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**The effect of national culture on customer satisfaction in call centres across
national borders**

A Research Report

by

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fulfilment of the requirements for the degree of Master of Business Administration

Abstract

Characteristics of national cultures have frequently been claimed to influence service quality perception and customer satisfaction. This inquiry investigates this claim by analysing a multinational company's call centre servicing two markets across national borders. Hypotheses are derived which relate the cultural and customer characteristics of age, gender and socio-economic status to customer satisfaction and perceived service quality within each country.

Using multiple regression and CHAID models as well as Mann-Whitney and Kruskal-Wallis tests, the hypotheses are tested by analysing call centre service feedback data on 245 customers in the South African and 201 customers in the British market. Empirical support for the effect of national culture on perceived service quality and customer satisfaction is found.

Empirical proof that females report higher levels of satisfaction than males is found while the importance customers place on service quality constructs are proven to vary by age and gender. A call centre management model integrating culture and customer characteristics, which provides a richer perspective of the mechanics of value creation, is suggested.

Keywords

Customer satisfaction, national culture, service quality, customer characteristics, offshoring, SERVPERF, call centres, cultural difference, services management, emerging markets

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other university. I further declare that I have obtained the necessary authorisation and consent to carry out this research.



Theo Kotzé

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Dedication

This Research paper is dedicated to my beautiful and brilliant wife Marlise and our adorable little Lara. Marlise, you sacrificed so much of your time over the past two years, and perhaps some of your sanity. I will probably need twenty years to make it up to you. Ek is uiters lief vir julle.

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1. Introduction to the Research Problem

1.1 Research title

The effect of national culture on customer satisfaction in call centres across national borders

1.2 Research problem

The current economic landscape is characterised by constant flux and increased competition through company's increased exposure to globalised markets. Within this globalised arena, customer needs have undergone sizeable changes; it has become imperative that companies operating across borders are able to conduct effective international, cross cultural communication and collaboration in order to stay in touch with their customers' ever changing needs.

The modern call centre is a strategic asset (Jaiswal, 2008) used to differentiate a brand by delivering exceptional service quality and increasing customer satisfaction (Miciak & Desmarais, 2001). Service quality is viewed from a customer's perspective and defined as: the customer's perception of what an important element of quality is (Clemes, Gan, Kao, & Choong, 2008). Call centre managers who understand the fundamental differences between the varieties of customers they serve, could mitigate many of the problems that arise in their call centres. Problems which include the misalignment of a call centre agent's language, culture and competency level, with those required by the customer. This would enable them to considerably improve customer satisfaction which in turn would create a competitive advantage in the densely populated global sector where they operate.

In response to dealing with customers across national boundaries, multinational corporations (MNCs) introduced cross national satisfaction measurement programmes to gauge, track and benchmark customer satisfaction within their service markets (Morgeson III, Mithas, Keiningham, & Aksoy, 2011). The feedback generated by the programmes, recorded through customer surveys, has become a widely accepted basis of performance measures for employees, managers and companies (Hekman, Aquino, Mitchell, Schilpzand, & Leavit, 2010). The logic behind undertaking these surveys holds that satisfied customers become more loyal customers (Iacobucci, Ostrom, & Grayson, 1995; Oliver, 1999; Vesel & Zabkar, 2009; Parahoo, 2012). Increased loyalty leads to higher retention, while the positive word of mouth generated by satisfied customers influences the future purchase behaviour of other customers (Gruca & Rego, 2005). Together these factors create growth in market share resulting in greater profitability (Anderson, Pearo, & Widener, 2008; Morgeson III et al., 2011). Companies also use customer satisfaction measures to compare against

their competition, identify strengths and weaknesses of product lines, to segment markets and manage the customer base as an asset (Bryant & Cha, 1996).

Recent research found service metrics misaligned with customer quality perceptions (Robinson & Morley, 2006; Jaiswal, 2008). As service quality and customer satisfaction become increasingly pivotal in business, the distinction between customer perception of service quality and service quality as measured by operational metrics becomes critical (Feinberg, Kim, Iacobucci, 1995; Hokama, de Ruyter, & Keen, 2000; Jaiswal, 2008). It appears that service controls, designed to ensure quality, are not necessarily conveying the desires of customers to the organisation but are merely indicators of efficiency (Feinberg et al., 2000; Robinson & Morley, 2006; Jaiswal, 2008). This results in poor alignment of strategic and financial efforts of the business and the actual needs of the customer being satisfied. The result of this misalignment is slow growth or loss of market share (Jaiswal, 2008), an increased number of customer complaints (Robinson & Morley, 2006), front line employee frustration (Jaiswal, 2008) and ultimately, financial setbacks.

The misalignment of customer satisfaction with service (operational) metrics speaks to the experience specific (“experiential”) or “phenomenological” (Vargo & Lusch, 2008) nature of value. This thinking, which resides within the service-dominant (S-D) logic, states that a customer is a co-creator of value in a service interaction and consequently assists in satisfaction determination (Anderson et al., 2008). The role a customer plays in determining value add (Anderson et al., 2008) as measured through customer satisfaction scores has primarily been one dimensional in its approach and tends to “...focus exclusively on discriminating characteristics of the service concept, ignore customer characteristics and implicitly treat all customers as identical” (Anderson et al., 2008, p. 366). There is a need for research that investigates the moderating effect of customer characteristics on customer satisfaction (Dimitriadis & Maroudas, 2007; Hekman et al., 2010; Sharma, Chen, & Luk, 2012). This inquiry seeks to answer this call by considering the customer characteristics of age, gender and socio-economic status impacting customer satisfaction within a South African multinational health insurance corporation running call centres for local and international customers.

MNCs face the additional challenge of cultural differences and its impact on customer satisfaction. Different cultures have different levels of service expectations (Donthu & Yoo, 1998). Morgeson III et al. (2010) stated that “...research comparing consumer satisfaction across nations is limited...” (p.198).

This inquiry recognises the added complexity of cultural difference and investigates the impact of the customer characteristics on customer satisfaction by country.

1.2.1 The business problem

This research will address the problems of perceived differences in customer satisfaction levels faced by a South African multinational health insurance corporation's call centres. According to the MNC's Head of Quality Management, Larry Borowitz the service units had proven operational metrics in place which should have accurately measured and comprehensively translated into high levels of customer satisfaction (Borowitz, 2012). However, across different business units servicing different countries, there was a marked difference in customer satisfaction results (Klompas, 2012). The customer satisfaction scores from different countries were vastly different despite the type of service and operational service quality being of a similar high standard.

The MNC's service units were situated in South Africa, primarily in one central location, and consisted of call centres as well as back office operational business units servicing customers both locally and in the United Kingdom. The call centres deal with customer queries and customer complaints while the operational business units perform functions such as data capturing and report generation.

1.2.2 The importance of customer satisfaction

Customer satisfaction was defined by Zeithaml and Bitner (2000) as a customer's assessment of a product or service based on their perception of whether the product or service has met their needs and expectations. Many companies have realised the significance of customer satisfaction, incorporating it into their employee remuneration strategy. In 2007 the Mercer consulting group reported that customer satisfaction surveys formed a critical part of strategic decision making with more than 66% of companies using survey feedback to determine a proportion of their employees' remuneration (Hekman et al., 2010). The impact of customer satisfaction on a firm's financial prosperity was demonstrated by Gruca and Rego (2005): a single percent change in customer satisfaction equated to a \$55 million gain or loss in cash flow for an average Fortune 500 firm. Research has also demonstrated a positive correlation between a firm's share price and their customer satisfaction ratings. Firms with higher customer satisfaction ratings will experience superior share price performance compared to firms with poorer customer satisfaction ratings. (Aksoy, Cooil, Groening, Keiningham, & Yalcin, 2008)

1.2.3 The future lies with service providers

Macroeconomic trends indicate that 47% of China's GDP will come from their service industries by 2015 (Chang, 2012), however this is still far removed from the proportion of GDP derived from service industries within developed economies such as the United Kingdom (77.8%), the United States of America (79.6%) and Japan (71.6%) (Central Intelligence Agency, 2012). It would appear that if a developing economy wants to transition from a reliance on resources, commodities and low skills to a more advanced economy, it will need a higher quantum of service offerings. A comparison of the three developed economies mentioned above with the BRICS economies illustrates the current relative disparity: Brazil (67.0%), Russia (58.6%), India (56.4%), China (43.1%) and South Africa (65.9%) (Central Intelligence Agency, 2012). The gap is expected to decrease over time in line with economic evolution requiring thousands of new organisations to understand customer satisfaction and its impact on the company's bottom line.

1.2.4 Offshoring services through call centres

Offshoring is the relocation of a domestic company's processes and activities abroad (Bunyaratavej, Hahn, & Doh, 2008, p.227). In an attempt to remain competitive many organisations outsource or offshore customer service departments across national borders. These customer service departments then typically service customers in the original markets using call centres. Using the Bain and Taylor (1999) definition of a call centre, it is "...a dedicated operation in which computer-utilising employees receive inbound, or make outbound calls..." (Bain & Taylor, 1999, p.102). This has grown into a massive industry; China for example has 18,977 registered service outsourcing companies (Chang, 2012).

As call centre service departments become outsourced, a company runs the risk of losing management control (Pai & Basu, 2007) effectively handing over the mechanism to influence customer satisfaction to a third party. Miciak and Desmarais (2001) stated that operational metrics were primarily used to gauge customer satisfaction in call centres. Studies found that internationally accepted operational metrics used in call centres were poor proxies for customer satisfaction (Miciak and Desmarais, 2001; Jaiswal, 2008). As such the call centre industry is still focused on measuring the portions of the service interaction which they interpret as under their control while perceived service quality from the customer's point of view goes unnoticed. Call centres located outside of the origin country face an additional complication when dealing with customer satisfaction; the impact of cultural differences on service quality perception.

Aron and Singh (2005) noted that companies in the U.S. and Europe have been experimenting with offshoring strategies since 2000 in an effort to create strategic advantage, reduce costs and increase efficiency. Offshoring arrangements have a high tendency to fail. Aron and Singh (2005) explain that as many as 50% of North American offshoring contracts signed between 2001 and 2004 failed to meet the expected outcomes. Why do such a high degree of offshoring contracts fail?

Various authors have documented the risks associated with service offshoring (Knights & Jones, 2007; Metters, 2008; Thelen, Honeycutt, & Murphy, 2010; Wiengarten, Fynes, Pagell, & de Burca, 2011; Nassimbeni, Sartor, & Dus, 2011). The risks include knowledge and data protection (Nassimbeni et al., 2011), customer loyalty, customer expectations and company image (Thelen, et al., 2010), cultural erosion (Knights & Jones, 2007) and cultural difference (Metters, 2008). The measurement of customer satisfaction or distinct lack thereof, is indicative of an additional operational risk identified by Aron and Singh (2005); the lack of metrics to measure customer satisfaction after receiving offshore services. This analysis has been neglected and presents an unknown operational risk.

The widespread nature of outsourcing highlights the need to understand the international context for business practitioners. It also provides an opportunity for investigating the current context of cross cultural management. Research into strategic outsourcing such as that conducted by Schniederjans and Zuckweiler (2004) and Holcomb and Hitt (2007) indicated that the offshoring trend as a strategic management decision will continue to grow in the future. The reasons primarily being those contained in transaction cost theory and resource based theory as discussed by Holcomb and Hitt (2007). Transaction cost theory according to Holcomb and Hitt (2007) is the “effort [by a firm] to capture cost savings” (p.464) whereas resource based theory focus on “...the role of specialized capabilities obtained through intermediate markets” (p.473). It is estimated that by 2020 the global offshore service outsourcing market will be worth between \$1.65 trillion and \$1.8 trillion (Chang, 2012). As offshoring becomes more prominent in corporate strategy – research needs to be conducted to fully understand the risks and opportunities this strategy presents.

1.2.5 Moderating factors of customer satisfaction

Bryant & Cha (1996) stated that efficient customer satisfaction tracking can be used to manage the customer base as a business asset, however fundamental differences in these satisfaction scores should be recognised and their root causes understood. Recent studies reveal that customer characteristics influence the perception of service quality perception and value, which when combined translate into customer satisfaction (Anderson et al., 2008) which in turn influences the behavioural intentions of customers (Sharma et al., 2012).

The root cause of the differences in satisfaction scores within the call centres servicing customers across national borders were investigated in respect of three customer characteristics. The selected characteristics are age, gender and socio-economic status. Each customer characteristic was investigated by service market. These characteristics were isolated by using a perceived service quality survey and customer data from the MNC.

1.2.5.1 Age, gender and socio-economic status

Previous studies on the impact of customer characteristics such as age, gender (Bryant & Cha, 1996; Mittal, & Kamakura, 2001; Clemes et al., 2008; Anderson et al., 2008; Sharma et al., 2012) and socio-economic status (Bryant & Cha, 1996; Greenwell, Fink, & Pastore, 2002, Clemes et al., 2008; Anderson et al., 2008) on customer satisfaction have been done. The findings were inconclusive across all environments and industries, suggesting the existence of additional, previously unconsidered, complexities impacting customers' perception of service quality. This prompted the consideration of national culture as a possible explanation for the situational interpretation of the service quality and the subsequent satisfaction level achieved.

1.2.5.2 National culture

The increased importance of cultural difference in the global economy was noted by House, Hanges, Javidan, Dorfman, & Gupta (2004) who stated that different cultures are becoming more interconnected as economic barriers are lowered. This result in cultural barriers becoming more pronounced (House et al., 2004).

A host of new business risks and opportunities are being uncovered as more cultures become increasingly exposed to international businesses. Managers who are sensitive to cultural differences will be able to take advantage of them and secure lucrative profits. According to the GLOBE (Global Leadership and Organizational Behavior Effectiveness) study "All experts in international business agree that to succeed in global business, managers need the flexibility to respond positively and effectively to practices and values that may be drastically different from what they are accustomed to", (House et al., 2004, p.5).

A small but growing body of literature has established the importance of understanding culture and its impact on customer satisfaction. Prior research by Morgeson III et al. (2011) in a study of 19 different countries, suggest a negative relationship between customer satisfaction and average per capita GDP; satisfaction decreases as per capita GDP increases. Along the five cultural dimensions

of Hofstede's (1991) model and the service quality constructs of Parasuraman, Zeithaml and Berry's (1988) SERVQUAL tool, many linkages have been found (Donthu & Yoo, 1998; Furrer, Liu, & Sudharshan, 2000; Tsoukatos & Rand, 2007). These three studies not only found links between culture and service quality perception, but also determined that the ranking of service quality constructs is predictable based on cultural profile.

1.2.6 Conclusion

Although relationships between customer satisfaction and customer characteristics have been established, most studies dealt with these concepts within developed markets. Additionally, relationships between customer satisfaction and customer characteristics have been established in other industries, but little research has been forthcoming concerning the call centre environment itself. Jaiswal (2008) stated that a limitation of the existing body of marketing knowledge is that it is almost entirely based on studies conducted in high income developed economies. This research aims to address this shortcoming, by providing a view of an MNC from an emerging market economy servicing customers from both developed and developing economies and demonstrates the impact of customer characteristic induced bias on service perception at both a national and international level.

If call centre managers understand the underlying differences between customers they serve, there is a possibility for companies to mitigate a large percentage of problems emerging through their call centres. This would result in improved customer satisfaction, better loyalty, improved retention and increased revenue.

2. Theory and literature review

The literature review is divided into four sections: firstly, a review of the concept of customer satisfaction, the difference between operational and perceived service quality when compared to customer satisfaction and the service metrics and associated instruments used in call centres. Secondly, an understanding of the scale and reasons behind the global growth in service offshoring and a review of customer satisfaction measurement in call centres were provided.

Thirdly, the concept of national culture and its relationship with perceived service quality and judgments of satisfaction were discussed. Finally, the concepts of age, gender and socio-economic status were explored and analysed using previous research on each topic.

2.1 Customer satisfaction

2.1.1 The relationship between perceived service quality and customer satisfaction

Researchers and practitioners alike are absorbed by the need to understand the drivers of customer satisfaction (Anderson et al., 2008). This interest is fuelled by findings that increased customer satisfaction leads to increased market share, customer retention, positive word of mouth referrals and ultimately increased profitability (Anderson et al., 2008).

The unclear distinctions between and measuring of service quality, customer satisfaction and service value (perceived service quality relative to price) have dominated service literature throughout the last two decades of the 20th century (Cronin, Brady, & Hult, 2000; Garcia & Caro, 2010). Service quality is the quality of the service provided and measured by the company along the lines of operational metrics whereas perceived service quality is measured from customer feedback. Cronin et al. (2000) noted that academic efforts have developed better consensus as to the interrelationships between these three constructs and suggested that service quality and value reviews precede satisfaction judgments.

It was however noted that the service quality provided, as measured by operational metrics, is not sufficient to explain differences in customer satisfaction (Robinson & Morley, 2006; Jaiswal, 2008). The proportion of satisfaction attributed to service quality, as opposed to perceived service quality remains unknown. A concept to explain the gap between service quality and customer satisfaction is service-dominant (S-D) logic (Anderson et al, 2008).

The premise of “service-dominant logic” (Vargo and Lusch, 2008) is that the customer does not merely rate or value service on a common universal service scale, but that the customer is always a co-creator of value (Vargo & Lusch, 2008). Furthermore that the “value is always uniquely and

phenomenologically (*sic*) determined by the beneficiary,” (p.9). As such it is a perceived value, obtained by each customer, which determines customer satisfaction.

Anderson et al. (2008) tested this premise and concluded that customer satisfaction has the dual input constructs of service quality perception and customer characteristics. As such the S-D logic holds true since customer characteristics (who you are) influences satisfaction levels of a service interaction. Tsoukatos and Rand (2007), in their evaluation of models linking perceived service quality to customer satisfaction offered a more crystallised conclusion: the primary driver of customer satisfaction is service quality perception.

