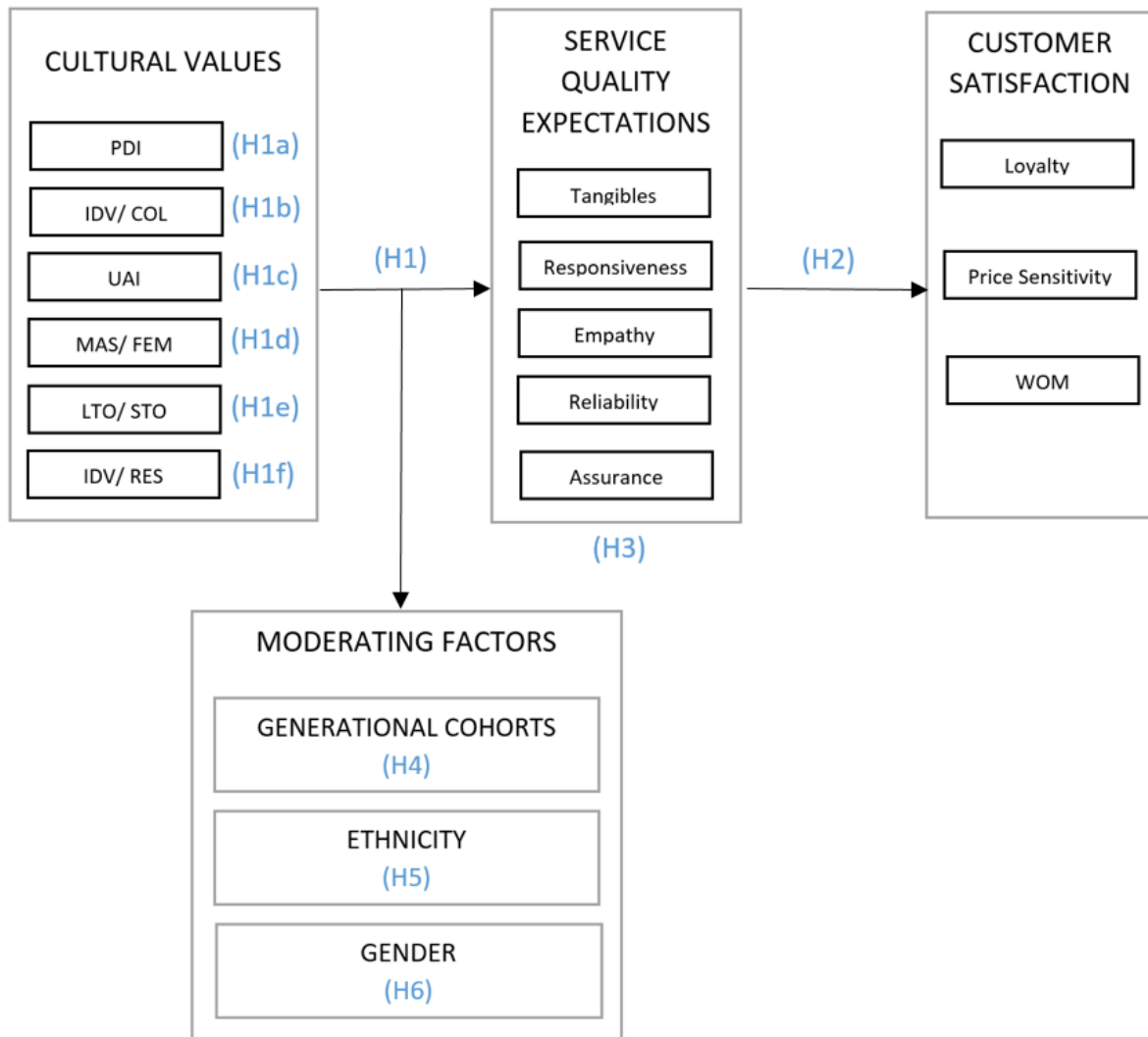
Male and female individuals have displayed contrasting behaviour and conduct depending on the circumstances, environment and cultural background (Hart et al 2007; Gruber et al, 2009; Meng and Elliott, 2009; Gupta and Bansal, 2011; Parham et al, 2015). Munusamy et al (2010) and Lal et al (2014) posit that studies that consider or include this variable may be able to shed further light on the comprehension of the consumers' behaviour and actions in a situation. As such, literature concur that demographic indicators such as one's gender may shape the consumer's expectations and perceptions (Webster, 1989; Gruber et al, 2009; Meng and Elliott, 2009; Parham et al, 2015). This was further supported by other studies that found the need for businesses to consider demographic variables when formulating their marketing strategies so as to be more effective in approaching and retaining their customers (Gupta and Bansal, 2011; Havinal and Sirigeri, 2013; Kim et al, 2013; Seiler et al, 2013). Significant to this study, gender was found to impact the evaluation dimensions of SERVQUAL which looks at the consumers' expectations and perceptions of service quality (Raven and Welsh, 2004; Hoyer and MacInnis, 2010). Nevertheless, due to the varying results and despite the collection of data on gender in most research, limited research have considered the influence of gender in relation to cultural values (Kueh and Voon, 2007). In their research, Kueh and Voon (2007) left out possible mediating variables such as gender and its role in relation to cultural values and service quality expectations. As such, one of their future research recommendations was to consider the effects of the gender variable in this context. This was further supported by Mokhlis (2012) and Seiler et al (2013) who opined on the infrequent and lack of current literature that considers the correlation between the gender variable to service quality expectations and customer satisfaction and called for further studies on gender differences. Hence, the following hypothesis is proposed:

H6. Gender moderates the relationship between cultural values and service quality expectations.

## 2.11 Conceptual Research Model

To recap, Figure 4 below illustrates the conceptual research model that demonstrates the integrative framework and projected hypothesized relationships between the constructs based on the research project and discussion above.

**Figure 4: Conceptual Research Model and Hypothesised Relationships**



# CHAPTER THREE

## Methodology

### **3.0 Chapter Three: Research Methodology and Design**

#### **3.1 Introduction**

This chapter comprises of two parts whereby the research direction and the methodology exercised to guide and complete this research study are explained, followed by the analytical implementation and procedures employed. Chapter Three commences by detailing the progression of the study from the initial position of the research to its delightful completion and will focus on the achievement of the study's research objectives through a systematic research methodology framework. The framework and structure of the methodology is deemed as the research design towards providing the path undertaken during the research direction, conduct, management and analysis. This section also includes the criteria identification and construct measurement of the selected measurement instruments, SERVQUAL and Hofstede indexes, which are then ratified by relevant authority in the subject matter. This is followed by a description of the questionnaire design which is subsequently run through a pilot study so as to ascertain any weaknesses in the data collection instrument which are then amended to improve the research tools and methodology. The section then considers the research method in the collection of the data whereby the sampling design and selection looks at the sampling procedure, frame and scale. The chapter goes on to provide an explanation of the methods in which the data are collected as well as the scales and the measurement adopted in the study.

The second part considers the data analytical procedures adopted and begins with a description of the statistical programs employed to analyse the raw data collected in the study. This is then followed by a section explaining the manner in which the data are pre-analysed to assess the degree of internal consistency so as to evaluate the reliability and validity of the variables and includes the common methods variance utilized in the study, along with a narration on statistical tests associated with factor analysis. As such, the analytical procedures are expected to be robust and effective so as to enable the information be received and interpreted efficiently. The principal analytical method underpinning this study is via structural equation modeling (SEM) and a detailed description of SEM will be presented which includes its mechanisms, rationality, processes and justifications. This encompasses the manners of fit indices selection whereby model fit and integrity are evaluated. The structural equation modeling and model parameter reviews will be organized and tabulated with the aid of the AMOS statistical



software program. This is then followed by explanations on the integral aspects of the model fitting processes, the issue of statistical significance, the estimation process and the goodness-of-fit statistics whereby care is taken against overfitting the model. Upon the adequate operation of the measurement model, the validity of the relationships between the variables in the structural model are measured and similarly put through statistical test to ensure model fit, reliability and construct validity. Lastly, the chapter ends with a description of the multi-group analysis that was adopted to evaluate the roles of the moderating variables put to test in the study.

### **3.2 Research Design and Framework**

A research design is the blueprint or framework that the researcher may assume and implement to conduct a research project and details the processes the researcher need to undertake to collect and analyse the data (Bryman and Bell; 2007; Malhotra, 2007). The objective of a research design is to “design a study that will test the hypotheses of interest, determine possible answers to the research questions, and provide the information needed for decision making” (Malhotra, 2007, p.78). The research design sets the groundwork for conducting the study and a sound research design will guide the research study in an effective and efficient manner towards its completion (Curwin and Slater, 2004; Bryman and Bell, 2007).

As such, this section contains the framework that will be adopted for the purpose of this research paper and will specify the details and direction of how the study will be managed. The study adopts a quantitative research methodology whereby the primary data will be collected, quantified and evaluated with the aid of statistical tools. Basically, quantitative research encompasses a linear progression of research stages that advances from the research topic’s literary theory to its conclusion and entails the search for indicators (Bryman and Bell, 2007). The conclusive or quantitative research design is characterized as more formal and structured when compared to the exploratory research design of the qualitative methodology and is based on sizeable representative samples whereby the data collected are examined via quantitative analysis (Curwin and Slater, 2004; Malhotra, 2007).

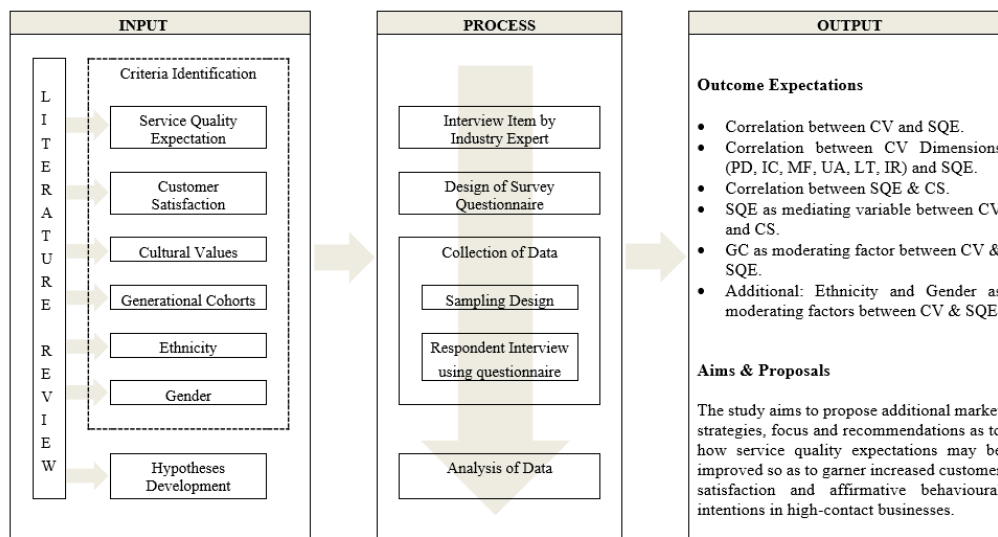
Furthermore, conclusive research is widely used by researchers to evaluate specific hypotheses as well as assess specific relationships (Malhotra, 2007). The research’s findings are deemed

to be conclusive in nature, hence its namesake (conclusive research), and may be adapted into the management's business and marketing strategies. Within the conclusive research design and for the purpose of this research paper, the descriptive research route is employed rather than the causal research approach due to suitability. As this research deals with the customers' expectations and perceptions as well as their cultural based inclinations, descriptive research will be apt as this research design is able to determine the perceptions of the service characteristics as well as the degree of its variable associations (Bryman and Bell, 2007; Malhotra, 2007).

### 3.3 Methodology Framework

For the purpose of direction and focus towards accomplishing this research study's objectives, a methodology framework was developed. The methodology framework, as illustrated in Figure 5, encompasses a systematic outline of stages in this research study, from the commencement and progression towards its conclusion. This framework is divided into three separate sections whereby the input-process-output approach is adopted.

**Figure 5: Research Methodology Framework**



With reference to Figure 5 above, the initial *input* section comprises of a literary-sourced history of cultural values and generational cohorts, which include a review of the constructs being researched; service quality expectations and customer satisfaction, as well as the

development of hypotheses adopted in this study. Additional factors, ethnicity and gender, were also included in the study. Correspondingly, this section further includes the identification of the criteria in the measurement of all the constructs.

The second *process* phase in Figure 5 above covers the development of the research instrument and the design of the questionnaire. Industry experts (in this case, from the hospitality industry) are selected to assist in the identification of industry-relevant interview items with the objective of finalising the construct measurement items through the addition, removal and selection of items that were derived during the *input* phase from combing through the literature review. Once this is completed, the researcher can merge the elected hospitality industry related measurement items and proceed to design the interview questionnaire as per the chosen research design.

Upon completion of the questionnaire, which may involve several rounds of tweaking as well as the pilot testing stage, the researcher may commence to collect the actual data from the selected sample, that is, the customers of the hospitality industry. After the completion of the data collection phase, the researcher will analyse and evaluate the data using analytical software fitting to the study's research methodology. The *output* phase contains the results of the study as well as the arising recommendations and strategy proposals. The following sections will further elaborate and explain the stages entailed in the research methodology.

### **3.4 Criteria Identification and Construct Measurement Instrument**

The measurement criteria was discussed earlier in Chapter Two's Literature Review section. As per the rationale arrived upon in the previous chapter, this study's research questionnaire elected to adapt Parasuraman et al (1985, 1988, 1991, 1994)'s SERVQUAL quality index performance measures to evaluate the investigated service quality construct. Numerous studies have presented SERVQUAL as an effective, useful and stable instrument for measuring service quality related attributes (Choon and Yoon, 2004; Law et al, 2004; Szwarc, 2005; Kumar et al, 2008; Gilmore and McMullan, 2009; Lovelock et al, 2009, 2014). Therefore, based on these reasons, this study deem the SERVQUAL scale as relevant and fitting due to the research's focus on the expectation construct. The SERVQUAL dimensions adopted will consist of the

following established components: (1) tangibles, (2) reliability, (3) responsiveness, (4) assurance and (5) empathy, as listed below:

- The tangibles dimension: refers to physical aspects such as the equipment, amenities and facilities. This includes the demeanour and disposition of the firm's personnel as well as all communication materials.
- The reliability dimension: refers to the service personnel's ability to perform and deliver the service reliably and correctly.
- The responsiveness dimension: refers to the personnel's readiness to assist the customers and deliver the services in a prompt and timely manner.
- The assurance dimension: refers to sincerity, credibility, competency and mannerism of the service provider and personnel. This includes the security provided by the establishment.
- The empathy dimension: refers to personal care, concern and consideration that the customers receive from the service provider.

For the purpose of this research study, the SERVQUAL instrument will be adapted to measure the following items as listed below in Table 5.

**Table 5: SERVQUAL Criteria Identification**

Tangibleness	Current and modern equipment
	Physical facilities are visually appealing
	Immaculate and presentable looking personnel
	Visually appealing marketing materials
Responsiveness	Services performed as informed
	Provides timely and prompt services
	Willingness to assist
	Responds to customer requests
Empathy	Provides personal attention
	Convenient operating hours
	Sensitive to customer's comfort
	Understands specific needs
Reliability	Promises are taken seriously
	Problems are solved with genuine concern
	Services are performed correctly
	Provides services timely
	Maintains proper records
Assurance	Employees behaviour instils confidence
	Safe dealings and transactions
	Courteous employees

	Knowledgeable employees
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Source: Adapted from Parasuraman et al (1985, 1988, 1991, 1994)

A summated seven-point Likert-type scale (1 = “strongly disagree”; 2 = disagree; 3 = somewhat disagree; 4 = neither agree nor disagree; 5 = somewhat agree; 6 = agree; 7 = “strongly agree”) will be employed to collect the responses for the measurement items.

In this study, the items to measure the customer satisfaction construct in the hospitality sector were developed based on other closely similar service related industries such as hotel (Olorunniwo et al, 2006; Ladhari, 2009) and food services (Qin and Prybutok, 2009). The six measurement items are as listed below:

1. Would you agree with the following statement: *I am satisfied with this hospitality service provider.*
2. Would you agree with the following statement: *My choice to seek service at this hospitality service provider was a good decision.*
3. Would you agree with the following statement: *I feel that my experience with this hospitality service provider has been enjoyable.*
4. Would you agree with the following statement: *I would recommend this establishment to others.*
5. Would you agree with the following statement: *I would re-visit this establishment.*
6. Would you agree with the following statement: *I am sensitive about the pricing of products and services.*

Again, a summated seven-point Likert-type scale (1 = “strongly disagree”; 2 = disagree; 3 = somewhat disagree; 4 = neither agree nor disagree; 5 = somewhat agree; 6 = agree; 7 = “strongly agree”) will be employed to collect the responses for the measurement items.

Similar to the SERVQUAL measurement instrument, Hofstede’s index was adopted as the measurement tool to evaluate the participants’ cultural values and dimensions. Hofstede (1980; 2001; 2010) offers the view that dimensions within cultures as measureable relative to other cultures, and as such, conducted the pioneer extensive empirical study to analyse the dimensions of culture which culminated with functional national indices that is currently being employed by numerous researchers around the world. Numerous literature has

presented Hofstede's cultural dimension index as an effective, valuable and stable instrument for measuring cultural values and related attributes (Donthu and Yoo, 1998; Furrer et al, 2000; Schneider et al, 2011; Soyezi, 2012; Felix and Braunsberger, 2016). The Hofstede cultural dimensions adopted will comprise of the following established components: (1) power distance, (2) uncertain avoidance, (3) individualism/ collectivism, (4) masculinity/ femininity, (5) long-term/ short-term orientation and the recently added dimension, (6) indulgence/ restraint, as listed below:

- The Power Distance dimension: refers to manifestation of human disproportion that exists in society.
- The Uncertainty Avoidance dimension: refers to the consideration of stress level that may be caused or faced when dealing with an ambiguous or uncertain prospects.
- The Individualism versus the Collectivism dimension: refers to the individual's integration into society or primary factions.
- The Masculinity versus Femininity dimension: is related to the division of emotive characteristics and roles between men and women.
- The Long-Term versus Short-Term Orientation dimension: refers to the choices that is made with consideration for the past, present and future.
- The Indulgence versus Restraint dimension: refers to one's inclination towards immediate gratification as opposed to restraining or delaying one's desires.

For the purpose of this research study, the cultural measurement instrument adapted from Hofstede are to measure the following items as listed below in Table 6.

**Table 6: Hofstede Criteria Identification**

Power Distance	Acceptance of social inequality
	Dependence of weaker individuals on a higher status individuals
	Consideration that social inequality should be eradicated
	Acceptance of interdependence between the lesser and more influential
Uncertainty Avoidance	Acceptance of negative emotions between individuals
	Perspectives and consideration of being in ambiguous situations
	Acceptance of uncertainty as a norm
	Concealment of one's emotions
Individualism/ Collectivism	Responsibility towards oneself and their immediate families
	Individuality irrespective of the social group they belong to
	Significance of family, extended family and society
	Consideration of preference towards collective identity
	Inclination towards economic standing in life

Masculinity/ Femininity	Perception of males as assertive, ambitious and tough
	Acceptance of gentler and feminine social cues
	Inclination towards equality between men and women in terms of emotive expressions
Long-Term/ Short-Term Orientation	Consideration of dedicating oneself to a superior cause
	Inclination towards forbearance to achieve long-range results
	Respect and adherence towards social traditions
	Inclination towards fulfilling social obligations regardless of personal cost
Indulgence/ Restraint	Perspective on inculcating diligence
	Perspective on inculcating frugality
	Perspective on leisureliness
	Perspective on faith

Source: Adapted from Hofstede (1984, 1999, 2003, 2011, 2017)

Likewise, a summated seven-point Likert-type scale (1 = “strongly disagree”; 2 = disagree; 3 = somewhat disagree; 4 = neither agree nor disagree; 5 = somewhat agree; 6 = agree; 7 = “strongly agree”) will be employed to collect the responses for the measurement items.

### 3.5 Identification of Interview Items by Industry Authority

The preliminary construct measurement items were derived from the review of past literature as well as theoretical concepts on item measurement instruments. However, the researcher needs to consider the fit and suitability of the measurement items to the industry being researched upon, whereby in this case, is the hospitality industry in Malaysia. As such, the researcher will arrange to seek the expert advice and knowledge of the authority in the subject matter or professionals in the specified (hospitality) industry. These industry experts would be able to further assist in the assessment, correction and refinement of the measurement items as well as advise on the applicability of the items specific to the industry. This step is undertaken to fulfil the criteria towards the development of a measurement instrument that is able to explicitly evaluate the researched hospitality industry.

First and foremost, the selection of the industry experts needs to fulfil certain criteria. The hospitality industry experts will be nominated based on their experiences and familiarity with the hospitality commerce or industry. Due to the focus of the research study on the expectations and satisfaction of the customers as well as their future behavioural intentions, the customers’ point of view on their perceptions and expectations of the service quality experienced are essential inputs that are required. The researcher will attempt to reach out to ten experts

comprising of five hospitality firms professionals and consultants plus another five highly experienced customers of various hospitality establishments. The experts will be requested to review the measurement items and give their respective comments and advice on the fit and suitability of the items in measuring service quality in the hospitality industry. Furthermore, their advice may include the addition and removal of certain items, in addition to the proper usage of industry terminology, of which will result in a more appropriate measurement instrument that is specifically relevant to the hospitality industry. As such, the researcher will be able to ensure content validity and reliability of the scale items in the survey instrument as well.

### **3.6 Questionnaire Design**

The form design or questionnaire is a crucial part when formulating a research design. According to Malhotra (2007, p.299), a questionnaire is “a structured technique for data collection that consists of a series of questions that a respondent answers” and has specific objectives. The questionnaire’s aim is to translate the required data into a set of specific questions or statements that the respondents can and will answer to garner the researched data (Malhotra, 2007). The questionnaire also needs to encourage the respondents to cooperate and answer the questions voluntarily. All questionnaire design should curtail non-response, partial answers, dullness and respondent fatigue (Malhotra, 2007). Lastly, the questionnaire should minimize respondent response error that may occur when the respondents give incorrect responses (Malhotra, 2007).

This study’s questionnaire is designed into three main written sections. Section A covers the information on the profile of the respondents whereas Section B houses the measurement items on service quality and customer satisfaction whilst Section C measures the cultural values and perspectives of participants. Each section of the questionnaire contains concise written instructions which serves as the guidelines for the respondents on the method to completing the questionnaire. Additionally, the guidelines are attached with the aim to prevent bias and confusion that may arise amongst respondents when attempting to complete the questions.



## Section A: Respondent Profile

Section A encompasses the respondent's demographic profile and experiences as a consumer in the hospitality industry. The respondent profile consists mainly of nominal data with a few ratio scales included. This section is anonymous but requires general information from the respondents such as gender, age, ethnicity, marital status, education, profession, monthly income as well as period of being a hospitality firm customer and the regularity of their visits.

## Section B: Service Quality and Customer Satisfaction

Section B seeks the respondent's opinions and feelings with regards to the statements listed with the respondents indicating the number that best corresponds to their answers, as per the instructions. This section collects only interval data and commences with an adaptation of the measurement instrument on service quality, SERVQUAL. The measurement items, which underwent fit and suitability assessment prior to receiving the approval from the industry's experts, list statements (variables) centred on the five dimensions in the SERVQUAL model, that is, tangibleness, responsiveness, empathy, reliability and assurance. The measurement items adopted are relevant to the hospitality industry and may be employed for the collection of data from the customers of all service-related establishments.

Based on the statements within each dimensions, the respondents are required to indicate both their expectations and perceptions in relation to their experience in a hospitality establishment. A summated Likert-type seven-point scale will be employed to collect the responses for all the variables due to its simple construction and administration. The Likert scale is a widely used measurement scale that is easily understood by the respondents and "requires the respondents to indicate a degree of agreement or disagreement with each of a series of statements about the stimulus objects (Malhotra, 2007, p. 274). This perspective was further supported by Helfrich et al (2007). This scale characteristically contains seven response categories ranging from "strongly disagree" to "strongly agree" and the questionnaire design for this research study will adopt the scales as such: 1 = "strongly disagree"; 2 = disagree; 3 = somewhat disagree; 4 = neither agree nor disagree/ neutral; 5 = somewhat agree; 6 = agree; 7 = "strongly agree". The respondents will specify their responses by circling the numbers that best corresponds to their expectations (in the left column) and perceptions (in the right column). The Likert-type scale

is a form of *closed question* format that simplifies the respondents' possible answers and thus resulting in the collection of increased discerning data (Helfrich et al, 2007; Malhotra, 2007).

The same applies to the customer satisfaction section. The variables or measurement items for this construct is placed after the service quality variables. Similar to the measurement items of service quality, all the customer satisfaction variables underwent the scrutiny of the industry experts and were shortlisted to six statements for this construct in this research. The seven-point Likert-scale was also adopted to collect the interval data.

### Section C: Cultural Values

Section C seeks to collect data on the respondent's cultural values with regards to the statements listed with the respondents indicating the number that best corresponds to their answers, as per the instructions. Similarly, this section collects only interval data and commences with an adaptation of the measurement instrument on cultural dimensions by Hofstede (1980; 2001; 2010). The measurement items, which underwent fit and suitability assessment prior to receiving the approval from the industry's experts, list statements (variables) centred on the six dimensions in the Hofstede index, that is, power distance, uncertain avoidance, individualism/ collectivism, masculinity/ femininity, long-term/ short-term orientation and indulgence/ restraint. The measurement items adopted are relevant to the study objectives and may be employed for the collection of data from the customers of all service-related establishments.

Based on the statements within each dimensions, the respondents are required to indicate their opinions in relation to their individual cultural background. Similar to the measurement items of the two previous constructs, the seven-point Likert-scale will be adopted to collect the interval data.

This research study, inclusive of the survey questionnaire, shall wholly adopt the English Language throughout the research period. This is due to the wide usage of the language in Malaysia, as well as for the ease of comprehension by the researcher's supervisors locally as well as in Australia. As such, the development of the questionnaire prototypes right to its amendments and final completion will be executed using the English Language. Additionally, in order not to overwhelm the respondents, the overall length of the questionnaire are kept

minimal with simple and clear instructions provided to guide the respondent accordingly. The researcher will then conduct a pilot study of the final survey questionnaire to ensure that the respondents fully and clearly comprehend the wordings and meanings of each and every statement including the guidelines and instructions. The final version of the survey questionnaire is contained in Appendix 1.

### **3.7 Pre-Test and Pilot Study**

Prior to proceeding to the dissemination of the survey questionnaires in the data collection phase, the researcher conducts a pilot test on all parts of the survey questionnaire as well as pre-test all the statements listed in the questionnaire. It is crucial to conduct these dual steps before administering the questionnaire directly to the study sample. This ensures that the survey statements or questions (variables) are clearly and correctly understood by the respondents, the adequacy of the survey instructions, in addition to the whole research instrument functioning well and in a smooth manner (Kwan and Walker, 2004; Bryman and Bell, 2007; Malhotra, 2007; Johanson and Brooks, 2010). A pre-test and pilot study can further safeguard the validity and reliability of the scale items in the survey instrument (Bryman and Bell, 2007; Malhotra, 2007; Johanson and Brooks, 2010).

The study sought to conduct a two-phase pre-test whereby the survey questionnaire is first reviewed by an academician and a market survey manager to establish face validity. This is then followed by cognitive interviewing technique for interpretations on the survey statements by selected participants that fit the sample profile. Next, the research conducts the pilot testing of the whole survey questionnaire on thirty (30) respondents with experience or knowledge in the industry, as recommended by Johanson and Brooks (2010). This is accomplished via the purposive sampling method and include hospitality industry professionals as well as experienced customers. These steps allow the researcher to amend mistakes and eliminate any confusion or ambiguity within the questionnaire (Kwan and Walker, 2004; Bryman and Bell, 2007; Malhotra, 2007; Johanson and Brooks, 2010). Furthermore, the researcher is able to observe the time frame taken to complete the questionnaire and ensure that the time limitations may be observed as well (Kwan and Walker, 2004; Bryman and Bell, 2007; Malhotra, 2007).

### **3.8 Research Method (Collection of Data)**

To put it simply, a research method is the technique for collecting data and comprises of specified instruments such as participant observation, focus groups or depth interviews, or a survey questionnaire (Bryman and Bell, 2007). These are just a few of the various methods that the researcher can employ, individually or in combinations, to gather the raw data for their research. Nevertheless, the collection of primary data requires high involvement from the researcher and can be rather costly and time consuming as well (Malhotra, 2007). As such, the researcher needs to weigh and take all these aspects into consideration when deciding on the appropriate research method. Therefore, after further deliberation with much regards on the researcher's limited resources, the researcher has elected to collect the required data using the survey research method with the aid of a self-completion questionnaire for this research study.

Malhotra (2007) prefers employing survey questionnaires due to its simplicity, flexibility and reliability which consists of questioning the participants directly. According to Bryman and Bell (2007, p.56), survey research is a descriptive research and quantitative approach that comprises "a cross-sectional design in relation to which data are collected predominantly by questionnaire or by structured interview on more than one case (usually quite a lot more than one) and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables (usually many more than two), which are then examined to detect patterns of association." Surveys are conducted for a variety of objectives to obtain a wide diversity of data and this include establishing consumer profiles, market segmentation, lifestyles and psychographics data, as well as the analysis of product image, price perception, and procurement and consumption behaviours (Malhotra, 2007). In addition, surveys are able to identify the variances in a multitude of factors besides opinions, attitudes and remuneration data whereby the extent of these disparities can be encapsulated (Curwin and Slater, 2004).

The survey methodology entails the respondents being queried verbally, in writing or via the computer to answer a range of questions on the research subject whereby the researcher is additionally able to question the respondents in a structured and straightforward manner (Malhotra, 2007). Malhotra further adds that a survey questionnaire is relatively simple to administer, code, analyse and translate its data into layman language. The survey data collected are deemed consistent as the responses are restricted to the answers provided with the

employment of fixed-response inquiries decreasing the possible results variations that may occur due to interviewer disparities (Malhotra, 2007). However, situations may arise when the respondents are reluctant or unable to specify the required information due to ignorance or information sensitivity. Moreover, structured questions and fixed answers, whilst may not be simple to word accurately, can also be rather rigid resulting in decreased validity when pursuing research on certain topics such as emotion-based or belief-related subject matters (Malhotra, 2007). Nevertheless, a survey is an established and dependable methodology of data collection and is additionally fitting when there are resource (time and cost) constraints such as under the circumstances of this research paper (Curwin and Slater, 2004). Lastly, surveys may yield varying results from sample to sample and as such, the selected sample need to be representative and sufficiently large (Curwin and Slater, 2004).