It is important to note the distinction made in the preceding paragraphs between service quality, measured by operational metrics, and perceived service quality and customer satisfaction, both measured by customer feedback. The measurement of customer feedback will now be discussed in more depth.

2.1.2 Measuring customer satisfaction and perceived service quality

The existing literature reinforces the fact that a gap exists between the notion of service quality as recorded via operational metrics and that of actual customer satisfaction. The Zeithaml and Bitner (2000) definition of customer satisfaction given in chapter 1 is important in the context of this inquiry as it differentiates between customer expectations and customer needs. Therefore, if a service provider simply fulfills a customer's needs it is not sufficient; the way the need was met in context of the customer's expectation is of equal importance.

This interpretation correlates with the gap theory put forward by Parasuraman et al. (1988) which led to their development of the SERVQUAL instrument. SERVQUAL measures customer satisfaction by comparing customer expectations to customer perceptions of service performance.

This quantifiable gap enables the service provider to measure expectation (should be) and perception (as is) in a single metric (Parasuraman et al., 1988). As a base for dimensions of service metrics, the SERVQUAL framework proposed five measurements or dimensions, described by Etgar and Fuchs (2009) as follows:

- 1) Tangibility which involves the appearance of physical facilities, including the equipment, personnel, and communication materials.
- 2) Reliability which involves the ability to perform the promised service dependably and accurately.
- 3) Responsiveness which involves the willingness to help customers and to provide prompt response.

- 4) Assurance which involves the knowledge and courtesy of employees and their ability to convey trust and confidence. Thus assurance includes competence, courtesy, credibility and security.
- 5) Empathy which involves the provision of caring, individualized attention to customers. Empathy includes access, communication, and understanding the customer.

Source: (Etgar & Fuchs, 2009, pp.475-476)

Each of these five constructs have precise, significant meanings particular to the perception of service quality. Therefore, these constructs will need to be distinguished from the terms used in a customary context. To achieve this distinction the first letter of the five constructs of service quality were capitalised throughout the remainder of this document e.g. Empathy to distinguish it from the customary concept of empathy.

Gap theory sceptics suggest that perceptions of service performance directly determine service quality (Tse & Wilton, 1988; Cronin & Taylor, 1992; Jaiswal, 2008). It is in light of this critique that Cronin and Taylor (1992) developed the SERVPERF scale which they believed to be an enhancement of the SERVQUAL instrument (Jain & Gupta, 2004). SERVPERF directly captures customers' performance perceptions in comparison to their expectations of the service encounter (Carrilat, Jaramillo, & Mulki, 2007). The SERVPERF scale tests only for the performance (perception) part of the SERVQUAL model but across the same five dimensions as described for SERVQUAL (Jain & Gupta, 2004) and defined above.

To aid in determining whether either of these scales is superior to the other this inquiry explored the comparative analyses performed by Jain and Gupta (2004) and Carrilat et al. (2007). Carrilat et al. (2007) empirically proved "both scales are adequate and equally valid predictors of OSQ [Operational Service Quality]" (Carrilat et al., 2007, p. 485). Jain and Gupta (2004) found that SERVPERF should be used to test for overall service quality in an organisation due to the tool's "...psychometric soundness and greater instrument parsimoniousness..." (p.25). Jain and Gupta (2004) also noted the relative ease of gathering data using SERVPERF when compared to SERVQUAL due to the lengthy SERVQUAL questionnaire. Answering 22 statements on expectation then 22 on perception increases data editing time and could have a negative effect on response rate (Jain & Gupta, 2004, p.31).

Based on the research of Jain and Gupta (2004) and Carrilat et al. (2008) the appropriateness of both measures was shown. The SERVPERF instrument was however chosen for this research since it has a higher expected response rate and is viewed as more appropriate for assessing overall service quality in an organisation (Jain & Gupta, 2004).

The gap between perceived service quality and customer satisfaction as well as the appropriate measurement instruments for quantifying these two constructs have been reviewed and deliberated. The following section will discuss these constructs within the service call centre environment, focussing on the inappropriate managerial use of operational metrics as a proxy for customer satisfaction.

2.1.3 Distinguishing between customer satisfaction and operational metrics in call centres

A call centre, is “...a dedicated operation in which computer–utilising employees receive inbound, or make outbound calls, with those calls processed and controlled either by an automatic call distribution (ACD) or predictive dialing system” (Bain & Taylor, 1999, p.102).

According to Jaiswal (2008) it was found that most call centres in India had separate quality control departments. This structure is true within the MNC investigated in this paper as well, where a specialised department is tasked with ensuring the call centres provide high quality service. Within the call centre industry, quality control and performance evaluation is done primarily based on operational metrics (Jaiswal, 2008).

Frequently used operational metrics as noted by Miciak and Desmarais (2001) and Jaiswal (2008) include: The average speed to answer a customer call; the abandonment rate - the ratio of number of calls abandoned by the customer prior to it being answered; average talk time - which is the total time the customer was connected to a call centre agent; queue time - which is the total time the customer is in the telephone line before speaking to a human voice and first-call resolution - which is the percentage of customers who have satisfactory problem resolution on the first call. This list is by no means comprehensive but serves to provide a feel of the operational metrics used to determine the level of service quality (Jaiswal, 2008).

Many call centres use operational measures, such as those described above, as a proxy for customer satisfaction assessment (Jaiswal, 2008, p.409). If some measure of customer satisfaction was available, it was usually a single overall service rating (Jaiswal, 2008). It was found that the “use of SERVQUAL or other similar instruments for collecting customer perceived dimension–wise service performance did not exist” (Jaiswal, 2008, p.409). Miciak and Desmarais (2001) made the point that operational metrics are poor predictors of customer satisfaction in call centres. Their study found that for average first–call resolution scores of 87%, the corresponding customer satisfaction score was only 70% (Miciak & Desmarais, 2001).

Feinberg et al. (2000) echoed these findings, showing low predictive power of operational metrics when used to determine customer satisfaction. They explored the discrepancies that exist between 13 operational variables and caller satisfaction (Feinberg et al., 2000). They noted that of the 13 operational metrics tested only two; the percentage of calls closed on first contact and average abandonment rate had significant effects on customer satisfaction. The effect was weak though as they only explained 5% of the observed variation in customer satisfaction. Jaiswal (2008) stated that based on the poor correlation between operational (service) metrics and customer satisfaction it was obvious that there exist other variables which determine customer satisfaction within call centres.

2.1.4 Determining the correct tool for measuring service quality within call centres

In order to understand which factors influence the quality of the service offered by call centres, Jaiswal (2008) noted that it is essential to appreciate the difference between service encounters occurring in call centres as opposed to other service organisations where the customers have physical “face-to-face” encounters. Call centre service encounters occur by phone where tangible factors such as the employee’s appearance and/or physical environment of the service encounter plays no role in affecting the customer’s perception of service quality. Jaiswal (2008) suggest that because of this physical distance, the customers’ role is less active and the importance of verbal signals is increased in a call centre interaction. Therefore the social skills of a call centre agent directly impacts service quality while tangibility has little or no effect (Jaiswal, 2008).

The exclusion of tangibility is potentially important in the decision as to what instrument should be used to measure customer satisfaction and how, if at all, it should be adjusted. Tangibility, reliability, responsiveness, assurance and empathy affect service quality perceptions according to the SERVQUAL instrument, yet Keiningham, Aksoy, Andreassen, Cooil and Wharen (2006) revealed that call centre customer satisfaction has all the dimensions found in SERVQUAL except tangibility. As both SERVQUAL and SERVPERF use the same five dimensions, the inability to measure tangibility will also extend to the SERVPERF instrument.

From this discussion it is clear that call centres form a critical part of the modern service offering. Within this critical operation the need for further investigation is required as Feinberg et al. (2000), Miciak and Desmarais (2001) and Jaiswal (2008) identified a fundamental flaw where call centre managers incorrectly use operational metrics to try and gauge customer satisfaction. There exist distinct differences between operational service metrics, a customer’s perceived service quality and customer satisfaction (Cronin et al., 2000). It was also speculated that the primary driver of

customer satisfaction is service quality perception (Tsoukatos & Rand, 2007) which lead into the formulation of the first hypothesis of this inquiry:

Hypothesis 1: Perceived service quality is the main antecedent of customer satisfaction.

The discussion also showed that two well-researched instruments for measuring perceived service quality; SERVQUAL and SERVPERF are widely used. The SERVPERF instrument proposed for this inquiry requires adjustment due to its inability to measure tangibility for the call centre environment.

Additional complexity arises when call centres are either outsourced, offshored or both. The following section will describe the strategic reasons businesses have for following this route and the additional risk factors that comes into play, with a particular focus on differences in national cultural.

2.2 Offshoring

Offshoring as described by Bunyaratavej et al. (2008, p.227) is the relocation of a domestic company's processes and activities abroad. This can be thought of as a physical restructuring of the affected departments. Traditional outsourcing, on the other hand refers to a company subcontracting a function or business unit to another company (outsource vendor) (Schneiderjans & Zuckweiler, 2004). An alternative definition is provided by Lankford and Parsa (1999) as "the procurement of products or services from sources that are external to the organization" (Lankford & Parsa, 1999, p.310).

Offshore outsourcing is therefore a combination of these two practices. A function is not only moved outside of the company to be performed by the outsource vendor, but this vendor resides outside the borders of the company's home country.

Lampel and Bhalla (2011) built a theory around how offshoring evolved into a distinct strategy from the more general strategic outsourcing practice. Their theory is rooted in the work done by Quinn and Hillmer (1994) who defined strategic outsourcing as the transfer of core competency activities, previously performed by the company, to other organisations. This outsourcing is performed for the purpose of gaining a strategic advantage in the organisation's core competencies (Quinn & Hilmer, 1994). Holcomb and Hitt (2007) defined strategic outsourcing as "the organizing arrangement that emerges when firms rely on intermediate markets to provide specialized capabilities that supplement existing capabilities deployed along a firm's value chain" (p.464).

Within this paper the distinction between offshoring and offshore outsourcing will not be made as the inquiry focus on the service interaction and does not address the added complexity of control.

2.2.1 Service offshoring

Carrilat, Jaramillo and Mulki (2007) highlighted the dominance of services over manufacturing, stating that 70% of the Organisation for Economic Co-operation and Development (OECD) countries' GDP consists of service activities spend. When looking at offshoring specifically it was noted that "the offshoring of manufacturing has been occurring for decades, the more recent trend of offshoring of services has been attracting greater attention" (Bunyaratavej et al., 2008, p.227). Reasons noted for the practice of service offshoring by Thelen et al. (2010) are the perceived benefits gained through cost reduction, round the clock service availability and access to large, well-educated labour pools (p.196).

Following the reasoning from Bunyaratavej et al. (2008) the specific rationale for offshoring may be separated into macro and micro driving factors. The two macro level factors are technological advancement and the drive of businesses to focus on their core competencies at company headquarters (Bunyaratavej et al., 2008). Technology enables the partitioning of a variety of company activities across geographical space while global competition is increasingly forcing organisations to move non-core activities to locations of improved efficiency (Bunyaratavej et al., 2008 p.229-230). This focus on core competency retention at headquarters aligns with Aron and Singh's (2005) ideas that core processes must be controlled by the company, critical processes should be bought from the best vendor available in the market and commodity processes should be outsourced.

At a micro level a variety of reasons are put forward by Bunyaratavej et al. (2008) motivating for organisations to follow the offshore route. These are: cost savings, improved productivity, improved quality, reduction of time spent on R&D, improved customer service, a more focused approach to core strengths within a service unit and the enablement to move certain functions to a variable cost structure (Bunyaratavej et al., 2008).

Holcomb and Hitt (2007) explained these micro level reasons as transaction cost theory motivators. By offshoring these services the transaction costs are significantly reduced. Additionally, higher levels of retention through improved service drives down transaction costs. As customer service is improved, trust is built which according to Lin and Wu (2011) translates into cost savings.

It is with this viewpoint that delivering better quality service and ensuring higher customer satisfaction have developed into tactical necessities for companies to survive in the global businesses environment (Parasuraman et al., 1988; Jaiswal, 2008).

2.2.2 The impact of offshoring

In an attempt to remain competitive many organisations outsource or offshore customer service departments and call centres across national borders. As previously notes, this offshore / outsource practice has grown into a massive industry with 18,977 service outsourcing companies registered in China employing 3.72 million people (Chang, 2012) as per the Chinese service outsourcing development report.

The widespread nature of outsourcing emphasises the need for business practitioners to understand the international context and at the same time provides an opportunity to investigate the current context of cross cultural management. Research into strategic outsourcing such as that conducted by Schniederjans and Zuckweiler (2004) and Holcomb and Hitt (2007) indicated that the offshoring trend as a strategic management decision will continue to grow in the future. The reasons primarily being those contained in transaction cost theory and resource based theory as discussed by Holcomb and Hitt (2007). Transaction cost theory according to Holcomb and Hitt (2007) are the “effort [by a firm] to capture cost savings” (p.464) whereas resource based theory focus on “...the role of specialized capabilities obtained through intermediate markets” (p.473). It is estimated that by 2020 the global offshore service outsourcing market will be worth between \$1.65 trillion and \$1.8 trillion (Chang, 2012).

As services offshoring becomes more prevalent in corporate strategy – research needs to be conducted to fully understand the added risks and opportunities of this decision. Within the following section previous research on risks related to offshoring ventures will be discussed with a specific focus on its effect on customer satisfaction.

2.2.3 Risks associated with offshoring ventures

Various authors have assessed the risks associated with service offshoring. Risks identified with this strategy were those of knowledge and data protection (Nassimbeni et al., 2011), customer satisfaction, customer loyalty, customer expectations and company image (Thelen, et al., 2010), cultural erosion (Knights & Jones, 2007) and cultural difference (Metters, 2008).

An additional operational risk identified by Aron and Singh (2005) is the lack of metrics to measure customer satisfaction after receiving offshore services. This ties back with the gap identified between operational metrics and perceived service quality (customer satisfaction). This analysis has been neglected and presents an unknown operational risk.

2.2.3.1 Risks associated with cultural difference in offshore service operations

Culture is described by Hofstede (1991) as: “the collective programming of the mind which distinguishes the members of one group or category of people from another” (p. 5). Another definition provided in GLOBE (2004) was that culture is a collective of identifications made evident in act and object. These two definitions are indicative of the facts that culture is learned (acquired), culture is based on practices (what people actually do) and values (what people believe should be done) and finally that culture is indeed varied.

Recent research has focused on the impact of cultural differences on the choice of location for service offshoring (Bunyaratavej et al., 2008; Boardman Liu, Berger, Zeng, Gerstenfeld, 2008; Thelen, et al., 2010). Of special interest to this research is the Thelen et al. (2010) paper which analysed US customers’ preference of offshore location. In deciding on offshore location, research has shown that the customer base’s pre-conceived ideas about the offshore country, influences the perception of the service quality likely to be received from an offshore vendor (Thelen et al., 2010). This bias needs to be taken into account by both the company deciding to offshore processes as well as the offshore vendor at the hand of reputational and managerial implications (Thelen et al., 2010). This understanding will enable decision makers to focus on areas where real improvements need to be made and not unduly discriminate against staff servicing that market when measuring performance (Thelen et al., 2010).

Building on previous cultural difference studies in service offshoring operations, Metters (2008) analysed the experience of a US Airline which offshored some of its services to Barbados and the Dominican Republic. The offshoring venture in Barbados was viewed as a success by the airline (Metters, 2008) while the Dominican Republic excursion was a failure. Metters found that the reason for these two discrepant outcomes was due to the cultural differences of the two nations.

In his research, Metters (2008) mentions two surveys undertaken in the corporate offshoring experience. The first survey is that of Aelera (2004), (as cited in Metters, 2008) which found that amongst the 60 executives surveyed (all of which were involved in offshoring information technology services) the most common problem cited was cultural differences. The second survey by Lewin et al. (2005) (as cited in Metters, 2008) surveyed 96 US companies that either had or were planning to offshore service operations.

Within the Lewin survey the most frequently cited risks related with offshoring were “cultural fit” second only to “service quality” (Metters, 2008, p.728). Metters (2008) noted that these surveys act as “barometers” to the significance of culture (p.728). Even though Metters (2008) investigated the impact of cultural fit, the influence of service quality came up in his research as the most significant

factor in determining the success of an offshore venture. This is fundamentally important as service quality is not only based on service metrics and the way the service provider believes it is performing, but also on the customer's perception of the quality of the service provided.

The Bunyaratavej et al. (2008) investigation into the complex choice of where to physically locate services offshoring activities is an essential reference when studying whether national culture plays a role in service quality and customer satisfaction within offshore service providers. Through empirical analysis they examined the attractiveness of host countries using input variables of wage, education level, infrastructure and cultural differences. These factors were found to be relevant variables and allowed the authors to measure a country's suitability as an offshore destination of choice (Bunyaratavej et al., 2008). The cultural difference factor referred to within their article was national culture as based on Hofstede's 1980 country scores (Bunyaratavej et al., 2008, p.234).

It seems therefore that the resulting impact of these factors on the call centre environment would be interesting to add to the literature and perhaps serve as another step into creating theories by industry and environment to accurately understand the impact of customer characteristics on customer satisfaction.

The following sections will discuss the "built in" bias which resides with the customer and how it influences the customer satisfaction level of the service interaction.

2.3 Cross-national variation in customer satisfaction

2.3.1 Defining and relating national culture to perceived service quality and customer satisfaction

Morgeson III et al. (2011) noted that existing research on customer satisfaction measured across nations is limited while Tsoukatos and Rand (2007) stated that "Further research to examine culture's impact on service quality perceptions would be of particular interest..." (p.513).

To approach the task of assessing the affect national cultural differences might have on customer satisfaction, a brief description of this concept is given followed by an evaluation of previous research conducted on the role that national culture plays in the perception of the level of service quality and how this translates into satisfaction (Donthu & Yoo, 1998; Tsoukatos & Rand, 2007; Jaiswal, 2008). Within this document the terms culture and national culture will be used interchangeably, referring to the same concept.