### **3.9 Sampling Design/ Selection**

This study's designated sampling design and selection entails data collection methodology through the distribution of the survey questionnaires via nonprobability sampling techniques. Nonprobability sampling allows the researcher to consciously or arbitrarily decide the elements in the sample and is widely adopted in tests where population projections are not necessary (Curwin and Slater, 2004; Malhotra, 2007; Gravetter and Forzano, 2012). As the interest of this research focuses on the sample proportion to express various responses and attitudes, the researcher undertook to garner beneficially informative estimates of the population characteristics from a nonprobability sample (Malhotra, 2007). Furthermore, due to the research project's budget and time constraints, the nonprobability sampling technique's low costs, convenience and least time consuming characteristics makes it the most appropriate sampling procedure (Malhotra, 2007). Nevertheless, it is necessary for the researcher to be mindful of the potential bias and endeavour to select diverse respondents in addition to making sure that all the respondents meet the research criteria. This ensures that there are variation in the data collected so as to elicit richer and more robust results (Baird, 2004; Malhotra, 2007; Gravetter and Forzano, 2012).

All respondents are required to fulfil the following prerequisites: (1) speaks and comprehend the English Language and (2) willing to assure complete participation and full commitment. However, participants may differ in terms of other personal factors such as gender, age,

ethnicity, education, economic class and span of experience, amongst others, in the consumption of services. Therefore, the following sampling criteria are applied as well whereby all the respondents are categorised according to their gender, birth year range, ethnicity, marital status, education level (for example, secondary school, diploma, bachelor degree or postgraduate degree), profession and personal remuneration package (for example, monthly salary of less than RM2000, RM2001 to RM5000, RM5001 to 10,000, RM10,000 to RM20,000 and above RM20,000). This study also considers the respondent's experience in the hospitality industry and classifies them accordingly (for example, monthly, quarterly, half yearly, yearly, periodically or never) with both male and female respondents accepted for the purpose of this study.

According to Hair et al (2010), a sample size of fifty (50) respondents should be the absolute minimum sample size as a sampling measure of less than fifty (50) respondents would be deemed unacceptable and unworthy. Nevertheless, Hair et al (2010) classify a study as meritorious when the sampling size exceed eighty (80) and above. On the other hand, McQuitty (2004) suggest that sample sizes should not be lower than one hundred (100) participants. However, Kline (1998, 2005) propose the number of respondents needed for any sample size to be based on the formula of approximately five respondents to each variable in the questionnaire. Similarly, Malhotra (2007) infer the guideline of four to five times the number of observations (sample size) to the number of variables. As there are a total of fifty one (twenty seven in Section B and twenty four in Section C) variables in this research study's survey questionnaire measurement instrument, the researcher anticipates that a minimum of two hundred and four (204) to two hundred and fifty five (255) samples are required to fulfil Malhotra's and Kline's respondent number criteria. However, Malhotra (2007) and Shen et al (2011) additionally recommended a minimum sample of two hundred (200) for marketing research studies though the sample size in many marketing research settings had been considerably smaller. Nevertheless, the bigger the sample size, the higher the precision of the sample as sampling error decreases (McQuitty, 2004; Bryman and Bell, 2007; Hair et al, 2010; Shen et al, 2011). As such, the researcher made provisions for the dissemination of five hundred (500) survey questionnaires during the data collection phase of this study.

The planned activities implementing the collection of the raw survey data was allocated within the projected timeframe of between twelve weeks to sixteen weeks. The participants may elect to take part in the research study by cooperating and completing the survey. Return of

completed survey forms implies consent is accorded by the respondent whereby the respondents are deemed to have been recruited once they have completed and returned the survey questionnaire. As the research is conducted completely in the English Language, inability to communicate or comprehend the language automatically disqualifies the respondent. Lastly, the respondents are advised on the research topic as well as the instructions to completing the survey questionnaire. As the survey questionnaire includes the variables to assess the demographic profile and information of the participants, the researcher is committed to all participants that the questionnaire is completely anonymous and all responses will be kept confidential and protected.

### **3.10 Data Analysis**

This research study will employ statistical programs such as the Statistical Package for Social Science (SPSS) and Analysis of Moment Structures (AMOS) programs to analyse the raw data collected through the survey questionnaire.

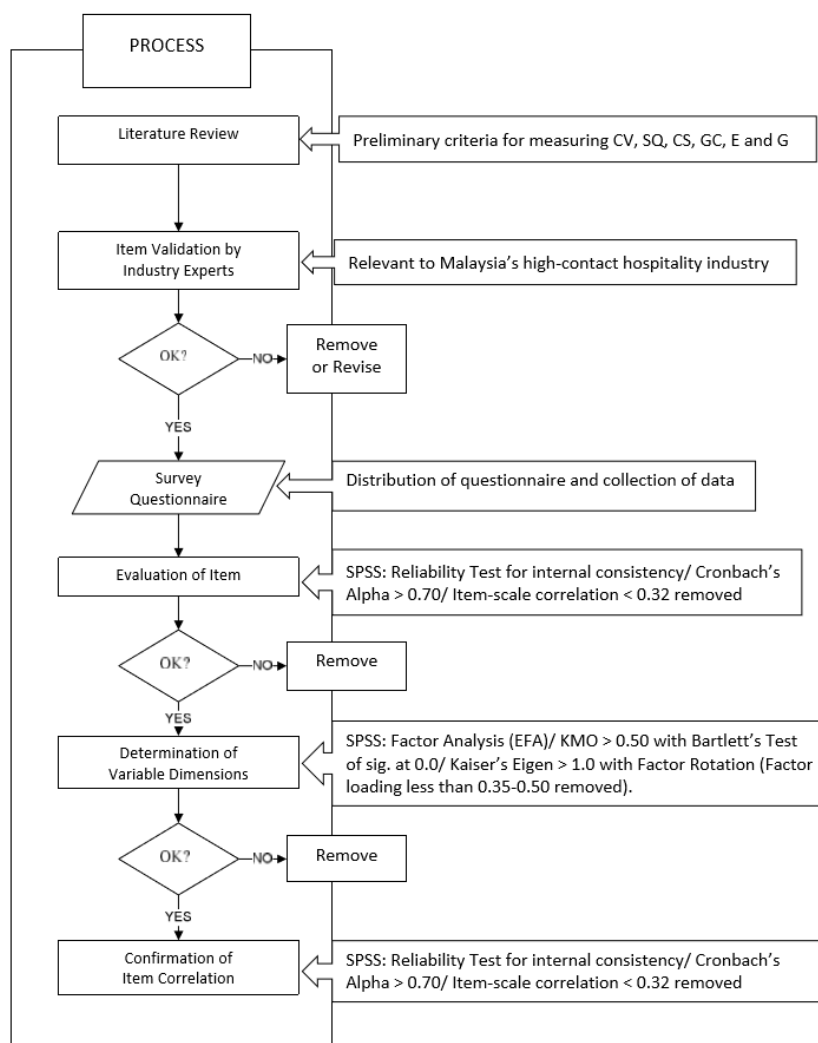
The SPSS Statistics program is a popular software package that is commonly applied in statistical examinations by all range of researchers in numerous fields, including the study of social and marketing sciences. The program is able to handle descriptive statistics (for example cross tabulation, frequencies, descriptive ratio statistics), bivariate statistics (for example, means, t-tests, ANOVA, correlation, nonparametric tests), predictions for numerical outcomes (for example, linear regression) as well as predictions for identifying groups (for example, factor analysis, cluster analysis, discriminants). Other than statistical analysis, the SPSS software also has additional features such as data documentation (a metadata dictionary stored in the datafile) and data management (creating derived data, file reshaping, case selection).

The AMOS statistical software is an add-on module for the SPSS program and is used for model fit statistics whereas SPSS is for statistical procedures. It is also known as causal modelling software or analysis of covariance. AMOS is able to read data from a multitude of sources and is designed primarily for the evaluation of covariance structure modelling, path analysis, confirmatory factor analysis and structural equation modeling. This software is a visual program which can be utilized to draw, build, assess, estimate, specify and present models to illustrate hypothesized relationships among variables. Furthermore, the researcher

can perform bivariate statistics (such as ANOVA and ANCOVA), predict numerical outcomes (such as linear regression analysis) plus handle missing data with AMOS.

In this research study, the researcher will commence with the SPSS program to test the descriptive and pre-analysis data whereby the data collected from the survey will be coded, analysed and interpreted with the aid of the SPSS software, to test the hypothesized relationships between pairs of variables that make up the service experience: service quality, customer satisfaction and behavioural outcomes. Subsequently, the AMOS program will be utilized to analyse the structural equation model along with confirmatory factor analysis and testing of the hypotheses. Figure 6 below presents the methodology framework that illustrates the stages in the research study from the development of the measurement instruments to the analysis of the research data.

**Figure 6: Methodology Framework towards Data Analysis**





### 3.11 Common Method Variance or Bias

Researchers need to be aware that research findings may be critically affected if and when the study fails to address the common method variance or CMV (Podsakoff et al, 2003; Friedrich et al, 2009; Richardson et al, 2009; Chang et al, 2010). Various scholars note that this is a common issue plaguing high number of research papers (Podsakoff et al, 2003; Friedrich et al, 2009; Spector and Brannick, 2010). According to Podsakoff et al (2003, p.879), CMV, also known as the common method bias, is defined as the spurious “variance that is attributable to the measurement method rather than to the constructs the measures represent” whereas Richardson et al (2009, p.762) consider CMV as the “systematic error variance shared among variables measured with and introduced as a function of the same method and/or source.” Measures affected by CMV may cause an inflation or deflation of the inter-correlations amongst the variables (Spector and Brannick, 2010). Despite its increasing prominence in research methodology, nevertheless, not all researchers agree with the necessity for CMV and view such concerns as exaggerated (Lindell and Whitney, 2001; Spector and Brannick, 2010). These researchers posit that evidence indicates the occurrence of CMV affecting the correlation between variables as a function that involves both the method and constructs being measured. However, it has been brought to attention that manuscript submissions lacking in CMV may be denied by certain journal publications, as in the case of the Journal of International Business Studies (Chang et al, 2010).

There are several causes of CMV which are generally assembled into four central classifications:

- (a) Common Rater Effects – which may arise if the dependent variable stems from the same respondent’s perceptual responses as the explanatory variables;
- (b) Item Characteristic Effects – which looks at the study participant’s perceptual responses as affected by the item’s distinctive characteristics or properties;
- (c) Item Context Effects – which occurs when the instrument’s other items influences the respondent whilst attempting to respond to an item; and

- (d) Measurement Context Effects – which considers the covariation inaccuracies that occur amidst the observed dependent and independent variables whilst at the same time, location or medium or in any combination thereof (Podsakoff et al, 2003, p.882).

So as to resolve, mitigate or avert the effects of CMV, researchers advocate several resolutions to restrain CMV and these measures are classified as procedural and statistical techniques (Lindell and Whitney, 2001; Podsakoff et al, 2003; Richardson et al, 2009; Chang et al, 2010):

#### Procedural Solutions

- a) Adoption of diverse information sources (respondents) when seeking the dependent and independent variables;
- b) Separation of the dependent and independent variables' measurement whereby different scales are used to execute the measurements between the two groups of variables or the introduction of a time interval between them;
- c) Shuffling the questions so as to reduce or remove any semblance of patterns that might occur in the respondents' minds;
- d) Improvement of scale items so as to diminish any obfuscating syntax, ambiguity or unclear concepts; and
- e) Lessening the respondents' apprehension by assuring anonymity.

#### Statistical Solutions

- a) Harman's Single Factor (HSF) Test
- b) Partial Correlation Procedure
- c) Common Latent Methods Factor
- d) Marker Variable

Due to the reasons above, this study adopts a staid outlook of CMV and has taken on several of the preventive procedural measures from the preliminary design phases. Nevertheless, there are impediments that may prove challenging to the extensive implementation of all the remedies in this study, for example, logistical issues, concerns regarding the recruitment of respondents as well as time and cost restraints. In the case of this study, the considerations adopted consist of both the procedural and statistical remedial measures and are as listed:

- a) Procedural Remedies – consisting of shuffling the survey questionnaire’s scale items, rewording or removing vague and unclear statements, and ensuring the data collection phase is conducted under rigorous provisions of privacy and anonymity.
- b) Statistical Remedies – Harman’s single factor test, which is one of the most extensively accepted remedial measure to address CMV (Podsakoff et al, 2003).

### **3.12 Pre-Analysis of Data**

This phase of the data analysis section sees the researcher employing the SPSS program’s reliability function to assess the degree of internal consistency so as to evaluate the reliability and validity of the measurement instrument’s fifty one (51) variables adopted to measure the constructs. Bryman and Bell (2007, p.163) posit reliability as “the consistency of a measure of a concept” whereas Malhotra (2007, p.284) refers to reliability as “the extent to which a scale produces consistent results if repeated measurements are made on the characteristics.” On the other hand, Malhotra (2007, p.286) defines validity as “the extent to which differences in observed scale scores reflect true differences among objects on the characteristic being measured, rather than systematic or random errors while Bryman and Bell (2007, p.165) refers to validity as the “issue of whether or not an indicator that is devised to gauge a concept really measures that concept.” The establishment of the reliability and validity of measures is crucial towards the assessment of their quality.

According to Malhotra (2007, p.285), internal consistency reliability is used “to assess the reliability of a summated scale where several items are summed to form a total score.’ In such a scale, the items individually measures some aspects of the constructs with the items being

consistent with the characteristics indicated. This form of reliability measure looks into the internal consistency of the groups of items that form the scale. One of the more straightforward method to measure internal consistency is split-half reliability whereby the scale items are halved into two and the resulting half scores are correlated (Malhotra, 2007). This measure shows high internal consistency when there are high correlations between the halves. The researcher can split the scale items into halves, either randomly, even numbered or odd numbered items. However, the manner in how the scale items are split will affect the results. To overcome this volatility, the researcher can adopt the coefficient alpha or Cronbach's alpha.

Here, for reasons mentioned in the previous paragraph, the researcher will apply a quantitative data analysis computer software called Cronbach's  $\alpha$  (alpha) or coefficient  $\alpha$  (alpha) that has been commonly used by numerous researchers as a test of internal reliability. Cronbach's alpha essentially "calculates the averages of all possible split-half reliability coefficients" and will vary between 0 (denoting no internal reliability) and 1 (denoting perfect internal reliability) (Bryman and Bell, 2007). According to Nunnally (1967, 1978) and Kline (1999), the recommended minimum level of Cronbach's alpha is 0.7. Bryman and Bell (2007) specify that the alpha figure of 0.7 or 0.8 is employed as a rule of thumb and considered efficient. Malhotra (2007) indicate that a value of 0.6 or less generally indicates unsatisfactory internal consistency reliability. Therefore, the questionnaire is considered acceptable if it has a Cronbach's alpha value of 0.7 or higher. However, the questionnaire will require revision if it has a Cronbach's alpha value of 0.6 or less. The equation for the calculation of Cronbach's alpha is shown as follows:

$$\alpha = \frac{N}{N-1} \left( 1 - \frac{\sum_{i=1}^N \sigma_{Y_i}^2}{\sigma_X^2} \right)$$

where;

$\alpha$  = reliability coefficient (Cronbach's alpha),

$N$  = the number of components (items),

$\sigma_X^2$  = the variance of the observed total test scores for the current sample of persons, and

$\sigma_{Y_i}^2$  = the variance of component I for the current sample of persons.

The researcher can improve on the internal consistency through three commonly used analyses: (1) corrected item-total correlations, (2) alpha if item deleted, and (3) factor analysis. The first two item-total statistics have a tendency to produce similar results unlike factor analysis that produce dissimilar results from the other two. So many researchers may use only corrected item-total correlations or alpha if item deleted in combination with factor analysis for further internal consistency analysis.

Corrected item-total correlations are the correlations between scores on each items and the total scale scores from the questionnaire (Field, 2005, 2013). If the scale is reliable, all the items would correlate with the total. The correlations would measure reasonably strong if the scale is internally consistent and vice versa whereby items that have a negative or low value item-total correlations will not be considered as good items. Field (2005, 2013) additionally proposes the elimination of items with value lower than 0.32 with other statistical literature indicating a rule of thumb value of at least 0.40 for the items to be considered acceptable. The researcher will have to remove or revise items with low or negative correlations but it is not recommended to discard more than one to two items at any one time (Field, 2005, 2013).

The second analysis, alpha if item deleted, provides crucial information and consists of the values of the overall alpha if that item is excluded from the scale calculation. In other words, this information indicate the value variation should an item be removed and this means the researcher can identify the items that can be deleted to increase the scale value (Field, 2005, 2013). If the questionnaire is reliable, there would be no one item that greatly affect the overall reliability or cause a significant decrease in the value of alpha. However, if it does, and similar to the previous analysis, the researcher may drop the item from the questionnaire but is recommended not to discard more than one or two items at any one time.

The final pre-analysis program the researcher will run on the data will be the factor analysis program within SPSS. Factor analysis is “a class of procedures primarily used for data reduction and summarization” whereby research with a number of correlated variables can be further condensed into a manageable set of data (Malhotra, 2007, p.609). The variables in factor analysis are expressed in a linear sequence of the underlying dimensions as well as of the observed variables whereby the factors are obtained in an order with the initial factor accounting for the greatest data variance, the subsequent factor the next highest and so forth. Furthermore, the factors can also be obtained in an uncorrelated manner, as with the aid of the

principal component analysis (Malhotra, 2007). Table 7 below shows that factor analysis is an interdependent technique that comprises of a series of symbiotic analysis.

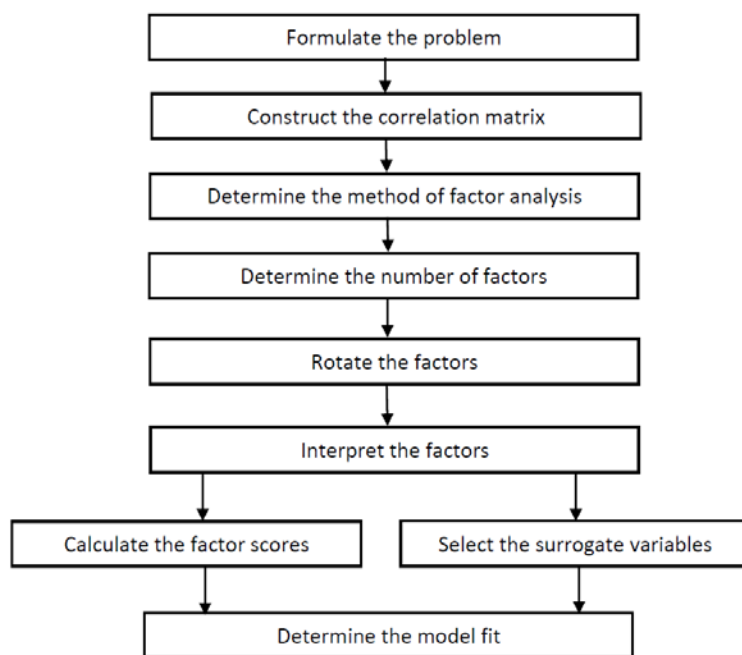
**Table 7: Statistics Associated with Factor Analysis**

Bartlett's test of sphericity	Bartlett's test of sphericity is a test statistics used to examine the hypothesis that the variables are uncorrelated in the population. In other words, the population correlation matrix is an identity matrix; each variable correlates perfectly with itself ( $r = 1$ ) but has no correlation with the other variables ( $r = 0$ ).
Correlation matrix	A correlation matrix is a lower triangle matrix showing the simple correlations, $r$ , between all possible pairs of variables included in the analysis. The diagonal elements, which are all 1, are usually omitted.
Communality	Communality is the amount of variance a variable shares with all the other variables being considered. This is also the proportion of variance explained by the common factors.
Eigenvalue	The eigenvalue represents the total variance explained by each factor.
Factor loadings	Factor loadings are simple correlations between the variables and the factors.
Factor loading plot	A factor loading plot is a plot of the original variables using the factor loadings as coordinates.
Factor matrix	A factor matrix contains the factor loadings of all the variables on all the factors extracted.
Factor scores	Factor scores are composite scores estimated for each respondent on the derived factors.
Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy	The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is an index used to examine the appropriateness of factor analysis. High values (between 0.5 and 1.0) indicate factor analysis is appropriate. Values below 0.5 imply that factor analysis may not be appropriate.
Percentage of variance	This is the percentage of total variance attributed to each factor.

Residuals	Residuals are the differences between the observed correlations, as given in the input correlation matrix, and the reproduced correlations, as estimated from the factor matrix.
Scree plot	A scree plot is a plot of the eigenvalues against the number of factors in order of extraction.
Source: Malhotra (2007, p. 612)	

Factor analysis has also been known for conceptualization that arises from the development of measures (Bryman and Bell, 2007). The variables in factor analysis are classified as neither independent nor dependent but the focus is on its interrelationships that are assessed and represented via a few underlying dimensions. As such, factor analysis has been prevalently employed to ascertain the underlying factors or dimensions that may rationalize the correlations within a set of variables (Malhotra, 2007). Researchers also use factor analysis processes to detect different and smaller groups of variables that are not correlated to replace the original grouping of variables that are correlated in ensuing multivariate analysis (discriminant or regression analysis) (Malhotra, 2007). Further uses of factor analysis include the identification of “a smaller set of salient variables from a larger set for use in subsequent multivariate analysis (Malhotra, 2007, p.611). Figure 7 below illustrates the steps in conducting a factor analysis.

**Figure 7: Conducting Factor Analysis**



Source: Malhotra (2007, p.613)

During the initial problem formulation segment (first step) of the factor analysis processes, the specification of the variables within the analysis are measured on a ratio or interval scale and are established by the researcher's judgement, prior research as well as research theory. The subsequent (second) step in conducting the factor analysis consists of the correlation matrix construction which is vital in the analytical process as well as providing valuable insights. Factor analysis is fitting when there are high correlations between the variables. As such, the researcher shall assess the suitability of the factor model by statistically testing the correlation matrix (Malhotra, 2007).

One of the tests the researcher may employ is the Bartlett's test of sphericity which is used to "test the null hypothesis that the variables are uncorrelated in the population; in other words, the population correlation matrix is an identity matrix. In an identity matrix, all the diagonal terms are 1, and all off-diagonal terms are 0. The test statistic for sphericity is based on a chi-square transformation of the determinant of the correlation matrix. A large value of the test statistic will favour the rejection of the null hypothesis. If this hypothesis cannot be rejected, then the appropriateness of factor analysis should be questioned" (Malhotra, 2007, p. 614). A separate but functional statistical test the researcher may use is the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. According to Malhotra (2007, p.614), this index "compares the magnitudes of the unobserved correlation coefficients to the magnitudes of the partial correlation coefficients. Small values of the KMO statistic indicate that the correlations between pairs of variables cannot be explained by other variables and that factor analysis may not be appropriate. Generally, a value greater than 0.5 is desirable."

The third step in conducting the factor analysis is to determine the method of factor analysis. There are two fundamental approaches to factor analysis: (1) principal components analysis and (2) common factor analysis (also known as the principal axis factoring). Principal components analysis considers the data's total variance and is applied when the primary consideration is the determination of the "minimum number of factors that will account for maximum variance in the data for use in subsequent multivariate analysis" (Malhotra, 2007, p.616). On the other hand, in the case of the common factor analysis (or principal axis factoring), estimation of the factors are centered simply on the common variance with the main consideration fixed on the identification of the underlying factors and of course, the interest in the common variance (Malhotra, 2007).



The next (fourth) step in conducting the factor analysis is to determine the number of factors. The determination on the number of factors are obtained through a series of techniques such as eigenvalues, significance tests, split-half reliability, percentage of variance, scree plots or by an *a priori* determination that is derived from the researcher's prior experience and expertise. While the initial or unrotated factor matrix points to links between the factors and individual variables, the factors may not be easily interpreted as the factors are correlated with multiple variables (Malhotra, 2007). The researcher will be able to better interpret the solution after the factors are rotated, as in the next step.

In the fifth step of conducting the factor analysis (rotating the numbers), the researcher may employ rotation to alter and simplify the factor matrix that will enable painless interpretation. In the case of this research study, the researcher will employ the Varimax (orthogonal rotation) procedure which is a popular rotation method that brings about orthogonal factors by "minimizing the number of variables with high loadings on a factor, thereby enhancing the interpretability of the factors" (Malhotra, 2007, p.619). This will result in factors that are not correlated. Alternatively, if the factors in the population are strongly correlated and the axes are not upheld at the appropriate angles, the researcher may utilize the Oblimin (oblique rotation) to simplify the factor pattern matrix. The rotated factor matrix will establish the basis for the interpretation of the factors.

The sixth step in conducting the factor analysis consists of the interpretation of the factors which commences with the identification of variables with high loadings on the same factor. The ensuing interpretation of the factors are based on the variables that load high on it (Malhotra, 2007). A separate handy manner to interpret the factors is by plotting the variables with the factor loadings as the coordinates. According to Malhotra (2007, p.619), "the variables at the end of an axis are those that have high loadings on only that factor and hence describe the factor" whereas "variables near the origins have small loadings on both the factors." The variables are considered to be related to both the factors if these variables are not located nearby to either of the axes. A factor is categorized as a general factor (or undefined) if it is not possible to clearly define the factor in terms of the original variables (Malhotra, 2007).

The next step, the seventh part in conducting the factor analysis, comprises of two possible actions that the researcher may consider at this junction: (1) calculation of the factor scores or

(2) selection of the surrogate variables. The researcher can compute the factor scores for each respondent, if necessary, as factor analysis maintains its own individual value. Factor scores refer to “the composite scores estimated for each respondent on the derived factors” and can be requested from most computer programs (Malhotra, 2007, p.620) However, the researcher need to note that only the principal component analysis permit the computation of the exact factor scores with the scores being uncorrelated. Common factor analysis computes score estimates with no warranty of uncorrelated factors (Malhotra, 2007). Alternatively (to the calculation of the factor scores), the researcher may select the surrogate or substitute variables instead which involves “singling out some of the original variables for use in subsequent analysis” (Malhotra, 2007, p.620). This is done through an examination of the factor matrix and the selection of a variable possessing the highest or near highest loading for each factor.

The final step in conducting a factor analysis is to determine the model fit. According to Malhotra (2007, p.621), “a basic assumption underlying factor analysis is that the observed correlation between variables can be attributed to common factors” and hence, “the correlations between the variables can be deduced or reproduced from the estimated correlations between the variables and the factors.” Based on the matrix’ estimation, the observed correlations (as provided in the input correlation matrix) and the reproduced correlations (as projected from the factor matrix) will produce variances that can be analysed to determine the model fit. The differences between the two correlations are labeled as *residuals* and a number of large residuals will render a necessary reassessment of the factor model due to the lack of good fit to the data. In such a case, the researcher will need to reconsider the model.

As per the literature reviewed in Chapter Two, the exogenous construct, cultural values, contains six distinct dimensions that the researcher will adopt for the purpose of this research study. Table 8 lists the measurement items and its respective descriptions (or statements).

**Table 8: Definition of Variables**

Dimension	Symbol	Statement/ Description
Power Distance Index	CV1	Social inequalities are expected and welcomed
	CV2	Powerful people should protect the less powerful
	CV3	Social inequality should discouraged or reduced
	CV4	There are interdependence between the more and less powerful people
Individualism/ Collectivism Index	CV5	People should only show responsibility for oneself and immediate family members
	CV6	People have individual identities regardless of their social groups
	CV7	Extended families are vital and its members need to show loyalty and be

		protective of one another
	CV8	People have identities that are based on their social groups
Masculinity/ Femininity Index	CV9	Wealth and material assets are vital
	CV10	Men need to be tough, ambitious and assertive
	CV11	Quality of life should be considered a leading social value
	CV12	Males and females should be equally caring and tender to others
Uncertainty Avoidance Index	CV13	It is normal to feel nervous, anxious and stressed
	CV14	It is normal to fear risks and uncertainty
	CV15	It is normal to accept uncertainty and take chances
	CV16	People should not share their personal emotions and feelings
Long Term/ Short Term Orientation Index	CV17	It is normal to want to work for a superior objective or cause
	CV18	People should persevere to achieve big plans and results
	CV19	People should respect and upkeep social traditions
	CV20	People should fulfill their social duties despite the personal expense
Indulgence/ Restraint Index	CV21	Diligence is a vital attribute
	CV22	Frugality is a crucial trait
	CV23	Having time for leisure is important
	CV24	Being religious is a valued characteristic

This section will result in the removal and grouping of items so as to enhance the reliability and validity of this research study's survey questionnaire measurement instrument. These resulting items will then undergo the following multivariate analysis towards the determination of the model fit whereby the model will be tested using the structural equation modeling analysis via the AMOS program's confirmatory factor analysis, as in the next section.

### 3.13 Research Analysis Instrument of Choice

Researchers are perpetually faced with the challenge of being informed and updated whilst synchronously working on increasingly complex and multifaceted research models. Consequently, it is imperative for the researcher to be able to effectively analyse such intricate models and to translate the data into constructive and meaningful information. As such, this paper's researcher has elected to adopt the Structural Equation Modeling mechanism to analyse the data that will be collected. Structural Equation Modeling or SEM, as it is popularly known, is one of the latest multivariate data analysis methodology and was developed to deal with the confines and weaknesses of older and traditionally used analytical techniques.

SEM has been labelled as a second generation statistical methodology and utilizes the method of examining the quantitative data in combination with the model's causal and correlational postulations. Furthermore, this statistical instrument is able to concurrently and wholly handle

both the independent and dependent variables along with its multiple indicators as well as simultaneously analyse the variables' inter-relationships within the model. In comparison, the older statistical methods are unable to model and analyse the independent variables and can only consider the individual relationships between the constructs separately, one at a time. As a result, SEM is deemed a rather advanced, effective and vigorous statistical tool towards solving numerous analytical requirements and problems in research methodology.

There are quite a number of software tools running SEM such as LISREL, MPLUS, EQS, PISTE, SEPATH, SPSS AMOS and so on but for the purpose of this research paper, the researcher will be utilizing SPSS Analysis of Moments Structures (AMOS) Graphics to run the SEM analysis. Comparatively, AMOS provides superior representation of the researched model through its advanced graphical capabilities and interface which enables the researcher to easily illustrate the model by duplicating the study's schematic diagram and doing away with the tedious manner of having to write the instructions manually into the program. The analysis is then run based on the graphical diagram with its corresponding output presented accordingly. Moreover, AMOS is one of the latest software that was expressly developed for the analysis of SEM.

### **3.13.1 Structural Equation Modeling**

Structural equation modeling (SEM) consists of multiple statistical techniques that was designed to analyse a theoretical or conceptual model and generally refers to a measurement model that identify the latent variables through measured variables along with a structural regression model that connects the latent variables together whereby parts of SEM are simultaneously linked using regression equations (Kaplan, 2009; Kline, 2011). Kaplan (2009, p.1) defines structural equation modeling as “a class of methodologies that seeks to represent hypotheses about the means, variances and covariances of observed data in terms of a smaller number of ‘structural’ parameters defined by a hypothesized underlying model” whereas Ullman (2006, p.2) describes SEM as the multivariate procedure that “allows examination of a set of relationships between one or more independent variables, either continuous or discrete, and one or more dependent variables, either continuous or discrete.”