The influence of culture on behaviour is put forward by Mueller and Thomas (2001) (as cited in Wong, Everett, & Nicholson, 2008) as "...the particular underlying system that shapes personality

traits and behaviors” (p.699). Hence, by extrapolation, culture impacts customer behaviour. On defining culture, Trompenaars (1994) (as cited in Wong, et al., 2008), was quoted as saying it is “the shared ways in which groups of people understand and interpret the world” (p. 698). This definition speaks to the cultural variation present in experience perception. Thus, culture impacts perceived service quality and perceived value which translates into customer satisfaction (Tsoukatos & Rand, 2007).

The importance of culture in the evaluation of customer satisfaction as stated by Donthu and Yoo (1998) is summarised in Tsoukatos and Rand (2007): “As a driver of people’s thoughts, wishes, perceptions and behaviour, culture influences service quality perceptions through service expectations” (p.469).

As a starting point to address issues pertaining to national culture, it is noted that the Dutch social psychologist Geert Hofstede’s research on the matter is viewed as seminal given the number of citations received (Powel, 2006). This sentiment is shared by Scheffknecht (2011) who stated that “...Hofstede and his IBM study....are undeniably the most prominent ones when it comes to cultural research” (p.73).

A brief overview of research conducted by Geert Hofstede is provided followed by a review on research relating his cultural dimensions to the constructs of customer satisfaction and perceived service quality.

2.3.2 Hofstede’s model

Hofstede (1980, 1991) created a quantitative model which measures cross cultural similarities and differences at a national level. It features five dimensions of culture namely; power distance (PDI), individualism-collectivism (IDV), masculinity-femininity (MAS), uncertainty avoidance (UAI) and long term orientation (LTO). Long term orientation was added in 1991, based on research by Michael Bond into “Confucian dynamism” (Minkov & Hofstede, 2011). The slightly altered definitions of the 1991 publication are given below.

Power distance addresses society’s tolerance for social inequality and includes the relationship with authority. Individualism-collectivism describes the relationship between the individual and the group (collective). It’s the degree of interdependence a society preserves among its members (Geert-Hofstede, 2012). Masculinity-femininity is the third measure and analyses the social and emotional implications of having been born as a boy or a girl and the way societies cope with gender roles (Minkov & Hofstede, 2011; Cagliano, Caniato, Golini, & Longini, 2011). Uncertainty avoidance

relates to the extent to which the society feels threatened by ambiguous or unpredictable situations and actively maintain beliefs and build institutions to prevent them (Geert-Hofstede, 2012, par.). The fifth dimension is long term versus short-term orientation also called Confucian dynamism and speaks to whether a society's efforts are focused on the future or the present and the past. A sixth dimension was added in 2010 based on research done by Michael Minkov on data from the World Values Survey. This dimension is called indulgence versus restraint and describes a society's allowance of human gratification or its denial thereof (Geert-Hofstede, 2012).

2.3.3 Cultural scores

Hofstede's model calculated country specific scores that range from 0 to 100 for each of the aforementioned cultural dimensions. Hofstede's scores for South Africa and the United Kingdom, the two countries investigated in this inquiry are shown in table 2-1 below:

Table 2-1: Hofstede's National culture scores

Country	PDI	IDV	MAS	UAI
South Africa	49	65	63	49
United Kingdom	35	89	66	35

Source: (Hofstede, 1991)

The values in table 2-1 indicate South African culture has a higher power distance, lower individualism and higher uncertainty avoidance than British culture while the masculinity – femininity dimension is fairly similar. The long term orientation dimension was never measured for South Africa by Hofstede, but a study by Muller (2006) suggested that it would be in the 81 to 100 range.

This finding suggests South Africans to be in the range of Asian countries like Japan (80) on the long term orientation dimension. This is in stark contrast to Hofstede's view for closely related cultures. West African culture scores, which are the closest related to the South African black population, is 16 for the long term orientation dimension.

Countries like the United Kingdom and United States of America with predominantly Anglo cultures, similar to that of the South African white population, scored long term orientation at 25 and 29 respectively. Muller's sample of university students might have been very optimistic about their future prospects or the sample sizes of 14, 24 and 33 (white, coloured and black) were simply too small to be significant. Therefore no LTO score for South Africa could be gathered from the literature.

2.3.4 Hofstede and customer satisfaction

In a study amongst retail bank customer across four countries, Donthu and Yoo (1998) found uncertainty avoidance and individualism to be positively correlated while power distance is

negatively correlated with service quality expectations. Donthu and Yoo (1998) stated that service quality expectation sets the minimum level of service delivery which customers would accept. Cultures expecting high levels of service quality will not tolerate low service levels (Donthu & Yoo, 1998). These customers would therefore express low satisfaction levels if their expectations are not met. A negative correlation between service quality expectations and cultural dimension, translates into a positive correlation between customer satisfaction and said cultural dimension. Table 2-2 below shows this relationship visually:

Table 2-2: Cultural dimensions’ correlation with customer satisfaction

	PDI	IDV	MAS	UAI
Service quality expectation	-	+		+
Customer Satisfaction	+	-		-

In table 2-2 the correlation between service quality expectation and Hofstede’s dimensions of power distance, individualism and uncertainty avoidance are shown. In cultures with high levels of power distance there will exist a lower level of service quality expectation (Donthu & Yoo, 1998), making them more tolerable of poor service. Within these cultures higher customer satisfaction scores can be expected as opposed to cultures with low power distance. The opposite is true for cultures with high individualism and high uncertainty avoidance: customer satisfaction levels within these cultures will be lower as their expectations are higher (Donthu & Yoo, 1998).

Hypothesis 2a: South Africa with a higher PDI, lower IDV and lower UAI will have a higher average customer satisfaction score than the British or greater tolerance of poor service.

2.3.4.1 Hofstede and perceived service quality

Tsoukatos and Rand (2007) conducted research into the cultural influences of service quality and customer satisfaction in Greece. From their review of previous literature, a gap was identified in the importance of service quality dimensions measured in the SERVQUAL and SERVPERF instruments (Tsoukatos & Rand, 2007). They stated that “If culture determines the importance of service quality dimensions, then it is also a driver of customer satisfaction through the relationships of the latter with the dimensions of service quality” (Tsoukatos & Rand, 2007, pp.467-468). The need to understand culture from a strategic point of view was argued using the following train of thought: to achieve customer satisfaction, quality resources need to be appropriately allocated. To assist with this allocation decision, the culture of the customers you serve needs to be understood and catered for (Tsoukatos & Rand, 2007).

The following section delves into the relationships which have been identified between Hofstede's cultural dimensions and the four service quality dimensions of Reliability, Responsiveness, Assurance and Empathy which can be tested amongst customers in the call centre service environment.

2.3.4.2 The relationship between cultural dimensions and perceived service quality

Power distance

Hofstede (1991) stated that power distance is "...the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally" (p.28). Cultures with a high score in power distance accept concentration of power and the reinforcement of authority to maintain inequalities in power and riches (Tsoukatos & Rand, 2007). Commenting on the impact of power distance on perceived service quality Furrer et al. (2000) stated that in cultures with high power distance score, customers would be comparatively weak compared to big and powerful service providers. These weak customers would have a high tolerance of service failures from the powerful service providers.

Based on a four country study of bank customers, Donthu and Yoo (1998) found that power distance is inversely related to Responsiveness and Reliability. These findings were confirmed by Furrer et al. (2000) and Tsoukatos and Rand (2007). Furrer et al. (2000) conducted research amongst students (both US and foreign) and their interaction with US retail banks while Tsoukatos and Rand (2007) surveyed Greek insurance customers.

According to Furrer et al. (2000) the constructs of Responsiveness and Reliability are measures of service failure. The negative correlation between these two constructs and societies with high power distance was therefore expected when taking into account Furrer et al.'s (2000) explanation that customers in these societies are perceived as weak and more likely to tolerate failure. An additional finding is that power distance is positively correlated with Assurance (Furrer et al., 2000). The explanation provided is that weaker customers require more assurance in their service relations with more powerful service providers. None of these studies found statistically significant results pertaining to the relationship between Empathy and power distance, though both Furrer et al. (2000) and Tsoukatos and Rand (2007) found a negative correlation. This could be explained as weak customers not expecting a powerful service provider to express care or understanding for their individual issues.

Individualism / collectivism

Hofstede (1991) stated that individualism relates to cultures where individuals are expected to look after themselves and their immediate family. The opposite of this idea is collectivism which describes the highly integrated relationship existing in cultures where people have been tied into a cohesive group from birth. Within this cohesive group security and acceptance is offered in exchange for unquestioning loyalty (Hofstede, 1991). Donthu and Yoo (1998) stated that individualistic societies emphasise "...job specialization, individual rewards, competitive climate and individual and nuclear family independence" (p.180). Customers in individualistic societies are independent, self-centred and ambitious which leads to them demanding high levels of service quality, matching their own work ethic (Furrer et al., 2000).

The relationship between individualism and the constructs of Empathy and Assurance yielded contradictory results. Donthu and Yoo (1998) found strong positive correlations between individualism and the constructs of Empathy and Assurance while Furrer et al. (2000) showed strong negative correlations. Donthu and Yoo (1998) had no clear rationale for their finding, but Furrer et al. (2000) stated individualists do not require the empathy or assurance from a service provider since these customers have high levels of self-confidence.

Furrer et al. (2000) found a strong positive relationship between individualism and Responsiveness. This speaks to the importance these individuals place on efficiency and high service quality. Tsoukatos and Rand (2007) found no significant relationships between individualism and service quality constructs within the Greek insurance industry.

Masculinity / femininity

This dimension reflects the degree to which gender roles are distinct within a society (Tsoukatos & Rand, 2007). Customers with a high score of masculinity expect female service employees to be more empathetic than proficient (Furrer et al., 2000) and expect male service providers to be more "...professional, and hence more reliable, responsive and assuring" (Tsoukatos & Rand, 2007, p.472). This relationship has a dependency on the gender of the service provider and should also be negligible in societies scoring low on masculinity.

Statistically significant negative correlations between masculinity and the constructs of Responsiveness (Furrer et al., 2000; Tsoukatos & Rand, 2007), Assurance (Tsoukatos & Rand, 2007) and Reliability (Tsoukatos & Rand, 2007) were found. Within the Greek insurance industry the majority of service employees were female (Tsoukatos & Rand, 2007). This might explain why their

results were significant across three dimensions as opposed to the singular point of significance (Responsiveness) found within the Furrer et al. (2000) study.

Uncertainty avoidance

This dimension captures the “...extent to which the members of a culture feel threatened by uncertain or unknown situations” (Hofstede, 1991, p.113). Tsoukatos and Rand (2007) stated that customers with high uncertainty avoidance would value Reliability, Responsiveness and Assurance highly. All three of these measures were found to have significant positive correlations with uncertainty avoidance in the studies by Furrer et al. (2000) as well as Tsoukatos and Rand (2007). The explanation given by Furrer et al. (2000) is that increased uncertainty caused by a service failure should be decreased by a “...guarantee of a quick solution...” (Furrer et al., 2000, p.364). Additionally Furrer et al. (2000) found a statistically significant positive correlation between uncertainty avoidance and Empathy. This need of a customer to be given individual, caring attention speaks of a person who likes to be reassured that the situation is under control.

A summary of the cultural dimensions’ direction of statistically significant correlations with service quality constructs are shown in table 2-3 below:

Table 2-3: Cultural dimensions’ correlation with service quality constructs

	PDI	IDV	MAS	UAI
Responsiveness	-	+	-	+
Assurance	+, -	+, -	-	+
Reliability	-		-	+
Empathy		+, -		+

In formulating a hypothesis it is not the country comparison between South Africa and United Kingdom customers which needs to be measured, but the relative positioning of the cultural dimension scores as high or low on Hofstede’s (1991) 100 point scale.

Combining the multi dimension findings from table 2-3 it is unclear which service quality constructs South African and United Kingdom customers would value highest. From a British perspective the score of 89 on individualism is exceptionally high, which might imply Responsiveness will receive the highest ranking. The PDI and UAI are very low, which might support either Responsiveness or Reliability (based on PDI). No clear call can be made on the construct of UAI.

From a South African perspective the scores were clustered around the middle, ranging from 49 to 65, with individualism (ranked 16th out of a group of 53) the highest cultural dimension. Therefore South Africa had no exceptional outliers which meant no clear prediction could be made for the South African cohort.

Hypothesis 2b: Differences between the rankings of service quality constructs for the two cultures exist.

The hypotheses around culture were purely formulated on cultural literature of which the authors used cultural data to come to their conclusions. Therefore the concept evaluated in the remainder of the research will be national culture, not country of origin.

2.4 Customer Characteristics

In a study across 40 industries, Bryant and Cha (1996) found that there are a number of factors which affect customer satisfaction and which need to be controlled for before testing for demographic differences. The first of these is the product type (manufacturing or service). Customer satisfaction for manufacturing companies was higher than those for service organisations (Bryant & Cha, 1996) and the reason stated was the rigid quality control processes which manufactured products are subjected to prior to sale, compared to the unique / varied quality of service provided by a person. This seems to imply that the repetitive nature of manufacturing to a set specification has a hand in customer satisfaction or simply that the customer already has an expectation prior to purchase. The second difference was found within service organisations where customers rated private sector providers higher than government services (Bryant & Cha, 1996). The most obvious explanation for this is the lack of competition within the public sector.

The following three sections discuss research findings on the impact the customer characteristics of age gender and socio-economic status have on customer satisfaction.

2.4.1 Customer age

Recent research into the impact that the demographic factors of age and gender have on customer satisfaction levels, suggest that these variables play a significant role in certain service environments (Sharma, Chen, & Luk, 2012).

Research in health services as conducted by Choi, Lee, Kim, & Lee (2005) and O'Malley, Zaslavsky, Elliott, Zaborski, & Cleary (2005) found age had a significant impact on how patients experienced medical provider interactions. Choi et al. (2005) found older patients to be more

satisfied with medical care services compared to younger patients who were more critical and demanding. Two reasons for this observed difference in customer satisfaction by age were proposed by Choi et al. (2005). The first of these hypotheses is that people's experience becomes more aligned with their expectations with time (Choi et al., 2005, p.147). As younger people are more critical of the medical service received, this hypothetical reasoning would suggest that either young people have higher (unrealistic) expectations of the service or alternatively that their expectations have not yet been recalibrated by years of receiving sub-par service.

The second hypothesis put forward to try and explain their finding was rather simplistic in saying that perhaps, with age, people become less critical of health care services (Choi et al., 2005). This explanation appears weak as no underlying rationale was discussed. A more plausible reason could be that with age and a natural deterioration of health, comes a deeper appreciation of good health, since one is much more likely to lose it. O'Malley et al. (2005) found age to be a significant variable in moderating customer satisfaction of both medical and surgical hospital admissions.

In a large scale study of motor vehicle customers Mittal and Kamakura (2001) found that the customer characteristics of age and gender both had a significant impact on customer satisfaction of the vehicle manufacturer. Motor vehicle owners above the age of 60 reported significantly higher satisfaction scores than younger motor vehicle owners (Mittal & Kamakura, 2001).

In their research into the determinants of customer satisfaction in Greek public organisations, Dimitriades and Maroudas (2007) discovered both age and gender significantly affect satisfaction (p.40). Their study found that when it comes to age, middle aged customers (citizens) appeared more "fulfilled" than their younger counterparts (Dimitriades & Maroudas, 2007, p. 40). A possible explanation put forward was that younger people were more demanding and critical of the "system" and older citizens were more "realistic" in their expectations (Dimitriades & Maroudas, 2007, p. 40). Anderson et al. (2008) found that within the airline industry age directly affects customer satisfaction, with older passengers reporting higher levels of satisfaction than younger travellers (p.374).

In the Mittal and Kamakura (2001), Choi et al. (2005), Dimitriades and Maroudas (2007) and Anderson et al. (2008) studies, generational differences in customer satisfaction were found. Both the Choi et al. (2005) and Dimitriades and Maroudas (2007) studies attributed this phenomenon to unrealistically high expectations from a younger generation. Bryant and Cha (1996) found that people younger than 44 had similar satisfaction levels. With increasing age higher levels of customer satisfaction are noted as well as an increase in the rate of change – this is particularly evident at ages 55 and older. It was also noted that this increase at age 55 was not limited to a specific gender group (Bryant & Cha, 1996).

An interesting theory to explain this phenomenon was that all those customers aged 55 or older in 1994, when the data was gathered, were born on or before 1939. This implied they lived and shopped in times of hardship (the great depression or scarcities associated with World War II) which caused supply shortages followed by post war increases in demand which outstripped supply (Bryant & Cha, 1996). As such, these people lived through times where customers had weak economic power which permanently affected their standards for comparison.

Within all of these studies, customers either had tangible experiences with direct human interaction or a physical product. Research on the moderating effect of age on the service quality perception in call centres for financial services is very uncommon. As such the finding is not obvious from the literature. Older generations might place more value on the “human touch” and inadvertently score call centre agents lower than their younger counterparts.

Based on Bryant and Cha’s (1996) research conducted in 40 industries and in the absence of literature suggesting the contrary for call centres of financial services, it was hypothesised that older customers would exhibit higher satisfaction scores than younger customers.

Hypothesis 3a: South African customers’ satisfaction scores for call centre service interactions increases with age

Hypothesis 3b: British customers’ satisfaction scores for call centre service interactions increases with age

A further study conducted by Choi et al. (2005) evaluated the relationship between customer (patient) age and the weighting they put on different quality measures. Their findings which revealed that older patients value different services to those of younger patients in acquiring satisfaction (Choi et al., 2007). This finding was echoed in work done by Anderson et al. (2008) in the airline industry. Their study showed that older people placed more importance on attributes such as interaction, food and flight as opposed to the attributes of aircraft and personal space which, were valued higher by younger passengers. It was therefore hypothesised that customers of different ages, would place different value weightings on different aspects of a service interaction.

Hypotheses 3c: The importance of service quality dimensions varies by age within South Africa

Hypotheses 3d: The importance of service quality dimensions varies by age within the United Kingdom

Research into the moderating effect a customer's gender has on customer satisfaction and the antecedent of perceived service quality is very limited within the call centre environment. This investigation will add to the literature, building a richer theoretical base for future research.

2.4.2 Customer gender

According to Anderson et al. (2008) past research found that women report higher overall customer satisfaction in services than men. One explanation they put forward was that women could be more experienced shoppers than men. This experience enables them to make better attribute comparisons as they are more skilled at identifying items which fit their needs. In being better at meeting their specific needs, a higher overall level of satisfaction is achieved (Bryant & Cha, 1996; Anderson et al., 2008, p.368).

Mittal and Kamakura's (2001) research also found satisfaction ratings to be higher for women than men. The gender related satisfaction difference discovered by Mittal and Kamakura (2001) was explained in Anderson et al. (2008, p.368) as women being more likely to refrain from being truthful about negative experiences than men. This behaviour, attributed to women, is perhaps culture specific since these findings are not supported in all countries as was shown by Dimitriades and Maroudas's (2007).

Dimitriades and Maroudas's (2007) found contradicting results within the Greek public service sector. Within the Greek public sector environment male customers (citizens) had higher levels of satisfaction than women. It was suggested by Dimitriades and Maroudas's (2007) that the reason for this finding was linked to possible disparities in the treatment of men and women in Greek business exchanges (p.40).

Both Anderson et al. (2008) and Choi et al. (2005) found no significant difference between male and female satisfaction ratings in either the airline or healthcare industries. The differences between males and females in rating customer satisfaction is therefore not clear cut and appears to vary by industry, type of service environment and culture.

These findings could perhaps be indicative of the impact environmental or industry differences may have on influencing satisfaction. After adjusting for these factors, it was however noted by Bryant and Cha (1996) that "irrespective of the economic sector measured, female customers show markedly higher satisfaction with their experiences as customers than do male customers" (p.23). Bryant and Cha (1996) reasoned that the higher satisfaction levels displayed amongst females resulted from the observation that women are better evaluators of their personal needs.

As the research on perceived service quality in the call centre environment pertaining to the moderating effect of customer gender is very scarce, the detailed research done by Bryant and Cha (1996) will form the basis of the hypothesis for this inquiry.

Hypotheses 4a: Female South African customers have higher levels of call centre customer satisfaction than their male counterparts

Hypotheses 4b: Female British customers have higher levels of call centre customer satisfaction than their male counterparts

According to Iacobucci and Ostrom (1995) men and women look at different aspects of a service encounter in evaluating the level of service received. In reviewing the importance male and female customers place on different aspects of the service experience, research conducted by Iacobucci and Ostrom (1995) concluded that women value the interpersonal mechanisms of a service interaction higher than men. Men on the other hand focus more on the core aspects (the task at hand) of the service encounter.

Within their study of customer satisfaction in the airline industry Anderson et al. (2008) tested this finding, leading them to conclude that gender differences are associated to men and women having "...a different compositional model of customer satisfaction..." (p.374). This gender difference moderates the relationship between the overall satisfaction levels and the satisfaction ranking of individual attributes of the service experience. As such it can be hypothesised that men and women place different value weightings to different aspects of a service interaction.

Hypothesis 4c: The relative importance of service quality constructs varies by gender in the South African market

Hypothesis 4d: The relative importance of service quality constructs varies by gender in the British market

In section 2.3.4 it was shown that societies with high masculinity had significant negative correlations to certain service quality constructs which are antecedents of customer satisfaction. Thus relating this gender difference back to Hofstede's masculinity / femininity dimension, it could also be hypothesised that satisfaction varies by gender, by culture.

2.4.3 Customer socio-economic status

Another factor that fits in well with Vargo and Lusch's (2008) idea of experiential aspects, influencing the determination of satisfaction, is the income of the customer (Anderson et al., 2008).

Research on the moderating impact of income on customer satisfaction ratings in the airline industry (Clemes et al., 2008; Anderson et al., 2008) revealed that income does influence satisfaction levels.

Within the Clemes et al. (2008) study the impact of passenger income on customer satisfaction within the full package international airline service was tested. The study revealed that low income passengers were less satisfied than passengers with a higher income. The reason postulated was that higher income passengers could fly with more expensive airlines therefore their airline of choice best met their expectations. This is in stark contradiction with studies done by Bryant and Cha (1996) and Anderson et al. (2008).

The US domestic airline industry was the source of data for the Anderson et al. (2008) study. The characteristics of this national market are different from the international airline market on both the supply and demand side. The primary difference between the experience lies within the fact that international flights are typically longer, leading to more time and opportunity for passengers to interact with the cabin crew and experience the service. Within the domestic US airline market Anderson et al. (2008) found the relationship between income and satisfaction to be negative, with higher income passengers less satisfied with the service than passengers of a lower income. This negative relationship between income and customer satisfaction was also found by Bryant and Cha (1996) which looked at 40 different industries within the US market. Bryant and Cha (1996) found this negative correlation counterintuitive as customers with more income could afford a better quality product, more suited to their needs and more adequately meeting their expectations. However, Anderson et al. (2008) commented that the expectations from the product / service increase as customers' income rises while Bryant and Cha (1996) said that value for price and a customer's sense of what he can afford play roles in judgments of satisfaction with quality.

A study by Greenwell, Fink and Pastore (2002) into the moderating effect income has on customer satisfaction at sport events revealed that income had a significant effect on the satisfaction ratings of stadium service personnel. Customers with lower income levels were more critical of stadium service personnel, rating them lower than their more affluent counterparts. Greenwell et al. (2002) proposed that this difference is caused by the perceived concept of service value in relation to what customers paid for the service. The person with a lower income would place more value on the experience as the price paid represents a larger share of disposable income. As such, lower income customers may demand a "...higher level of attention from the service personnel to justify their relatively greater investment" (Greenwell et al., 2002, p.239). From a cultural perspective, this finding is interesting as the US score very low on the construct of power distance in both the Hofstede (1991) and GLOBE (2004) models. This would suggest that low income individuals within the US society are not accepting of the fact that wealthier (more powerful) customers receive superior service.

The literature therefore suggests different findings based on different industries, dissimilar environments and cultural difference. Based on the findings from Bryant and Cha (1996) across 40 industries, it will be hypothesised that customer satisfaction decreases as income increases.

Hypothesis 5a: Customer satisfaction in the South African market decreases as customer socio-economic status increases

Hypothesis 5b: Customer satisfaction in the British market decreases as customer socio-economic status increases

Little research could be found on the impact of income/socio-economic status on perceived service quality. If one assumes that individuality increases in line with socio-economic status, it could be argued that high income customers in both countries would value Empathy highly based on the Donthu and Yoo (1998) reasoning. Based on the Furrer et al. (2000) reasoning the opposite would be true. As such, this inquiry will merely test whether different socio-economic customer segments places different value on different service quality constructs.

Hypothesis 5c: The relative importance of service quality constructs varies by socio-economic status within the South African market

Hypothesis 5d: The relative importance of service quality constructs varies by socio-economic status within the British market

2.4.4 Relative importance of Input factor

In order to isolate the impact of the four demographic factors of age, gender, socio-economic status and national culture on customer satisfaction a final hypothesis was run.

Hypothesis 6: The primary driver of customer satisfaction in terms of independent demographic factors is culture

2.5 Conclusion

The literature review explained service offshoring, its strategic importance in business and the various risks the organisation needs to take into account when deciding to move service centres offshore. The risk of varied customer characteristics was highlighted and its relevance explained.

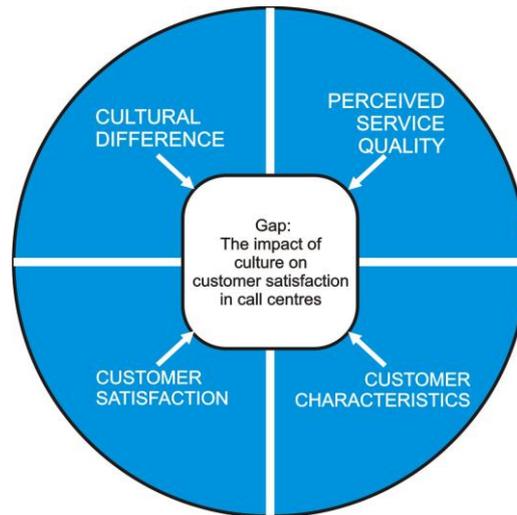
The review revealed the current gap which exists between service quality and customer satisfaction within service providers with a special focus on call centres – a common feature within offshore

service providers. The use of either the SERVQUAL or the SERVPERF instruments for measuring customer satisfaction were considered and compared and it was shown why SERVPERF was selected for this research. The concept of cultural difference was discussed.

Literature on the impact of national culture, age, gender and socio-economic status on customer satisfaction was reviewed and discussed. From a practical point of view it assists managers servicing multi-cultural customer bases to better understand their market and segment accordingly.

Figure 2-1 provides a graphical view of the gaps are in the literature:

Figure 2-1: Research gap analysis



Four distinct gaps were identified in the literature. The first gap was the need for more research using the SERVPERF survey to assess perceived service quality (Jaiswal, 2008), the second gap was the need for more research into the impact of customer characteristics on service evaluation (Sharma et al., 2012), the third was the need for more research into the impact of cultural differences on customer satisfaction and importance of service quality constructs by cultural dimension (Morgeson III et al., 2011), the fourth was the need for more research into cultural impact on customer satisfaction in call centres (Bunyaratavej et al., 2008).

3. Research Questions

3.1 Introduction

This chapter builds on the discussion above. The moderating impact of the customer characteristics of age, gender, socio-economic status and culture on the constructs of customer satisfaction and relative ranking of service quality constructs will be investigated.

3.2 Formulating research questions

Research question 1: Is perceived service quality the main antecedent of customer satisfaction in a call centre service interaction?

As discussed in sections 2.1.1 and 2.1.2, Tsoukatos and Rand (2007) stated that there were unclear distinctions between service quality and customer satisfaction within the literature. Various authors however suggested that service quality perception was the biggest contributor to customer satisfaction (Cronin & Taylor, 1992; Jaiswal, 2008). Proving this theory for call centre service providers would add value to the literature.

The following four research questions explore the differences in customer satisfaction and perceived service quality by customer characteristics within the two countries.

Research question 2: Does cultural difference have a moderating effect on customer satisfaction scores?

From the discussions in section 2.3.4, Donthu and Yoo (1998), Furrer et al. (2000) and Tsoukatos and Rand (2007) examined correlations between Hofstede's cultural dimensions and customer satisfaction.

The first hypothesis was based on the literature discussed in section 2.3.4: South Africa's higher PDI, lower IDV and lower UAI translated into higher average customer satisfaction scores when compared with customers in Britain (Donthu & Yoo, 1998; Furrer et al., 2000; Tsoukatos & Rand, 2007).

Based on the literature review in section 2.3.4.2, the second hypothesis was constructed: due to the differences between the two cultures, differences in the customer service quality rankings could be expected.

Research question 3: Does age have a moderating effect on customer satisfaction scores within different cultures?

From the discussions in section 2.4.1, the literature provided inconclusive findings on whether older customers exhibit higher satisfaction scores when compared with younger customers.

To get more clarity on the matter the first hypothesis constructed was: Customer satisfaction increases in direct relation to the customer's age (Bryant & Cha, 1996). A secondary hypothesis was constructed: the importance of service aspects varies by age (Choi et al., 2005; Anderson et al., 2008).

Research question 4: Does gender have a moderating effect on customer satisfaction scores within different cultures?

From the discussions in section 2.4.2, the literature suggested that in most, but not all industries, female customers exhibit higher satisfaction scores than male customers (Bryant & Cha, 1996). Tsoukatos and Rand's (2007) findings contradicted this as males reported higher satisfaction scores in their study. The second hypothesis was constructed as: the importance of the service aspects varied by gender (Anderson et al., 2008). The suggestions in the literature were used to establish two sets of hypotheses.

Research question 5: Does socio-economic status have a moderating effect on customer satisfaction scores within different cultures?

From the discussions in section 2.4.3, Bryant and Cha's (1996) study across 40 industries found that customer satisfaction decreased as income increased. A secondary set of hypotheses state the importance of service aspects varied by socio-economic status.

Research question 6: Is national culture the primary predictor of customer satisfaction in terms of the four factors tested in this research?

In order to isolate the impact of the four demographic factors of age, gender, socio-economic status and national culture on customer satisfaction a final hypothesis was run.

This hypothesis took the four factors tested in research questions 2, 3, 4 and 5 and quantified their impact in predicting customer satisfaction scores in the absence of perceived service quality variables. This hypothesis serves to focus the research back to the overarching purpose of this study: the effect of national culture on customer satisfaction in call centres across national borders.

From these six questions 17 hypotheses were postulated.

3.3 Research hypotheses

In this section the alternative hypotheses are expressed. The null hypotheses were not explicitly expressed as it simply speaks to equality within each hypothesis.

3.3.1 Terminology

- SA refers to South Africa
- UK refers to United Kingdom
- SE₁, SE₂, SE₃ refers to the three different socio-economic groups

3.3.2 Hypotheses

Hypothesis 1: Perceived service quality as measured by the SERVPERF instrument explains more than 50% of the customer satisfaction score as measured by the MBR (Member based research)

Hypothesis 1a - H_A: $R^2_{SA} > 0.50$

Hypothesis 1b - H_A: $R^2_{UK} > 0.50$

Hypothesis 2.1: South African customers' average customer satisfaction score is significantly higher than the average customer satisfaction score for British customers

Hypothesis 2a - H_A: $Median_{SA} > Median_{UK}$

Hypothesis 2.2: The importance of service quality dimensions varies by customers' national culture

Hypothesis 2b - H_A: $Primary\ service\ quality\ construct_{UK} \neq Primary\ service\ quality\ construct_{SA}$

Hypothesis 3.1: Customer satisfaction scores increases with age

Hypothesis 3a - H_A : $\text{Median}_{SA, \text{young}} < \text{Median}_{SA, \text{middle-aged}} < \text{Median}_{SA, \text{old}}$

Hypothesis 3b - H_A : $\text{Median}_{UK, \text{young}} < \text{Median}_{UK, \text{middle-aged}} < \text{Median}_{UK, \text{old}}$

Hypothesis 3.2: The importance of service quality dimensions in determining customer satisfaction varies by age

Hypothesis 3c - H_A : $\text{Primary service quality construct}_{SA, \text{young}} \neq \text{Primary service quality construct}_{SA, \text{middle-aged}} \neq \text{Primary service quality construct}_{SA, \text{old}}$

Hypothesis 3d - H_A : $\text{Primary service quality construct}_{UK, \text{young}} \neq \text{Primary service quality construct}_{UK, \text{middle-aged}} \neq \text{Primary service quality construct}_{UK, \text{old}}$

Hypothesis 4.1: Female customers report significantly higher satisfaction scores than male customers

Hypothesis 4a - H_A : $\text{Median}_{SA, \text{female}} > \text{Median}_{SA, \text{male}}$

Hypothesis 4b - H_A : $\text{Median}_{UK, \text{female}} > \text{Median}_{UK, \text{male}}$

Hypothesis 4.2: The importance of service quality dimensions in determining customer satisfaction varies by gender

Hypothesis 4c - H_A : $\text{Primary service quality construct}_{SA, \text{female}} \neq \text{Primary service quality construct}_{SA, \text{male}}$

Hypothesis 4d - H_A : $\text{Primary service quality construct}_{UK, \text{female}} \neq \text{Primary service quality construct}_{UK, \text{male}}$

Hypothesis 5.1: Customers' satisfaction scores decreases as socio-economic status increases

Hypothesis 5a- H_A : $\text{Median}_{SA, SE1} > \text{Median}_{SA, SE2} > \text{Median}_{SA, SE3}$

Hypothesis 5b- H_A : $\text{Median}_{UK, SE1} > \text{Median}_{UK, SE2} > \text{Median}_{UK, SE3}$

Hypothesis 5.2: The importance of service quality dimensions in determining customer satisfaction varies by socio-economic status

Hypothesis 5c - H_A : $\text{Primary service quality construct rank}_{SA, SE1} \neq \text{Primary service quality construct rank}_{SA, SE2} \neq \text{Primary service quality construct rank}_{SA, SE3}$

Hypothesis 5d - H_A: Primary service quality construct $_{UK,SE1} \neq$ Primary service quality construct $_{UK,SE2} \neq$ Primary service quality construct $_{UK,SE3}$

Hypothesis 6 - H_A: The primary driver of customer satisfaction in terms of independent demographic factors is culture

Hypothesis 6a - H_A: Predictive power_{culture} > Predictive power_{age}; Predictive power_{gender}; Predictive power_{socio-economic status}

4. Research method:

4.1 Introduction

4.1.1 Company introduction

The MNC is a South African financial services company. Within the holding company there were three health insurance companies with operations in two geographic areas outside South Africa. They have grown their footprint in Britain by means of acquisition and operated in the market under an acquired, well-known brand. Within South Africa and Britain these private health insurance companies were respectively placed first and third in market based on membership. The MNC's health insurance products provide private medical benefits with a range of coverage levels and choice of healthcare providers. The in – and outbound call centres for both South African and British customers were located in Johannesburg, South Africa. The call centres operated 24 hours, 7 days a week and were staffed by South African personnel.

4.1.2 Introduction to the methodology used

The responses on call centre customer satisfaction scores for customers from both countries were analysed. The unit of analysis was customer satisfaction, scored on a 7 point Likert–type scale and the level of analysis was at a country (national) level.