Byrne (2010, p.3) additionally propose SEM as a “statistical methodology that takes a confirmatory (i.e. hypothesis-testing) approach to the analysis of a structural theory bearing on some phenomenon” whereby the theory represents “causal processes that generate observations on multiple variables (Bentler, 1988, cited in Byrne, 2010, p.3).” According to Byrne (2010, p.3), the term structural equation modeling “conveys two important aspects of the procedure: (a) that the causal processes under study are represented by a series of structural (i.e. regression) equations, and (b) that these structural relations can be modelled pictorially to enable a clearer conceptualization of the theory under study.” Byrne further adds that “the hypothesized model can then be tested statistically in a simultaneous analysis of the entire system of variables to determine the extent to which it is consistent with the data and if the goodness-of-fit is adequate, the model argues for the plausibility of postulated relations among the variables but if it is inadequate, the tenability of such relations is rejected (Byrne, 2010, p.3).

Several of the more well-known tools that SEM utilize or combine for statistical analysis include path analysis, (M)ANOVA, multiple regression, latent growth modelling, confirmatory factor analysis and many others. SEM has been commonly adopted in various fields such as business, sciences and education in testing of hypothesis models in quantitative research methodologies.

### **3.13.2 SEM Concepts**

There are several fundamental concepts in SEM that the researcher needs to grasp and comprehend before one can proceed. This section will look at the central concepts, framework, terms and research jargon most commonly utilized in the application of SEM as a multivariate tool.

#### **Latent versus Measured Variables**

SEM is concerned with latent and measured variables. According to Bryman and Bell (2007), a variable is simply the attributes or characteristics on which the cases vary, such as people, organisations or cities within the problem context. A *latent variable* is a variable that one is unable to observe or measure directly and as such are usually defined as behavioural beliefs

terminologies, for example, human intelligence or depression. Other labels of latent variables include unobserved variables, constructs or factors. Latent variables are implied from measured variables and are inferred by the correlation strength between the measured variables (Byrne, 2010). Schumacker and Lomax (2010) provided the following examples: a person's physical condition is the latent variable that is linked to the health related construct, consumer confidence in establishments is a latent variable that represents the economic construct, and, intelligence as the latent variable of the psychological construct. On the other hand, a measured variable is a variable that one can measure or directly observe and is employed to infer or define the latent variable or construct. Measured variables are also known as manifest variables, indicators or observed variables. Examples of measured or observed variables include the following: blood pressure to measure health related constructs and the stock market index as one of the representation of the economic construct. According to Schumacker and Lomax (2010), SEM indicates how the constructs are defined by the sets of variables and its interrelation to one another whereby the hypothesized model are statistically tested concurrently against the dependability of the data collected. Byrne (2010) ascertain that SEM allows a statistical test of goodness-of-fit and propose that the model hold reasonable hypothesized relationships between the variables if the goodness-of-fit is adequate but relationship plausibility faces rejection when the goodness-of-fit is inadequate. This basically means that the observed data patterns that can be explained by the proposed model substantiate the model as an acceptable or plausible depiction of the proposed process or structure.

Kaplan (2009) and Byrne (2010) find that SEM allows distinctions between latent (non-observed factors) and measured (observed) variables and is especially useful in isolating measured variables error from latent variables measurement. For example, human intelligence is a concept that one is unable to measure directly, unlike one's body weight or height. Other latent variable examples include depression, drug or alcohol consumption, stress or anxiety and verbal IQ. Intelligence or depression cannot be observed nor is it measurable. As such, experts develop theories and came up with measurement instruments (test items in the form of questions) so as to determine and quantify the latent variable (for example, intelligence) as per their premise (Kline, 2005; Byrne, 2010). In the case of intelligence, the theory is then tested using SEM on the data collected from the participants of the intelligence test whereby intelligence is the latent variable and the measured or observed variables are the test items. An example of such instrument is the Wechsler Intelligence Scale for Children that measures the intelligence of a child (Byrne, 2010).

## Exogenous versus Endogenous Latent Variables

In general, an independent variable cannot be manipulated by other variables in the model whereas a dependent variable can be swayed by other variables in the model (Byrne, 2010; Schumacker and Lomax, 2010). According to Byrne (2010), an exogenous latent variable is the same as an independent variable whereas endogenous latent variable is synonymous with a depended variable. A model is unable to account for any fluctuations in the value of an exogenous latent variable though external factors such as age, gender and socioeconomic may influence these variables. On the contrary, the model is able to rationalize the variations in the value of an endogenous latent variable as the influencing variables are already specified in the model.

## The Factor Analytic Model

In any research, the number of variables may be considerable and possibly correlated, and as such, needs to be condensed to a manageable level. Researchers usually adopt factor analytic models for this purpose. Factor analysis is the general label for a class of procedures used primarily for the reduction and summarization of data by looking at groups of variables that tend to be correlated to each other and identifying the underlying dimensions that rationalize these correlations (Malhotra, 2014). Generally, there are two types of factor analytic models, the exploratory factor analysis (EFA) and the confirmatory factor analysis (CFA). The researcher will adopt the exploratory factor analysis (EFA) when there is no prior knowledge of the relationships between the latent and measured variables. This include situations where the researcher is uncertain or unaware of the links between the variables. Conversely, the researcher need to have some knowledge of the latent variable's underlying constitution to apply the confirmatory factor analysis (CFA). In this case, the researcher rely on their theoretical or empirical knowledge (or both) when putting forward hypothesized premises on the measured variables and its underlying factors.

## SEM Testing

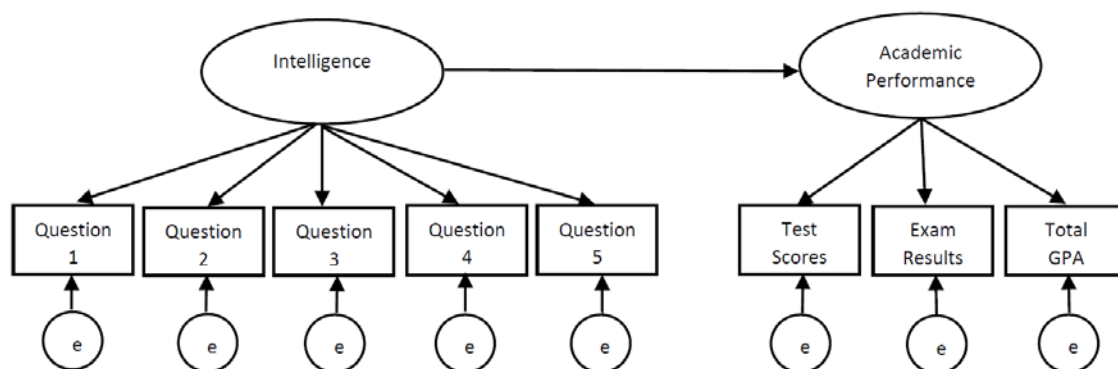
According to Jöreskog (1993), the framework for SEM testing falls into three scenarios; (1) strictly confirmatory, (2) alternative modelling and (3) model-generation.

- **Strictly confirmatory:** The researcher develops and proposes a model for testing based on prior knowledge (theoretical or empirical) to represent their hypotheses. The data is then collected for analysis, of which the results will either reject or fail to reject the model. The model does not undergo further adjustments.
- **Alternative modelling:** The researcher proposes alternative models developed from the same theoretical or empirical knowledge. The alternative model is then tested against a set of empirical data, of which the researcher will select the model that best represents the data sample.
- **Model generation:** The researcher rejects the model due to poor data fit and carry on to re-estimate and adjust the model in an exploratory manner to generate a new model.

### 3.13.3 Components of a Structural Equation Model

There are two sections in a structural equation model: a structural part and a measurement part. The structural segment is concerned with the relationships between the latent variables only whereas the measurement segment deals with the links between the latent variables and the measured variables. A popular advantage of SEM is that the latent variables are free of random error as the model is left with a common variance after errors have been assessed and eliminated. Figure 8 below illustrates a structural equation model on intelligence.

**Figure 8: A conceptual illustration of a structural equation model**

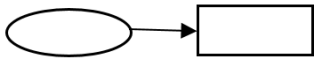
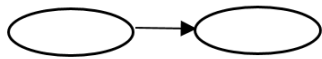

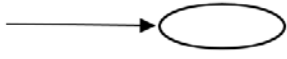




With reference to Figure 8 above as an example, the simplistic SEM illustration suggests that academic performance (as measured by the test scores, exam results and total GPA results) can be predicted by intelligence (based on the questions). SEM diagrams commonly illustrate the latent variables as ellipses or circles with the measured or observed variables in boxes or rectangular formats. The term, error (e), represents the variables' residual variances that was unaccounted for by the model's hypothesized pathways and the illustration above demonstrate how error (e) may, separately and individually, influence all the measured or observed variables (in rectangular boxes) but does not affect the latent variables (in oval circles).

A structural equation model's parameters consist of the regression coefficients, variances and covariances between the variables. The single-headed arrows represent the variable's impact on another and indicate the regression coefficients' hypothesized pathway amongst the variables. The dual-headed arrows represent the correlations or covariances between variable pairs. A simpler variation may just specify a number within the variable's circles or boxes. Lastly, the covariances among the variables or error terms are signified by the two-headed curved arrows which suggests nil directionality. Table 9 below illustrates the basic configurations involved when creating a model in a research study involving SEM.

**Table 9: Basic SEM Configurations**

	Path coefficient for regression of an observed variable onto an unobserved latent variable (or factor)
	Path coefficient for regression of one factor onto another factor
	Measurement error associated with an observed variables
	Residual error in the prediction of an unobserved factor
Source: Byrne (2010)	

SEM allows the researcher to measure the strength of the relationships by providing statistical values for the parameters (as indicated by the arrows) individually in the model. As such, SEM is a measurement instrument that is able to test the researched theory as well as independently identify the measured variables that are reliable indicators of the latent variables (Kline, 2005; Byrne, 2010).

### **3.13.4 Structural Equation Modeling Construction**

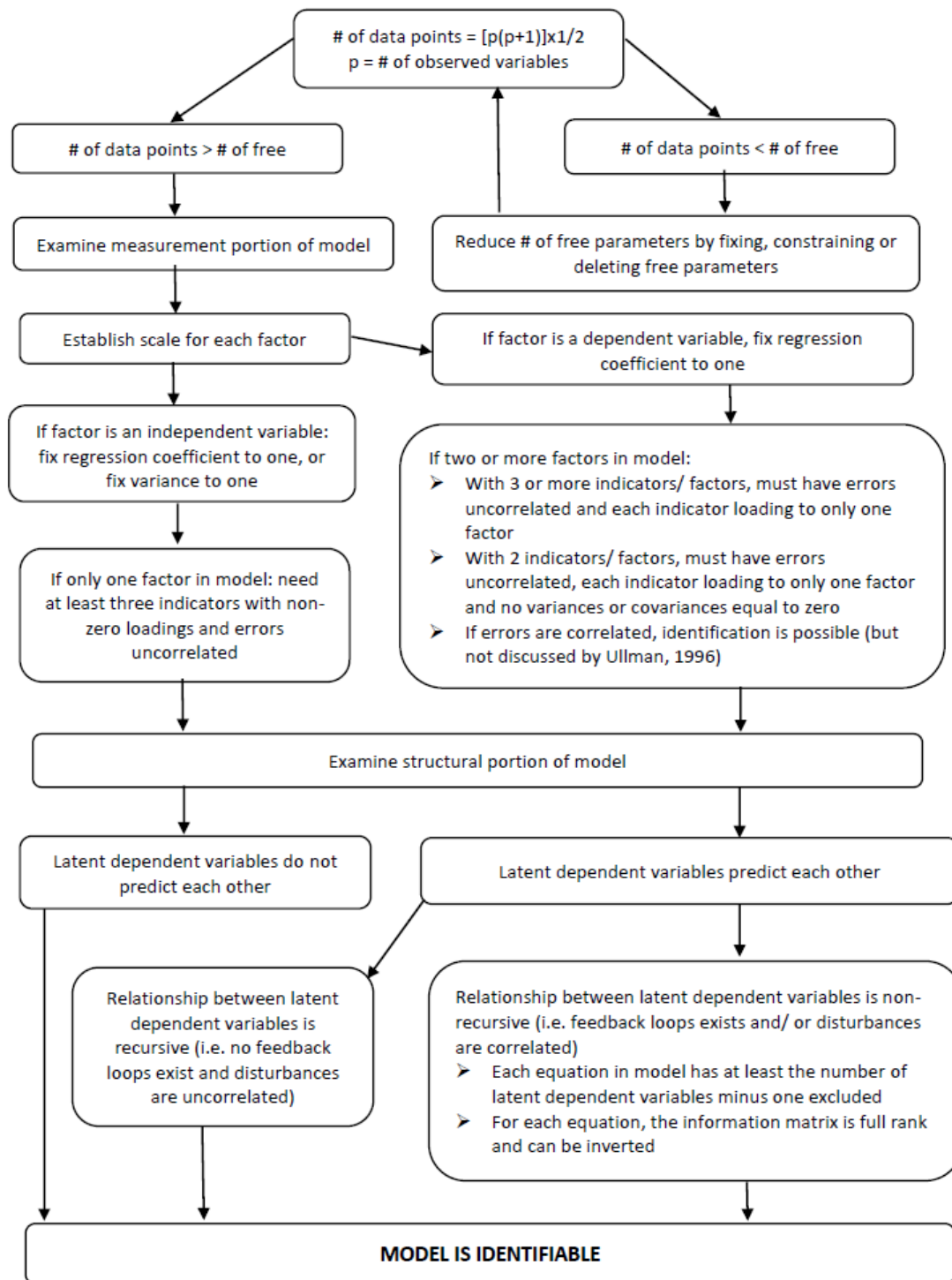
The objective in the development of a SEM is to seek a model that is able to sufficiently fit and parsimoniously rationalize the data so as to provide a functional representation of reality. The construction of a SEM involves five phases: (1) Model Specification; (2) Model Identification; (3) Model Estimation; (4) Testing Model Fit; and (5) Model Manipulation.

Model Specification is the preliminary stage in the building of a structural equation model and entails the formal exercise of stating a model. This involves the determination of the model parameters as free or fixed. Fixed parameters are typically pre-determined at a value of zero and are not derived from the data. This also indicates nil relationship amongst the variables. In a SEM diagram, fixed parameters' pathways are numerically labelled, with the exception of those assigned zero which will have no pathways indicated. On the other hand, free parameters are deemed at non-zero as they are derived from the measured or observed data. SEM diagrams typically adopt asterisks to identify the free parameters' pathways. In SEM, the determination of free or fixed parameters is imperative as it ascertains the parameters employed in the assessment between the covariance matrix and the population sample variance with the hypothesized diagram whilst testing the model fit in Phase Four. The researcher holds the authority to make the final decision on the model parameters (be it fixed or free) and this is a representation of the researcher's understanding with regards to the system pathways in the relational structure of the observed system.

Model Identification is the second phase in developing a structural equation model and looks at the possibility and probability of obtaining a unique value from the measured or observed data to assign to the free parameters. This is dependent upon the choice of model as well as the specification of the free, fixed and constrained parameters. Constrained parameters occur when a separate parameter is set equal to it. Furthermore, phase three's model estimation stage in SEM requires the over-identification of the models to test the variables' hypothesized relationships. (Ullman, 2006). However, for it to be possible for the models to be over-identified, the number of measured or observed variables must exceed the number of data points (variances and covariances). Figure 9 below illustrates the synopsis on the model

identification (phase two) procedures via a schematic flowchart that was adapted from Ullman (2006).

**Figure 9: Model Identification Flow Summary**



Source: Adapted from Ullman (2006)

The diagram above is a simple illustration of the general steps in establishing phase two's model identification process. Nevertheless, the researcher's errors or data characteristics can trigger issues when attempting to identify the model and this may cause the model to be unidentifiable (Hoyle, 1995; Ullman, 2006).

Model Estimation is the third phase in the development of a structural equation model and the free parameters' onset values are decided upon at this stage to generate the model's estimated population covariance matrix,  $\Sigma(\Theta)$ . The researcher selects the start values from prior information using multiple regression analysis or SEM software programs (Hoyle, 1995; Ullman, 2006). The estimation exercise is aimed towards producing the model's estimated population covariance matrix,  $\Sigma(\Theta)$  that meets the observed population covariance matrix,  $S$ , whereby the difference between the two (residual matrix) are minimized. There are diverse methods that can be adopted to generate the model's estimated population covariance matrix,  $\Sigma(\Theta)$  and methodology selection is based on the data characteristics as well as sample distribution and size. The processes adopted are mostly repetitive with the minimization function's conventional formula listed as below:

$$Q = (s - \sigma(\theta))'W(s - \sigma(\theta))$$

where;

- $s$  = vector containing the variances and covariances of the measured or observed variables,
- $\sigma(\theta)$  = vector containing corresponding variances and covariances as predicted by the model, and
- $W$  = weight matrix

In the above function, the weight matrix ( $W$ ) corresponds to the selected estimation technique. The election of  $W$  is to minimize  $Q$  and in general paradigms of  $\chi^2$  – statistic distribution,  $Q(N-1)$  provides the appropriate function. According to Ullman (2006), the assumption of independent factors and errors, as well as factor distribution, error distribution and sample size affects the performance of  $\chi^2$ . The estimation methods normally utilized include the following as listed below:

1) Asymptotically Distribution-Free (ADF)

$$F_{ADF} = [S - \sigma(\theta)]'W^{-1}[S - \sigma(\theta)]$$

W, in this function, contains elements that take into account kurtosis.

2) Maximum Likelihood (ML)

$$F_{ML} = \log|\Sigma| - \log|S| + \text{tr}(S\Sigma^{-1}) - p$$

in this case,  $W = \Sigma^{-1}$  and  $p$  = number of measured variables

3) Generalized Least Squares (GLS)

$$F_{GLS} = 1/2 \text{tr}[(S - \Sigma(\theta))W^{-1}]^2$$

where,

tr = trace operator, takes sum of elements on main diagonal of matrix

$W^{-1}$  = optimal weight matrix, must be selected by researcher (most common choice is  $S^{-1}$ )

A number of researchers have examined the above estimation methods and considered the advantages and limitations. Hoyle (1995) and Ullman (2006) are two of the researchers that view Asymptotically Distribution-Free estimator as functional when the estimation exercise is conducted on non-normally distributed data. However, sample size need to exceed 2,500 for this method to work well. On the other hand, estimation methods such as Maximum Likelihood and Generalized Least Squares are more practical in cases of normally distributed data where the errors and factors are independent. Nevertheless, regardless of the selected function, the estimation exercise's core aim is to attain as close to zero possible fitting function for the model's original sample covariance matrix and estimated covariance matrix are considered equal when the fitting score is zero.

Testing Model Fit is the subsequent and fourth phase in the development of a SEM. As mentioned in the previous SEM phase, a good model fit requires the value of the fitting function to be zero or

as close as possible to zero. Nevertheless, according to Ullman (2006), the model is considered a good fit if the ratio between  $\chi^2$  and the degrees of freedom is smaller than two. Hoyle (1995) recommends a sample size of one hundred to two hundred so as to instill confidence in the goodness of fit test. Mitchell (1993) posit that a model need to have ten to twenty times the number of observations as the number of variables. Furthermore, Hoyle (1995) and Ullman (2006) refer to a range of non- $\chi^2$ -distributed fitting functions which Hoyle (1995) labels as “adjunct fit indices” and Ullman (2006) describes as “comparative fit indices” whereby the fit of an independent model (containing variables with nil relationships) is compared to the fit of the estimated model. This comparison usually results in a number between zero and one, with 0.90 or greater deemed as indication of a good fit. Hoyle (1995) and Ullman (2006) recommend the usage of several indices towards the determination of model fitness.

Model Modification is the final phase in the SEM development progression whereby the model’s hypotheses are tweaked and re-tested when the model’s estimated variance/ covariance matrix inadequately reproduce the sample variance/ covariance. The model may be adjusted by removing original pathways or adding new pathways. This basically means that the parameters are altered from free to fixed and vice versa. However, the researcher needs to bear in mind that there are higher chances of making Type One errors when model adjustments are made after the initial testing. In the model modification stage, the Lagrange Multiplier Index and the Wald Test are the more commonly adopted procedures to adjust a model. These tests are able to indicate the shift or variation in the value of  $\chi^2$  during the alterations of the model’s pathways. The Lagrange Multiplier Index is similar to the forward stepwise regression and queries the addition of the free parameters in enhancing the fitness of the model. Conversely, the Wald Test simulate the backward stepwise regression and probes as to the removal of free parameters in boosting the fitness of the model. Ullman (2006) propose cross-validation with other samples as well as adopting a low probability value ( $p < 0.01$ ) in the addition or deletion of parameters when adjusting for increased Type One errors. The researcher should apply the Lagrange Multiplier Index prior to employing the Wald Test, that is, to add all the free parameters before any deletion as the sequence of freeing the parameters may influence the choice of the parameters left.

Final Model Presentation: Upon the model attaining an acceptable fit, the free parameters’ individual estimates will be assessed. The free parameters are then evaluated against a null value through the use of a z-distributed statistic that is developed from the division of the parameter estimate by the

standard error of that estimate. The ratio resulting from the assessment need to surpass  $\pm 1.96$  for the relationship to be deemed significant. Once the model's individual relationships are tested, the estimates of the parameters can be standardized for the model's final presentation. Finally, the standardized parameter estimates can be decoded in reference to the model's other parameters and the pathways' relative strength may be contrasted and evaluated within the model.

### **3.13.5 SEM and other Multivariate Applications**

Byrne (2010) conducted a study that compared the differences between SEM and other multivariate applications. SEM leans towards data analyzing with inferential functions and as such adopts a confirmatory/ disconfirmatory approach as opposed to an exploratory methodology. This is contrasted by other multivariate procedures that mostly centers on the descriptive nature which tend to be challenging when attempting to test the hypotheses. Moreover, SEM is able to examine both the latent (non-observed factors) and measured (observed) variables whereas the traditional multivariate applications scrutinize only the measured or observed variables. Byrne (2010) also view the traditional multivariate systems as weak in the evaluation and correction of error measurements that can be circumvented by employing SEM. Finally, there is a lack of alternative applications that may estimate a model's interval indirect effects or model multivariate relations, which is possible with SEM.

### **3.13.6 Advantages and Limitations of SEM**

SEM is considered a valuable tool towards the comprehension of relational data in multivariate systems. SEM possesses the capabilities to distinguish between the variables' direct and indirect relationships as well as eliminating errors when examining the relationships between the latent variables, as compared to other relational modelling instruments. According to Schumacker and Lomax (2010), researchers are recommended the application of SEM in their research methodology due to the following key rationales. Firstly, the SEM tool has matured over several decades to enable variable interaction that allows the execution of statistical modelling on sophisticated theories as well as

quantitatively test the theoretical models via the confirmation/ disconfirmation exercise. Comparatively, most other basic multivariate statistical tools are not equipped to handle complex premises due to the limited variable application. Furthermore, SEM takes account of the measurement errors during the analysis of the data, unlike many other basic statistical methods that deals with the error measurements separately. Lastly, SEM-based software programs such as AMOS, EQS, PISTE and LISREL are readily available through web access and are user-friendly. This additionally encourages the adoption of SEM in the development and testing of research models.

Nevertheless, there are limitations to all statistical modelling applications. For one, the SEM tool is unable to test relationship directionality as the research's causality hypotheses is represented by the directions of the arrows. In addition, the recreation of the observed variance and covariance patterns may be hampered by the variables and pathway choices that the researcher had decided upon. This may result in more than one model fitting the data.

### **3.14 SEM Analysis**

According to Byrne (2010), the structural equation model (SEM) comprises of two submodels: the measurement model and the structural model and the SEM processes emphasizes on two steps, that is, to validate the measurement model and fitting the structural model. Byrne (2010) describe the measurement model as the section that relates the relationship between the latent or unobserved variables to the measured or observed variables and is indicated by an arrow or “the link between the scores on a measuring instrument (i.e., the observed indicator variables) and the underlying construct they are designed to measure (i.e., the unobserved latent variables) (Byrne, 2010, p.12). To recap, a latent variable is a variable that one is unable to observe or measure directly and as such are usually defined as behavioural beliefs terminologies, for example, human intelligence or depression whereas a measured variable is a variable that one can measure or directly observe and is employed to infer or define the latent variable or construct. The measurement model will be accomplished primarily through the confirmatory factor analysis model that specify “the pattern by which each measure loads on a particular factor (Byrne, 2010, p.13).



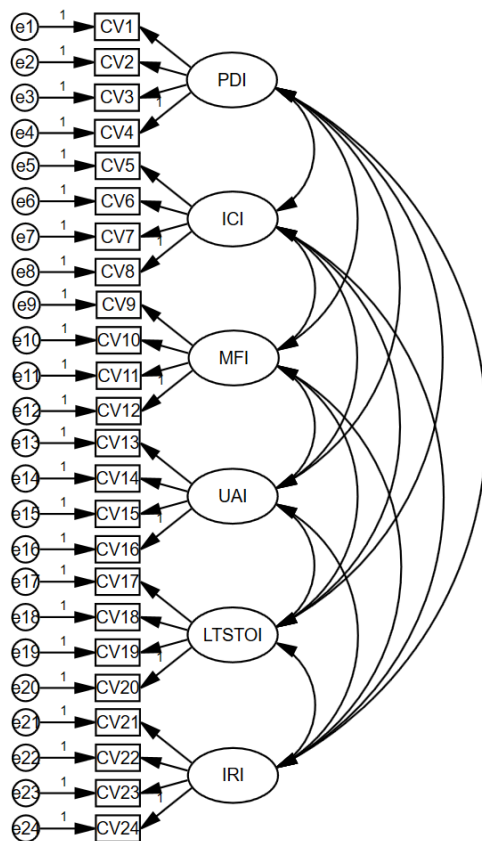
In comparison, the structural model is the section that relates to the relationship between the latent or unobserved variables to one another and “specifies the manner by which particular latent or unobserved variables directly or indirectly influence (i.e., “cause”) change in the values of certain other latent variables in the model (Byrne, 2010, p.13). The structural model is commonly accomplished through the path analysis instrument with latent variables. Generally, a model’s latent or unobserved variables are measured through several indicators with the minimum number set at two but it is sounder for the researcher to select three or more indicators per unobserved variable. This section, the SEM analysis, will see the researcher commencing with the confirmatory factor analysis (CFA) on the measurement model. This is based on Byrne (2010) affirming that the measurement model needs to be estimated through the CFA as a criterion towards the validation of the structural model.

### **3.14.1 Measurement Model**

In this research study, the measurement model will be an adaptation of Hofstede’s (2010)’s six-dimension cultural value configuration. Figure 10 below illustrates the projected measurement model as per the six dimensions. Based on the measurement model diagram, the following summarized descriptions are observed:

1. Six dimensions (power distance index, individualism/ collectivism index, masculinity/ femininity index, uncertainty avoidance index, long term/ short term orientation index, indulgence/ restraint index) represent cultural values.
2. Each target loading (the item-pair measure on the dimensions) is non-zero whereas the non-target loadings (all other factors) are zero.
3. As per the theory on cultural values, the dimensions correlates to one another.
4. The measures’ errors (or uniqueness) are not correlated.

**Figure 10: Proposed Measurement Model for Six Dimensions of Cultural Values**



In working with the AMOS program, the researcher will first need to specify the hypothesized model to the program. This is the first step in the model specification stage. For the purpose of this research study, the researcher can draw the hypothesized with the aid of features in AMOS graphics or even other drawing tools. Figure 10 above illustrates the hypothesized model that will be provided to the AMOS program for analysis in this research study, pending no amendments nor reconfiguration from the pre-analysis section in Chapter 4.

Once this is done, the next action will be the data specification stage whereby the researcher informs the program the location of the data. Prior to that, the researcher will need to key in the raw data via the SPSS program platform beforehand. Upon completion of the data input processes, the data will be copied onto the *Data Files* folder in the AMOS program and will be used as the working file that the hypothesized model will based upon. However, depending on the program version, older programs may require the researcher to restructure the data before the researcher can conduct any analysis using AMOS.

Once the model to be analysed as well as the data file (upon which the analysis will be based) has been specified, the researcher can proceed to the next step of calculating the estimates and the consideration of the AMOS text output. The model summary in the program will allow the researcher to check the overview of the model which includes the information required towards the determination of its identification status.

The main stage in the structural equation modeling analysis is the model evaluation phase whereby the extent to which the hypothesized model adequately describes or fits the sample data. The “evaluation of model fit should derive from a variety of perspectives and be based on several criteria that assess model fit from a diversity of perspectives” (Byrne, 2010, p.66). These goodness-of-fit tests basically determines if the researcher should accept or reject the model. If the goodness-of-fit findings are found to be inadequate, the researcher will need to identify the model’s source of misfit. In addition, the researcher need to bear in mind that these overall fit tests does not determine if the model’s particular paths are significant. Only once after the model has been accepted, then the researcher can proceed to interpret the model’s path coefficients (Byrne, 2010).

Past literature indicate the commonly employed fit tests as (1) the chi-square indices, (2) the goodness of fit and adjusted goodness of fit measures, (3) the normed and non-normed fit statistics, as well as (4) the parsimonious goodness of fit and parsimonious normed fit indices. Nevertheless, all the indices has its own pros and cons. As such, the researcher is recommended to employ a minimum of three to four fit tests so as to exhibit diverse criteria (Jaccard and Wan, 1996; Kline, 2005; Hooper et al, 2008; Byrne, 2010). Hu and Bentler (1999) and Byrne (2010) caution that the researcher carefully considers the critical factors when selecting the goodness-of-fit indices.

The AMOS program is able to test approximately twenty five (25) diverse goodness-of-fit measures, of which the choice and combination is left to the researcher’s decision. For the purpose of this research’s SEM methodology, the statistical indices that the researcher may employ to measure the model’s goodness-of-fit includes the Relative Chi-Square, Expected Cross Validation Index, Root Mean Square Error of Approximation, Comparative Fit Index, Standardize Root Mean Square Residual and several others. Table 10 lists the fit tests (along with a brief description) that the researcher will consider employing for this research study.

The evaluation criteria will center particularly on the adequacy of the parameter estimates as well as the model as a whole (Byrne, 2010).