The first step was to gather customer satisfaction data. Using the SERVPERF survey tool (Cronin & Taylor, 1992; Ramseook-Munhurrin, Naidoo & Lukea-Bhiwajee, 2009) health insurance customers from South Africa and Britain were surveyed. An additional question requesting a service level rating (MBR score) was posed to customers to gauge customer satisfaction. The nature of the data collected stemmed from 8 May to 19 June 2012 (6 weeks) and was cross sectional in nature. (Albright, Winston, & Zappe, 2009) described cross sectional data as data of a population from a particular point in time.

The additional factors of age, gender and socio-economic status were added to analyse the data in line with the research questions posed. Using the responses from the SERVPERF survey as input variables and the MBR (satisfaction) score as dependent variable, various statistical tests were conducted to ascertain the difference between customers from the two different cultures with varied characteristics.

The importance of controlling for organisational culture to enhance the impact of national differences was highlighted by Scheffknecht (2011). This was adhered to in the analysis as all service

consultants were South African and worked on the same campus. The analysis approach used four different statistical methods to assess the hypotheses. The design will therefore be quantitative in nature. The full method will now be described in detail.

4.2 Population

The target population were the MNCs customers from two countries – South Africa and the United Kingdom. The sample frame was limited to customers

- older than 18
- who had a call centre interaction in the past six weeks prior to the survey date
- who had a valid email address and
- who was not surveyed by the MNC in the past three months.

The size of the South African sampling frame was 87,642 while the British sampling frame consisted of 4,508 unique adult lives. There were therefore two target populations and two sample frames – one for South African and one for British customers.

4.3 Sampling

4.3.1 Sample size

For both sample frames the target data size were set at a minimum of 200 respondents as an attainable and credible amount. Based on Cochran's sample size formula (Bartlett, Kotrlik and Higgins, 2001) an amount of 126 would have been adequate to make credible inferences, after selection and measurement bias have been accounted for. The Cochran formula used in this analysis had an alpha of .05, a seven point survey scale, an estimated standard deviation of 2 and an acceptable error of 5%.

From the MNC's prior experience the average response rate for questionnaires with more than 15 questions was 15% for South Africa and 8% for the United Kingdom (Klompas, 2012). As such the aim was to survey a minimum of 1,334 South African and 2,500 United Kingdom customers.

To ensure the self-imposed minimum number of 200 respondents were attained it was considered prudent to increase the sample size. Therefore the expected sample size required to attain 250 respondents, using the previously observed response rates, were set as target. Based on the

expected response rates this necessitated sample sizes of 1,667 and 3,125 for South African and British customers respectively.

4.3.2 Random sampling

Within each of the target populations simple random sampling as described by Lohr (1999 p.31) and Saunders and Lewis (2012 p.135) was conducted.

To pick random customers, the unique customer data from the MNC's two target populations was imported into Microsoft Excel and a unique number assigned to each sampling unit. This was continued for all data points in the two country cohorts until the final data point's unique number had been assigned. This final data point became an upper limit of the population which was called Y_u . For the South African population, 1,667 random numbers between 0 and Y_u was generated using the RANDBETWEEN formula in Microsoft Excel.

The same method was used for the British population, but since the response rate was so much lower a total of 3,125 random numbers between 0 and Y_u had to be generated to ensure the desired response size for this market. This method is valid since the sample frame will not be sorted in some way (Saunders & Lewis, 2012, p. 135). These values were calculated, then copied and pasted (hard coded) to prevent the software from automatically re-calculating random values. Using the VLOOKUP formula in Microsoft Excel, the random numbers generated were linked to the data points which were subsequently selected.

4.3.3 Survey distribution and actual sample size

As mentioned earlier, the MNC has its own department with the mandate of managing service levels. For continuous service auditing purposes they survey customers on a regular basis. To ensure customers are not over-surveyed they have a rule that no customer may be surveyed within three months of receiving a prior survey, whether they responded or not. Customers surveyed in this research could therefore not be surveyed for another three months. In the smaller British customer population the possibility existed that this research could affect the MNC's ability to survey the number of customers which would return a significant response cohort in the month following the survey.

As such, the sample sizes of 1,667 and 3,125 for the respective customer cohorts were agreed to by the MNC, but with conditions. To ensure the minimum number of surveys were sent, yet achieve the 200 respondents required, the surveys were batched and straddled over a number of days. This allowed for later survey batch sizes to be decreased or not sent at all based on the achieved response rate of the first two runs.

Surveys were planned to be distributed to customers of each country according to the schedule shown in the table below. The number in brackets indicates the actual volume that ended up being sent on each of the survey days:

Table 4-1: Survey distribution schedule

Survey day	Number of surveys	
	South Africa	United Kingdom
Day one	700 (700)	700 (700)
Day two	700 (700)	700 (700)
Day three	267 (209)	700 (670)
Day four	-	700 (0)
Day five	-	325 (0)
Total	1,667 (1,609)	3,125 (2,070)

Prior to sending the surveys on the third day, the number of responses received from the prior two days' surveying was counted and the response rate calculated within each country sample. This exercise revealed that the quantity of surveys scheduled for day three distribution could be decreased without compromising on the minimum target of 200 usable responses per country.

On day three of the survey process, only 209 of the 267 planned South African surveys were sent, while only 670 of the 700 planned British surveys were distributed. Subsequently no surveys were distributed to the British target sample on days four and five.

4.3.4 Summary of sample size

Using random sampling with minimum respondent requirements and minimisation of customers surveyed, a sample of 1,609 South African and 2,070 British customers were surveyed over a period of three days.

4.4 Survey design using the SERVPERF instrument

This survey is an adaptation of the original 22 statement SERVPERF survey proposed by Cronin and Taylor (1992) as was used by Ramseook-Munhurrin et al. (2009). Two changes were made to the Ramseook-Munhurrin et al. (2009) questionnaire for the purposes of this research. The first was the removal of the tangibility questions as call centre customers cannot adequately assess it (Keiningham et al., 2006). The second change was the removal of the statement "We provide services at the time we promised to do so". This statement within the reliability construct is

perceived as similar to the statement “When we promised to do something by a certain time, we do so”. The inclusion might have been an oversight in the Ramseook-Munhurrun et al. (2009) paper.

The adjusted SERVPERF survey consisted of 15 statements gauging customer perception and were answered by means of seven point Likert-scales ranging from strongly agree (7) to strongly disagree (1) with no descriptive labels for scores from (2) to (6) (Parasuraman et al., 1988). A shortened version of the 15 statements are shown in the table below, for a full view of the actual survey, please refer to Appendix B.

Table 4-2: SERVPERF statements (variables) for survey

Responsiveness		Assurance	
V ₁ . We provide prompt service		V ₄ . Our behaviour instils confidence	
V ₂ . We are always willing to help		V ₅ . We can be trusted	
V ₃ . We are never too busy to respond		V ₆ . We are consistently courteous	
		V ₇ . We have the required knowledge	
Reliability		Empathy	
V ₈ . We keep our promises		V ₁₂ . We give individual attention	
V ₉ . We show sincere interest		V ₁₃ . We have our customers’ best interest at heart	
V ₁₀ . We perform services right the first time		V ₁₄ . We understand customer needs	
V ₁₁ . We provide correct/accurate information		V ₁₅ . We have convenient working hours	

The average of the scores within each dimension provided the overall dimension score. These values were used to calculate the rank of the four dimensions.

Customer satisfaction was treated as a one-dimensional construct, gauged through an additional question asking the member to score their satisfaction with their latest service interaction (the MBR score). The MBR score is a customer satisfaction score ranging from 0 to 10, commonly used within the MNC. It was not deemed significantly different from the one-dimensional construct used by Tsoukatos and Rand (2007) to assess customer satisfaction in their research.

4.5 Survey distribution method

The survey was sent to the sampled customers by means of an online survey tool, Survey Monkey. This tool stores the survey feedback data online and enables easy data portability to Microsoft Excel. As part of the agreement with the MNC, the surveys would be sent by their service quality department using their subscription to Survey Monkey. In effect, even though the survey was created for this research, the data became secondary data.

4.6 Pilot testing

Saunders and Lewis (2012) emphasised the critical importance of conducting a pilot test of the questionnaire prior to its official release. This is to ensure that the statements are understood and the responses are accurately recorded (Saunders and Lewis, 2012 p.148-149). Using the online survey tool “Survey Monkey”, 20 questionnaires were distributed to a pre-selected sample of the researcher’s colleagues for testing purposes. Of these surveys, 14 responses were received, which translates into a 70% response rate. Even though the survey was kept open for seven days, it is worth noting that those who responded did so within the first two days after receiving the survey. Additionally, 11 out of 14 (78.6%) responses were received within 24 hours of the survey being sent.

Three random respondents and two non-respondents were contacted afterwards to get their feedback. Two of the respondents stated they had difficulty distinguishing which of the MNC’s product lines the survey was trying to get service feedback on. Based on these criticisms, the introduction to the survey was re-written with a focus on highlighting the product line.

Both of the non-respondents replied that they assumed that it will take them a long time to complete the survey. As such they did not take the time to look at the survey. Based on this feedback a text line was added to the email introduction stating that it will take approximately three minutes to complete the survey. The three minute projection was based on the feedback received from the survey tool which measured the amount of minutes each respondent took. Survey Monkey’s data revealed that 12 of the 14 respondents (85.7%) were able to complete the survey within one sitting of three minutes or less.

Based on the feedback received, the pilot exercise allowed for the survey to be improved and potentially increase:

- a) the response rate, as well as
- b) the quality of responses.

4.7 Survey bias

A number of potential response biases caused by the distribution method had to be addressed in the survey. In deciding on the survey distribution method, it had to be ensured that the response data was not skewed towards a specific subgroup of the population e.g. gender or age. The following paragraphs provide a brief description of how the distribution method was chosen and how bias could be reduced.

Five survey distribution methods were considered: mail, email, telephone using human operators, telephone using automated recordings and text on cell phones. Based on research conducted by the MNC's service lab the most expensive of these methods was telephone using human operators, it did however have the highest response rate (Klompas, 2012). The second most expensive method was telephone using automated recordings, but with response rates similar to that of emails (Klompas, 2012), while traditional mail had the lowest response rate.

Text on cell phones had the second highest response rate, but had only been tested with single questions, such as the MBR. The technology to send multiple question surveys on regular cell phones (not smartphones) was not owned by, and subsequently not tested by the MNC. Email allows for multiple response surveys, had the lowest cost and the third highest response rate. However, as the population to be surveyed was large, the response rate became a non-issue.

Focussing specifically on email as distribution method, it was found that the average respondent age was slightly older than that of the insured population, while females were more prevalent amongst the respondents than the insured population (Klompas, 2012). As such the respondent population might require age and gender adjustment should the difference to the distribution of the insured population be significant. Based on these considerations, email was chosen as the ideal survey distribution method.

4.8 Quality control

After receiving the responses the data was cleaned up. All incomplete surveys were flagged and discarded from the data used for modelling. The number of incomplete surveys and their impact on the results are discussed in chapter five.

4.9 Customer characteristic variables

To enable the testing of the moderating impact customer characteristics have on customer satisfaction, the factors of age, gender and socio-economic status were obtained. The age (age last birthday) and gender variables were collected from the MNC's database, but to obtain the socio-economic status proved more challenging. The customer income information for South African customers was scamp and a proxy for income had to be used. The MNC's British database contained the income bands within which customers reside - not their actual income though.

These variables were included in the survey response analysis to test for other reasons which might influence the way customers perceive service quality. The additional factors are given in the table below:

Table 4-3: Customer characteristic variables

Variable	Data type	Level available	Banded	Final data type
Age	Continuous numeric	Individual	Yes	Categorical
Gender	Categorical	Individual	No	Categorical
SA – socio-economic status (insurance product)	Categorical	Individual	Yes	Categorical
UK – socio-economic status (income)	Categorical	Individual	Yes	Categorical

The age variable was banded into three categories: 18-34, 35-54 and 55-99. These data bins were chosen to be in line with work done by Bryant and Cha (1996) for two reasons. The first reason was that their research was the most detailed (covering 40 industries) and the second reason was the possibility to try and refute their economic shortage theory for customers aged 55 years and older in 1994 (Bryant and Cha, 1996). For ease of use, the three age bands will be referred to as young, middle-aged and old in some tables or equations.

Unfortunately income data was not available and could not be requested in the survey - as agreed with the MNC. From the MNC's past experience, questions related to income resulted in a flood of customer queries and complaints as people perceive the data will be used for direct marketing purposes. In the British market the income band for each member's salary was available; however within the South African market no data was available.

In order to determine the socio economic status in South Africa, in the absence of income, a proxy was used. The insurer offered 19 different health insurance plans – each with a unique price based on richness of benefits. The single member premium for each plan was used as a crosswalk to ascertain what people can afford. Those who could afford a plan priced above the 75th percentile were classified as high income earners. Those who could afford a plan priced below the 25th percentile were classified as low income earners. Members falling between these two bands were classified as middle income. There are limitations with this method as many of the intermediate priced plans could be acquired by high income earners who perceive their health status as good, therefore requiring fewer benefits from their health insurance.

In the British market the midpoint of each income band was calculated, thereafter the 25th and 75th percentiles were found and customers apportioned to each as described in the South African case above.

4.10 National culture data

Differences in national culture were measured using Hofstede's (1991) four factor model. The dimensions of power distance, individualism–collectivism, masculinity-femininity and uncertainty avoidance were included.

The reason for not testing the dimensions of long term versus short term orientation and indulgence versus restraint are practical. The LTO score for South Africa is not available while the IVR scores for both countries were unavailable (Geert-Hofstede, 2012).

4.11 Data analysis methods

Upon retrieval of the respondent data, Cronbach's alpha as applied with a SERVPERF questionnaire in Beerli, Martin and Quintana (2004) was used to test the reliability of the survey results. The 15 questions from the SERVPERF survey and the four combined SERVPERF constructs as described in the literature review were used in the statistical modelling along with the customer characteristics of age, gender and socio-economic group as described in section 2.4.

Two statistical models (multiple regression and CHAID) and two statistical tests (Kruskal-Wallis and one-tailed Mann-Whitney tests) were used in this inquiry. These are described below, indicating their application to specific hypotheses.

4.11.1 A multiple regression model

Zikmund (2003) defined multiple regression as an analysis of association where the effects of two or more independent variables on a single interval scaled or ratio scaled dependent variable are investigated simultaneously. Sample size is significant when running a regression based on survey results. Hill and Lewicki (2006) stated that: "most authors recommend that you should have at least 10 to 20 times as many observations...as you have variables..." (p. 346). Therefore with 13 times the respondents to variables ratio in Britain and 16 times the respondents to variables ratio in South Africa, the samples were sufficiently big to run a multiple linear regression.

Three multiple regression analyses were performed in this inquiry to answer hypotheses 1a, 1b and 6. For hypotheses 1a and 1b the fifteen service dimensions from the SERVPERF survey were used as independent (predictor) variables to predict the satisfaction (MBR) score (dependent variable). This model provides an R^2 value or coefficient of determination. The R^2 value was defined as "...the percentage of variation of the dependent variable explained by the regression" (Albright et al., 2009, p.593). As such the R^2 value expressed the goodness of fit of the model: the closer the value to one, the better the fit (Albright et al., 2010).

For hypothesis 6 four factors; national culture, age, gender and socio-economic status were used as independent (predictor) variables to predict the satisfaction (MBR) score (dependent variable). The focus in this hypothesis was not in attaining a high R^2 value, but in determining which of the four predictors had the greatest predictive power when assessing customer satisfaction. A CHAID model could also have been used to determine the effect.

4.11.2 Chi-squared automatic interaction detection (CHAID) models

CHAID builds non-binary trees, effectively yielding many multi-way frequency tables making it very popular for market segmentation studies (Hill & Lewicki, 2006). CHAID "...construct trees where each (non-terminal) node identifies a split condition to yield optimum prediction (of continuous or response variables) or classification (for categorical dependent or response variables)" (Hill & Lewicki, 2006, p.77). It can therefore be applied to regression or classification analysis. Six CHAID decision tree models were used in this inquiry for hypothesis 2b, 3c, 3d; 4c, 4d and 5c, 5d.

After passing the reliability test, the data for the 15 SERVPERF values were averaged across the four service dimensions of interest (Reliability, Responsiveness, Assurance and Empathy) in line with the method used in Tsoukatos and Rand (2007). Using CHAID analysis the four service constructs were used as independent (predictor) variables to predict the MBR score (dependent variable).

The tree indicates which service dimension is most strongly related to the dependent variable (Satisfaction) and therefore serves as a ranking of independent variable importance.

4.11.3 Normality of data for hypothesis tests

Based on a Kolmogorov-Smirnov test, the data from the survey was proven not to conform to that of a normal distribution. In cases where assumptions cannot be made about the shape of the underlying variable distribution, non-parametric tests are used to test for differences (Huizingh, 2007). Since the underlying distribution of variables were ordinal and did not conform to normal distribution, non-parametric hypothesis tests were used in this inquiry (Huizingh, 2007). For these tests comparisons of the median not the mean were investigated.

4.11.4 One tailed Mann-Whitney test

The Mann-Whitney test determines whether two independent samples were taken from populations with the same distribution, by testing whether the two groups have the same median. Huizingh (2007) noted that ordinal values can be used and stated that there exists "... a slight preference for the Mann-Whitney test for large samples and the Kolmogorov-Smirnov test for very small samples"

(Huizingh, 2007, p.331). Given the relatively large sample sizes, this inquiry used the Mann-Whitney test for hypotheses 2a, 3b, 4a and 4b.

The difference in sample population medians of MBR scores for the variables of gender and culture were tested using one tailed independent samples Mann-Whitney tests. This method tests the null hypothesis of equal means against the alternative hypothesis that evidence is supported in a single direction (Albright et al., 2010, p.491).

4.11.5 Kruskal-Wallis

Huizingh (2007) stated that “the Kruskal-Wallis test and the median test are non-parametric tests that are often used when the assumptions of analysis of variance are not met” (p.334). The Kruskal-Wallis test is an extension of the Mann-Whitney test comparing medians for two or more groups to detect differences. The test uses more information and is superior to the median test (Huizingh, 2007).

For hypotheses 3a, 3b and 5a, 5b the difference in sample population medians of MBR scores for the variables of age and socio-economic status were tested using the Kruskal-Wallis test. This method tests the null hypothesis of equal means. If the alternative hypothesis holds, at least one mean is different from the others. To determine whether there is directional difference between groups a second analysis using one tailed Mann-Whitney tests determines which medians are significantly different from which other medians as was described in section 4.11.4 above.

4.12 Limitations

The assumptions required for the South African income classification limits the power of the socio-economic status analysis. Working with only two countries in one industry limits the generalisation of the findings.

4.13 Summary

The methodology for the research was described in this section. The following section shows the results of the statistical tests.

5. Results

5.1 Introduction

This chapter presents the results of the data gathered during the fieldwork phase of the research namely the quantitative data obtained by means of survey submissions. All the models run and tests performed used the software packages SPSS modeler version 14.2 and SPSS statistics version 20.

5.2 Survey respondent data

The quantitative survey data yielded 262 respondents in the South African and 209 respondents in the British market. Of these respondents 245 South African and 201 British respondents completed the entire survey. The South African respondent cohort consisted of 211 (86.1%) white and 34 (13.9%) black respondents. Given the lack of literature on Hofstede's cultural dimensions by race within South Africa and Britain no further distinction on race will be made within this analysis.

5.3 Data reliability

As a first step the reliability of the responses were tested. An assessment of Cronbach's alpha coefficient for internal consistency reliability for scales was subsequently conducted. Gliem and Gliem (2003) stress the importance of this step when Likert-type scales are used (p.88).

Using SPSS Statistics version 20, the Cronbach alpha for the 15 statements in the SERVPERF survey was calculated as 0.980 for the South African and 0.985 for the British cohort respectively.

The formula used by the software package SPSS was: $\alpha = \frac{rk}{1+(k-1)r}$. Here k is the number of items considered and r is the mean of the inter-item correlations. The size of alpha is therefore determined by both the number of items in the scale (k = 15) as well as the mean of inter-item correlations.

According to Gliem and Gliem (2003) the following rule of thumb for interpreting Cronbach's alpha score can be used: “_ > .9 – Excellent, _ > .8 – Good, _ > .7 – Acceptable, _ > .6 – Questionable, _ > .5 – Poor, and _ < .5 – Unacceptable” (p.87). The closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. Scores of 0.980 and 0.985 indicate a high level of internal consistency for the scale with this specific sample. The high Cronbach scores are concerning as it indicates little variation within the questions across all four constructs. This might be caused by the use of the survey to measure call centre service interactions and aggravated by the absence of the construct of Tangibility. This requires future research on the tried and tested SERVPERF survey within the call centre environment, but from a customer's perspective. The full results and item analysis are available in Appendix C.

5.4 Descriptive statistics

This section provides descriptive statistics for the respondent data along the data splits required for data comparison within the hypotheses.

5.4.1 Overall results

The 15 SERVPERF questions were rolled up (averaged) into four constructs. The table below provides a statistical description of the four SERVPERF dimensions as well as the MBR (satisfaction) scores for the South African cohort:

Table 5-1: Descriptive statistics of SERVPERF dimensions and MBR – South Africa

Measure	Responsiveness	Assurance	Reliability	Empathy	MBR
Count	245	245	245	245	245
Mean	6.12	6.15	6.00	6.02	8.51
Min	1.33	1.00	1.00	1.50	0.00
Max	7.00	7.00	7.00	7.00	10.00
Range	5.67	6.00	6.00	5.50	10.00
Variance	1.69	1.52	1.91	1.56	5.75
Standard Deviation	1.30	1.23	1.38	1.25	2.40
Skewness	-1.89	-1.98	-1.83	-1.59	-2.32
Median	6.67	6.75	6.50	6.50	9.00
Mode	7	7	7	7	10

The table below provides a statistical description of the four SERVPERF dimensions as well as the MBR scores for the British cohort:

Table 5-2: Descriptive statistics of SERVPERF dimensions and MBR scores - British cohort

Measure	Responsiveness	Assurance	Reliability	Empathy	MBR
Count	201	201	201	201	201
Mean	4.56	4.62	4.42	4.56	5.88
Min	1.00	1.00	1.00	1.00	0.00
Max	7.00	7.00	7.00	7.00	10.00
Range	6.00	6.00	6.00	6.00	10.00
Variance	3.69	3.55	3.86	3.20	12.90
Standard Deviation	1.92	1.88	1.96	1.79	3.59
Skewness	-0.37	-0.41	-0.35	-0.34	-0.46
Median	5.00	5.00	5.00	5.00	7.00
Mode	7	7	7	7	10

The figure below shows a graphical representation of the service quality dimension scores, broken down by country:

Figure 5-1: Overall service quality constructs - mean scores



The construct of Assurance received the highest score in both the South African (6.15) and British (4.62) markets. The South African sample rated the service received higher than their British counterparts across all four constructs. The biggest difference was in Reliability where the South African sample scored the service they received 35.84% higher than the British sample score of 4.42. On the rating score (MBR) the South African sample scored the MNC 44.91% higher than the British cohort.

The table below provides descriptive statistics for the four factors hypothesised to influence customer satisfaction namely age, gender, socio-economic status and culture:

Table 5-2: Descriptive statistics of possible impact factors

Variables	Variable categories	Proportion		MBR	
		SA	UK	SA	UK
Age	18-34	27.76%	15.42%	8.13	4.65
	35-54	40.41%	53.23%	8.65	5.77
	55-99	31.84%	31.34%	8.68	6.67
Gender	Female	60.41%	41.29%	8.81	6.40
	Male	39.59%	58.71%	8.06	5.51
Socio-economic status	SE ₁	25.31%	16.42%	8.19	4.94
	SE ₂	35.51%	24.88%	8.57	6.04
	SE ₃	39.18%	58.71%	8.67	6.07
Country / culture		54.93%	45.07%	8.51	5.88

5.4.2 Results by country

Within this section the score across the four SERVPERF dimensions as well as the MBR values were compared by country i.e. South African customer satisfaction was compared to customers from the United Kingdom.

5.4.2.1 The South African sample

The South African sample of 1,609 customers surveyed yielded 262 responses. This equates to a response rate of 16.28%, which was in line with the expected 15% response rate provided by the MNC based on its own experience in the South African market. Out of these 262 respondents, only 245 completed the survey. The completion rate was 93.51%. Survey fatigue set in at question eight, with another drop off at question 16. As such the actual response rate was adjusted down to 15.22%. It was interesting to note that the average rating for the respondents who dropped out during the survey were lower for the questions completed, compared to respondents who completed the entire survey.

The comparative mean rating scores for the first four statements are shown in the table below for those who completed the survey against those who did not.

Table 5-3: Completed vs. drop out cohort satisfaction comparison – South Africa

Statements	Mean rating scores	
	Completed Survey	Did not complete survey
We provide prompt service	6.09	5.47
We are always willing to help	6.18	5.71
We are never too busy to respond	6.09	5.59
Our behaviour instils confidence	6.16	5.35

The following table provides a breakdown of the 245 completed South African market responses by mean score and standard deviation. Questions were shortened. The full survey is available in appendix A.

Table 5-4: South African customer feedback summary ranked by mean

Construct	Statement / Question	Mean score	Standard deviation
Assurance	We are consistently courteous	6.28	1.18
Responsiveness	We are always willing to help	6.18	1.32
Empathy	We have convenient working hours	6.18	1.12
Assurance	Our behaviour instils confidence	6.16	1.32
Assurance	We have the required knowledge to answer customers' questions	6.16	1.32
Empathy	We give individual attention	6.15	1.3
Reliability	We show sincere interest in solving problems	6.13	1.33
Responsiveness	We provide prompt service	6.09	1.41
Responsiveness	We are never too busy to respond	6.09	1.41
Reliability	We provide correct/accurate information	6.02	1.52
Assurance	We can be trusted	6.01	1.48
Reliability	We keep our promises	5.99	1.45
Empathy	We understand customers' specific needs	5.91	1.48
Reliability	We perform services right the first time	5.87	1.65
Empathy	We have our customers' best interest at heart	5.85	1.54
Satisfaction	MBR (out of 10)	8.51	2.4

Across all 15 statements the South African respondents reported high customer satisfaction levels on the 7 point Likert-type scale. The maximum response average was 6.28 for the statement: "We are consistently courteous to our customers". The minimum average response value was 5.85 for the statement: "We have our customers' best interest at heart".

The correlation coefficient between the mean score and the standard deviation was negative 0.91 across the 15 statements. As such, the standard deviation increased in line with a decrease in rating score. This could be indicative of individual outliers bringing the overall score down. The overall satisfaction or MBR score was 8.51 (out of 10) for this cohort.

In accordance with the SERVPERF survey, the scores of the 15 statements were rolled up to construct level to crystallise perceived service quality. The mean for the perceived service quality constructs are provided in the table below:

Table 5-5: SERVPERF construct scores – South Africa

Constructs	Mean score	Standard deviation
Responsiveness	6.12	1.30
Assurance	6.15	1.23
Reliability	6.00	1.38
Empathy	6.02	1.25

South African customers rate the call centre the highest on the construct of Assurance while the minimum score of 6.00 is attained for the construct of reliability. Extrapolating these findings to all South African customers of the MNC, it can be inferred that they appear satisfied with the service quality they received.

5.4.2.2 The United Kingdom sample

The British sample of 2,070 customers surveyed yielded 209 responses. This equates to a response rate of 10.1%, which is higher than the expected 8% response rate based on the MNCs own experience in the British market. Out of these 209 respondents, only 201 completed the survey. The completion rate was 96.17%. Survey fatigue set in at question 8, with another drop off at question 16. The discontinuation locations are similar to that observed in the South African sample and correlates with page breaks in the survey. Based on completed responses, the actual response rate was adjusted down to 9.71%.

As was the case with the South African population, the respondents who failed to complete the survey scored the service on average lower than those who completed the survey. The comparative mean rating scores for the first four statements are shown in the table below for those who completed the survey against those who did not.

Table 5-6: Completed vs. drop out cohort satisfaction comparison – Britain

Statements	Mean rating scores	
	Completed Survey	Did not complete survey
We provide prompt service	4.52	4.25
We are always willing to help	4.61	4.00
We are never too busy to respond	4.57	4.00
Our behaviour instils confidence	4.41	4.13

As this phenomenon was observed across both country cohorts, it cannot be used as a possible reason to explain differences between the South African and British respondents who completed the survey.

The following table provides a breakdown of the British market responses by mean score and standard deviation:

Table 5-7: British customer feedback summary ranked by mean

Construct	Statement / Question	Mean score	Standard deviation
Assurance	We are consistently courteous	5.06	1.86
Empathy	We have convenient working hours	5.05	1.75
Empathy	We give individual attention	4.63	1.97
Responsiveness	We are always willing to help	4.61	2.04
Assurance	We have the required knowledge to answer customers' questions	4.61	1.92
Responsiveness	We are never too busy to respond	4.57	1.89
Reliability	We provide correct/accurate information	4.54	2.01
Responsiveness	We provide prompt service	4.52	2.09
Reliability	We show sincere interest in solving problems	4.49	2.1
Reliability	We keep our promises	4.42	2.1
Assurance	Our behaviour instils confidence	4.41	2.13
Assurance	We can be trusted	4.41	2.09
Empathy	We understand customers' specific needs	4.29	2.07
Empathy	We have our customers' best interest at heart	4.26	2.11
Empathy	We have convenient working hours	5.05	1.75
Satisfaction	MBR (out of 10)	5.88	3.66

Across all 15 statements the British respondents reported mid-range customer satisfaction levels on the 7 point Likert-type scale. The highest response average was 5.06 for the statement: "We are consistently courteous to our customers". The minimum average response value was 4.23 for the

statement: “We perform services right the first time”. The correlation coefficient between the mean score and the standard deviation was negative 0.86 across the 15 statements. As such, the standard deviation increased when the rating score decreased. This could be indicative of individual outliers bringing the overall score down. The overall customer satisfaction or MBR score was 5.88 (out of 10) for this cohort. This is much lower than the 8.51 average achieved by the South African cohort.

In accordance with the SERVPERF survey, the scores of the 15 statements were rolled up to construct level to crystallise perceived service quality. The mean for the perceived service quality constructs are provided in the table below:

Table 5-8: SERVPERF construct scores – Britain

Constructs	Mean score	Standard deviation
Responsiveness	4.56	1.92
Assurance	4.62	1.88
Reliability	4.42	1.96
Empathy	4.56	1.79

British customers rated the call centre service the highest on the construct of Assurance while the minimum score of 4.42 was attained for the construct of Reliability. Extrapolating these findings to all British customers of the MNC, it can be inferred that there exist significant room for improvement in this market segment as they were not satisfied with the service quality they received.

5.4.2.3 Comparing responses from the two country samples

For modelling purposes the 15 questions were rolled up into the four constructs of Responsiveness, Assurance, Reliability and Empathy. The weighted average for each of these constructs was calculated and is shown in the table below:

Table 5-9: Country response results comparison by construct

Constructs	SA Mean score (n =245)	UK Mean score (n =201)	SA Standard deviation	UK Standard deviation
Responsiveness	6.12	4.56	1.30	1.92
Assurance	6.15	4.62	1.23	1.88
Reliability	6.00	4.42	1.38	1.96
Empathy	6.02	4.56	1.25	1.79
Customer Satisfaction (out of 10)	8.51	5.88	2.40	3.59

Of the 446 respondents who completed the questionnaire, 245 (54.93%) were South African while 201 (45.07%) were United Kingdom customers. The age and gender of each respondent were drawn from the company’s database to be tested as possible explanatory factors. The figure below

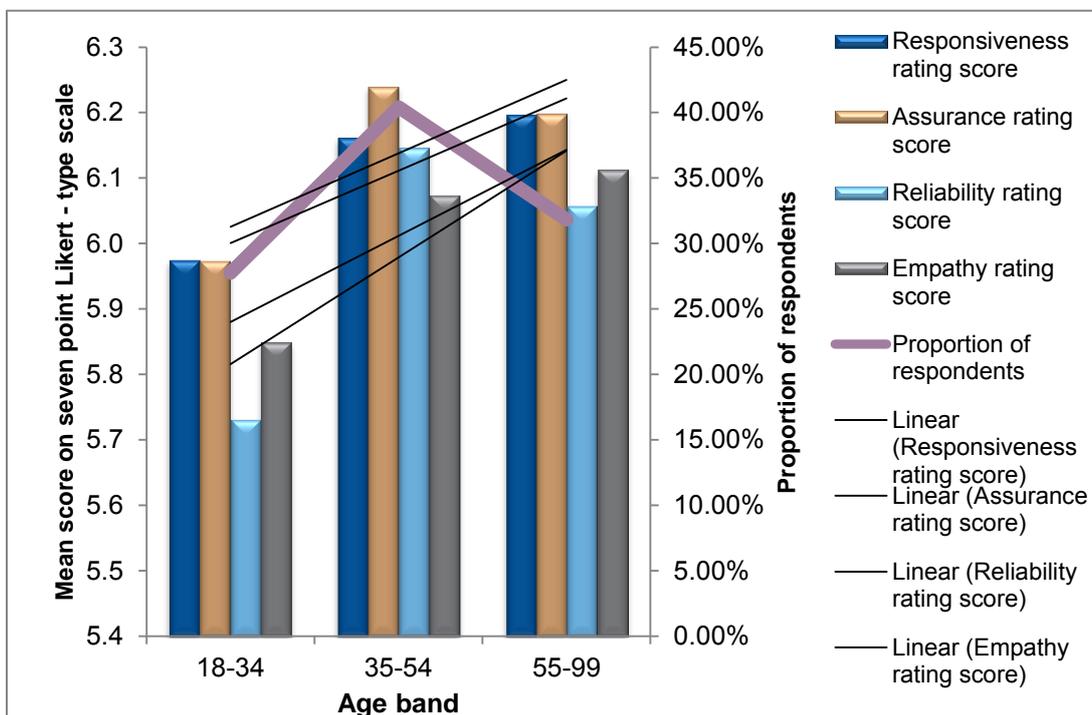
shows the rating score broken down by age and gender and quantifies the proportion of respondents within the demographic subgroups.

5.4.3 Results by age

The age range was 66 years with the youngest respondent 20 and the oldest respondent 86 years of age. The 446 respondents were partitioned into three age bands as described in Chapter 4 of the Research. The proportion of respondents within each age band is shown in the table below.

In the South African sample the largest portion (40.41%) of respondents fell within the 35-54 year (middle aged) age band, while the average age of the respondents was 46.6 years. The British sample had an average age of 48.35 with the largest portion (53.23%) of respondents within the 35-54 year age band. A breakdown of the scoring of the four SERVPERF dimensions by age band is shown in the figure below:

Figure 5-2: SERVPERF dimensions by age – South Africa



From figure 5-2 above it can be seen that the construct of Assurance received the highest scores across age bands followed by the construct of Responsiveness. The age band with the lowest scores across all four dimensions was the 18 to 34 year age band. Within this young cohort, Responsiveness was rated the highest and Reliability the lowest with scores of 5.98 and 5.73 (out of 7) respectively. There was a general increasing trend across all four dimensions, in line with age increases.