**Table 10: Different Types of Goodness-of-Fit Tests**

<p><b>Model Chi-Square (CMIN) and Chi-Square To Degrees of Freedom ratio (CMIN/DF):</b> CMIN refers to the minimum discrepancy and “represents the discrepancy between unrestricted sample covariance matrix and the restricted covariance matrix” (Byrne, 2010, p.75). It also represents the Likelihood Ratio Test statistic and is the most common fit test that is readily available in all statistical programs. However, due to its limitations and to adjust for model complexity, Wheaton et al (1977, cited in Byrne, 2010) developed the Chi-Square to degrees of freedom ratio (CMIN/DF) which is now typically adopted as adjuncts to CMIN. Byrne (2010) propose that the value of CMIN/DF to be close to 1.0 for the model to be tenable with any ratio above 2.0 as indicating an inadequate model fit.</p>
<p><b>Expected Cross-Validation Index (ECVI):</b> ECVI “measures the discrepancy between the fitted covariance matrix in the analysed sample, and the expected covariance matrix that would be obtained in another sample of equivalent size” and is useful for comparing non-nested models (Byrne, 2010, p.82). According to Byrne (2010, p.83), “application of the ECVI assumes a comparison of models whereby an ECVI index is computed for each model, and then all ECVI values are placed in rank order; the model having the smallest ECVI value exhibits the greatest potential for replication and because ECVI coefficients can take on any value, there is no determined appropriate range of values.” As such, lower ECVI is better fit and a model with lower ECVI value as compared to the independence (ECVI Ind) and saturated (ECVI Sat) models represents best fit to the data (Byrne, 2010).</p>
<p><b>Root Mean Square Error of Approximation (RMSEA):</b> Also known as the discrepancy per degree of freedom, this index considers the approximation errors in the population and is sensitive to the model’s complexity or number of estimated parameters (Byrne, 2010). According to Browne and Cudeck (1993, cited in Byrne, 2010, p.80), “values less than 0.05 indicate good fit, and values as high as 0.08 represent reasonable errors of approximation in the population.” Similarly, MacCallum et al (1996, cited in Byrne, 2010, p.80) “elaborated on these cutpoints and noted that RMSEA values ranging from 0.08 to 0.10 indicate</p>

mediocre fit, and those greater than 0.10 indicate poor fit.” Nevertheless, Hu and Bentler (1999, cited in Byrne 2010, p.80) suggest 0.06 as the cut-off for a good model fit and cautions that RMSEA tend to reject true population models when the sample sizes are small. MacCallum and Austin (2000, cited in Byrne, 2010, p.80-81) recommends RMSEA for the following reasons: “(1) RMSEA appears to be adequately sensitive to model misspecification, (2) commonly used interpretative guidelines would appear to yield appropriate conclusions regarding model quality, and (3) it is possible to build confidence intervals around RMSEA values.”

**Goodness-of-Fit Index (GFI) and Adjusted Goodness-of-Fit Index (AGFI):** GFI was developed to provide researchers with alternative options to the Chi-Square test. According to Byrne (2010, p.77), GFI is “a measure of the relative amount of variance and covariance in S that is jointly explained by  $\Sigma$  whereas the AGFI differs from the GFI only in the fact that it adjusts for the number of degrees of freedom in the specified model.” Both indexes “can be classified as absolute indices of fit because they basically compare the hypothesized model with no model at all (Hu and Bentler, 1999, cited in Byrne, 2010, p.77). The indices range from 0 to 1.00 whereby values closer to 1.0 denotes indication of good fit (Byrne, 2010, p.77). However, Wang (1999, cited in Byrne, 2010) warns that both the indexes can be affected by sample size with Jöreskog and Sörbom (1993, cited in Byrne, 2010, p.77) alerting the possibility of the value being negative.

**Comparative Fit Index (CFI):** The CFI was conceived from Bentler and Bonett’s (1980) Normed Fit Index (NFI) after NFI showed a tendency to underestimate fit in small samples. As such, the CFI is one of the fit indexes that is less affected by the size of the sample. According to Byrne (2010, p.78), the value for CFI “ranges from zero to 1.00 and are derived from the comparison of a hypothesized model with the independence or null model with each providing a measure of complete covariation in the data.” Bentler (1992, cited in Byrne, 2010, p. 78) originally considers “a value of >0.90 as representative of a well-fitting model” but Hu and Bentler (1999, cited in Byrne, 2010, p.78) propose “a revised cut-off value close to 0.95” as representation of a good fit model. CFI is also frequently adopted in the testing of modifier variables.

**Standardized Root Mean Square Residual (SRMR):** Also known as Standardized RMR, the SRMR is a statistic related to the correlation residuals and represents “the average value across all standardized residuals, and ranges from zero to 1.0” with the value getting smaller (around 0.50 or less) to be representative of a well-fitting model (Byrne, 2010, p.77). Hence, as the value of the SRMR gets smaller, the model fit improves with 0 indicating perfect fit. Nevertheless, the SRMR value may be smaller when there are more parameters in the model or when the size of the sample is large (Byrne, 2010).

There are three criteria of interest when reviewing the model parameter estimates: (1) the feasibility of the parameter estimates, (2) the appropriateness of the standard errors, and (3) the statistical significance of the parameter estimates (Byrne, 2010, p.67). When assessing the fit of the model’s individual parameters, the researcher’s first action is to determine the viability of the estimated values. The parameter estimates should “exhibit the correct sign and size, and be consistent with the underlying theory” whereby “any estimates falling outside the admissible range signal a clear indication that either the model is wrong or the input matrix lacks sufficient information” (Byrne, 2010, p.67). According to Byrne (2010, p.67), examples of parameters that exhibit unreasonable estimates are correlations over 1.00, negative variances and covariance or correlation matrix that are not positive definite.

The second criteria to reviewing the model parameter estimates is the appropriateness of standard error which reflects “the precision with which a parameter has been estimated, with small values suggesting accurate estimation” (Byrne, 2010, p.67). As such, the presence of excessively small or large standard errors is another indication of poor model fit. As an example, the test statistic for its related parameter cannot be defined if the standard error is close to zero (Bentler, 2007; Byrne, 2010). Similarly, extremely large standard errors are an indication that the parameters cannot be determined (Jöreskog and Sörbom, 1993; Byrne, 2010).

The third and final criteria of interest when reviewing the model parameter estimates are the statistical significance of the parameter estimates. In this section, the researcher will apply a statistical test that is known as the *Critical Ratio*. According to Byrne (2010, p.68), the critical ratio is a test statistic that “represents the parameter estimate divided by its standard error; as

such, it operates as a z-statistic in testing that the estimate is statistically different from zero” and is “based on a probability level of .05, then, the test statistic needs to be over  $\pm 1.96$  before the hypothesis (that the estimate equals 0.0) can be rejected.” The researcher can regard the nonsignificant parameters as inconsequential the model, with the exception of the error variances. Nevertheless, the researcher need to consider that the nonsignificant parameters are possibly indicative that the sample size may be too small (Jöreskog and Sörbom, 1993; Byrne, 2010).

Finally, the researcher will need to consider the model as a whole. Prior to that, the researcher will first need to review the four integral aspects of fitting a hypothesized model, that is: (1) the model fitting process, (2) the issue of statistical significance, (3) the estimation process, and (4) the goodness-of-fit statistics. Byrne (2010) recommends the subsequent action of determining the evidence of model misspecification for the interest of completeness as well as for didactic purposes. Model misspecification refers to “an analysis of the data that serves in identifying any parameters that have been incorrectly specified (Byrne, 2010, p.84). The researcher will be able to detect model misspecification with the aid of AMOS through the *Analysis Properties* resource option which releases two types of information, the *standardized residuals* and the *modification indices*. Residuals refer to the discrepancy between the restricted and sample covariance matrix whereas the modification indices “reflects the extent to which the hypothesized model is appropriately described” (Byrne, 2010, p.86).

When applying SEM to test the hypothesized model’s validity, the researcher may face a situation during the post hoc analyses whereby the researcher is confronted with the decision as to whether to re-specify and re-estimate the model. If the researcher considers this direction, “the analyses then become framed within an exploratory, rather than a confirmatory, mode” (Byrne, 2010, p.89). This means the confirmatory factor analytic approach terminates when the researcher decides to re-specify or re-estimate the hypothesized model. The researcher may continue to adopt confirmatory factor analytic approaches during the re-specification and re-estimation of the model but the analysis will be deemed as an exploratory approach that centers on the detection of misfitting parameters in the hypothesized model. MacCallum (1986, cited in Byrne, 2010) terms such post hoc analyses as *specification searches*.

There are dual reasons as to whether the researcher should decide to proceed with a specification search. Firstly, the researcher should “determine whether the estimation of the

targeted parameter is substantively meaningful” (Byrne, 2010, p.89). According to Jöreskog and Sörbom (1993) and Byrne (2010), the researcher may consider freeing up the parameter exhibiting the next largest modification index value if it is not viable to release the one with the largest modification index. Secondly, the researcher needs to know when one can cease fitting the model and “consider whether or not the re-specified model would lead to an overfitted model” (Byrne, 2010, p.91). According to Byrne (2010, p.91), “overfitting a model involves the specification of additional parameters in the model after having determined a criterion that reflects a minimally adequate fit.” MacCallum et al (1996) and Byrne (2010) advise against further modifications when the initial model already fits well.

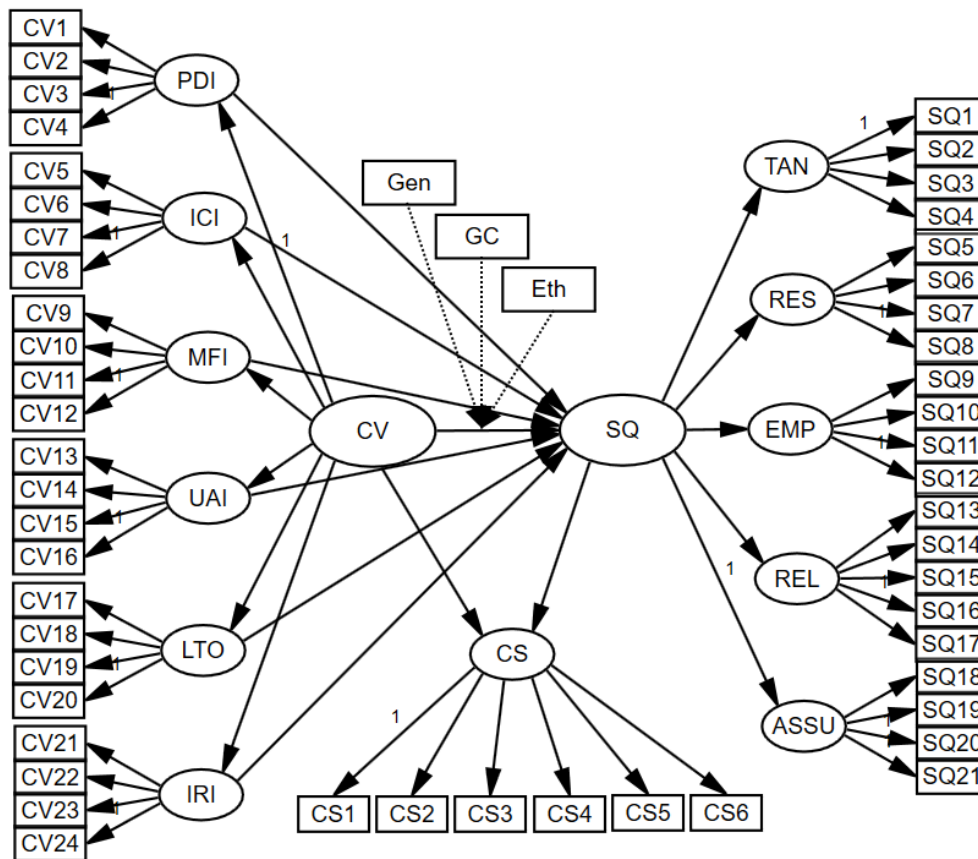
### **3.14.2 Structural Model**

As the structural model involves only the links between the latent or unobserved variables, the researcher will only need to assess the validity of the relationships between these variables. However, the researcher is required to ensure that the measurement of each unobserved variable is psychometrically sound and hence the reason why the researcher may only proceed with analysing the structural model after the completion of all the tests and analyses on the measurement model. According to Byrne (2010), the measurement model must be operating adequately prior to the analysis on the structural model so as to garner confidence in the evaluation results of the hypothesized structural model.

Once the analyses on the measurement model has been established, the structural model will similarly undergo statistical tests to determine the model fit, as performed earlier on the measurement model. Based on this research study’s hypotheses, the study’s objective is to evaluate the correlation and relationship between the three constructs: service quality, customer satisfaction and behavioural intentions. Figure 11 below illustrates the projected structural model of the constructs in this research study. Upon analysis, the structural model will fall into one of the three model identification categories: just-identified, over-identified or under-identified. Byrne (2010, p.33) posit that “the issue of identification focuses on whether or not there is a unique set of parameters consistent with the data.”



**Figure 11: Proposed Structural Model for the Relationships between SQ, CS and CV**



A just-identified model refers to a model whereby the number of data points (variances and covariances) matches the structural parameters. Though the model presents equal correspondence between the data and all the parameters, researchers may deem it as lacking in scientific interest due to the nil degrees of freedom which meant it cannot be rejected (Byrne, 2010). In contrast, an over-identified model occurs when the data points numbers more than the parameters to be estimated. Researchers deem this situation as scientifically useful due to the model possessing positive degrees of freedom that permits rejection of the model (Byrne, 2010). An under-estimated model results from a model where the number of estimable parameters exceeds the data points. This means the model is lacking in the necessary data input for the parameters which brings about endless possible solutions (Byrne, 2010). As such, Byrne (2010) posit that it is the aim of SEM researchers to specify a model that meets the over-identification criteria.

### 3.15 Reliability

Researchers are encouraged to repetitively test and assess the study's instrument so as to evaluate and measure the tool's consistency. This is done through reliability tests which also indicate convergent reliability and is "inversely related to measurement error" (Hair et al, 2010, p.687). Popularly adopted reliability tests include Cronbach's Alpha (CA), Composite Reliability (CR) and Kuder-Richardson Formula 20 (Hair et al, 2010; Peterson and Kim, 2013). Hair et al (2010) posit that there has been nil unanimity as to which test is deemed as the superior one among all. However, there has been increasing criticisms surfacing on the adequacy of CA despite the test being widely touted as the test of choice to estimate a study instrument's reliability (Peterson and Kim, 2013). As far back as in 1993, Cortina put forward CA should be employed with caution whereas Schmitt (1996) viewed CA as a reliability test that is lacking. Correspondingly, Hair et al (2010) denote CA as possibly understating reliability with Peterson and Kim (2013) concluding CR as a better reliability test as compared to CA. Furthermore, CR is usually adopted alongside SEM (Hair et al, 2010) which is the statistical instrument employed in this study. The calculation of CR is as shown below:

$$CR = \frac{(\sum_{i=1}^n L_i)^2}{(\sum_{i=1}^n L_i)^2 + (\sum_{i=1}^n e_i)}$$

where;

$L_i$  = represents the standardised factor loading,

$n$  = the number of observed variables, and

$e_i$  = the error variance term of the observed variable in the construct

According to Hair et al (2010), a result of  $\geq .70$  indicates the study instrument's reliability as satisfactory though the researcher may accept a score of between .60 and .70 if there are indications of the construct validity being met.

### 3.16 Construct Validity

According to Bagozzi et al (1991, 2010) and Hair et al (2010), the researcher assesses the construct validity by examining the convergent, discriminant and nomological validity which

is imperative so that measures may be validated and separated from the measurement errors' misleading influences. Researchers should not take for granted the issues of measurement error occurrence for it may cause confusing empirical findings. In convergent validity, the average variance extracted (AVE), which looks at the latent variable's degree of variance, is evaluated in SEM. The construct's validity may be disputed if the measurement error is found to be higher than the construct's variance (Fornell and Larcker, 1981). Statistical scholars recommend an AVE score of above .50 so as to satisfy the construct's convergent validity requirement (Fornell and Larcker, 1981; Hair et al, 2010; Carlson and Herdman, 2011). The formula for AVE is as indicated below:

$$AVE = \frac{\sum_{i=1}^n L_i^2}{n}$$

where;

$L_i$  = represents the standardised factor loading, and

$n$  = the number of observed variables in the construct.

On the other hand, discriminant or divergent validity is measured through the inter-construct covariances which is typically done by comparing the latent construct's AVE to the squared inter-construct correlations alongside any factors that may be associated (Hair et al, 2010). The determination of the discriminant validity depends on the AVE of the latent construct being weightier than the corresponding squared inter-construct correlations. The final validity test recommended is the nomological validity measure which is conducted through the evaluation of the constructs' correlations in the model and is performed to ensure the measurement theory is cogent and justifiable (Hair et al, 2010). According to Cronbach and Meehl (1955, p.290), a nomological network is based on "the interlocking system of laws which constitute a theory." To ensure construct validity, all validity tests were conducted in this study so as to ensure merit in the analysis.

### 3.17 Multi-Group Analysis

This study included the hypotheses that three of the demographic variables may act as a moderating factor between two constructs. The interaction is hypothesized to possibly affect

the direction or strength of the relationship. The three moderating variables that are being investigated are: generational cohorts, ethnicity and gender. According to the literature on SEM, the moderating variable is the variable that moderates or “interfere” the effects of an independent variable on its corresponding dependent variable (Kaplan, 2009; Byrne, 2010; Schumacker and Lomax, 2010; Kline, 2011). Prior to the introduction of the moderating variable into the model, the study must first confirm that the effects of the independent variable on its dependent variable exist and is significant. Thus, upon the insertion of the moderator variable into the model, the causal effect would alter due to certain interaction effect between the independent variable and the moderator variable. As such, the effects of the independent variable on the dependent variable would either decrease or increase. This means that the effect of the independent variable on its dependent variable may vary depending on the level of the moderator variable.

There are several techniques which researchers can adopt to determine the role of the moderating factors in the relationship between the constructs. One method looks at establishing the variance and non-invariance whereby the significance of the p-value is statistically measured less than 0.5 whereas the another method examines the CFI value of which values less than 0.01 would mean the model didn’t change (Cheung and Rensvold, 2002; Kaplan, 2009; Byrne, 2010; Kline, 2011). However, Byrne (2010) and Kline (2011) caution that conflicting results may arise from both these methods. As such, the adoption of either method is acceptable though there may be a preference amongst researchers to engage the method in seeking the model invariance. The common parameters employed to defend a multi-group analysis are chi square value differences, factor loadings, factor covariances and structural regression paths (Kaplan, 2009; Byrne, 2010; Schumacker and Lomax, 2010; Kline, 2011). Byrne (2010) and Kline (2011) propose that the analysis be performed in a logical, structural and sequential manner. Hence, the analysis progression elected will be conducted accordingly: (a) data from the moderating variable are split into two separate datasets; (b) two separate AMOS models, Model 1 and Model 2, are developed whereby Model 1’s parameter in the path of interest is constrained to equal 1 whereas no constraints in the path of interest for Model 2; (c) Model 1 and Model 2 are run using the first dataset and the chi-square value difference obtained; (d) Model 1 and Model 2 are run using the second dataset and the chi-square value difference obtained. Moderation occurs in the path of interest when the chi-square values differ by more than 3.840 (Byrne, 2010).

### **3.18 Ethical Issues**

This study involves collecting data from human participants, and as such, raise the necessity to address several ethical issues. Primarily, the study sought to obtain consent from the relevant authority in University of Newcastle (UON) inclusive of the study supervisor as well as the survey participants. In this research, guidelines instituted by UON's Human Research Ethics Committee and Head of School were adhered to under the supervision and direction of the Project Supervisor. In accordance with the guidelines, the survey participants will remain anonymous and strict confidentiality will be maintained with regards to all responses. In addition, the participants are permitted to pull out from the study at any stage of the data collection phase. Furthermore, as part of the university's ethical requirements, this study also went through a peer review declaration and an ethical clearance application whereby the approval notifications were received prior to the commencement of data collection segment. The Certificate of Approval from the Ethics Committee is as attached in Appendix 2.

# CHAPTER FOUR

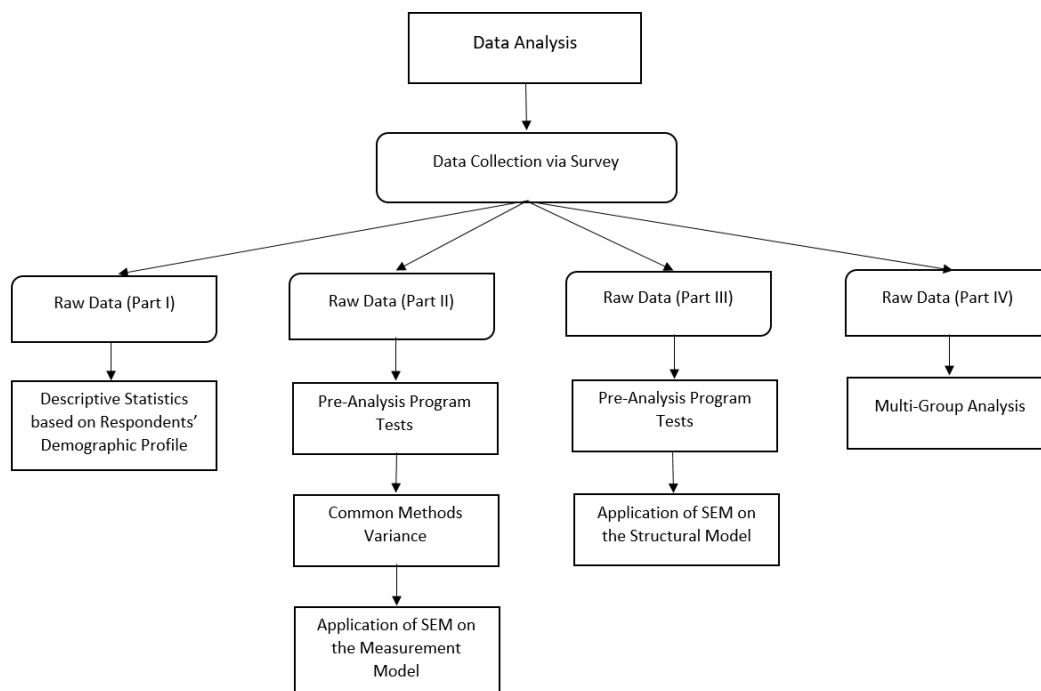
## Data Analysis

## 4.0 Chapter Four: Research Analysis

### 4.1 Introduction

This chapter details the findings derived from the analysis and evaluation of the research data collected. Chapter Four will consist of several sub-sections. The preliminary section will present the research survey process which covers the descriptive statistics (frequencies) based on the respondents' demographic profile and consumer experiences. This was then followed by the pre-analysis program and test results after the data had undergone several reliability and validity tests which includes the exploratory factor analysis. Subsequently, the data was then evaluated for the common methods variance using Harman's test to ensure that there is nil common method bias that may affect the research findings. The ensuing section encompasses the bulk of the data analysis in the study which includes the various tests and conclusions of the structural equation modeling analysis for both the measurement and structural models. Lastly, the chapter examines the moderating variables in a multi-group analysis whereby the results are presented accordingly. Figure 12 illustrates the diagram path for this research study's data analysis execution and progression towards the attainment of the research results.

**Figure 12: Steps in the Analysis of the Data**



## **4.2 Research Survey Process**

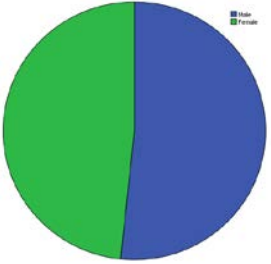
The preliminary survey questionnaire form was initially evaluated by the industry experts and academicians to assess, correct and refine the measurement items in addition to giving their recommendations and advice on the fit and suitability of the items specific to the industry. Once the approval has been received by the participating advisors, the questionnaire then underwent several rounds of pilot testing to pre-test all parts of the questionnaire and was further revised three times before electing on the final survey questionnaire form that was utilized for the data collection segment. Please refer to Appendix 1 for the survey questionnaire form employed in this research study. Finally, the survey questionnaire forms were distributed to the respondents for the collection of data. This data collection phase was carried out over an approximate timeframe of four (4) months.

## **4.3 Research Sample**

A total of five hundred (500) survey forms were printed and distributed. At the end of the data collection period, only four hundred and seventy three (473) questionnaire forms were returned. Out of the four hundred and seventy three forms (473) received, thirty two (32) were manually rejected due to errors and/ or incomplete responses. The remaining four hundred and forty one (441) survey form data were subsequently computed into the Statistical Package for Social Science (SPSS) program and were further reduced to four hundred and twenty (420) due to further responses and data oversights in Section B and C of the survey questionnaire. The remaining computed data were then put through a frequency statistical analysis to derive descriptive data and statistics on the general characteristics of the sampling. Table 11 to Table 18 below lists and illustrates the summary of the respondents' demographic profile and consumer experiences.

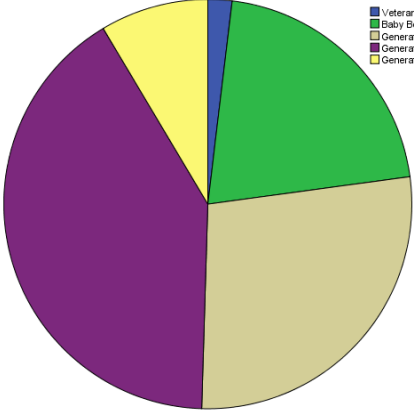


**Table 11: Descriptive Data on the Gender of Respondents**

Gender	Frequency	Percent	
Male	217	51.7	
Female	203	48.3	

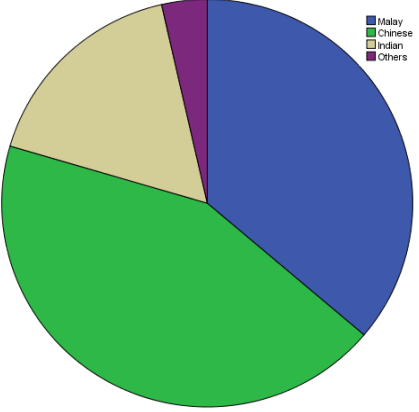
The results of the analysis show that the number of male and female respondents are comparable with the male participants making up approximately fifty two percent (52%) of the sampling whilst the female respondents constitute the remaining forty eight percent (48%).

**Table 12: Descriptive Data on the Generational Cohort of Respondents**

Generational Cohort	Frequency	Percent	
Veteran	8	1.9	
Baby Boomers	88	21.0	
X Generation	116	27.6	
Y Generation	172	41.0	
Z Generation	36	8.6	

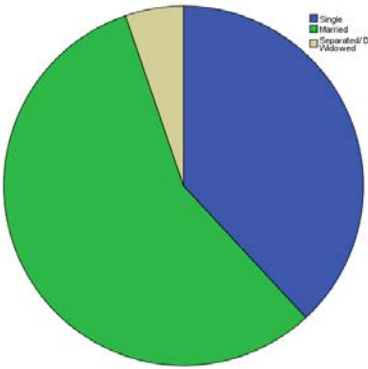
Majority of the respondents were in the Y Generational Cohort which comprises approximately forty one percent (41%) of the total respondents, followed by the X Generational Cohort category touching almost twenty eight percent (28%) of the sampling. The third largest group of respondents made up almost twenty one percent (21%) and came from the Baby Boomers Generational Cohort grouping. This is subsequently followed by the Z Generational Cohort at almost nine percent (9%) and those in the Veteran Generational Cohort at only two percent (2%). The low proportion of the Veteran Generational Cohort respondents were due to the reduced and nominal presence of these senior citizens in the approved data collection locations.

**Table 13: Descriptive Data on the Ethnicity of Respondents**

Ethnicity	Frequency	Percent	
Malay	152	36.2	
Chinese	182	43.3	
Indian	71	16.9	
Others	15	3.6	

The results of the analysis show that majority of the respondents agreeable to participate in the data collection phase were mostly participants of Chinese ethnicity, making up approximately forty three percent (43%) of the sampling. This is followed by the Malay respondents which numbers approximately thirty six percent (36%) and the Indian respondents making up almost seventeen percent (17%) of the sampling with the respondents falling under other ethnicities constituting the remaining four percent (4%).

**Table 14: Descriptive Data on the Marital Status of Respondents**

Marital Status	Frequency	Percent	
Single	160	38.1	
Married	238	56.7	
Separated/ Divorced/ Widowed	22	5.2	

The number of single respondents were lower than the married respondents with one hundred and sixty (160) single-status respondents that constitute approximately thirty eight percent (38%) and two hundred and thirty eight (238) married respondents that made up almost fifty seven percent (57%) of the total respondents. The remaining five percent (5%) of twenty two (22) respondents were either separated, divorced or widowed.

**Table 15: Descriptive Data on the Education Level of Respondents**

Education	Frequency	Percent	
Secondary School	122	29.0	
Diploma	79	18.8	
Bachelor Degree	190	45.2	
Postgraduate Degree	29	6.9	

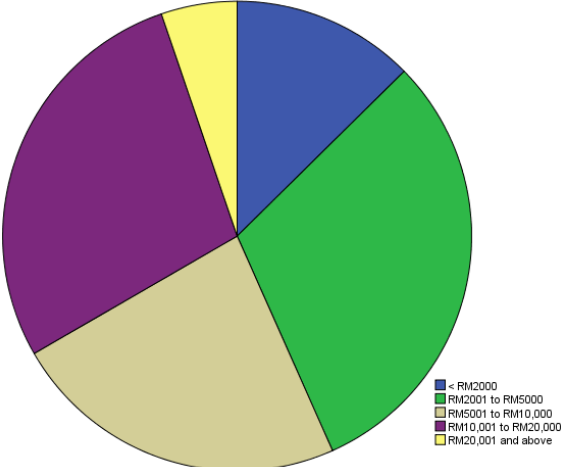
Almost half of the respondents who participated possesses a bachelor degree constituting over forty five percent (45%) of the total respondents. This is followed by the secondary school certificate holders making up around twenty nine percent (29%) of the respondents with approximately nineteen percent (19%) of the respondents being diploma holders. The smallest group consisting of around seven percent (7%) possesses a postgraduate degree.

**Table 16: Descriptive Data on the Profession of Respondents**

Profession	Frequency	Percent	
Retired	24	5.7	
Student	38	9.0	
Unemployed	23	5.5	
Administrative	64	15.2	
Manager	31	7.4	
Director	13	3.1	
Self Employed	115	27.4	
Professional	112	26.7	

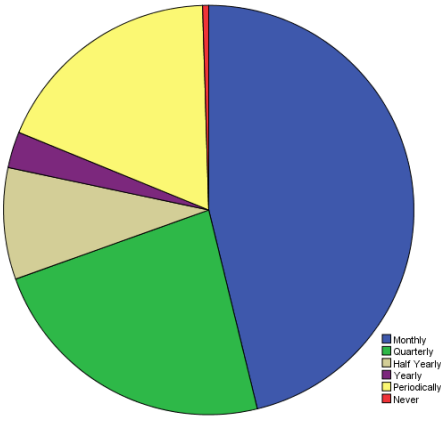
Professionals such as doctors, lawyers and accountants represents approximately twenty seven percent (27%) of the total respondents with another twenty seven percent (27%) comprising of self-employed individuals. The remaining respondents form the following breakdown: directors (3.1%), managers, (7.4%), administrators (15.2%), retirees (5.7%), students (9.0%) and unemployed individuals (5.5%).