Figure 5-3: SERVPERF dimensions by age – Britain

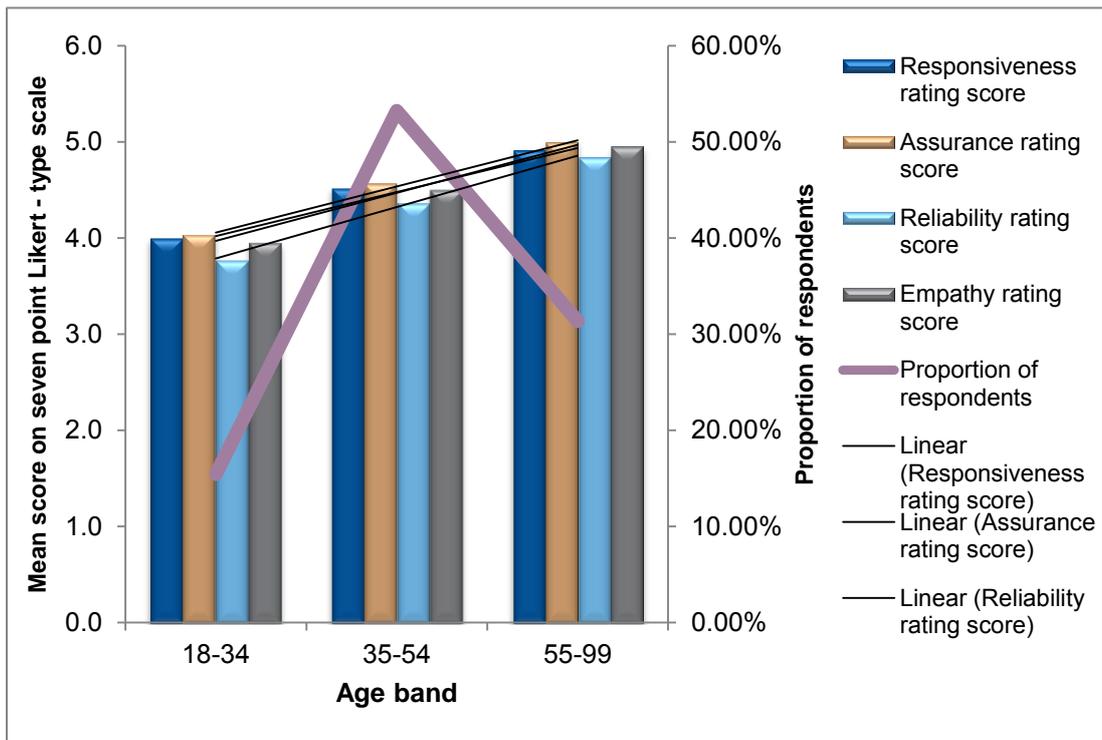


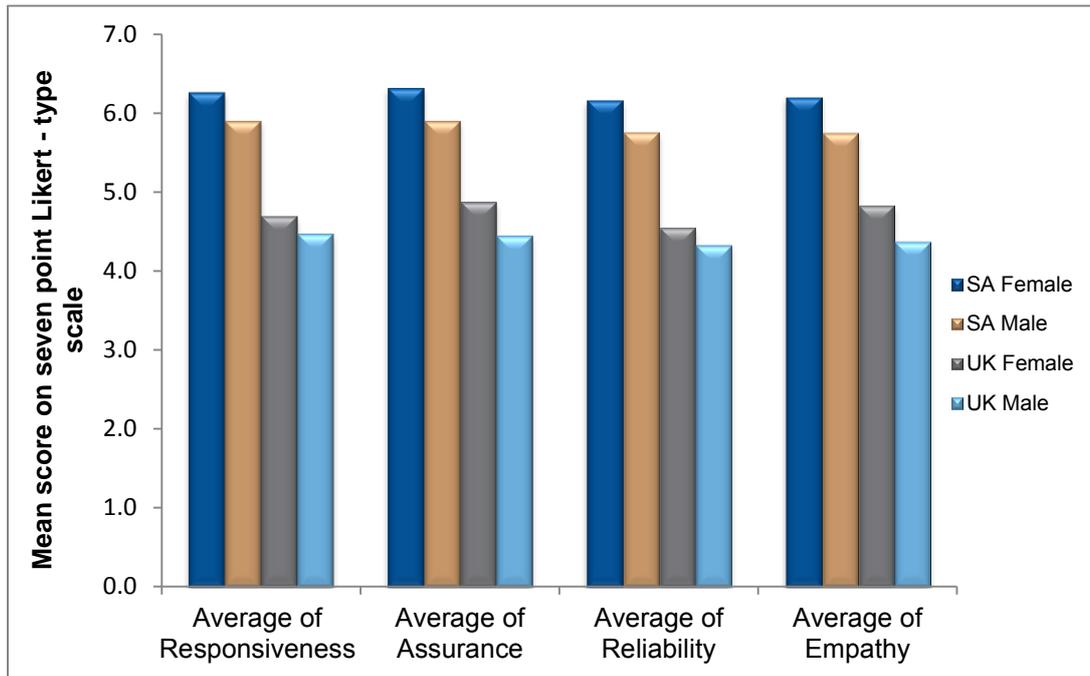
Figure 5-3 shows the construct of Assurance received the highest scores across all British respondent age bands. The age band with the lowest scores across all four dimensions was the 18 to 34 year old age band. A general increasing trend was observed across all four dimensions, in line with the increase in age.

5.4.4 Results by gender

This section explores the difference between the four SERVPERF dimensions and the MBR at a gender level. The majority (60.41%) of South African respondents were female, while males formed the largest proportion of respondents (58.71%) within the British cohort.

A breakdown of the scoring of the four SERVPERF dimensions by gender is shown in the figure below.

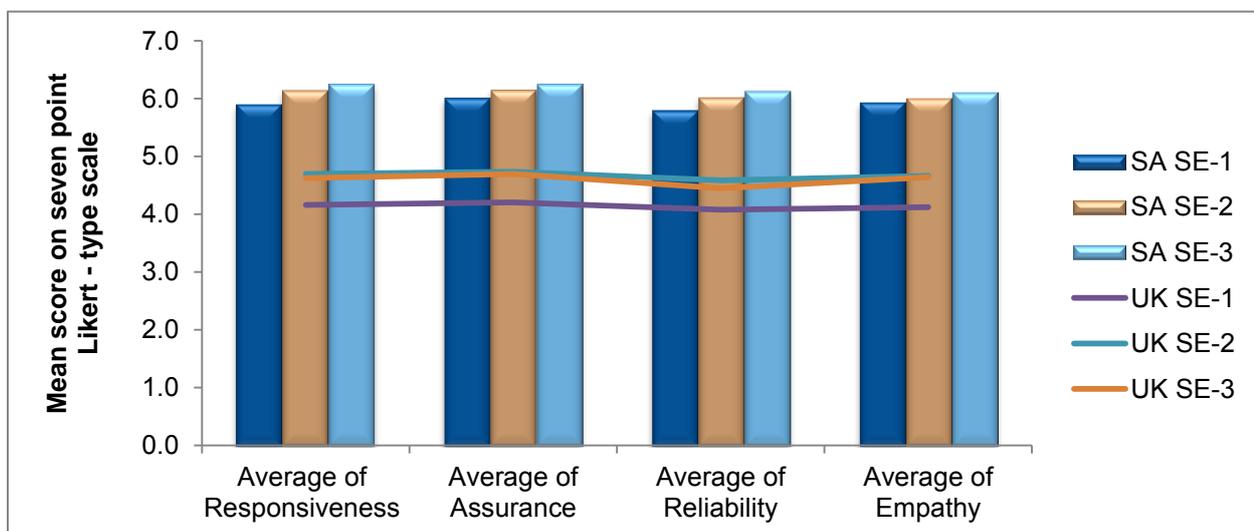
Figure 5-4: SERVPERF dimensions by gender



5.4.5 Results by socio-economic group

Within this section the difference in perceived customer satisfaction is investigated based on the different socio-economic levels. The figure below provides a graphical breakdown of SERVPERF dimensions by socio-economic status:

Figure 5-5: SERVPERF dimensions by socio-economic level



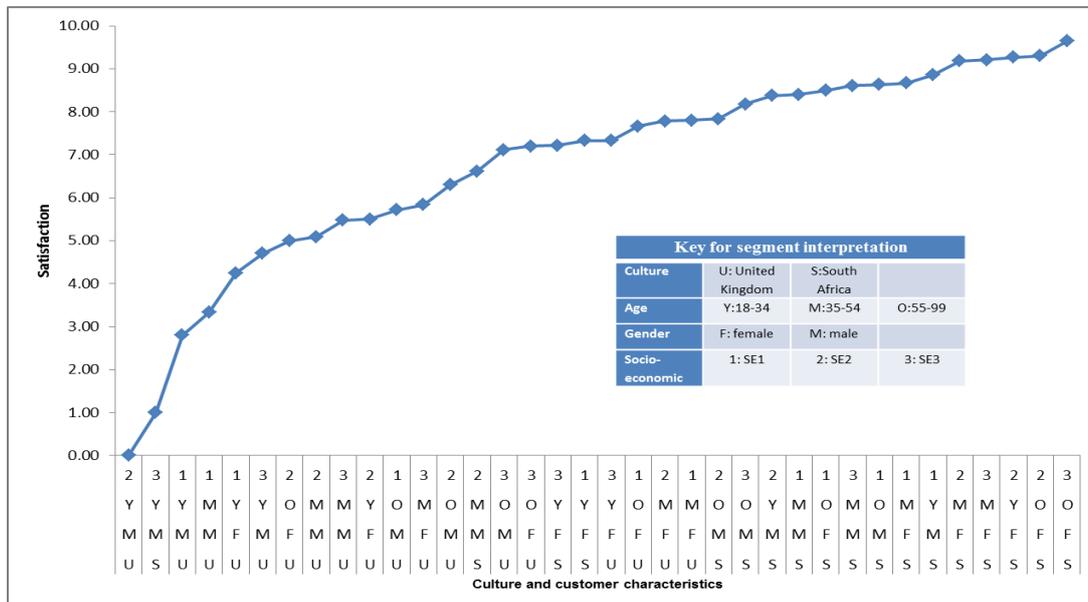
South African customers within the high socio-economic group rate the service they received higher than the lower socio-economic groups. In the British market the lowest socio-economic group rated the service they received lower than the other socio-economic groups, while the middle and high level group had a much closer experience across all four service quality constructs.

5.4.6 Conclusion

On average South African respondents reported higher satisfaction scores than their British counterparts while female customers in both countries gave the company a better rating than their male counterparts. There was some support for the prevalence of age and income bias.

The figure below shows the mean customer satisfaction scores, segmented by culture and customer characteristics:

Figure 5-6: Ranked satisfaction scores – segmented by culture and customer characteristics



From this graph the most difficult customer segment to please was (U,M,Y,2), translated as United Kingdom males between the ages of 18 and 34 within the second socio-economic tier. This segment scored satisfaction as zero (out of 10). The second most difficult segment to please was South African males between the ages of 18 and 34 within the third socio-economic tier (S,M,Y,3). This segment had an average satisfaction score of one. The four lowest scoring segments consisted of male customers.

On the opposite side of the spectrum are those customer segments which were most satisfied. The highest of these was the segment of South African females older than 54 within the third socio-economic tier. This segment had an average satisfaction score of 9.65 (out of 10). The four highest

scoring segments consisted of female customers and the 14 highest scoring segments consisted of South African customers.

Figure 5-6 shows graphical support for suggesting culture and customer characteristics might significantly influence satisfaction levels.

5.5 Testing the hypothesis

In this section the results of the hypotheses set out in Chapter 4, tested at a 5% significance level, are presented.

5.5.1 Research question 1: Is service quality perception the biggest contributor to customer satisfaction?

Hypothesis 1a: $R^2_{SA} > 0.50$

A multiple regression was run to predict the MBR (satisfaction) score from the 15 service quality questions and determine whether perceived service quality explains the bulk of a customer's satisfaction with call centre service. The assumptions of linearity, homoscedasticity and unusual points were met. There was independence of residuals, as assessed by a Durbin-Watson statistic of 2.171.

These variables statistically significantly predicted the MBR score $F(8, 236) = 110.897, p < .0005, R^2 = .790$. Eight variables added statistically significantly to the prediction, $p < .05$. Regression coefficients and standard errors are shown in Table 5-10 below:

Table 5-10: Perceived service quality impacting satisfaction – South Africa

Variable	Beta	SE _{Beta}	β
Intercept	-0.749	0.373	
V₂: Willingness to help	-0.467	0.117	-0.258*
V₄: Instilling confidence	0.490	0.151	0.270*
V₅: Trustworthiness	0.479	0.127	0.295*
V₇: Knowledgeable	0.381	0.115	0.210*
V₉: Sincerity in problem resolution	0.270	0.129	0.150*
V₁₀: Service accuracy quality	0.348	0.086	0.240*
V₁₃: Serves interest of customers	0.309	0.120	0.199*
V₁₄: Understanding customers	-0.270	0.136	-0.166*

Note. * $p < .05$; Beta = unstandardised regression coefficient; SE_B = standard error of the coefficient; β = standardised coefficient

Hypothesis 1b: $R^2_{UK} > 0.50$

A multiple regression was run to predict the MBR score from the 15 service quality questions and determine whether perceived service quality explains the bulk of a customer's satisfaction with call centre service. The assumptions of linearity, homoscedasticity and unusual points were met. There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.827.

These variables statistically significantly predicted the MBR score $F(5, 195) = 107.817, p < .0005, R^2 = .734$. Five variables added statistically significantly to the prediction, $p < .05$. Regression coefficients and standard errors are shown in Table 5-11 below:

Table 5-11: Perceived service quality impacting satisfaction – Britain

Variable	Beta	SE _{Beta}	β
Intercept	-0.838	0.365	
V₁: Prompt service	0.497	0.142	0.292*
V₃: Availability to respond	-0.386	0.166	-0.203*
V₉: Sincerity in problem resolution	0.395	0.166	0.231*
V₁₂: Individual attention	0.439	0.172	0.238*
V₁₃: Serves interest of customers	0.569	0.161	0.333*

Note. * $p < .05$; Beta = unstandardised regression coefficient; SE_B = standard error of the coefficient; β = standardised coefficient

These results statistically prove that service quality explains more than 50% of the customer satisfaction score from the MBR in both South Africa and the UK. The null hypotheses of 1a and 1b were rejected; proving perceived service quality is the main antecedent of customer satisfaction.

5.5.2 Research question 2: Does cultural difference have a moderating effect on customer satisfaction scores?

Hypothesis 2a – H_A: Median_{SA} > Median_{UK}

A one tailed Mann-Whitney test was run to determine if there were differences in customer satisfaction of call centre service between South African and British customers. The call centre satisfaction was statistically significantly higher for South African customers (Median_{SA} = 8.51) than British customers (Median_{UK} = 5.88), $U = 66,219, z = 8.6877, p < 0.001$.

The South African cohort's average customer satisfaction score was significantly higher than the average British satisfaction score and the null hypothesis of 2a was rejected at a 5% significance level.

Hypothesis 2b – Primary service quality construct_{UK} ≠ Primary service quality construct_{SA}

For both country cohorts separate CHAID decision tree models were run with a dependent variable of MBR score and independent variables of the four service quality constructs. These were used to test whether the importance of service quality dimensions in determining customer satisfaction varied by culture. The results are given in the table below:

Table 5-12: Culture distributed CHAID model results of service quality

Culture	Most significant SERVPERF construct	df	F	Sig. F
SA	Assurance	df ₁ = 4, df ₂ = 240	140.076	0.000*

UK	Empathy	df ₁ = 5, df ₂ = 195	93.458	0.000*
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Note. * p < .05

Using a CHAID model the most significant predictor of customer satisfaction for the South African cohort was the service quality construct of Assurance, while Empathy was the most significant for the British cohort. The null hypothesis of 2b was rejected. For the two cultures there was thus a significant difference in the importance of service quality construct in determining customer satisfaction.

5.5.3 Research question 3: Does age have a moderating effect on customer satisfaction scores within different cultures?

Hypothesis 3a – H_A: Median_{SA_young} < Median_{SA_middle-aged} < Median_{SA_old}

Using an independent samples Kruskal-Wallis test, the null hypothesis that the median scores of the three age bands are equal, was tested at a 5% significance level.

The table below provides a summary of the test conducted and the results:

Table 5-13: Age band satisfaction median - Kruskal-Wallis test for South Africa

Total N	Test statistic	df	Asymptotic. Sig. (2 sided test)
245	1.437	2	.487

Note. * p < .05

The Kruskal-Wallis test revealed MBR scores were not statistically significantly different between the different age band groups, $\chi^2(2) = 1.437$, $p = .487$. Therefore the null hypothesis of 3a was not rejected at a 5% significance level. This indicates that there were no significant differences between customer satisfaction scores from different aged customers in the South African cohort.

Hypothesis 3b – H_A: Median_{UK_young} < Median_{UK_middle-aged} < Median_{UK_old}

Using an independent samples Kruskal-Wallis test, the null hypothesis that the median scores of the three age bands are equal, was tested at a 5% significance level.

The table below provides a summary of the test conducted and the results:

Table 5-14: Age band satisfaction median - Kruskal-Wallis test for Britain

Total N	Test statistic	df	Asymptotic. Sig. (2 sided test)
201	9.137	2	.016*

Note. * p < .05

A Kruskal-Wallis test revealed MBR scores were statistically significantly different between the different age band groups, $\chi^2(2) = 9.137$, $p = .0016$. Therefore the null hypothesis of 3b was rejected at a 5% significance level.

To isolate the difference in age bands a post-hoc analysis using one-tailed Mann-Whitney tests was performed, the findings of which are shown in table 5-15 below:

Table 5-15: Pairwise comparison of age bands – Britain

Sample1-Sample2	Test statistic	Significance	Adjusted significance
1-2	4.977	.026	.077
1-3	9.40	.003	.008*
2-3	1.816	.178	.534

Note. * $p < .05$

Post-hoc analysis revealed statistically significant differences in MBR scores between the young (Median = 5.00) and old (Median = 8.00) ($p = .008$) age groups, but not between the middle-aged (Median = 7.00) and any other group at a 5% significance level. There was thus a statistically significant difference between the customer satisfaction scores of young and old British customers, yet the increasing trend predicted at each age band was not proven. Therefore $\text{Median}_{\text{UK_young}} < \text{Median}_{\text{UK_old}}$ was proven, but not $\text{Median}_{\text{SA_young}} < \text{Median}_{\text{SA_middle-aged}} < \text{Median}_{\text{SA_old}}$.