**Table 17: Descriptive Data on the Monthly Income of Respondents**

Monthly Income	Frequency	Percent	
Less than RM2,000	53	12.6	
RM2,001 to RM5,000	129	30.7	
RM5,001 to RM10,000	98	23.3	
RM10,001 to RM20,000	118	28.1	
RM20,000 and above	22	5.2	

Approximately twenty eight percent (28%) of the respondents earn between ten thousand to twenty thousand Ringgit Malaysia (RM10,000.00 to RM20,000.00) per month and over twenty three percent (23%) receive a salary that falls between five thousand to ten thousand Ringgit Malaysia (RM5,000.00 to RM10,000.00) monthly. Comparatively, over thirty percent (30%) of the respondents earn between two thousand to five thousand Ringgit Malaysia (RM2,000.00 to RM5,000.00) each month with another thirteen percent (13%) earning less than two thousand Ringgit Malaysia (RM2,000.00) monthly. The respondents in the highest income bracket constitute over five percent (5%) of the survey participants receiving an annual income that exceeds two hundred and forty thousand Ringgit Malaysia (RM240,000.00) and above.

**Table 18: Descriptive Data on the Respondents' Visits to a Hospitality Firm**

Number of Visits	Frequency	Percent	
Monthly	194	46.2	
Quarterly	98	23.3	
Half Yearly	37	8.8	
Yearly	12	2.9	
Periodically	77	18.3	
Never	2	0.5	

Majority of the survey participants are highly experienced in the hospitality industry with over

forty six percent (46%) making monthly visits to a hospitality establishment. Those who make quarterly visits constitute approximately twenty three percent (23%) with almost nine percent (9%) of the sampling visiting only on a half yearly basis. The remaining twenty one percent (21%) only make yearly or periodic visits with two (2) of the sampling respondents having no interest in visiting any hospitality establishments thus far.

## 4.4 Pre-Analysis

### 4.4.1 Reliability Statistics

#### 4.4.1.1 Cronbach's Alpha

The researcher commences with a pre-analysis statistical test at this stage of the data analysis section to evaluate the degree of internal consistency in order to assess the reliability and validity of the measurement instrument's fifty one (51) variables selected to measure the constructs. As previously discussed in the earlier chapters, the step of establishing the reliability and validity of the measures is imperative towards the assessment of the measurement instrument's strength. The pre-analysis statistical test employed is a quantitative data analysis computer software called Cronbach's  $\alpha$  (alpha) or coefficient  $\alpha$  (alpha) that has been frequently used by numerous researchers as a test of internal reliability. Cronbach's alpha is a commonly utilized reliability function in the SPSS program. According to Bryman and Bell (2007), Cronbach's alpha "calculates the averages of all possible split-half reliability coefficients" and varies between 0 (indicating no internal reliability) and 1 (indicating perfect internal reliability). Table 19 presents the results of the overall fifty one (51) variables in the survey questionnaire measurement instrument.

**Table 19: Cronbach's Alpha Reliability Test on all items**

Cronbach's Alpha	N of Items
0.957	51

Bryman and Bell (2007) considers an alpha value of 0.7 to 1.0 as the guideline to acceptable reliability. Similarly, Nunnally (1967) and Kline (1999) propose that the Cronbach's alpha figure to be set at 0.7 minimally to attain instrument reliability. As such, Cronbach's alpha with

a value of 0.6 or less will be considered as lacking internal reliability and consistency and will require a revision of the measurement instruments (Nunnally, 1967; Kline, 1999; Malhotra, 2007). In conclusion, the measurement instrument is deemed adequate if the alpha value is 0.7 and above but modification of the instruments will be necessary if the alpha value is 0.6 or lower. As this research's Cronbach's alpha value (as indicated in Table 19 above) is within the acceptable range at 0.957, the fifty one (51) measurement instruments in the survey questionnaire are determined as possessing acceptable reliability. Table 20 below presents the Cronbach's alpha value for the individual constructs which similarly exceeds the minimum alpha value, and as such, substantiates the reliability of the survey questionnaire.

**Table 20: Cronbach's Alpha Reliability Test on the three constructs**

	Cronbach's Alpha	N of Items
Cultural Values	.926	24
Service Quality	.960	21
Customer Satisfaction	.919	6

#### **4.4.1.2 Cronbach's Alpha If Deleted Item**

Next, the researcher may conduct additional analyses on the individual variables or items to improve the questionnaire's internal consistency. For this purpose, researchers frequently adopt the following analyses: (1) corrected item-total correlations, (2) alpha if item deleted, and (3) factor analysis. However, the first two statistics, corrected item-total correlations and Cronbach's alpha if item deleted statistics, may generate findings that are comparable to one another. On the other hand, factor analysis yields contrasting results as compared to the other two (corrected item-total correlations and alpha if item deleted). As such, the researcher can adopt either the corrected item-total correlations or the alpha if item deleted in combination with factor analysis for further internal consistency analysis. As it is not necessary to run multiple analyses at the same time, the researcher will rely on the alpha if item deleted findings. Table 21 below presents the results for Cronbach's alpha if item deleted statistical analyses.

**Table 21: Cronbach's Alpha If Item Deleted Statistics on all Variables**

Cronbach's Alpha if Item Deleted for All Items					
CV1	.957	SQ1	.955	CS1	.955
CV2	.957	SQ2	.955	CS2	.955
CV3	.956	SQ3	.956	CS3	.955
CV4	.956	SQ4	.956	CS4	.956
CV5	.956	SQ5	.956	CS5	.956
CV6	.956	SQ6	.956	CS6	.956
CV7	.956	SQ7	.956		
CV8	.956	SQ8	.956		
CV9	.956	SQ9	.955		
CV10	.956	SQ10	.956		
CV11	.956	SQ11	.955		
CV12	.956	SQ12	.956		
CV13	.956	SQ13	.955		
CV14	.956	SQ14	.955		
CV15	.956	SQ15	.955		
CV16	.956	SQ16	.955		
CV17	.956	SQ17	.955		
CV18	.956	SQ18	.955		
CV19	.956	SQ19	.955		
CV20	.956	SQ20	.955		
CV21	.956	SQ21	.956		
CV22	.956				
CV23	.956				
CV24	.957				
<i>Note: Case Total = 420 (100%), Cases Valid = 420 (100%), Exclusions = 0 (0%)</i>					

According to Field (2005), the alpha if item deleted reliability test refers to the variation in value should the item be removed from the scale calculation. Field (2005) posit that the questionnaire is deemed reliable if no one item causes the alpha value to deviate greatly. As the alpha scores in Table 21 above remained consistent with little or nil variations, the items are considered acceptable and reliable. Likewise, the researcher may advance to the factor analysis statistical test to complete the pre-analysis section.

#### 4.4.1.3 Factor Analysis

The final pre-analysis program the researcher ran on the measurement items was the SPSS' factor analysis statistical test. According to Malhotra (2007, p.609), the factor analysis program

is “a class of procedures primarily used for data reduction and summarization” whereby the number of correlated variables in a research are moderated into a manageable set of data. The program does so by targeting on the assessment of the inter-relationships so as to identify the underlying dimensions or factors of the constructs in order to explain the correlations between the variable sets. (Malhotra, 2007).

The factor analysis process commences with the problem formulation stage whereby the variables are established through the researcher’s analysis and judgement with the variable specification measured on a ratio or interval scale, as previously listed in Chapter Three’s Methodology Section. The researcher then runs the correlation matrix construction to assess the suitability of the factor model. This is done with the employment of the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and the Bartlett’s Test of Sphericity. Bartlett’s test of sphericity is based “on a chi-square transformation of the determinant of the correlation matrix” and is commonly utilized to “test the null hypothesis that the variables are uncorrelated in the population” whereas the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy compares the magnitudes of the unobserved correlation coefficients to the magnitudes of the partial correlation coefficients. (Malhotra, 2007, p.614). Table 22 below presents the results of the KMO and Bartlett’s tests.

**Table 22: KMO Measure of Sampling Adequacy and Bartlett’s Test of Sphericity**

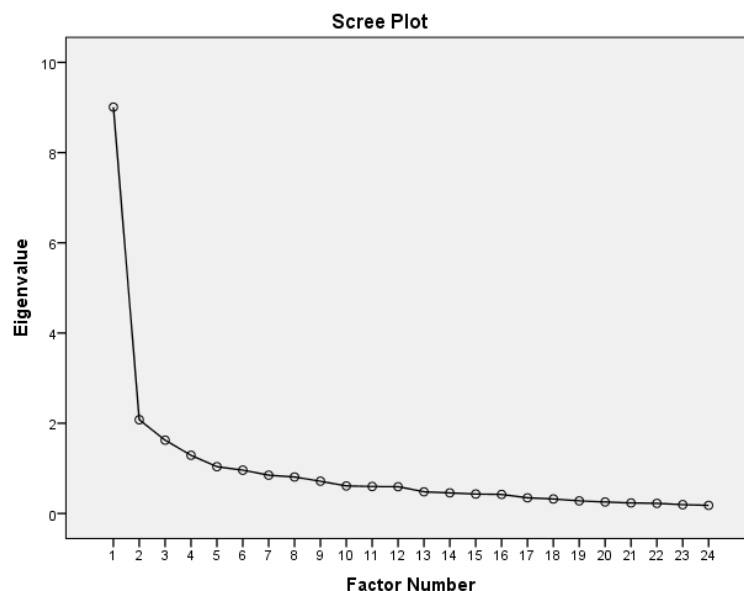
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.913
Approx. Chi-Square		5277.382
Bartlett’s Test of Sphericity	Df	276
	Sig.	.000

According to Malhotra (2007, p.614), the value of the KMO needs to exceed 0.5 to be accepted as smaller values denote unsupported correlations between the variable pairs. On the other hand, the results of the Bartlett’s test need to be a large value so as to reject the null hypothesis of the population’s variables being uncorrelated for a hypothesis that cannot be rejected will question the suitability of factor analysis. Based on the results above, the KMO value of .913 is higher than the required minimum value of 0.5 and the Bartlett’s test large chi-square value of 5277.382 sufficiently supports the rejection of the null hypothesis. Hence, the variables indicate solid correlation and the researcher may proceed to the subsequent stages in the factor analysis.



The researcher then selects the commonly employed factor extraction method, that is, the principal component analysis (PCA). According to Malhotra (2007, p.616), the PCA looks at the total variance within the data by establishing the “minimum number of factors that will account for maximum variance in the data for use in subsequent multivariate analysis.” This stage of the factor analysis is performed concurrently with the determination on the number of factors though a scree plot using Eigenvalue computation. According to Malhotra (2007, p. 617), a scree plot is “a plot of the eigenvalues against the number of factors in order of extraction and the shape of the factor is used to determine the number of factors.” Malhotra further added that the plot will contain “a distinct break between the steep slope of factors, with large eigenvalues and a gradual trailing off associated with the rest of the factors.” Scree refers to the gradual trailing off in the plot and designates the actual factor numbers. Malhotra (2007, p.617) propose “the number of factors determined by a scree plot will be one or a few more than that determined by the eigenvalue criterion.” Figure 13 below presents the resulting scree plot along with eigenvalues derived from the analysis.

**Figure 13: Scree Plot with Eigenvalue Determination**



Malhotra (2007, p. 579, p.617) posit the eigenvalue as representative of the “amount of variance associated with the factor” and is “the ratio of between-group to within-group sum of squares” with greater eigenvalues implying better performance and functionality. Hence, the researcher will retain only factors possessing eigenvalues above 1.0, as proposed by Malhotra, as factors with variance below 1.0 are comparable to a single variable since each variable

already possess a variance of 1.0 due to standardization (Malhotra, 2007, p. 617). As such, Figure 13 above indicates five groups within the cultural value construct that possesses eigenvalues that are above 1.0 that will be retained for the next phase of factor analysis. Table 23 below provides the Total Variance Explained with additional details on the eigenvalues and the percentage of explained variance at fifty four percent (54%). Nevertheless, while the initial or unrotated factor matrix points to links between the factors and individual variables, the factors may not be easily interpreted as the factors are correlated with multiple variables (Malhotra, 2007). The researcher will be able to better interpret the solution after the factors are rotated, as in the next step.

**Table 23: Total Variance Explained**

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.009	37.539	37.539	8.553	35.638	35.638	3.515	14.647	14.647
2	2.078	8.657	46.196	1.673	6.969	42.607	2.836	11.816	26.462
3	1.625	6.769	52.966	1.202	5.007	47.614	2.526	10.524	36.986
4	1.289	5.373	58.338	.863	3.597	51.211	2.017	8.404	45.391
5	1.037	4.321	62.659	.586	2.443	53.654	1.983	8.264	53.654

The ensuing factor analysis stage entails the researcher “rotating the numbers” to revise and simplify the factor matrix so as to ease interpretation of the data. The researcher employed a frequently utilized rotation method, the Varimax (orthogonal rotation) procedure, to uncover the orthogonal factors that is done by “minimizing the number of variables with high loadings on a factor and thereby enhancing the interpretability of the factors” (Malhotra, 2007, p.619). This reveals the uncorrelated factors that forms the basis towards the interpretation of the factors. Table 24 below lists the outputs of the twenty four (24) items (CV1 to CV24) after the implementation of the factor matrix that were orthogonally rotated by Varimax.

**Table 24: Rotated Factor Matrix with Factor Loading Values and Cronbach’s Alpha**

Items	Factor (Loading Values)					Cronbach’s Alpha	
	1	2	3	4	5		
CV5	0.869					0.858	
CV8	0.842						
CV7	0.715						
CV6	0.706						
CV17	0.651						

CV16	0.633						0.926
CV22		0.845					
CV21		0.782					
CV23		0.775					
CV19		0.627					
CV18		0.547					
CV20		0.525					
CV11			0.735				
CV10			0.692				
CV12			0.671				
CV9			0.541				
CV1				0.834			
CV2				0.801			
CV4				0.602			
CV3				0.567			
CV13					0.742		
CV14					0.740		
CV15					0.557		

According to Malhotra (2007, p.619), interpretation of the factors are facilitated through the identification and grouping of the variables that possess high loadings within the same factor with the factor being interpreted based on the variables with high loadings. After the removal of factor loading values below 0.5 in Table 24 above, the rotated factor matrix reveals the five groupings within the remaining twenty three (23) items (CV1 to CV24). Factor 1 lists CV5, CV8, CV7, CV6, CV17 and CV16; whereas Factor 2 lists CV22, CV21, CV23, CV19, CV18 and CV20. The next factor grouping, Factor 3 lists CV11, CV10, CV12 and CV9 with Factor 4 being CV1, CV2, CV4 and CV3. The final factor, Factor 5, consists of CV13, CV14 and CV15. All the five factors were then labelled based on the measurement scale it was adapted upon, that is, Hofstede's (2010) cultural value dimensions. Factor 1 consists of the "Individualism/ Collectivism, Long Term/ Short Term Orientation and Uncertainty Avoidance" dimensions whereas Factor 2 lists the "Indulgence/ Restraint and Long Term/ Short Term" dimensions. Finally, Factor 3 refers to the "Masculinity/ Femininity" dimension with Factor 4 consisting of the "Power Distance" Index Lastly, Factor 5 consists of solely the "Uncertainty Avoidance" dimension. In addition, the researcher re-tested all the five factors using Cronbach's alpha statistical test to reassess and validate the reliability of the questionnaire. According to Nunnally (1967), Kline (1999) and Malhotra (2007), Cronbach's alpha value need to exceed 0.7 to be accepted. As the alpha value for all the five factors, Factor 1 (0.858), Factor 2 (0.843), Factor 3 (0.785), Factor 4 (0.782) and Factor 5 (0.781) as well as the total value for all the items (CV1 to CV23) at 0.926 exceed the minimum alpha value and

hence are considered reliable. Table 25 below refers to the five factors and its respective items and item description as well as Hofstede indexes as labels for enhanced clarity and comprehension.

**Table 25: The Five Groups of Factors with Respective Items and Item Descriptions**

Factors	Items	Item Description	Hofstede Index
Factor 1	CV5	People should only show responsibility for oneself and immediate family members	Individualism/ Collectivism, Long/ Short Term Orientation, Uncertainty Avoidance
	CV8	People have identities that are based on their social groups	
	CV7	Extended families are vital and its members need to show loyalty and be protective of one another	
	CV6	People have individual identities regardless of their social groups	
	CV17	It is normal to want to work for a superior objective or cause	
	CV16	People should not share their personal emotions and feelings	
Factor 2	CV22	Frugality is a crucial trait	Indulgence/ Restraint, Long/ Short Term Orientation
	CV21	Diligence is a vital attribute	
	CV23	Having time for leisure is important	
	CV19	People should respect and upkeep social traditions	
	CV18	People should persevere to achieve big plans and results	
	CV20	People should fulfill their social duties despite the personal expense	
Factor 3	CV11	Quality of life should be considered a leading social value	Masculinity/ Femininity
	CV10	Men need to be tough, ambitious and assertive	
	CV12	Males and females should be equally caring and tender to others	
	CV9	Wealth and material assets are vital	
Factor 4	CV1	Social inequalities are expected and welcomed	Power Distance
	CV2	Powerful people should protect the less powerful	
	CV4	There are inter-dependence between the more and less powerful people	
	CV3	Social inequality should discouraged or reduced	
Factor 5	CV13	It is normal to feel nervous, anxious and stressed	Uncertainty Avoidance
	CV14	It is normal to fear risks and uncertainty	
	CV15	It is normal to accept uncertainty and take chances	

Subsequent to the interpretation of the factors, the factor scores are calculated and computed for use in the following multivariate analysis. The focus of the analysis in this section is to remove and group the items in order to enhance the reliability and validity of the measurement instrument, after which, the researcher then moves on to the determination of the model fit whereby the resulting factors undergoes structural equation modeling via the confirmatory factor analysis in the AMOS program. According to Malhotra (2007, p.621), “the differences between the observed correlations (as given in the input correlation matrix) and the reproduced correlations (as estimated from the factor matrix) can be examined to determine model fit, with these differences being called residuals.” Presence of a number of large residuals in the factor model indicate lack of fit to the data whereby the researcher needs to reconsider the model if and when that occurs.

Additionally, as a side note, the factor analysis (exploratory) should only be measured on the exogenous variables and are unable to classify between the endogenous constructs. As such, the researcher conducts the factor analysis (exploratory) only on the cultural value construct, being the exogenous (independent) variable, but not on the service quality (SQ) and customer satisfaction (CS) constructs as SQ and CS are endogenous (dependent) variables in the model. As previously discussed, an exogenous variable are not affected by the other variables in the model unlike an endogenous variable which may be manipulated by other variables in the model (Byrne, 2010; Schumacker and Lomax, 2010).

#### **4.5 Common Methods Variance**

This study is conscious of the fact that common methods variance may occur to adversely influence research findings and hence, has undertaken the position to ensure the research methodology takes account of the variance that may cause deceptive correlations amongst the variables. As such, this issue was resolved as per the adoption of the various procedural and statistical recommendations as proposed by preceding and current literature which were presented earlier in Chapter Three. The steps for the CMV procedural remedies were implemented prior to the data collection phase whilst the statistical technique is executed at this phase of the study. At this juncture of the study, the Harman's Single Factor (HSF) test was selected as a diagnostic technique to ascertain and establish the potential effects of the CMV. Nevertheless, despite the popularity of the HSF test as a CMV test, it is deemed as an analytical procedure on a diagnosis basis and not as a remedial tool (Podsakoff et al, 2003). According to Podsakoff et al (2003, p.889), the test makes the assumption that the presence of a high level of CMV will indicate that either "a single factor will emerge from the factor analysis or one general factor will account for the majority of the covariance among the measures." In this study, the examination of the measured variables' unrotated factor structure was performed through a single-factor analysis. The results established that the single factor possesses a variance of only thirty one percent (31%) which is far less than fifty percent (50%). Additionally, the results determine the occurrence of additional factors with nil individual factor being accountable for the data's variance majority of over fifty percent (50%). As such, it can be concluded that this study has no threat of common method bias.

## **4.6 Structural Equation Modeling Analysis**

The researcher has previously covered the literature on structural equation modeling (SEM) in Chapter Two as well as the SEM methodology the researcher will be undertaking in Chapter Three. To recap, SEM is a second generation multivariate procedure consisting of various statistical techniques which emphasizes on the validation and fitting of the model. SEM employs a confirmatory approach towards data analysis for inferential purposes, as compared to other multivariate analysis, which tend to be descriptive such as exploratory factor analysis (Byrne, 2010). This research procedure allows the researcher to gain greater insights into the model as SEM encompasses both the unobserved (latent) and observed (measured) variables whereas former methods focuses on the observed measurements. In addition, SEM has the ability to circumvent error inaccuracies as the parameters of the error variance are provided for in SEM, unlike the traditional multivariate procedures that are not able to assess or rectify the measurement error (Byrne, 2010). The SEM methodology allows for straightforward application for modeling multivariate relations as well as estimating point and interval indirect effects. As such, SEM is an effective procedure when the researcher is attempting to test research theories and to address research problems (Byrne, 2010).

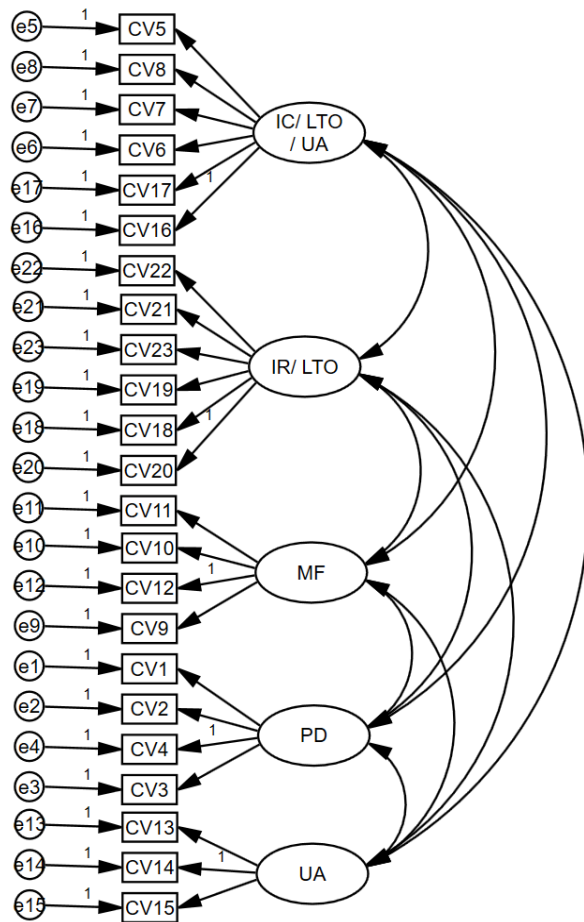
As stated in Chapter Three, the SEM model is made up of two submodels: the measurement model and the structural model. The SEM analysis looks at the validation of the measurement model and the fitting of the structural model (Byrne, 2010). Byrne (2010) recommends the estimation of the measurement model with the aid of the confirmatory factor analysis (in the AMOS statistical program) whereas the analysis of the structural model along with the latent variables to be conducted using the path analysis instrument.

### **4.6.1 Measurement Model**

Based on the results of the factor analysis in the pre-analysis stage, item groupings were amended to improve on the reliability and validity of the measurement instrument. The six cultural value indexes (power distance, individualism/ collectivism, masculinity/ femininity, uncertainty avoidance, long term/ short term orientation and indulgence/ restraint) that were originally adapted from Hofstede (2010)'s measurement tool were reconfigured into five factor groups with Factor 1 consisting of the "individualism/ collectivism, long term/ short term

orientation and uncertainty avoidance” dimension, Factor 2 consisting of the “indulgence/ restraint and long term/ short term orientation” dimensions, Factor 3 consisting of the “masculinity/ femininity” dimension, Factor 4 consisting of the “power distance” dimension with the final factor, Factor 5, consisting of the “uncertainty avoidance” Index. Table 25 above (in the previous section) lists the five new groups of factors with its respective items and item descriptions whereas Figure 14 below illustrates the revised measurement model.

**Figure 14: Reconfigured Measurement Model after EFA**



This revised measurement model will be considered as the specified template for the subsequent evaluation of the model fit. Upon specification of the model (as above), which is the primary step when working with the AMOS program, the researcher then proceeds to move the data files folder into the AMOS program for the following analysis on the computation of the estimates and to produce the AMOS text output. This is followed by the researcher running the selected goodness-of-fit tests to ascertain the fit adequacy of the model, which in turn, leads to the researcher’s determination of the model acceptance or rejection. Byrne (2010) propose

the application of three to four goodness-of-fit tests in order to present distinct analytical benchmarks.

As indicated earlier in Chapter Three, the AMOS program are able to run an approximate analysis of 25 varying goodness-of-fit measures. According to past literature, a number of researchers are on the same page with Byrne (2010) that model fit measures should run multiple fit analysis so as to exhibit robust criteria (Jaccard and Wan, 1996; Hu and Bentler, 1999; Kline, 2005; Hooper et al, 2008). Jaccard and Wan (1996) propose a minimum of three fit indices with each differing in its respective report measures whereas Hu and Bentler (1999) suggesting the adoption of SRMR along with RMSEA, CFI and NNFI for a vigorous goodness-of-fit evaluation. Similarly, Kline (2005) and Hooper et al (2008) posit the combination of CFI, SRMR, RMSEA and CMIN or CMIN/DF. However, Byrne (2010) is of the opinion that RMSEA and CFI are more relevant when adopted in conjunction with ECVI to ensure best fit.

For the purpose of this research paper, the researcher ran the various goodness-of-fit tests on the research models and elected on the combination with the best results. The different types of goodness-of-fit tests include the following: (1) the chi-square to degrees of freedom ratio (CMIN/DF); (2) expected cross-validation index (ECVI); (3) the root mean square error of approximation (RMSEA); (4) the goodness-of-fit index (GFI); (5) comparative fit index (CFI) and (6) standardized root mean square residual (SRMR). Please refer to Chapter Three for additional information on these goodness-of-fit indexes. The researcher took into account tests that are susceptible to large sample sizes and rejects fit indexes which may inadvertently release erroneous values due to this research paper's high sample size.

According to Byrne (2010), the CMIN/DF value should be between 1.0 to 2.0 with preference for values in the vicinity of the 1.0 ratio for the model to be deemed tenable and any value exceeding 2.0 being rejected. On the other hand, the lower the ECVI score, the better the fit with the RMSEA preferring values not more than 0.05 to signify good model fit though values as high as 0.08 are accepted as consideration of the "reasonable errors of approximation in the population" (Byrne, 2010, p.80). Correspondingly, the GFI value should range from zero to 1.0 with values closer to 1.0 being representative of a model possessing good fit though the CFI considers the values between 0.90 and 0.95 as a representation of a good model fit. Finally, the SRMR may range from zero to 1.0 with the lower value indicating a well-fitting model (Byrne, 2010).



#### 4.6.2 SEM Analysis for Model A

The preliminary stage in an SEM analysis is the specification of the hypothesized model. This is performed on the first order measurement model, which shall be labelled Model A for the purpose of this study. Here, the objective is to test the hypothesis that “cultural values consist of five dimensions” as indicated after the exploratory factor analysis in SPSS. Figure 15 below appends the measurement “Model A” with its tabulated parameter estimates and characteristics as described in the following section below.

- a) There are five dimensions for the reconfigured cultural value model which are relabelled accordingly: Individualism/ Collectivism Index (IC), Indulgence/ Restraint Index (IR), Masculinity/ Femininity Index (MF), Power Distance Index (PD) and Uncertainty Avoidance Index (UA).
- b) The exogenous latent variable, Individualism/ Collectivism, is reorganized as measured by the following observed variables; IC1, IC2, IC3, IC4, IC5 and IC6.
- c) The exogenous latent variable, Indulgence/ Restraint, is reorganized as measured by the following observed variables; IR1, IR2, IR3, IR4, IR5 and IR6.
- d) The exogenous latent variable, Masculinity/ Femininity, is reorganized as measured by the following observed variables; MF1, MF2, MF3 and MF4.
- e) The exogenous latent variable, Power Distance, is reorganized as measured by the following observed variables; PD1, PD2, PD3 and PD4.
- f) The exogenous latent variable, Uncertainty Avoidance, is reorganized as measured by the following observed variables; IC1, IC2 and IC3.
- g) There are 23 observed variables as indicated by the 23 boxes or rectangles.
- h) The indicators e1 to e23 are the errors in measurement that is associated with each observed variable.
- i) Each of the observed variable correlates to a loading of only one dimension.
- j) As per theory, the five dimensions correlates to one another and this inter-correlation is specified by the dual-headed arrows.
- k) There are nil correlation between the measurement errors, e1 to e23.

**Figure 15: Measurement Model A**

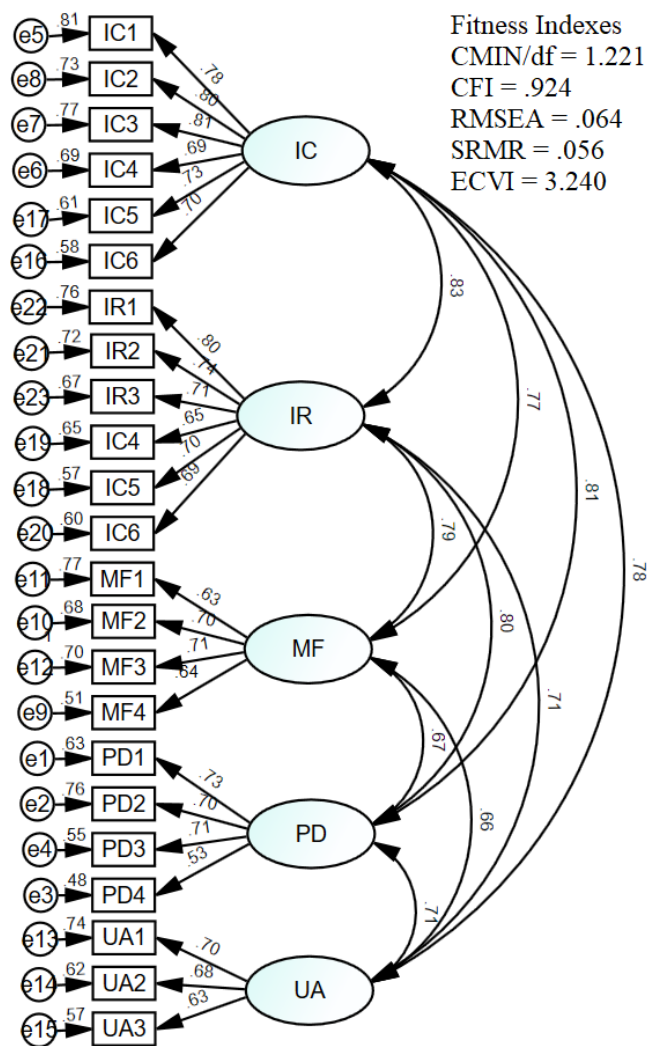


Table 26 below tables the abbreviations and the descriptions of the variables.

**Table 26: Abbreviation and Descriptions of Model A's Variables**

Dimensions	Symbols	Item Description
Individualism/ Collectivism	IC1	People should only show responsibility for oneself and immediate family members
	IC2	People have identities that are based on their social groups
	IC3	Extended families are vital and its members need to show loyalty and be protective of one another
	IC4	People have individual identities regardless of their social groups
	IC5	It is normal to want to work for a superior objective or cause
	IC6	People should not share their personal emotions and feelings
Indulgence/ Restraint	IR1	Frugality is a crucial trait
	IR2	Diligence is a vital attribute
	IR3	Having time for leisure is important
	IR4	People should respect and upkeep social traditions
	IR5	People should persevere to achieve big plans and results
	IR6	People should fulfill their social duties despite the personal expense
Masculinity/ Femininity	MF1	Quality of life should be considered a leading social value
	MF2	Men need to be tough, ambitious and assertive

Femininity	MF3	Males and females should be equally caring and tender to others
	MF4	Wealth and material assets are vital
Power Distance	PD1	Social inequalities are expected and welcomed
	PD2	Powerful people should protect the less powerful
	PD3	There are inter-dependence between the more and less powerful people
	PD4	Social inequality should discouraged or reduced
Uncertainty Avoidance	UA1	It is normal to feel nervous, anxious and stressed
	UA2	It is normal to fear risks and uncertainty
	UA3	It is normal to accept uncertainty and take chances

Upon the completion of the model specification stage, the researcher then proceeded to the data specification segment where the SPSS data file and variables are linked accordingly. The main stage of the analysis is the model evaluation phase where the hypothesized model is statistically examined to assess its model fit which determines the acceptance or rejection of the model. Once the model has been deemed fit, only then can the researcher proceed with the model's path coefficients analysis (Byrne, 2010). In this section, the researcher selected and shortlisted a combination of test results after the evaluation of Model A's goodness-of-fit on AMOS. The statistical results are as summarized below in Table 27.

**Table 27: Model A's Goodness-of-Fit Test Results**

	CMIN/DF	CFI	RMSEA	SRMR	ECVI	ECVI (SAT)	ECVI (IND)
Model A	1.221	0.9224	0.064	0.056	3.240	5.311	13.715

Based on the goodness-of-fit test results for Model A, the CMIN/DF was 1.22. According to Byrne (2010), the value of CMIN/DF should be in the region of 1.0 for the model to be tenable. Since the result is closer to 1.0 than 2.0, this test indicates that the model fit is adequate.

The results for the CFI fit test returned a score of 0.92. According to Bentler (1992), a CFI value above 0.90 is representation of good fit though Hu and Bentler (1999) revised the good fit value to not exceed 0.95. As such, the CFI measure indicates that Model A is a well-fitting model.

A good model fit requires a RMSEA value lower than 0.05 (Browne and Cudeck, 1993). Nevertheless, MacCallum et al (1996) posit that RMSEA values ranging from 0.08 to 0.10 as indicative of acceptable model fit while only values above 0.10 are considered as poor fit. However, Hu and Bentler (1999) propose that a model with good fit as possessing a value of 0.06. Since the results for the RMSEA value from the test was 0.064, the conclusion is that the model exhibits adequate goodness-of-fit.

Model A's SRMR results was 0.0568. SRMR values ranges from zero to 1.0 with the lower values indicating better fit though Hu and Bentler (1999) propose the SRMR value to be less than 0.08 to qualify as a model with good fit. According to Byrne (2010), a SRMR result of zero represents a model with perfect fit. In view with these positions, Model A is deemed as a well-fitting model.

Lastly, the ECVI score for Model A was 3.240, which was then assessed against the ECVI Ind (independence) and ECVI Sat (saturated) models. Byrne (2010) propose that the ECVI score to be the lowest of the three to represent best fit. Since the ECVI results of 3.240 was lower than both the ECVI Ind's 13.715 and ECVI Sat's 5.311 results, the model is considered as a well-fitting model.

As indicated by the results above, Model A is considered an adequate measurement model based on the positive goodness-of-fit statistical tests and evaluation. However, when applying SEM to evaluate the validity of the hypothesized model, the researcher may encounter the options with regards to re-specifying and re-estimating the model, as earlier mentioned in Chapter Three. In this situation, the researcher may consider that the fit statistical results can be further enhanced through the Modification Indices function in the AMOS program. The Modification Indices (MI) are usually employed by researchers to amend the model or models in the attempt to enhance the model fit whereby the model's chi-square value is reduced by adding a relationship or arrow between the variables. Nevertheless, researcher need to be conscious of over-fitting a model to suit the data. Conversely, the MI function includes another parameter labelled the "par change" or "expected parameter change" which calculates the coefficient variation with the addition of a relationship or arrow as well. The direction can be either positive or negative though the researcher may decide against the addition of the path, despite the MI value, should the modification be marginal. Correspondingly, the addition of a path or relationship is mandatory if the change in parameter is significant in absolute size despite its MI value being secondary or less. Table 28 below appends the Modification Indices table that presents MI and par change values to show the covariance between each pair of items. A high MI value (values above 15) indicates redundancies between that two items which would require the researcher to make modifications to the measurement model.

**Table 28: Model A's Modification Indices**

			M.I.	Par Change
UA3	<--->	IC5	4.577	0.039
UA1	<--->	IR4	4.038	-0.047
PD4	<--->	IC6	4.236	0.042
IR5	<--->	IR6	5.076	-0.059
IR5	<--->	PD3	5.801	-0.046
IR3	<--->	MF4	6.232	0.058
IC6	<--->	UA3	5.506	0.044
IC6	<--->	MF2	4.057	-0.045
IC3	<--->	MF3	4.015	0.061
IC2	<--->	PD4	4.217	0.034

Based on the Modification Indices values for Model A, the results indicate that the MI values are less than fifteen (15) indicating that there are no redundant items in the model. As such, there is no further need to modify the measurement model. In addition, MacCallum et al (1992) and Byrne (2010) opine that additional modification is not necessary when the model is already adequate or fits well as further modifications may merely cater to sample quirks or fluctuations. Hence, there is no need to create additional relationships or allude to any modifications for Model A, which is deemed as possessing adequate theoretical construct and validity. Following this determination, the researcher proceeded to examine Model A's consistency, reliability and validity which looks at the convergent and discriminant validity in the next section. Both types of validity are imperative to ensure merit in the construct validity.

Subsequently, the next stage involves the researcher assessing the model's construct reliability and validity so as to ensure that the measures may be validated and is not subjected by the misleading influences of the measurement errors (Bagozzi, 1953; Hair et al, 2010). At this juncture, the researcher initially evaluates the convergent validity parameter which refers to the constructs' degree of association between measures that are projected to be related. As presented earlier in the pre-analysis section, the EFA reported the item loading values for each factor whereby the observed variable's coefficients in each construct were resolved simultaneously through the metric specification for each scale. In this step, the parameter estimates were investigated on its regression weight, along with the standard error (SE), critical ratio (CR) and significant p-value levels (p-value). Table 29 below presents Model A's parameter estimates.

**Table 29: Model A's Parameter Estimates**

			Regression Weight		S.E.	C.R.	P
			Unstandardized	Standardized			
IC1	<---	IC	1.000	.781			
IC2	<---	IC	1.069	.805	.131	8.182	***
IC3	<---	IC	1.357	.816	.141	9.622	***
IC4	<---	IC	.969	.696	.127	7.626	***
IC5	<---	IC	1.113	.735	.130	8.551	***
IC6	<---	IC	.933	.704	.115	8.081	***
IR1	<---	IR	1.000	.808			
IR2	<---	IR	1.066	.744	.144	7.422	***
IR3	<---	IR	.967	.717	.128	7.563	***
IR4	<---	IR	.892	.654	.127	7.035	***
IR5	<---	IR	1.062	.702	.140	7.586	***
IR6	<---	IR	.994	.698	.135	7.379	***
MF1	<---	MF	1.000	.638			
MF2	<---	MF	1.035	.708	.143	7.224	***
MF3	<---	MF	1.038	.710	.143	7.234	***
MF4	<---	MF	1.130	.640	.155	7.267	***
PD1	<---	PD	1.000	.735			
PD2	<---	PD	1.045	.704	.125	8.388	***
PD3	<---	PD	.648	.711	.105	6.176	***
PD4	<---	PD	.755	.531	.112	6.760	***
UA1	<---	UA	1.000	.706			
UA2	<---	UA	1.059	.685	.144	7.367	***
UA3	<---	UA	.832	.634	.123	6.778	***

\*\*\*Significant level at 0.001 (two-tailed)

The critical ratio values were above  $\pm 1.96$ , as indicated from the unstandardized estimates' results in the table above, with the significant p-value level at 0.001 (two-tailed). The values suggest that the construct possesses good measures. In the subsequent step, Table 29 presents the model's standardized estimate of regression weight. The results for the standardized estimates present a model that exhibits convergent validity as indicated by the significant p-value at 0.001 with every variable loading higher than 0.5.

The next step of the analysis is a different function of AMOS's Modification Indices and considers the discriminant or divergent validity of Model A which refers to the degree in which the construct's items are distinct by its association to the respective latent variable as compared to another. The coefficient on regression weights suspend the consideration to associate an observed variable with other latent variables as it would be interpreted as cross-loading. Since the results demonstrate the absence of any cross-loading between the observed variable and other latent variables, the discriminant validity for the model was established.

Consequently, the analysis evaluated the multicollinearity (or collinearity) concerns which may

arise when a regression model's independent variables correlate. In other words, multicollinearity is an occurrence where a regression model's variable is linearly predicted to another variable with accuracy. As independent variables are supposed to be independent, hence any correlation will trigger an analysis quandary when attempting to get a model fit and results interpretation, especially when the degree of correlation is substantial. Table 30 lists the standardized estimate of correlation between all the five constructs in Model A. The results indicate that there were no threat of any multicollinearity risk as the correlation values were well below 1.0. Additionally, the critical ratio were above  $\pm 1.96$  with a highly significant p-value of 0.001 which concludes Model A as an adequate model and may proceed to the next phase of the analysis.

**Table 30: Model A's Standardized Estimate of Correlation (Multicollinearity)**

			Estimate	C.R.	P
IC	<--->	IR	.886	5.389	***
IC	<--->	PD	.871	5.256	***
IC	<--->	UA	.683	4.281	***
IR	<--->	PD	.870	5.056	***
IR	<--->	MF	.624	3.974	***
IR	<--->	UA	.593	3.630	***
MF	<--->	IR	.573	4.251	***
PD	<--->	UA	.514	3.920	***

\*\*\*Significant level at 0.001 (two-tailed)

#### 4.6.3 SEM Analysis for Model B

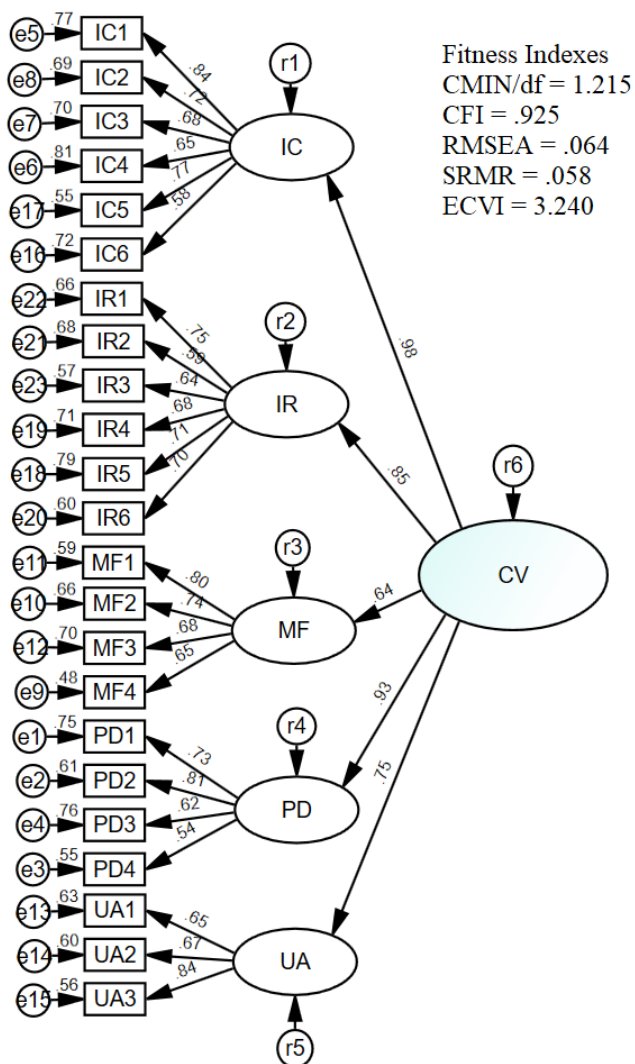
In this section, the analysis progresses to the second order testing of structural equation modeling. This is performed on the CV measurement model, which shall now be labelled Model B. Here, the aim is to test the hypothesis that “cultural values can be explained by five first-order constructs” as the assessment progression after the above analysis on Model A. The measurement “Model B” is as appended in Figure 16 below with its tabulated parameter estimates and characteristics as described in the following section below.

- There are five sub constructs for the cultural value (CV) model which are labelled accordingly: Individualism/ Collectivism Index (IC), Indulgence/ Restraint Index (IR), Masculinity/ Femininity Index (MF), Power Distance Index (PD) and Uncertainty Avoidance Index (UA).
- The individual items on its respective latent variable, as determined in the first-order

measurement model analysis, exhibit a non-zero loading and was constructed to measure the other four latent variables' zero loading.

- c) The observed variables were devised to have no correlations with the associated error terms.
- d) There is a single exogenous latent variable, Cultural Values (CV), which were measured by five endogenous latent variable, Individualism/ Collectivism Index (IC), Indulgence/ Restraint Index (IR), Masculinity/ Femininity Index (MF), Power Distance Index (PD) and Uncertainty Avoidance Index (UA).
- e) The errors in the equation or residual (res1, res2, res3, res4 and res5) are associated with the endogenous latent variables, IC, IR, MF, PD, UA and CV respectively.
- f) The construct's metric of factor loading parameters were fixed at the value of 1.0.

**Figure 16: Measurement Model B**





As per the evaluation conducted on Model A, this assessment also commenced with the goodness-of-fit statistical tests on Model B. The researcher ran all the fit tests in AMOS and shortlisted the following fit indicators in the examination of Model B's goodness-of-fit. The results are as represented in Table 31 below:

**Table 31: Model B's Goodness-of-Fit Test Results**

	CMIN/DF	CFI	RMSEA	SRMR	ECVI	ECVI (SAT)	ECVI (IND)
Model B	1.215	0.925	0.064	0.058	3.240	4.000	13.715

Based on the goodness-of-fit test results for Model B, the CMIN/DF was 1.215. According to Byrne (2010), the value of CMIN/DF should be in the region of 1.0 for the model to be tenable. Since the result is closer to 1.0 than 2.0, this test indicates that the model fit is adequate.

The results for the CFI fit test returned a score of 0.925. According to Bentler (1992), a CFI value above 0.90 is representation of good fit though Hu and Bentler (1999) revised the good fit value to not exceed 0.95. As such, the CFI measure indicates that Model B is a well-fitting model.

A good model fit requires a RMSEA value lower than 0.05 (Browne and Cudeck, 1993). Nevertheless, MacCallum et al (1996) posit that RMSEA values ranging from 0.08 to 0.10 as indicative of acceptable model fit while only values above 0.10 are considered as poor fit. However, Hu and Bentler (1999) propose that a model with good fit as possessing a value of 0.06. Since the results for the RMSEA value from the test was 0.064, the conclusion is that the model exhibits adequate goodness-of-fit.

Model B's SRMR results was 0.05. SRMR values ranges from zero to 1.0 with the lower values indicating better fit though Hu and Bentler (1999) propose the SRMR value to be smaller than 0.08 to qualify as a model with good fit. According to Byrne (2010), a SRMR result of zero represents a model with perfect fit. In view with these positions, Model B is deemed as a well-fitting model.

Lastly, the ECVI score for Model B was 3.240, which was then assessed against the ECVI Ind (independence) and ECVI Sat (saturated) models. Byrne (2010) propose that the ECVI score to be the lowest of the three to represent best fit. Since the ECVI results of 3.240 was lower than both the ECVI Ind's 13.715 and ECVI Sat's 4.040 results, the model is considered as a

well-fitting model.

As indicated by the results above, Model B is considered an adequate model based on the positive goodness-of-fit statistical tests and evaluation. Similar to the evaluation of Model A, the researcher then progressed to the Modification Indices function in the AMOS program. Table 32 below indicates the MI and par change values for the items in Model B.

**Table 32: Model B's Modification Indices**

			M.I.	Par Change
UA2	<--->	MF4	4.587	-0.024
UA1	<--->	MF1	4.602	-0.056
PD1	<--->	UA2	5.431	0.058
MF1	<--->	IC5	4.327	0.069
IR4	<--->	IR5	5.182	-0.071
IR3	<--->	PD3	5.421	-0.039
IR3	<--->	MF3	5.758	0.052
IC6	<--->	UA3	4.277	0.039
IC5	<--->	MF2	6.488	0.058

Based on the Modification Indices values for Model B, the results present MI values below 15 indicating that there are no item redundancy in the model. Therefore, there is no need to make any modification on the measurement model. MacCallum et al (1992) and Byrne (2010) opine that additional modification is not necessary when the model is already adequate or fits well as further modifications may merely cater to overfitting or sample fluctuations. As such, there is no need to create additional relationships or allude to any modifications for Model B, which is deemed as possessing adequate theoretical construct and validity. Following this determination and adopting the analysis flow of the previous model, the researcher proceeded to examine Model B's consistency, reliability and validity which looks at the convergent and discriminant validity in the following section.

Again, the researcher evaluates the convergent validity parameter through the investigation of the standardized and unstandardized estimates on its regression weight, along with the estimate, standard error (SE), critical ratio (CR) and significant p-value levels (p-value). Table 33 presents Model B's parameter estimates. The critical ratio values were above  $\pm 1.96$ , as indicated from the unstandardized estimates' results in the table above, with the significant p-value level at 0.001 (two-tailed). The values suggest that the construct possesses good measures. Likewise, the results for the standardized estimates present a model that exhibits convergent validity as indicated by the significant p-value at 0.001 with every variable loading

higher than 0.5. The results conclude that all the dimensions of cultural values indicate a positive relationship with the second-order construct and hence, supports the premise of this study that “The dimensions of cultural values in the high-contact hospitality industry are “Individualism/ Collectivism Index, Indulgence/ Restraint Index, Masculinity/ Femininity Index, Power Distance Index and Uncertainty Avoidance Index.”

**Table 33: Parameter Estimates of Model B**

			Regression Weight		S.E.	C.R.	P
			Unstandardized	Standardized			
IC	<---	CV	1.000	.986			
IR	<---	CV	1.339	.859	.287	4.974	***
MF	<---	CV	1.308	.645	.280	4.860	***
PD	<---	CV	1.245	.937	.276	4.719	***
UA	<---	CV	1.280	.756	.289	4.628	***
IC1	<---	IC	1.000	.841			
IC2	<---	IC	1.166	.721	.141	8.157	***
IC3	<---	IC	1.258	.686	.151	9.629	***
IC4	<---	IC	.970	.650	.137	7.537	***
IC5	<---	IC	1.127	.778	.140	8.557	***
IC6	<---	IC	.949	.589	.125	8.148	***
IR1	<---	IR	1.000	.753			
IR2	<---	IR	1.054	.592	.153	7.441	***
IR3	<---	IR	.967	.647	.137	7.545	***
IR4	<---	IR	.867	.680	.136	7.440	***
IR5	<---	IR	1.045	.715	.149	7.552	***
IR6	<---	IR	.979	.704	.144	7.484	***
MF1	<---	MF	1.000	.802			
MF2	<---	MF	1.012	.747	.151	7.174	***
MF3	<---	MF	1.024	.688	.151	7.437	***
MF4	<---	MF	1.115	.655	.162	7.359	***
PD1	<---	PD	1.000	.737			
PD2	<---	PD	1.058	.815	.135	8.506	***
PD3	<---	PD	.659	.625	.115	6.381	***
PD4	<---	PD	.760	.541	.122	6.406	***
UA1	<---	UA	1.000	.658			
UA2	<---	UA	1.046	.674	.151	7.573	***
UA3	<---	UA	.826	.847	.130	6.471	***

\*\*\*Significant level at 0.001 (two-tailed)

#### 4.6.4 SEM Analysis for Model C

In this section, a structural model of cultural values relevant to the hospitality industry was constructed to estimate the parameters. This model is labelled as Model C whereby the items were derived from the first-order construct analysis conducted earlier. The same five dimensions, Individualism/ Collectivism Index (IC), Indulgence/ Restraint Index (IR),

Masculinity/ Femininity Index (MF), Power Distance Index (PD) and Uncertainty Avoidance Index (UA), were carried forward and incorporated into Model C. The objective of this section was to test the following six (out of twelve) hypotheses:

H1a. The power distance cultural dimension has a significant influence on service quality expectations.

H1b. The individualism/ collectivism cultural dimension has a significant influence on service quality expectations.

H1c. The masculinity/ femininity cultural dimension has no significant influence on service quality expectations.

H1d. The uncertainty avoidance dimension has a significant influence on service quality expectations.

H1e. The short term/ long term orientation dimension has a significant influence on service quality expectations.

H1f. The indulgence/ restraining dimension has a significant influence on service quality expectations.

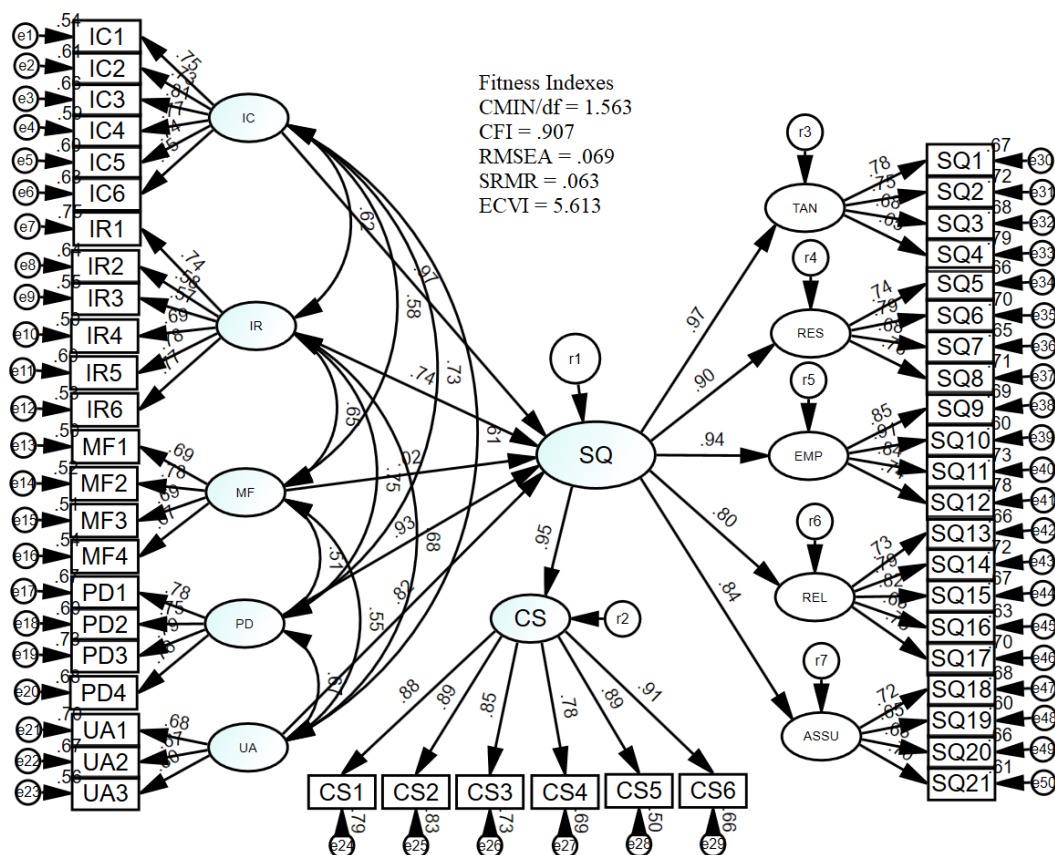
The structural “Model C” is as illustrated in Figure 17 below with its tabulated parameter estimates and its characteristics described in the following section.

- a) There are five sub constructs for the cultural value (CV) model which are labelled accordingly: Individualism/ Collectivism Index (IC), Indulgence/ Restraint Index (IR), Masculinity/ Femininity Index (MF), Power Distance Index (PD) and Uncertainty Avoidance Index (UA).
- b) The dimension of IC was measured by six indicator whereas the dimension of IR was measured by another six indicators. Correspondingly, the dimension of MF and PD were measured by another four items respectively with the remaining UA dimension being measured by three indicators.
- c) The individual items on its respective latent variable, as determined in the earlier analysis, exhibit a non-zero loading and was constructed to measure the other four latent variables’ zero loading.
- d) The mediating latent variable or construct, service quality expectation, was measured by five dimensions that consists of twenty one observed variables: SQ1, SQ2, SQ3, SQ4, SQ5, SQ6, SQ7, SQ8, SQ9, SQ10, SQ11, SQ12, SQ13, SQ14, SQ15, SQ16, SQ17, SQ18, SQ19,

SQ20 and SQ21.

- e) The endogenous latent variable, customer satisfaction, was measured by six observed variables: CS1, CS2, CS3, CS4, CS5 and CS6.
- f) This study was developed to consider the influences of the individual cultural values dimensions on service quality expectations and customer satisfaction.
- g) The observed variables were devised to have no correlations with the associated error terms.
- h) The errors in the equation or the residuals (res1, res2, res3, res4, res5, res6 and res7) are associated with the endogenous latent variables, SQ, CS, TAN, RES, EMP, REL and ASSU respectively.
- i) The indicators e30 to e50 are the measurement errors for items SQ1 to SQ21 respectively in the SQ construct whereas e24 to e29 are the errors in measurement for items CS1 to CS6 in the construct CS.
- j) All the constructs' metric of factor loading parameters were fixed at the value of 1.0.

**Figure 17: Model C's Structural Model of CV Dimensions, SQ and CS**



As per the previous evaluations, this assessment also commenced with the goodness-of-fit statistical tests on Model C. The researcher ran all the fit tests in AMOS and shortlisted the following fit indicators in the examination of Model C's goodness-of-fit. The results are as presented in Table 34 below:

**Table 34: Model C's Goodness-of-Fit Test Results**

	CMIN/DF	CFI	RMSEA	SRMR	ECVI	ECVI (SAT)	ECVI (IND)
Model C	1.563	0.910	0.069	0.063	5.613	6.848	20.154

Based on the goodness-of-fit test results for Model C, the CMIN/DF was 1.563. According to Byrne (2010), the value of CMIN/DF should be in the region of 1.0 for the model to be tenable. Since the result is between 1.0 and 2.0, this test indicates that the model fit is adequate.

The results for the CFI fit test returned a score of 0.910. According to Bentler (1992), a CFI value above 0.90 is representation of good fit though Hu and Bentler (1999) revised the good fit value to not exceed 0.95. As such, the CFI measure indicates that Model C is a well-fitting model.

A good model fit requires a RMSEA value lower than 0.05 (Browne and Cudeck, 1993). Nevertheless, MacCallum et al (1996) posit that RMSEA values ranging from 0.08 to 0.10 as indicative of acceptable model fit while only values above 0.10 are considered as poor fit. However, Hu and Bentler (1999) propose that a model with good fit as possessing a value of 0.06. Since the results for the RMSEA value from the test was 0.069, the conclusion is that the model exhibits adequate goodness-of-fit.

Model C's SRMR results was 0.0630. SRMR values ranges from zero to 1.0 with the lower values indicating better fit though Hu and Bentler (1999) propose the SRMR value to be less than 0.08 to qualify as a model with good fit. According to Byrne (2010), a SRMR result of zero represents a model with perfect fit. In view with these positions, Model C is deemed as a well-fitting model.

Lastly, the ECVI score for Model C was 5.613, which was then assessed against the ECVI Ind (independence) and ECVI Sat (saturated) models. Byrne (2010) propose that the ECVI score to be the lowest of the three to represent best fit. Since the ECVI results of 5.613 was lower than both the ECVI Ind's 20.154 and ECVI Sat's 6.848 results, the model is considered as a

well-fitting model.

As indicated by the statistical results, Model C is considered an empirically acceptable model based on the positive goodness-of-fit tests and evaluation. MacCallum et al (1992) and Byrne (2010) cautioned against additional modification when the model is already adequate or fits well as further modifications may merely cause overfitting or cater to sample idiosyncrasies. As such, there is no need to create additional relationships or allude to any modifications for Model C, which is deemed as possessing adequate theoretical construct and validity. Following this determination and keeping with the analysis progression, Table 35 below presents the unstandardized and standardized regression weight values.

**Table 35: Parameter Estimates of Model C**

			Regression Weight		S.E.	C.R.	P
			Unstandardized	Standardized			
SQ	<---	IC	1.439	.975	.288	4.985	***
SQ	<---	IR	1.348	.748	.205	4.850	***
SQ	<---	MF	0.022	.022	.067	0.328	.743
SQ	<---	PD	1.244	.934	.254	4.808	***
SQ	<---	UA	1.104	.829	.285	4.644	***
IC1	<---	IC	1.000	.755			
IC2	<---	IC	1.214	.731	.165	8.554	***
IC3	<---	IC	1.208	.810	.154	9.243	***
IC4	<---	IC	.988	.773	.143	7.634	***
IC5	<---	IC	1.115	.745	.138	8.889	***
IC6	<---	IC	.958	.750	.119	8.210	***
IR1	<---	IR	1.000	.742			
IR2	<---	IR	1.048	.588	.168	7.558	***
IR3	<---	IR	.985	.572	.145	7.450	***
IR4	<---	IR	.844	.698	.125	7.431	***
IR5	<---	IR	1.103	.785	.140	7.377	***
IR6	<---	IR	.958	.774	.134	7.264	***
MF1	<---	MF	1.000	.695			
MF2	<---	MF	1.142	.781	.158	7.274	***
MF3	<---	MF	1.045	.690	.145	7.488	***
MF4	<---	MF	1.019	.678	.134	7.395	***
PD1	<---	PD	1.000	.789			
PD2	<---	PD	1.451	.755	.142	8.119	***
PD3	<---	PD	.789	.790	.125	6.788	***
PD4	<---	PD	.758	.781	.118	6.547	***
UA1	<---	UA	1.000	.689			
UA2	<---	UA	1.149	.674	.144	7.622	***
UA3	<---	UA	.855	.807	.139	6.553	***
CS	<---	SQ	1.415	.954	.289	4.951	***
TAN	<---	SQ	1.404	.974	.318	4.694	***
RES	<---	SQ	1.392	.905	.298	4.599	***
EMP	<---	SQ	1.301	.945	.345	4.585	***
REL	<---	SQ	1.258	.802	.305	4.504	***
ASSU	<---	SQ	1.000	.845			
CS1	<---	CS	1.000	.882			

CS2	<---	CS	1.254	.893	.154	8.451	***
CS3	<---	CS	1.204	.856	.148	9.025	***
CS4	<---	CS	.988	.789	.134	7.677	***
CS5	<---	CS	1.080	.890	.141	8.628	***
CS6	<---	CS	.954	.912	.138	8.284	***
SQ1	<---	TAN	1.000	.783			
SQ2	<---	TAN	1.034	.756	.254	5.682	***
SQ3	<---	TAN	.994	.683	.188	7.592	***
SQ4	<---	TAN	.985	.655	.157	7.401	***
SQ5	<---	RES	1.000	.747			
SQ6	<---	RES	1.044	.791	.154	7.558	***
SQ7	<---	RES	.988	.680	.131	7.329	***
SQ8	<---	RES	.805	.788	.120	7.073	***
SQ9	<---	EMP	1.000	.852			
SQ10	<---	EMP	1.021	.913	.133	8.803	***
SQ11	<---	EMP	.984	.843	.124	7.718	***
SQ12	<---	EMP	.905	.741	.104	8.410	***
SQ13	<---	REL	1.000	.736			
SQ14	<---	REL	1.088	.792	.138	8.544	***
SQ15	<---	REL	1.203	.820	.129	9.480	***
SQ16	<---	REL	.959	.632	.118	7.458	***
SQ17	<---	REL	.908	.755	.113	8.071	***
SQ18	<---	ASSU	1.000	.729			
SQ19	<---	ASSU	1.089	.651	.155	7.245	***
SQ20	<---	ASSU	.955	.688	.141	7.083	***
SQ21	<---	ASSU	.814	.707	.134	6.805	***

\*\*\*Significant level at 0.001 (two-tailed)

Again, the researcher evaluates the validity parameters through the investigation of the standardized and unstandardized estimates on its regression weight, along with the estimate, standard error (SE), critical ratio (CR) and significant p-value levels (p-value). Table 35 above presents Model C's parameter estimates. All of the path coefficient analysis, with the exception of one, indicate that the critical ratio values were above  $\pm 1.96$ , as presented from the parameter estimates in the table below, with the significant p-value level at 0.001 (two-tailed). The values suggest that these constructs possess good measures. Likewise, the results for the standardized estimates indicate that the structural model exhibits convergent validity as indicated by the significant p-value at 0.001 with every variable loading higher than 0.5. The results conclude that these observed variables indicate an affirmative and significant relationship with their respective construct. Nevertheless, there was a single path, MF to SQ, which was deemed not significant with the critical ratio result that was below  $\pm 1.96$  and the p-value at 0.743. This could be due to model misspecification which restricted the direct linkage from MF to SQ.



#### 4.6.5 SEM Analysis for Model D

In this section, a structural model of cultural values relevant to the hospitality industry was constructed to estimate the parameters. This model is labelled as Model D whereby the items were derived from the second-order construct analysis conducted previously. The same main construct, Cultural Values (CV), along with its five sub-dimensions, Individualism/ Collectivism Index (IC), Indulgence/ Restraint Index (IR), Masculinity/ Femininity Index (MF), Power Distance Index (PD) and Uncertainty Avoidance Index (UA), were carried forward and incorporated into Model D. The objective of this section was to test the following three (out of twelve) hypotheses:

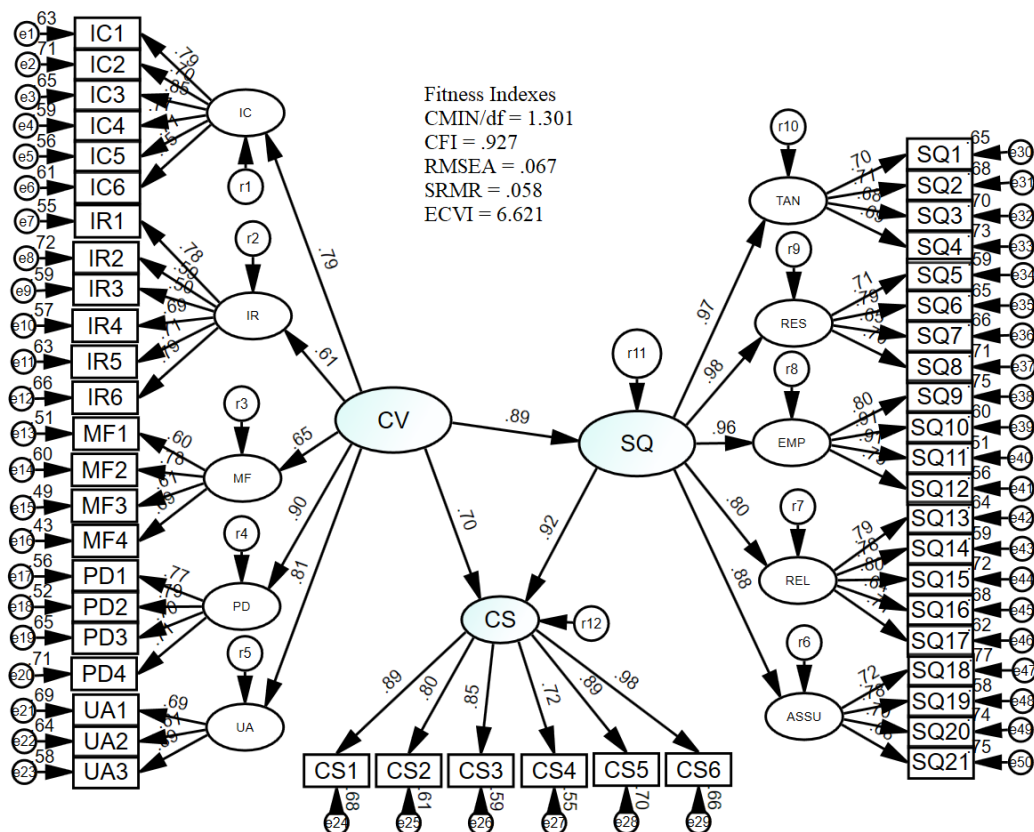
- H1. Cultural value has a positive and significant effect on service quality expectations
- H2. Service quality expectation has a positive and significant effect on customer satisfaction.
- H3. Service quality expectation mediates the relationship between cultural values and customer satisfaction

The structural “Model D” is as illustrated in Figure 18 below with its tabulated parameter estimates and its characteristics described in the following section.

- a) There are five factors for the cultural value (CV) model which are labelled accordingly: Individualism/ Collectivism Index (IC), Indulgence/ Restraint Index (IR), Masculinity/ Femininity Index (MF), Power Distance Index (PD) and Uncertainty Avoidance Index (UA).
- b) The dimension of IC was measured by six indicators whereas the dimension of IR was measured by another six indicators. Correspondingly, the dimension of MF and PD were measured by another four items respectively with the remaining UA dimension being measured by three indicators.
- c) The individual items on its respective latent variable, as determined in the earlier analysis, exhibit a non-zero loading and was constructed to measure the other three latent variables’ zero loading.
- d) The mediating construct, service quality expectation, was measured by five dimensions that consists of twenty one observed variables: SQ1, SQ2, SQ3, SQ4, SQ5, SQ6, SQ7, SQ8, SQ9, SQ10, SQ11, SQ12, SQ13, SQ14, SQ15, SQ16, SQ17, SQ18, SQ19, SQ20 and SQ21.

- e) The endogenous construct, customer satisfaction, was measured by six observed variables: CS1, CS2, CS3, CS4, CS5 and CS6.
- f) This study was developed to consider the influences of the cultural construct on service quality expectation and customer satisfaction. The study also examined the direct effects of service quality expectation on customer satisfaction as well as its mediating role between cultural values and customer satisfaction.
- g) The observed variables were devised to have no correlations with the associated error terms.
- h) The residual for the equation (res1, res2, res3, res4, res5, res6, res7, res8, res9, res10, res11 and res12) are associated with the endogenous latent variables, IC, IR, MF, PD, UA, ASSU, REL, EMP, RES, TAN, SQ and CS respectively.
- i) All the constructs' metric of factor loading parameters were fixed at the value of 1.0.

**Figure 18: Model D's Structural Model of CV, SQ and CS**



As per the previous evaluations, this assessment also commenced with the goodness-of-fit statistical tests on Model D. The researcher ran all the fit tests in AMOS and shortlisted the following fit indicators in the examination of Model D's goodness-of-fit. The results are as

presented in Table 36 below:

**Table 36: Model D's Goodness-of-Fit Test Results**

	CMIN/DF	CFI	RMSEA	SRMR	ECVI	ECVI (SAT)	ECVI (IND)
Model D	1.301	0.927	0.067	0.058	6.621	7.973	21.142

Based on the goodness-of-fit test results for Model D, the CMIN/DF was 1.301. According to Byrne (2010), the value of CMIN/DF should be in the region of 1.0 for the model to be tenable. Since the result is closer to 1.0 than 2.0, this test indicates that the model fit is adequate.

The results for the CFI fit test returned a score of 0.927. According to Bentler (1992), a CFI value above 0.90 is representation of good fit though Hu and Bentler (1999) revised the good fit value to not exceed 0.95. As such, the CFI measure indicates that Model D is a well-fitting model.

A good model fit requires a RMSEA value lower than 0.05 (Browne and Cudeck, 1993). Nevertheless, MacCallum et al (1996) posit that RMSEA values ranging from 0.08 to 0.10 as indicative of acceptable model fit while only values above 0.10 are considered as poor fit. However, Hu and Bentler (1999) propose that a model with good fit as possessing a value of 0.06. Since the results for the RMSEA value from the test was 0.067, the conclusion is that the model exhibits adequate goodness-of-fit.

Model D's SRMR results was 0.058. SRMR values ranges from zero to 1.0 with the lower values indicating better fit though Hu and Bentler (1999) propose the SRMR value to be smaller than 0.08 to qualify as a model with good fit. According to Byrne (2010), a SRMR result of zero represents a model with perfect fit. In view with these positions, Model D is deemed as a well-fitting model.

Lastly, the ECVI score for Model C was 6.621, which was then assessed against the ECVI Ind (independence) and ECVI Sat (saturated) models. Byrne (2010) propose that the ECVI score to be the lowest of the three to represent best fit. Since the ECVI results of 6.621 was lower than both the ECVI Ind's 21.142 and ECVI Sat's 7.973 results, the model is considered as a well-fitting model.

As indicated by the statistical results, Model D is considered an empirically acceptable model

based on the positive goodness-of-fit tests and evaluation. MacCallum et al (1992) and Byrne (2010) cautioned against additional modification when the model is already adequate or fits well as further modifications may merely cause overfitting or cater to sample idiosyncrasies. As such, there is no need to create additional relationships or allude to any modifications for Model D, which is deemed as possessing adequate theoretical construct and validity. Following this determination and keeping with the analysis progression, Table 37 presents the unstandardized and standardized factor loading values.

**Table 37: Parameter Estimates of Model D**

			Regression Weight				
			Unstandardized	Standardized	S.E.	C.R.	P
SQ	<---	CV	1.183	.891	.591	7.944	***
IC	<---	CV	1.000	.793			
IR	<---	CV	1.446	.618	.386	5.835	***
MF	<---	CV	1.375	.658	.290	4.583	***
PD	<---	CV	1.212	.905	.427	5.991	***
UA	<---	CV	1.108	.817	.192	4.038	***
CS	<---	CV	1.021	.708	.110	3.487	***
IC1	<---	IC	1.000	.794			
IC2	<---	IC	1.316	.701	.324	4.295	***
IC3	<---	IC	1.283	.858	.284	8.843	***
IC4	<---	IC	.964	.773	.390	7.038	***
IC5	<---	IC	1.026	.710	.419	6.735	***
IC6	<---	IC	.985	.758	.285	5.823	***
IR1	<---	IR	1.000	.781			
IR2	<---	IR	1.1037	.592	.847	7.824	***
IR3	<---	IR	.978	.503	.103	5.822	***
IR4	<---	IR	.837	.692	.582	5.702	***
IR5	<---	IR	1.029	.710	.185	6.251	***
IR6	<---	IR	.940	.792	.119	7.889	***
MF1	<---	MF	1.000	.604			
MF2	<---	MF	1.201	.784	.295	5.582	***
MF3	<---	MF	1.184	.618	.158	7.295	***
MF4	<---	MF	1.029	.695	.305	6.139	***
PD1	<---	PD	1.000	.779			
PD2	<---	PD	1.378	.795	.284	8.946	***
PD3	<---	PD	.830	.702	.310	6.942	***
PD4	<---	PD	.855	.719	.184	7.288	***
UA1	<---	UA	1.000	.695			
UA2	<---	UA	1.284	.617	.152	7.037	***
UA3	<---	UA	.894	.895	.114	6.592	***
CS	<---	SQ	1.415	.927	.158	8.184	***
TAN	<---	SQ	1.404	.974	.318	4.694	***
RES	<---	SQ	1.346	.985	.218	4.188	***
EMP	<---	SQ	1.274	.968	.394	4.042	***
REL	<---	SQ	1.107	.804	.303	4.595	***
ASSU	<---	SQ	1.000	.884			
CS1	<---	CS	1.000	.892			
CS2	<---	CS	1.749	.806	.154	8.451	***
CS3	<---	CS	1.365	.856	.148	9.025	***
CS4	<---	CS	.962	.722	.134	7.677	***

CS5	<---	CS	1.552	.895	.141	8.628	***
CS6	<---	CS	.974	.986	.138	8.284	***
SQ1	<---	TAN	1.000	.705			
SQ2	<---	TAN	1.184	.710	.282	5.824	***
SQ3	<---	TAN	.973	.688	.195	7.659	***
SQ4	<---	TAN	.936	.696	.122	7.993	***
SQ5	<---	RES	1.000	.710			
SQ6	<---	RES	1.193	.792	.104	7.294	***
SQ7	<---	RES	.975	.658	.126	7.696	***
SQ8	<---	RES	.885	.702	.185	7.195	***
SQ9	<---	EMP	1.000	.805			
SQ10	<---	EMP	1.284	.913	.119	8.959	***
SQ11	<---	EMP	.996	.829	.152	7.201	***
SQ12	<---	EMP	.928	.755	.195	8.953	***
SQ13	<---	REL	1.000	.792			
SQ14	<---	REL	1.935	.781	.128	8.043	***
SQ15	<---	REL	1.992	.809	.194	9.295	***
SQ16	<---	REL	.957	.647	.185	7.002	***
SQ17	<---	REL	.929	.719	.127	8.194	***
SQ18	<---	ASSU	1.000	.725			
SQ19	<---	ASSU	1.955	.782	.195	7.025	***
SQ20	<---	ASSU	.917	.706	.104	7.995	***
SQ21	<---	ASSU	.859	.689	.155	6.593	***

\*\*\*Significant level at 0.001 (two-tailed)

Again, the researcher evaluates the validity parameters through the investigation of the standardized and unstandardized estimates on its regression weight, along with the estimate, standard error (SE), critical ratio (CR) and significant p-value levels (p-value). Table 37 presents Model D's parameter estimates indicating the regression path coefficients between the constructs and its significance. The critical ratio values were above  $\pm 1.96$ , as indicated from the unstandardized estimates' results in the tables appended, with the significant p-value level at 0.001 (two-tailed). The values suggest that the construct possesses good measures. Likewise, the results for the standardized estimates indicate that the structural model exhibits convergent validity as indicated by the significant p-value at 0.001 with every variable loading higher than 0.5. The results conclude that all the observed variables indicate an affirmative relationship with their respective construct.

#### 4.7 SEM Analysis Results

Based on the EFA analysis in the pre-analysis section, the cultural value construct relevant to the hospitality industry was consolidated into five main dimensions: Individualism/ Collectivism Index (IC), Indulgence/ Restraint Index (IR), Masculinity/ Femininity Index

(MF), Power Distance Index (PD) and Uncertainty Avoidance index (UA). After multiple EFA runs, the researcher found that items from two of the original cultural values dimensions, Uncertainty Avoidance Index (UA) and Long Term/ Short Term Orientation Index (LTO), had merged or combined with other dimensions, hence condensing the original six dimensions into the remaining five dimensions. Due to the resulting reconfigured dimensions, one of the hypotheses are not supported. The affected hypothesis is H1e which referred to “The short term/ long term orientation dimension has a significant correlation to service quality expectations.” This could be due to unanticipated shortcomings or inadequacy in the development of the measurement item or scale that would be able to represent the two dimensions appropriately and effectively. Nevertheless, the remaining hypotheses, H1, H1a, H1b, H1c, H1d, H1f, H2 and H3 are supported by the model in the analysis, with its statistical findings and values as presented below in Table 38 and the subsequent paragraphs.

**Table 38: Results on Hypothesis**

Hypothesis	Construct Path			Standardized Estimate	S.E.	C.R.	P	Status
H1	SQ	<---	CV	0.891	0.591	7.944	0.001	Significant
H1a	SQ	<---	PD	0.934	0.254	4.808	0.001	Significant
H1b	SQ	<---	IC	0.975	0.288	4.985	0.001	Significant
H1c	SQ	<---	MF	0.022	0.067	0.328	0.743	Not Significant
H1d	SQ	<---	UA	0.829	0.285	4.644	0.001	Significant
H1f	SQ	<---	IR	0.748	0.205	4.854	0.001	Significant
H2	CS	<---	SQ	0.954	0.108	8.712	0.001	Significant
H3	CS	<---	CV	0.708	0.110	3.487	0.001	Significant

H1. Cultural value has a positive and significant effect on service quality expectation

Based on the results, the standardized estimate of regression weight was 0.891, with the standard error value at 0.591. CR results was 7.944 which is greater than  $\pm 1.96$  with the significant p-value at 0.001 (two-tailed). As such, cultural values significantly impacts service quality expectations.

H1a. The power distance cultural dimension has a significant influence on service quality expectations.

Based on the results, the standardized estimate of regression weight was 0.934, with the

standard error value at 0.254. CR results was 4.808 which is greater than  $\pm 1.96$  with the significant p-value at 0.001 (two-tailed). Hence, the power distance cultural dimension has a significant influence on service quality expectations.

H1b. The individualism/ collectivism cultural dimension has a significant influence on service quality expectations.

Based on the results, the standardized estimate of regression weight was 0.975, with the standard error value at 0.288. CR results was 4.985 which is greater than  $\pm 1.96$  with the significant p-value at 0.001 (two-tailed). Therefore, the individualism/ collectivism cultural dimension has a significant influence on service quality expectations.

H1c. The masculinity/ femininity cultural dimension has no significant influence on service quality expectations.

Based on the results, the standardized estimate of regression weight was 0.022, with the standard error value at 0.067. CR results was 0.328 which is below the  $\pm 1.96$  threshold with the p-value at 0.743. Therefore, the masculinity/ femininity cultural dimension has no significant influence on service quality expectations.

H1d. The uncertainty avoidance dimension has a significant influence on service quality expectations.

Based on the results, the standardized estimate of regression weight was 0.829, with the standard error value at 0.285. CR results was 4.644 which is greater than  $\pm 1.96$  with the significant p-value at 0.001 (two-tailed). Hence, the uncertainty avoidance dimension has a significant influence on service quality expectations.

H1f. The indulgence/ restraining dimension has a significant influence on service quality expectations.

Based on the results, the standardized estimate of regression weight was 0.748, with the standard error value at 0.205. CR results was 4.850 which is greater than  $\pm 1.96$  with the significant p-value at 0.001 (two-tailed). As such, the indulgence/ restraining dimension has a significant influence on service quality expectations.

H2. Service quality expectation has a positive and significant effect on customer satisfaction.

Based on the results, the standardized estimate of regression weight was 0.954, with the standard error value at 0.108. CR results was 8.712 which is greater than  $\pm 1.96$  with the significant p-value at 0.001 (two-tailed). Hence, service quality expectation has a positive and significant effect on customer satisfaction.

H3. Service quality expectation mediates the relationship between cultural values and customer satisfaction.

Based on the results, the standardized estimate of regression weight between cultural values and the customer satisfaction construct was 0.708, with the standard error value at 0.110. CR results was 3.487 which is greater than  $\pm 1.96$  with the significant p-value at 0.001 (two-tailed). However, the mediator variable plays the role of indicating the indirect effect of the exogenous construct on a separate endogenous construct. Since the hypothesis testing for regression coefficient between CV and CS is still significant with the absolute value of CV to SQ and SQ to CS being higher than the absolute value of CV to CS, hence the service quality expectation construct only partially mediates the relationship between cultural values and customer satisfaction.

#### **4.8 Analysing the Moderating Variables**

There are three hypotheses in this study that looked at variables in a moderating role and its influence on the cultural value and service quality expectation relationship. The moderating factors examined are the three demographic variables; gender (A1MF3), generational cohort (A2MF1) and ethnicity (A3MF2). As explained in Chapter Three, multi-group analysis were conducted so as to establish the invariance or non-invariance of the variables. The study has also established in the above section that the relationship between cultural values and service quality expectation is highly significant. This is a necessary requirement towards running a multi-group analysis as outlined in Chapter Three.



There are a few steps to performing a multi-group analysis. Firstly, the moderator variables' data were split into two separate data sets. Then two separate AMOS models, Model 1 and Model 2, are developed with Model 1's parameter in the path constrained to equal 1 and Model 2 with no constraints in the path of interest. In the next step, the first dataset was used to estimate the constrained model and then the unconstrained model and the difference in chi-square value obtained. Moderation only occurs when the chi-square value differs by more than 3.840. The same procedure is then repeated using the second dataset whereby the both the constrained and unconstrained models are re-estimated. As with the first model, the chi-square value difference between the constrained and unconstrained models is obtained. Again, if the value differs by more than 3.84, then moderation has occurred in that path.

### Generational Differences

In this study, hypothesis H4 proposed that “Generational differences moderates the relationship between cultural values and service quality expectations.” Generational cohort was a categorical variable collected in Section A. Two groups of generational cohorts were selected, the Gen X cohort (Dataset 1) and the Gen Y cohort (Dataset 2). There were 116 respondents from the Gen X cohort whereas the Gen Y cohort consists of 172 respondents. Based on the steps outlined above to conduct the multi-group analysis, the results output are as presented in Table 39 below.

**Table 39: H4's Chi-Square Value Difference**

Constrained	NPAR	CMIN	DF	P	CMIN/DF
Default Model	28	123.530	50	0.000	2.470
Saturated Model	78	0.000	0		
Independence Model	12	1761.731	66	0.000	26.692
Unconstrained	NPAR	CMIN	DF	P	CMIN/DF
Default Model	29	74.585	49	0.013	1.522
Saturated Model	78	0000	0		
Independence Model	12	1761.731	66	0.000	26.692
Dataset 1	Constrained Model	Unconstrained Model	Chi-Square Difference	Results on Moderation	Results on Hypothesis
Chi-Square	123.530	74.585	48.945	Significant	Supported
DF	50	49	1		
The hypothesis statement:					Supported
H4: Generational Differences moderates the relationship between cultural values and service quality expectations.					
Constrained	NPAR	CMIN	DF	P	CMIN/DF

Default Model	28	155.088	50	0.000	3.101
Saturated Model	78	0.000	0		
Independence Model	12	1985.040	66	0.000	30.076
Unconstrained	NPAR	CMIN	DF	P	CMIN/DF
Default Model	29	84.540	49	0.000	1.725
Saturated Model	78	0000	0		
Independence Model	12	1985.040	66	0.000	30.076
Dataset 2	Constrained Model	Unconstrained Model	Chi-Square Difference	Results on Moderation	Results on Hypothesis
Chi-Square	155.088	84.540	70.548	Significant	Supported
DF	50	49	1		
The hypothesis statement:					Supported
H4: Generational Differences moderates the relationship between cultural values and service quality expectations.					

Based on the above results, the moderation is significant since the difference in the chi-square value between the constrained and unconstrained model is above 3.840 for both Dataset 1 and Dataset 2 which ran on separate data sets. Group Gen X's chi-square difference value is 48.945 whereas Group Y's chi-square difference is 70.548 with the degrees of freedom value being 1. In order for the test to be deemed significant, the chi-square value difference need to be above the chi-square value with 1 degree of freedom, 3.840. As such, the results indicate support for the hypothesis that generational differences moderates the relationship between latent exogenous construct, cultural value, and its corresponding latent endogenous construct, service quality expectations.

## Ethnicity

In this study, hypothesis H5 proposed that “Ethnicity moderates the relationship between cultural values and service quality expectations.” Ethnicity was a categorical variable collected in Section A. Two ethnicity groups were selected, C (Dataset 1) and M (Dataset 2). There were 182 respondents from Group C whereas Group M consists of 152 respondents. Based on the steps outlined above to conduct the multi-group analysis, the results output are as presented in Table 40 below.

**Table 40: H5's Chi-Square Value Difference**

Constrained	NPAR	CMIN	DF	P	CMIN/DF
Default Model	28	108.949	50	0.000	2.178
Saturated Model	78	0.000	0		

Independence Model	12	2001.951	66	0.000	30.332
Unconstrained	NPAR	CMIN	DF	P	CMIN/DF
Default Model	29	105.401	49	0.013	2.151
Saturated Model	78	0000	0		
Independence Model	12	2001.951	66	0.000	30.332
Dataset 1	Constrained Model	Unconstrained Model	Chi-Square Difference	Results on Moderation	Results on Hypothesis
Chi-Square	108.949	105.401	3.548	Not Significant	Not Supported
DF	50	49	1		
The hypothesis statement:  H4: Ethnicity moderates the relationship between cultural values and service quality expectations.					Not Supported
Constrained	NPAR	CMIN	DF	P	
Default Model	28	78.960	50	0.000	1.579
Saturated Model	78	0.000	0		
Independence Model	12	1670.271	66	0.000	25.307
Unconstrained	NPAR	CMIN	DF	P	CMIN/DF
Default Model	29	75.484	49	0.000	1.540
Saturated Model	78	0000	0		
Independence Model	12	1670.271	66	0.000	25.307
Dataset 2	Constrained Model	Unconstrained Model	Chi-Square Difference	Results on Moderation	Results on Hypothesis
Chi-Square	78.960	75.484	3.476	Not Significant	Not Supported
DF	50	49	1		
The hypothesis statement:  H4: Ethnicity moderates the relationship between cultural values and service quality expectations.					Not Supported

Based on the above results, the verdicts were the same for both Dataset 1 and Dataset 2 whereby the moderating influence is not significant since the difference in the chi-square value between the constrained and unconstrained model is below 3.840. Group C's chi-square difference value is 3.548 whereas Group M's chi-square difference is 3.476 with the degrees of freedom value being 1. In order for the test to be deemed significant, the chi-square value difference need to be above the chi-square value with 1 degree of freedom, 3.840. As such, the test of hypothesis for moderation that was performed found that the moderator variable "ethnicity" does not moderate the causal effects of the cultural value construct on the endogenous construct, service quality expectations. Therefore, the hypothesis that "Ethnicity moderates the relationship between cultural values and service quality expectations" is rejected.

## Gender

In this study, hypothesis H6 proposed that “Gender moderates the relationship between cultural values and service quality expectations.” Gender was a categorical variable collected in Section A. This moderating variable was then separated into two groups, M (Dataset 1) and F (Dataset 2). There were 217 respondents from Group M whereas Group F consists of 203 respondents. Based on the steps outlined above to conduct the multi-group analysis, the results output are as presented in Table 41 below.

**Table 41: H6’s Chi-Square Value Difference**

Constrained	NPAR	CMIN	DF	P	CMIN/DF
Default Model	28	108.565	50	0.000	2.171
Saturated Model	78	0.000	0		
Independence Model	12	2000.855	66	0.000	30.315
Unconstrained	NPAR	CMIN	DF	P	CMIN/DF
Default Model	29	105.480	49	0.013	2.152
Saturated Model	78	0000	0		
Independence Model	12	2000.855	66	0.000	30.315
Dataset 1	Constrained Model	Unconstrained Model	Chi-Square Difference	Results on Moderation	Results on Hypothesis
Chi-Square	108.565	105.480	3.085	Not Significant	Not Supported
DF	50	49	1		
The hypothesis statement:					Not Supported
H4: Gender moderates the relationship between cultural values and service quality expectations.					
Constrained	NPAR	CMIN	DF	P	CMIN/DF
Default Model	28	77.825	50	0.000	1.556
Saturated Model	78	0.000	0		
Independence Model	12	1758.408	66	0.000	26.642
Unconstrained	NPAR	CMIN	DF	P	CMIN/DF
Default Model	29	74.841	49	0.000	1.557
Saturated Model	78	0000	0		
Independence Model	12	1758.408	66	0.000	26.642
Dataset 2	Constrained Model	Unconstrained Model	Chi-Square Difference	Results on Moderation	Results on Hypothesis
Chi-Square	77.825	74.841	2.984	Not Significant	Not Supported
DF	50	49	1		
The hypothesis statement:					Not Supported
H4: Gender moderates the relationship between cultural values and service quality expectations.					

Based on the above results, the moderating influence is not significant as per the first moderating variable since the difference in the chi-square value between the constrained and unconstrained model is below 3.840 as well. Again, the results were the same for both Dataset 1 and Dataset 2 in this section. Group M's chi-square difference value is 3.085 whereas Group F's chi-square difference is 2.984 with the degrees of freedom value being 1. In order for the test to be considered significant, the chi-square value difference need to be above the chi-square value with 1 degree of freedom, 3.840. As such, the test of hypothesis for moderation that was run observed that the moderator variable "gender" does not moderate the causal effects of the cultural value construct on the endogenous construct, service quality expectations. Therefore, the hypothesis that "Gender moderates the relationship between cultural values and service quality expectations" is rejected.

#### **4.9 Results Summary**

To summarise, there were a total of twelve hypotheses tested in this paper. Out of the twelve hypotheses proposed, three were rejected. The research's findings are as summarised. On a whole, the cultural value construct confirms a positive and significant influence on service quality expectations (H1). However, out of the six individual cultural value dimensions, the short term/ long term dimension, had to be dropped due to unanticipated shortcomings or inadequacy in the measurement scale (H1e). Nevertheless, the remaining sub construct dimensions; power distance (H1a), individualism/ collectivism (H1b), uncertainty avoidance (H1d) and indulgence/ restraining (H1f) dimensions independently support a positive influence on service quality expectation with the masculinity/ femininity cultural dimension (H1c) fulfilling the expected position of having no significant influence on the service quality expectation construct. In addition, service quality expectation is positively linked to customer satisfaction (H2) though only partially mediating the relationship between cultural values and customer satisfaction (H3). In terms of the moderating variables, only the generational cohort demographic variable moderates the relationship between cultural values and service quality (H4) whereas ethnicity (H5) and gender (H6) were found to be insignificant as a moderating variable between cultural values and service quality. As such, hypotheses H1, H1a, H1b, H1c, H1d, H1f, H3 and H4 are supported whereas hypotheses H1e, H5 and H6 were not supported with hypothesis H2 only partially supported.

# CHAPTER FIVE

## Implication and Conclusion

## **5.0 Chapter Five: Implication and Conclusion**

### **5.1 Introduction**

Chapter Five presents the research's conclusion and provides an analytical assessment of the results obtained in the previous chapter. This final chapter comprises of six sub-sections with Section 5.1, being this section, providing the introduction to the overall chapter. This is followed by Section 5.2 which reports and discusses the research questions, objectives and findings whilst Section 5.3 ruminates the theoretical aspects and contributions. Next, the deliberation and examination of the practical implications within the research findings are raised in Section 5.4. The subsequent Section 5.5 considers the research limitations as well as possible suggestions for future research. Lastly, Section 5.6 concludes this chapter as well as the research.

### **5.2 Research Questions and Findings**

#### **5.2.1 Discussion for RQ1 and its corresponding hypotheses, H1 and H1a to H1f**

This preliminary research question was conceived to delve into the cultural value construct, as a whole and as well as its individual dimensions, in influencing the service quality expectation construct. The research objective was to evaluate the relationship between cultural values and service quality expectation. Seven hypotheses, H1 and H1a to H1f, were developed to seek the answers to this research question. According to the findings from the structural equation modeling analysis in Chapter Four, Hypothesis H1 is supported as the cultural value construct was indeed found to have a positive and significant effect on service quality expectation in the Malaysian hospitality industry. However, out of the six individual cultural value dimensions, the short term/ long terms dimension, had to be dropped due to unanticipated shortcomings or inadequacy in the measurement scale (H1e). Nevertheless, the remaining sub construct dimensions; power distance (H1a), individualism/ collectivism (H1b), uncertainty avoidance (H1d) and indulgence/ restraining (H1f) dimensions independently show a positive influence on the service quality expectation construct with the masculinity/ femininity cultural dimension

(H1c) fulfilling the expected position of having no significant correlation to the service quality expectation construct.

This is in line with the literature as proposed earlier in Chapter Two. Numerous researchers concur that culture is a major determinant that impacts one's service quality expectations and conclude that cultural values enable the explanation in the variation within the consumers' service quality expectations and perceptions (Dash et al, 2009; Hofstede et al, 2010; Li and Cai, 2012; Guesalaga et al, 2016; Stauss, 2016; Davis et al, 2017). On the flipside, these researchers also propose that expectations and perceptions can be anticipated when cultural differences are taken into consideration. By the same token, the power distance cultural dimension influences the consumers' expectations of quality as well (Donthu and Yoo, 1998; Kueh and Voon, 2007). This is apparent in industries such as the hospitality industry whereby consumers from lower power distance societies possessing loftier expectations as compared to their high power distance counterparts. Interestingly, Malaysia being a nation ranked with one of the highest power index score, was found to have rather high expectations of service quality in the hospitality industry as well. This indicates that there may be other factors in play that influences the Malaysian consumers to expect superior services. Though Malaysia, as a nation, does possess many characteristics of a high power index country, this study have found that the Malaysian consumers displaying consumer behavior comparable to a nation with a low power index in the context of the hospitality industry. This translates to the importance of service quality and for businesses to endeavour in embracing quality in all their offerings, especially in the hospitality industry.

Likewise, the study found the individualism/ collectivism and uncertainty avoidance cultural dimensions to markedly influence the service quality expectation construct with individualistic and high uncertainty avoidance consumers imposing higher expectations all around. Again, despite Malaysia being a rather collectivist nation with a score of 26, the Malaysian consumers were found to have higher expectations of quality services in the hospitality industry that is analogous to an individualistic nation. In this aspect, the Malaysian consumers exhibit less restraints and placed emphasis on personal choices and decisions. Hence, comparable to the above power distance dimension, it is imperative that businesses inculcate quality services so as to fulfill the expectations of their customers and achieve customer satisfaction, especially in the hospitality industry. Nevertheless, Malaysia did perform accordingly as expected in terms of the uncertainty avoidance dimension in the context of the local hospitality industry. Malaysia



possesses one of the lower UAI score and demonstrate a rather relaxed stance towards differences of opinions and ideas. As such, Malaysia displays a more open, accepting and unfettered environment. Similarly, this was found to be true even with the newest cultural value dimension, indulgence, which saw higher expectations within this sub construct in the hospitality industry. As Malaysia is a rather indulgent society that has scored comparably to developed nations such as Finland and Belgium, the dimension score for Malaysia was fitting and described the Malaysian consumers aptly in their high expectations of service quality in the hospitality industry. Malaysians are relatively liberated to behave as per their inclinations and hence individuals are free to dictate one's individual expectations and perceptions without restraint. This has led to the Malaysian consumers as expecting high service quality, especially in the context of the hospitality industry.

On the other hand, the study found that the masculinity/ femininity cultural dimension is not a significant function to the service quality expectation in the Malaysian hospitality industry. As Malaysia ranks somewhat in the middle of the scale in relation to this index, with a score of 50, indicating that Malaysians are less concerned with the masculine or feminine characteristics of the services. This implies that the Malaysian consumers tend to prefer certain value-perceived traits as opposed to the gender tasked engagements. This assertion is analogous to several researchers' position that such characteristics may not necessarily play a significant role in all sectors (Kueh and Voon, 2007; Chaker and Jabnoun, 2010; Bizri, 2014). In conclusion, based on the findings above which parallels prior literature conducted, cultural values on a whole significantly and positively affects service quality expectations in the hospitality industry in Malaysia. This context is further applicable to four of the six dimensions as well (that is, power distance, individualism/ collectivism/ uncertainty avoidance and indulgence/ restraint).

### **5.2.2 Discussion for RQ2 and its corresponding hypothesis, H2**

This subsequent research question endeavour to assess the influence of service quality expectation on the customer satisfaction construct. As such, the research objective was to examine the relationship between service quality expectation and customer satisfaction. Hypothesis H2 singly represents this research question. According to the findings from the structural equation modeling analysis in Chapter Four, Hypothesis H2 is supported as the

service quality expectation construct was found to have a positive and significant effect on customer satisfaction, specifically in the hospitality industry in Malaysia. Similarly, literature corroborates this position that service quality is intimately related to customer satisfaction (Cronin and Taylor, 1992; Parasuraman et al, 1994; Lovelock et al, 2009, 2011).

### **5.2.3 Discussion for RQ3 and its corresponding hypothesis, H3**

This third research question strive to investigate the influence of the service quality expectation construct on the cultural values and customer satisfaction relationship. The research objective was to specifically examine if service quality expectations mediate the relationship between cultural values and customer satisfaction. Hypothesis H3 was developed to correspond to this research question. According to the findings from the structural equation modeling analysis in Chapter Four, Hypothesis H3 is only partially supported as the service quality expectation construct only partially mediates the relationship between cultural values and customer satisfaction in the hospitality industry in Malaysia. Though this supports the literature generated over decades that the three constructs are inter-related (Li and Cai, 2012; Polsa et al, 2013; Guesalaga et al, 2016; Stauss, 2016; Davis et al, 2017), Hofstede et al (2010) note that culture is a challenging construct which requires the researcher to take into consideration the numerous diverse views and characteristics as the equation may generate distinctive and varying results.

### **5.2.4 Discussion for RQ4 and its corresponding hypothesis, H4**

This research question queries if demographic variables, such as generational differences, influence the relationship between cultural values and service quality expectations. Hence, the research objective was to examine the moderating role generational cohorts may play in the relationship between cultural values and service quality expectations. In this section, Hypothesis H4 was adopted to seek the answer to the research question. Based on the analysis, Hypothesis H4 is supported as it was found that the generational cohort demographic variable significantly moderates the relationship between cultural values and service quality in the Malaysian hospitality industry. Numerous researchers agree that each generational grouping share a distinctive underlying bond and outlook that were nurtured through shared experiences and events and that these cohorts present contrasting characteristics (Berkowitz and Schewe,

2011; Gurău, 2012; Gardiner et al, 2013; Giovannini et al, 2015) and that these generational components are able to influence the causal association between the aforementioned constructs. However, most of the literary perspective is based on the generational cohort construct as an antecedent variable. In this study, the generational variable was positioned in a moderating role and offered an alternative study angle as to the range and significance of this construct. The study was able to identify that the collective might of these individual generational cohorts, specifically Gen X and Gen Y, were able to influence the relationship between the exogenous and endogenous constructs, cultural values and service quality expectations. As such, the data supports and validates the premise that generational differences are able to moderate the relationship between cultural values and service quality expectations. Additionally, this study acknowledges that it is imperative for researchers to identify the reach and impact that the generational groupings may impose on the efficacy and effectiveness of a business' marketing strategy. In this respect, this calls for researchers to further conduct in-depth and updated analysis on the influences of these generational cohorts.

#### **5.2.5 Discussion for RQ5 and its corresponding hypothesis, H5**

This fifth research question strive to evaluate if the demographic variable, ethnicity, moderates the relationship between cultural values and service quality expectations. As such, the research objective was to assess if ethnicity plays a moderating role in the relationship between cultural values and service quality expectations. Here, Hypothesis H5 was developed in relation to this research question. However, interestingly, the findings established that the phenomenon did not transpire as expected which meant that Hypothesis H5 is not supported and hence, the hypothesis is conclusively rejected. Ethnicity does not moderate the relationship between cultural values and service quality expectations. This could be due to the underlying factor that the cultural value construct is interrelated and interconnected with ethnicity (Fossen, 1998; Pires and Stanton, 2005; Fenwick, 2010; Soye, 2012; Baskerville et al, 2014), thus possibly making it a superfluous exercise.

#### **5.2.6 Discussion for RQ6 and its corresponding hypothesis, H6**

This final research question attempts to assess if the demographic variable, gender, moderates the relationship between cultural values and service quality expectations. Consequently, the

research objective was to assess if the gender variable plays a moderating role in the relationship between cultural values and service quality expectations. In order to answer this research question, Hypothesis H6 was developed. However, based on the analysis, there was no occurrence with regards to the causal relationship between the constructs. Accordingly, this meant that Hypothesis H6 is not supported and hence, the hypothesis is conclusively rejected. Gender does not moderate the relationship between cultural values and service quality expectations. As stated by supporting preceding research, consumers are less concerned about the service provider's gender as compared to the service values conveyed (Kueh and Voon, 2007; Chaker and Jabnoun, 2010; Bizri, 2014).

### **5.2.7 Summary of Research Findings**

This paper centers on delivering supporting explanation on consumers with differing cultural background as well as the level of expectation and satisfaction they communicate in the context of service quality, specifically in the high-contact hospitality industry. The hypothesized correlations between the constructs were assessed against past literature and analysed through the quantitative data collected. The findings indicate that there are parallel results as well as variances.

Firstly, this study ratifies past literature that culture, from a macro-perspective, have shown to have a significant influence on the customers' expectations of service quality in the hospitality industry. When looking at the culture construct from a micro-perspective, four out of the six cultural dimensions confirms that culture has a considerable influence on service quality expectations. The four dimensions are power distance, uncertainty avoidance, individualism/collectivism and indulgence/ restraint. The analysis found that both the long term/ short term and masculinity/ femininity indexes less relevant in relation to expectations of service quality in the hospitality industry. It is evident that not all the cultural dimensions will make an impression despite the overall cultural construct wholly influencing expectations. As cultures are highly diverse and multi-faceted, its influence and results may vary depending on the geographical locality of the data collected. In addition, the context of the industry and nature of the services further adds to the complexity of the equation. As such, it is not feasible to expect a study that is able to identify and approach all the relationship intricacies adequately.

Moreover, the study supports the premise that service quality expectations strongly influences customer satisfaction which correspond to majority of the literature. Service quality expectation also mediates the relationship between culture and customer satisfaction though only partially. Finally, only one out of three demographic variables was found to have a moderating effect on the relationship between cultural values and service quality expectations. The study found generational differences to be able to moderate the relationship as opposed to ethnicity and gender. Additional details about the thesis findings will be further discussed in the subsequent sections.

### **5.3 Theoretical Contribution**

This thesis delved into a mountain of literature and investigated the different constructs elected in the study; cultural values, service quality expectations and customer satisfaction, specifically in the context of the hospitality industry. The study also designated three demographic variables, namely generational cohorts, ethnicity and gender, as moderating factors between the cultural construct and service quality expectations. According to Nonaka and Takeuchi (2011), research that adopts a theory-based approach that is deductive and scientific tend to seek out predictive and universal conclusions, context aside. Nevertheless, the inferences or suppositions are dependent on the context and the analysis may be deemed irrelevant and meaningless if the interests, values and goals are not considered at the same time. In this paper, the research's findings were able to support and validate many of the past related literature. This indicates the relevance of the factors in the hospitality industry in Malaysia as well. However, this study also refutes a selection of the literature. Therefore, this shows that the variables may interact contrarily and depends on a myriad of factors.

A number of past literature has evaluated the influences of cultural values on service quality expectations and customer satisfaction (Gunawardane, 2010; Li and Cai, 2012; Bouzaabia et al, 2013; Cai and Luo, 2015; Guesalaga et al, 2016; Stauss, 2016; Davis et al, 2017). However, the conceptual research model constructed in this study was developed based on an integrative framework that includes the demographic variables, generational cohorts, ethnicity and gender as moderating factors between the cultural value construct, as well as its individual dimensions, and service quality expectations along with the customer satisfaction construct that is not a

replication of known past studies' conceptual models. According to Yang and Lau (2015), diversities within the varying cultures are analogous to generational variances though few studies have considered both the cultural and generational angle simultaneously. As such, to the best of the knowledge of this study's researcher, the theoretical combination and model proposed has yet to be effected. In this respect, this research paper makes the following theoretical contributions.

Firstly, the premise developed in the theoretical framework was based on the notion that the demographic variables such as generational differences, ethnicity and gender moderates the relationship between cultural values and service quality expectations. The input of these demographic variables in the research model suggested that the cultural value construct and service quality expectation relationship is a complex topic that may not be simply rationalized when additional factors are introduced into the equation. From a macro perspective, the study found that the cultural value construct significantly influences the service quality expectation construct. However, the generational demographic variable has shown to be able to moderate this relationship. This means that generational differences are able to "interfere" or alter the relationship between cultural values and service quality expectations. Based on the analysis, the effects of cultural values on service quality expectations decreased when generational differences came into play. This occurs when the moderating variable significantly influences the relationship between the exogenous and endogenous constructs resulting in the weakening of the exogenous' variable's influence on the endogenous variable. On the other hand, this study's analysis found that the ethnicity and gender demographic variables were not able to moderate the relationship between cultural values and service quality expectations. Despite the ethnicity demographic variable being positively linked to service quality expectations as indicated in past literature, the findings in this study notes that ethnicity does not resonate with the literature when placed in a moderating role. In comparison, past research illustrates that the influences of the gender demographic variable fluctuating depending on the context. Consequently, this study have found that gender does not play a relevant role as a moderating factor between cultural values and service quality expectations in the hospitality industry in Malaysia. These findings suggest that the causal dynamics of the individual moderating factors diverge in the manner that the cultural value construct is influenced in its interaction with the service quality expectation construct. Therefore, this study's multi-moderating factors approach and analysis provide the main theoretical contribution to this paper.

The next theoretical input looks at the individual cultural dimensions, specifically the power distance and individualism/ collectivism dimensions. In terms of the power distance index, this study found that Malaysia is a high power distance nation that behaves parallel to a low distance nation, especially in the context of the hospitality industry. Literature propose that lower power distance societies tend to impose greater expectations when compared to the high power distance societies. However, despite Malaysia having been categorized as one of the highest power distance nations, the Malaysian consumers exhibit rather high expectations of service quality in the hospitality industry. Likewise, the study similarly found Malaysia to be a collectivist nation with demanding traits akin to an individualistic nation. Again, past literature put forward that collectivist nations tend to practice self-restraint with less concern on individual choices and decisions. Here, in the context of the hospitality industry, Malaysia revealed individualistic and indulgent tendencies that overpowered its collectivist attributes. Nevertheless, this assessment may be contingent based on the context of the study. As such, this study propose that certain nations may present conflicting traits that contradict their Hofstede cultural classification. In the case of Malaysia, her society possesses the qualities from both fringes of the respective aforementioned cultural dimensions, as displayed by the Malaysian consumers.

Next, the service quality expectation construct is a popularly adopted construct amongst social sciences researchers when it comes to studies relating to services marketing and consumer behavior. This construct is also usually adopted as an exogenous or endogenous variable in the research model and analysis, as similarly applied in this study. However, this study additionally analysed the service quality expectation construct in a mediating role between cultural values and customer satisfaction. Whilst this study does not profess this input as a core theoretical contribution, it does stipulate a standpoint that the cultural value and customer satisfaction relationship can be mediated by the service quality expectation construct. Nevertheless, in the context of the hospitality industry in Malaysia, the findings in this study indicates that the service quality expectation construct only partially mediates the relationship between cultural values and customer satisfaction. This suggests that the direct effect of the cultural value construct on customer satisfaction is still significant despite it being reduced when service quality expectation enters the model as a mediator variable.

Additionally, the study adds to the comprehension of Hofstede's newest dimension, that is the dimension of indulgence and restraint, in the hospitality industry in a country like Malaysia.

Currently, the main literature on the indulgence/ restraint index emphasizes on its characteristics which can be rather general with little explanation in terms of the consumers' expectations in a service environment. As such, there is a lack of literature on this sixth dimension by Hofstede as well as insufficient analysis in relation to other constructs. Based on this study's findings, the indulgence/ restraint dimension strongly influences service quality expectations in Malaysia's hospitality industry. Unlike other highly restrained Muslim nations such as Pakistan or Egypt, Malaysia is a Muslim nation with fairly indulgent characteristics and traits and impose high expectations of service quality, particularly in the context of the hospitality industry. With this finding, this aspect of the study is able to contribute to building the foundation for future research in relation to this particular dimension.

Moreover, this thesis responded to calls made by previous literature to fill the research or literary gaps. Kueh and Voon (2007) proposed future researchers to consider the incorporation of demographic variables, such as gender, in a moderating role between cultural values and service quality expectations. As customer expectations vary, knowing the type of customer may enable researchers to evaluate the extent to which cultural values are able to influence one's expectations and perception of the service encounter. As such, studies that assimilate these variables facilitate the assessment of the degree of cultural customization that may be requisite for the service experience to be effectual and successful. However, in the case of this study, the demographic gender was found to be irrelevant and does not influence the relationship between culture and service quality expectations in the hospitality industry. This led to the understanding that Malaysian consumers are more inclined towards value-perceived service offerings rather than gender centered engagements.

Nevertheless, one would need to take into account of other factors as well as consider the dimension individually so as to ascertain the overall interaction between these variables. Another literary gap that was identified and that the study undertook to address was to contribute to the literature covering this regional populace and blend of cultures. Malaysia is a multicultural nation with an intricate weave of national, social and racial population composition. Hence, updated research on this country will promote the knowledge and comprehension of the constantly growing and evolving population amalgam.



## 5.4 Practical Implication

The knowledge derived from this study's findings may offer owners and managers a number of ideas and suggestions that will enable them to add to their commercial or economic worth. Perceptive business owners and managers acknowledge that it is critical to be able to anticipate and gratify the consumers' service quality expectations and perceptions. Effective management of the customers' predispositions invariably leads to happier and more satisfied customers and the ability to do so successfully would ensure the customers' loyalty and continual support. This inevitably leads to the firm's affirmative and progressive growth, achieve competitive advantage as well as the inclination to differentiate itself positively from its competitors. As such, it is crucial for businesses to identify and comprehend the factors that may affect or influence a consumer's expectations and perceptions.

Primarily, this study's key findings validates the postulation that culture is a prominent antecedent of quality expectations which is essential to attain customer satisfaction. A satisfied customer tends to display positive allegiance and affirmative procurement behaviour. Therefore, it is imperative that business owners and managers take into consideration the customers' cultural profiles and offer culturally adapted or customized services accordingly. Businesses are not able to read, placate nor fulfil all of their customers' expectations. Nevertheless, awareness of the respective cultures' values, ideologies, attributes and sensitivities will enable the business owner or managers to develop the effective strategies that are more relevant in fulfilling their target customers' expectations and achieving satisfaction. In doing so, these businesses may also improve and develop a more efficient resource allocation, coordination and management program at the same time. However, as indicated in the literature, culture is an intangible feature which is dynamically and intricately intertwined with societal living, and hence, managers will need to maintain an observant and discerning approach towards any changes so as to be able to adapt accordingly and be on top of the game.

Firms may also take into consideration the managerial implications in terms of the cultural dimensions. This study adopted Hofstede's measurement instrument that consisted of six dimensions that were used as measurement items. Out of the six cultural dimensions, four were found to have a positive and significant effect on service quality expectation in the hospitality industry in Malaysia. The four dimensions are power distance, individualism/ collectivism, uncertainty avoidance and indulgence/ restraining. Out of the remaining two dimensions, the

short term/ long terms dimension had to be dropped due to unanticipated measurement instrument shortcomings whereas the masculinity/ femininity cultural dimension was found to have insignificant correlation to the service quality expectation construct in the hospitality industry in Malaysia. With these findings in mind, managers can allocate the firm's resources to the strategies that best serve the customers and fulfil their expectations.

As an example, in the context of the hospitality industry, managers may train their service personnel to treat customers in a high power distance nation, such as Malaysia, utmost care, respect, patience and good-naturedness when dealing with the customers. Societies with a high power distance index value and expect customer service relationships and marketing strategies that recognises the customer's importance and status. In contrast, Malaysia is a collectivist society which emphasizes on familial relations and societal ties whereby loyalty is a pivotal and paramount trait. As such, marketing and service strategies that fosters strong relationships and instils a sense of belonging in a cohesive group will fare well in a collectivist culture. On the other hand, Malaysia scored low on the uncertainty avoidance index and hence, tends to tolerate uncertainty, adopt a relaxed attitude and "live day-by-day" outlook with preference for minimal restrictions. This means that service managers need to proffer flexible or adaptable service offerings and make the concerted effort to minimize constrictive rules and procedures. Finally, Malaysia is a culture of indulgence rather than restraint. Consumers from indulgent societies are inclined to act on their impulses and may behave as they please as well as spend money based on their whims and fancies. They also value positive experiences and therefore, managers are encouraged to instil customer-oriented service experiences that will leave a memorable and emotional impact on their customers.

Another factor that business owners and managers need to be aware of is the generational cohort that their customers belong to. Regardless of the customer's cultural background, generational differences may moderate the relationship between the customer's cultural values and service quality expectations. As such, similar to the cultural factors, it would be astute for the service managers to take into consideration the generational traits and characteristics that their customer may belong to and offer complementary or corresponding service offerings. For example, both the X and Y Generational cohorts are technologically savvy as compared to the preceding cohorts. Therefore, firms are encouraged to embrace and implement innovative or internet-based marketing strategies and tools such as social media and apps so as to better reach their X and Y generational customers. In another example, Gen Xers are viewed are rather

conservative whereas the Millennials are deemed a liberal lot. In this aspect, Gen Xers favour value-for-money procurement experiences while the Gen Y consumers are less concerned with the costs and lean towards memorable procurement experiences. As such, businesses that are able to create and inject a service experience that will leave a favourable impression may appeal to the Millennials. Such sensitivity orientation towards the customer will further endear the service provider to their customers. In this time and day of immense and intense ongoing competition, the business owners need to be constantly aware and seize all opportunities to create and leave a memorable impression amongst their customers. Correspondingly, managers will also be encouraged to embrace a compliant and amenable stance in recognising and identifying the variations or deviations that may occur with the respective or younger generational cohorts.

Last but not least, this study was conducted on the hospitality industry which is a high-contact industry. The high-contact industry entails services whereby there is a continual or significant interaction and communication between the service personnel and their clients. There is a wide spectrum of high-contact service organisations from different sectors such as the beauty, wellness, nursing homes, healthcare industry and many more. Service managers in a similar or other high-contact industry may adopt the same customer management concepts and strategies as industries in the same typology tend to present analogous relationship characteristics. As such, this will enable service managers of another high-contact establishment to benchmark against better performing businesses of the same typology. In doing so, the proactive firms may be able to increase market share effectually, enhance their rapport with their clientele and develop robust growth performance as well as competitive advantage in their respective industry.

## **5.5 Limitations and Directions for Future Research**

This thesis has outlined several theoretical and practical contributions in the previous sections. However, the researcher recognises that there are issues that require further examination so as to achieve a more encompassing and wholistic interpretation of the constructs studied as well as its relationships. As such, the study acknowledges that there will be limitations that needs to be addressed. Nevertheless, these limitations also suggest future research avenues.

The primary limitation is that the study looked at the cultural construct as whole. This applies to the dimensional aspects of the construct too. As culture encompasses a very complex, subjective and not easily measurable variable that will inevitably vary geographically as well as the distinct research respondents, there are many aspects within this one construct that warrants further attention and analysis. Consequently, it may be beneficial to adopt other measuring items or inputs to evaluate the construct or individual dimensions. Another research angle that future studies may consider is to first measure specifically if the particular respondent is individualistic or collectivistic before analysing the correlation to other constructs such as service quality expectations rather than measure the dimension as a whole. As the world evolves, so does the individuals. Hence, individuals that belong to a collectivistic society may not necessarily conform and may present individualistic traits instead. Likewise with respondents from a high power distance society who may exhibit low power distance traits. Therefore, future research may consider a research approach that takes account of this more meticulous perspective.

Secondly, this study has had to drop the long term/ short term orientation index after the pre-analysis reconfigured the dimensions. This was possibly due to unanticipated shortcomings or inadequacy in the measurement scale which merged or combined the dimension with other dimensional values. As such, this limitation in the study warrants the research to be reproduced under other or similar settings so as to better comprehend the antecedent factors, be it individually or as a whole.

Thirdly, the indulgence/ restraint index in Hofstede's cultural model was a new and recent addition as one of the cultural dimensions in the model. The quest for literary information on this index was deemed challenging and inadequate when compared to the abundance in academic research on the other five older dimensions. Hence, the literature available on this dimension is seemingly lacking and warrants additional attention and examination for further comprehension and a more rigorous interpretation of this particular index. Moreover, just as the above, it may be educational for future studies on this dimension to consider employing other or added measurement items to appraise the dimension.

Fourthly, in this study's attempt to evaluate the cultural values, the study adopted the widely embraced Hofstede's cultural dimension as the measurement framework. Geert Hofstede's

cultural model was established to measure cultural values on a national level which was then adapted to evaluate organizational cultures. Though Hofstede is a popular cultural model that has been commonly employed to measure cultural values, it is not the only one and there are numerous other cultural measurement instruments such as Hall, Riddle, Schwartz, Denison, Trompenaars and Hampden-Turner, Deal and Kennedy, CTT Barrett, GLOBE's cultural models and many others. The adoption of any one of these other models may generate divergent findings especially when implemented to evaluate the relationships with other constructs. Hence, it would be noteworthy to analyse the constructs using these other instruments and compare the results accordingly.

Fifthly, the study employed three, out of the eight demographic variables in the questionnaire, as moderating factors in the research model. However, two of the demographic variables adopted in the study, ethnicity and gender, did not exhibit any influence as moderating factors on the two constructs' causal order. As such, successive studies may administer similar research path and configuration in a different industry so as to track the demographic variables' moderating stance between the cultural construct and service quality expectation construct. Future studies may also consider adopting the other demographic factors as moderating factors.

Next, the study focused on the context of the hospitality industry in Malaysia. Hence, the research's findings will need to be interpreted with distinct considerations and parameters as the research's results were specific to the industry and may not be applicable to a different industry. As such, future research may contemplate other industries so as to increase the study's relevance and applicability. Furthermore, the study considered the industry as a whole and did not stipulate on a specific type of hospitality establishment. As such, ensuing studies can verify the findings by centring only a particular sub-sector in the industry.

Lastly, the study was conducted solely in Malaysia, which is a country that is composed of highly divergent cultural factions. As such, the findings may not be applicable to another country. Furthermore, Malaysia is a Muslim majority nation which has governed the country for decades and hence has inadvertently dominated the other cultural groups in varying manners through its legislative policies. Thus, the respondents from other cultures may exhibit traits parallel to the dominant culture in Malaysia. Additional studies can be conducted locally to further comprehend the cultural makeup of the societies here. Since Indonesia is the only other nation with a similar societal and cultural composition to Malaysia, it would be interesting

to have the same research conducted in Indonesia and have the results compared. Future studies can also consider running the research on other countries whereby such research focus is inadequate or to conduct the study contrasting two or more countries with similar cultural values and background simultaneously. It is also important to have current and up-to-date research findings. Additionally, follow-up studies may look into the research gap on a comparison of the constructs between developing and developed nations.

## **5.6 Conclusion**

This study endeavours to present a research paper that illustrates the cohesive relationship between cultural values, service quality expectations and customer satisfaction. In addition, demographic variables such as generational cohort, ethnicity and gender were also incorporated into the research model as moderating factors between the cultural construct and service quality expectation. This framework was conducted within the context of the high-contact hospitality industry in Malaysia. The hospitality industry is a sector that is highly reliant on services and the manner the service is expected and delivered. As such, firms that are inclined toward the management of their consumer's expectations are predisposed to surpass the performance of their competitors.

The services sector plays a very vital commercial role with its ever growing contribution towards the global economy. Hence, it is imperative that corporations comprehend the consumers' expectations and perceptions of service quality and the manner in which the firms may attain customer satisfaction. This is especially significant in the current fast and constantly evolving world as the consumers of today are now more demanding and challenging than the consumers of yesteryears. Furthermore, businesses now have to operate in a highly competitive environment as service providers offering the same fare mushroom and proliferate at an increasingly rapid pace. As such, it is notable that businesses that have an excellent grasp and knowledge of their consumers' behavioural intentions would invariably possess a robust and competitive advantage over their competitors.

One definitive approach to understanding service quality expectations and customer satisfaction is to recognise and identify its influencing antecedent factors. Accordingly, this

study has pointed out that cultural values have a positive and significant effect on service quality expectations which then shapes customer satisfaction. As such, culture is an overall compelling antecedent factor that is strongly linked to service quality expectations. There are varying cultures in every country around the world. Therefore, service managers need to be conscious of their consumers' cultural background and values as the incorporation of these variables as a part of the firm's marketing strategies will draw the interests of the consumers. Service providers that are able to offer adaptation and customization according to their patron's culture would be viewed as having a leg up over their competitors.

Finally, the study's findings additionally established that only one out of the three demographic variables, generational differences, are able to moderate the relationship between one's cultural values and service quality expectations. Consequently, managers are also encouraged to take into consideration the generational cohort that their customers belong to so as to further tweak their promotional stratagems and boost their business appeal. In general, this study highlights the magnitude and value in a business' sensitivity towards their consumers' culture-originated and generational-based principles and tenets. This is especially fundamental when planning and executing the strategies for efficacious service delivery and management of service expectations so as to achieve quality and customer satisfaction.

In conclusion, this chapter of the study presents the discussions of the research's findings, theoretical and practical contributions as well as its limitations. The research model develops the original framework of determining service quality expectations and customer satisfaction in the hospitality industry. As such, this study affirms the importance of recognising and knowing the cultural origins and generational cohort of one's customers. This provides the knowledge that may assist businesses to generate effective marketing strategies and customer management policies.

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