Hypothesis 3c – H_A: Primary service quality construct_{SA, young} ≠ Primary service quality construct_{SA, middle-aged} ≠ Primary service quality construct_{SA, old}

For each of the age bands separate CHAID decision tree models were run with a dependent variable of MBR score and independent variables of the four service quality constructs. These were used to test whether the importance of service quality dimensions in determining customer satisfaction amongst South African customers varied by age. The results are given in the table below:

Table 5-16: SERVPERF construct importance by age band – South Africa

Age band	Most significant SERVPERF construct	df	F	Sig. F
18-34	Reliability	df1 = 3, df2 = 64	85.660	0.000*
35-54	Assurance	df1 = 2, df2 = 96	127.029	0.000*
55-99	Assurance	df1 = 3, df2 = 74	34.702	0.000*

Note. * p < .05

The CHAID model results indicate variance in the importance placed in service quality construct by age group. Therefore the null hypothesis of 3c was rejected.

Hypothesis 3d – H_A: Primary service quality construct_{UK, young} ≠ Primary service quality construct_{UK, middle-aged} ≠ Primary service quality construct_{UK, old}

For each of the age bands separate CHAID models were run with a dependent variable of MBR score and independent variables of the four service quality constructs. These were used to test whether the importance of service quality dimensions in determining customer satisfaction amongst British customers varied by age. The results are given in the table below:

Table 5-17: SERVPERF construct importance by age band - Britain

Age band	Most significant SERVPERF construct	df	F	Sig. F
18-34	Reliability	df1 = 3, df2 = 27	46.778	0.000*
35-54	Empathy	df1 = 3, df2 = 103	76.921	0.000*
55-99	Empathy	df1 = 3, df2 = 59	66.370	0.000*

Note. * p < .05

The CHAID model results indicate variance in the importance placed in service quality construct by age group. Therefore the null hypothesis of 3d was rejected.

5.5.4 Research question 4: Does gender have a moderating effect on customer satisfaction scores within different cultures?

Hypothesis 4a – H_A: Median_{SA, female} > Median_{SA, male}

A one tailed Mann-Whitney test was run to determine if the average female customer satisfaction score was significantly higher than that of males within the South African cohort. The satisfaction score was statistically significantly higher for female customers (Median_F=8.81) than male customers (Median_M=8.06), $U = 20,056$, $z = 3.6436$, $p = 0.001$. The null hypothesis of 4a was rejected at a 5% significance level.

Hypothesis 4b – Median_{UK, female} > Median_{UK, male}

A one tailed Mann-Whitney test was run to determine if the average female customer satisfaction score was significantly higher than that of males within the British cohort. The satisfaction score was not statistically significantly higher for female customers (Median_F=6.398) than male customers (Median_M=5.508), $U = 8,951$, $z = 1.4074$, $p = 0.0797$. The null hypothesis of 4b was not rejected at a 5% significance level.

The results showed female customers rated call centre service interactions higher than their male counterparts within the South African, but not within the British market.

Hypothesis 4c – H_A: Primary service quality construct_{SA, female} ≠ Primary service quality construct_{SA, male}

For both gender sub-groups a CHAID decision tree model was run with a dependent variable of MBR score and independent variables of the four service quality constructs. These were used to test whether the importance of service quality dimensions in determining customer satisfaction amongst South African customers varied by gender. The results are given in the table below:

Table 5-18: Gender distributed CHAID model results of service quality – South Africa

Gender	Most significant SERVPERF construct	df	F	Sig. F
Female	Assurance	df ₁ = 3, df ₂ = 144	120.740	0.000*
Male	Assurance	df ₁ = 3, df ₂ = 93	59.655	0.000*

Note. * $p < .05$

Using a CHAID model the most significant predictor of customer satisfaction was the service quality construct of Assurance for both South African gender sub-groups. Therefore the null hypothesis of

4c was not rejected. There is no significant difference in the relative value customers of different gender attach to service quality constructs within the South African market.

Hypothesis 4d – H_A : Primary service quality construct_{UK, female} \neq Primary service quality construct_{UK, male}

For both gender sub-groups a CHAID model was run with a dependent variable of MBR score and independent variables of the four service quality constructs. These were used to test whether the importance of service quality dimensions in determining customer satisfaction amongst British customers varied by gender. The results are given in the table below:

Table 5-19: Gender distributed CHAID model results of service quality – Britain

Gender	Most significant SERVPERF construct	df	F	Sig. F
Female	Empathy	df1 = 3, df2 = 78	111.583	0.000*
Male	Empathy	df1 = 2, df2 = 114	77.344	0.000*

Note. * $p < .05$

Using a CHAID model the most significant predictor of customer satisfaction was the service quality construct of Empathy for both British gender sub-groups. Therefore the null hypothesis of 4d was not rejected. There is no significant difference in the relative value customers of different gender attach to service quality constructs within the British market.

5.5.5 Research question 5: Does socio-economic status have a moderating effect on customer satisfaction scores within different cultures?

Hypothesis 5a – H_A : Median_{SA, SE1} > Median_{SA, SE2} > Median_{SA, SE3}

Using an independent samples Kruskal-Wallis test, the null hypothesis that the median scores of the three socio-economic status bands are equal, was tested at a 5% significance level.

The table below provides a summary of the test conducted and the results:

Table 5-20: Socio-economic status band satisfaction median - Kruskal-Wallis test for South Africa

Total N	Test statistic	df	Asymptotic. Sig. (2 sided test)
245	1.978	2	.372

Note. * $p < .05$

A Kruskal-Wallis test was run to determine if there were differences in MBR scores between socio-economic status groups. MBR scores were not statistically significantly different between the different socio-economic status groups, $\chi^2(2) = 1.978$, $p = .372$. Therefore the null hypothesis of 5a was not rejected at a 5% significance level. This indicates that differences in socio economic status did not have a significant impact on the customer satisfaction ratings by South African customers.

Hypothesis 5b – Median_{UK, SE1} > Median_{UK, SE2} > Median_{UK, SE3}

Using an independent samples Kruskal-Wallis test, the null hypothesis that the median satisfaction scores of the three socio-economic status bands are equal was tested at a 5% significance level.

The table below provides a summary of the test conducted and the results:

Table 5-21: Socio-economic status satisfaction median - Kruskal-Wallis test for Britain

Total N	Test statistic	df	Asymptotic. Sig. (2 sided test)
201	2.118	2	.347

Note. * $p < .05$

A Kruskal-Wallis test was run to determine if there were differences in MBR scores between socio-economic status groups. MBR scores were not statistically significantly different between the different socio-economic status groups, $\chi^2(2) = 2.118$, $p = .347$. Therefore the null hypothesis of 5b was not rejected at a 5% significance level. This indicates that differences in socio economic status did not have a significant impact on the customer satisfaction ratings by United Kingdom customers.

Hypothesis 5c – H_A: Primary service quality construct_{SA, SE1} ≠ Primary service quality construct_{SA, SE2} ≠ Primary service quality construct_{SA, SE3}

For each of the status bands a CHAID decision tree model was run with a dependent variable of MBR score and independent variables of the four service quality constructs. These were used to test whether the importance of service quality dimensions in determining customer satisfaction amongst South African customers varied by socio-economic status. The results are given in the table below:

Table 5-22: SERVPERF importance by socio-economic status – South Africa

Socio-economic status	Most significant SERVPERF construct	df	F	Sig. F
SE ₁	Assurance	df1 = 3, df2 = 58	67.397	0.000*
SE ₂	Assurance	df1 = 3, df2 = 83	97.202	0.000*
SE ₃	Empathy	df1 = 2, df2 = 93	59.962	0.000*

Note. * $p < .05$

The null hypothesis of 5c was rejected since the same construct does not get priority in determining customer satisfaction across all three status bands. The importance South African customers placed on service quality to determine customer satisfaction varied by socio-economic status level.

Hypothesis 5d – H_A: Primary service quality construct_{UK,SE1} ≠ Primary service quality construct_{UK,SE2} ≠ Primary Service quality construct_{UK,SE3}

For each of the status bands a CHAID decision tree model was run with a dependent variable of MBR score and independent variables of the four service quality constructs. These were used to test whether the importance of service quality dimensions in determining customer satisfaction amongst British customers varied by socio-economic status. The results are given in the table below:

Table 5-23: SERVPERF importance by socio-economic status - Britain

Socio-economic status	Most significant SERVPERF construct	df	F	Sig. F
SE ₁	Empathy	df1 = 3, df2 = 29	61.158	0.000*
SE ₂	Reliability	df1 = 3, df2 = 46	44.004	0.000*
SE ₃	Empathy	df1 = 3, df2 = 114	75.029	0.000*

Note. * $p < .05$

The null hypothesis of 5d was rejected as the same construct does not get priority in determining customer satisfaction across all three status bands. The importance British customers placed on service quality to determine customer satisfaction varied by socio-economic status level.

5.5.6 Research question 6: Is national culture the primary predictor of customer satisfaction in terms of the four factors tested in this research?

Hypothesis 6 - H_A: National culture is the primary predictor of customer satisfaction in terms of customer characteristic factors

A multiple regression was run to predict the MBR (satisfaction) score from the four customer characteristic factors of age, gender, socio-economic status and national culture and determine whether national culture is the primary predictor of a customer’s satisfaction with call centre service. The assumptions of linearity, homoscedasticity and unusual points were met. There was independence of residuals, as assessed by a Durbin-Watson statistic of 2.091.

These variables statistically significantly predicted the MBR score $F(3, 442) = 36.653, p < .0005, R^2 = .199$. Three of the four variables added statistically significantly to the prediction, $p < .05$. Regression coefficients and standard errors are shown in Table 5-24 below:

Table 5-24: Predicting satisfaction using customer characteristics and national culture

Variable	Beta	SE _{Beta}	β
Intercept	11.068	.625	
National culture	-2.523	.285	-.385*
Age	-1.033	.290	-.158*
Gender	.692	.196	.154*

Note. * $p < .05$; Beta = unstandardised regression coefficient; SE_B = standard error of the coefficient; β = standardised coefficient

The figure below shows the predictor importance of the three significant variables used to predict satisfaction in the final regression model:

Figure 5-7: Predictive power of national culture in determining customer satisfaction



These results statistically proved that amongst the four factors of age, gender, socio-economic status and national culture, the latter was the primary predictor (66% predictor importance) of customer satisfaction. For hypothesis 6 the null hypothesis was subsequently rejected; proving national culture was the main predictor of customer satisfaction amongst the four predictors tested.

5.6 Summary

The table below provides a summary of the null hypotheses tested against and decision reached based on tests conducted at a 5% significance level.

Table 5-25: Summary of hypothesis results

Null hypothesis	Decision
1a: Perceived service quality explains less than or equal to 50% of the customer satisfaction score in South African cohort	Reject
1b: Perceived service quality explains less than or equal to 50% of the customer satisfaction score in British cohort	Reject
2a: South African and British customers report equal satisfaction scores on call centre service	Reject
2b: The relative importance customers place on different service quality dimensions is similar within the South African and British cohorts	Reject
3a: Average customer satisfaction scores are similar across different age bands within the South African cohort.	Don't Reject
3b: Average customer satisfaction scores are similar across different age bands within the British cohort	Reject*
3c: The relative importance customers place on different service quality dimensions is similar amongst South African customers of different ages	Reject
3d: The relative importance customers place on different service quality dimensions is similar amongst British customers of different ages	Reject
4a: Average customer satisfaction scores are similar across different gender groups within the South African cohort	Reject
4b: Average customer satisfaction scores are similar across different gender groups within the British cohort	Reject
4c: The relative importance customers place on different service quality dimensions is similar amongst South African customers of different gender	Don't reject
4d: The relative importance customers place on different service quality dimensions is similar amongst British customers of different gender	Don't reject
5a: Average customer satisfaction scores are similar across different socio-economic groups within the South African cohort	Don't reject
5b: Average customer satisfaction scores are similar across different socio-economic groups within the British cohort	Don't reject
5c: The relative importance customers place on different service quality dimensions is similar amongst South African customers of different socio-economic groups	Reject

Null hypothesis	Decision
5d: The relative importance customers place on different service quality dimensions is similar amongst British customers of different socio-economic groups	Reject
6: The demographic factors tested in this research have a similar impact on predicting customer satisfaction	Reject

*Although the null hypothesis was rejected, care must be taken when interpreting the alternative hypothesis

6. Discussion of results

6.1 Introduction

The data gathered using the surveys in the fieldwork phase and presented in chapter 5 are analysed in this chapter. Each of the research objectives will be analysed and commented on in line with the research questions presented in chapter 3.

6.2 Analysis of research questions

6.2.1 Research question 1: Is perceived service quality the main antecedent of customer satisfaction in a call centre service interaction?

From the two multiple regression models run in hypotheses 1a and 1b, it was clear that perceived service quality as measured by the SERVPERF survey explains most of the customer satisfaction score across both countries.

Within the South African cohort, 79.0% of variation in the customer satisfaction score was explained by eight of the service quality questions posed. This is a slightly better result compared to the findings from the British cohort. Within the British cohort, 73.4% of variation was explained by five service quality questions. This ties up with the research by Tsoukatos and Rand (2007) which stated that perceived service quality explains most, but not all of customer satisfaction.

The value of this finding adds to the literature as it quantifies the proportion of satisfaction attributed to service quality perception. With predictive power exceeding 70% for call centre interactions, the SERVPERF tool can serve as a standalone predictive instrument for customer satisfaction within these industries. As such the SERVPERF survey, trimmed of tangibility, is not limited to measuring perceived service quality.

The inquiry found clear support that perceived service quality is the main antecedent of customer satisfaction in a call centre service interaction as it explains more than 70% of variation in the customer satisfaction score.

6.2.2 Research question 2: Does cultural difference have a moderating effect on customer satisfaction scores?

6.2.2.1 The effect of cultural dimensions on customer satisfaction

The results from hypothesis 2a empirically proved that South African customers reported significantly higher satisfaction levels than British customers. This supports the research done by

Donthu and Yoo (1998) on Hofstede's cultural dimension of power distance and individualism-collectivism while contradicting their finding on uncertainty avoidance.

Donthu and Yoo (1998) stated that within cultures with higher levels of power distance (South Africa in this instance) lower levels of service quality are expected. This makes South Africans more tolerant of poor service, yielding higher customer satisfaction scores as opposed to British culture with lower power distance. Using the dimension of individualism the results from Donthu and Yoo's (1998) study was confirmed. They found that cultures with high individualism, (like Britain) have higher service expectations which translate into lower customer satisfaction. Due to their individualism the British are independent, self-centred and ambitious leading to a high expectation of service quality aligned with their own work ethic.

On the dimension of uncertainty avoidance the result of hypothesis 2a contradicts the Donthu and Yoo (1998) findings. They stated that countries with higher uncertainty avoidance (SA) are more risk averse and customers would subsequently take more time choosing a service provider. As a result of this extra time and effort spent to come to this decision, Donthu and Yoo (1998) theorised these cultures would exhibit high expectations of their service interactions, translating into lower customer satisfaction scores. This is perhaps true within an environment where the customer has multiple options of service providers and switching is relatively easy.

This research proposes that customers with high uncertainty avoidance in the South African market are starved of good alternative providers. They are subsequently more accepting of service failures and report higher satisfaction scores than their less risk averse British counterparts. This theory might hold within all emerging markets as there exists large information asymmetry, few alternatives (less competition) and higher switching costs (time and effort) within these countries.

In emerging markets where competition amongst service providers is low, the process of switching service provider is cumbersome, with no guarantee of improved service from the competition. Therefore developed market customers would expect these service levels as a bare minimum and are not afraid to switch service providers while emerging market customers are more tolerant of poor service quality for lack of real alternative service offerings.

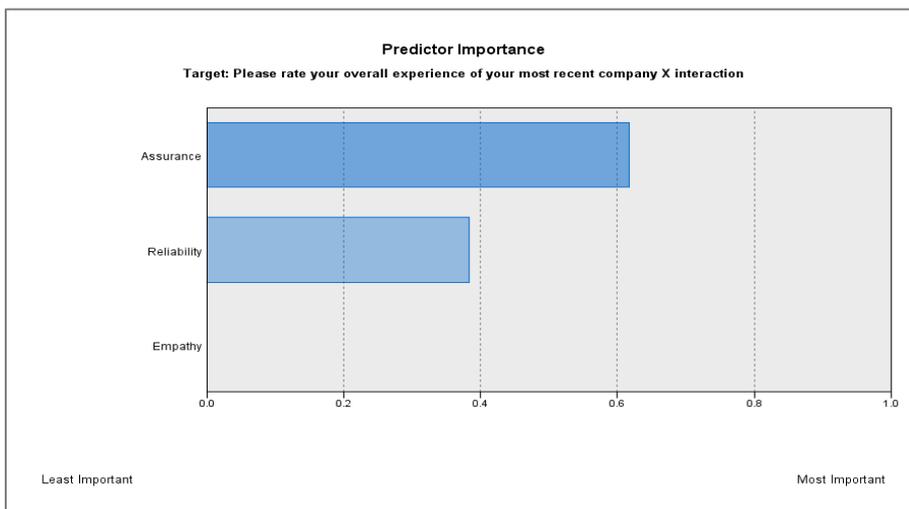
The results showed that Hofstede's PDI and IDV cultural dimensions were useful at predicting customer satisfaction levels between countries. Care should be taken when comparing developed with developing nations. There are two reasons for this: firstly, the data used for Hofstede's scores were obtained in the 1960s and 1970s and are thus dated; secondly, there is a gap in the study field of customer satisfaction in the developing world – there is not enough data to make generalisable findings.

6.2.2.2 The effect of cultural dimensions on perceived service quality

The results from hypothesis 2b empirically proved a significant difference in the importance of service quality constructs in determining customer satisfaction between the national cultures of South Africa and Britain.

Figure 6-1 below shows assurance and reliability as the most significant predictors of customer satisfaction for the South African customers:

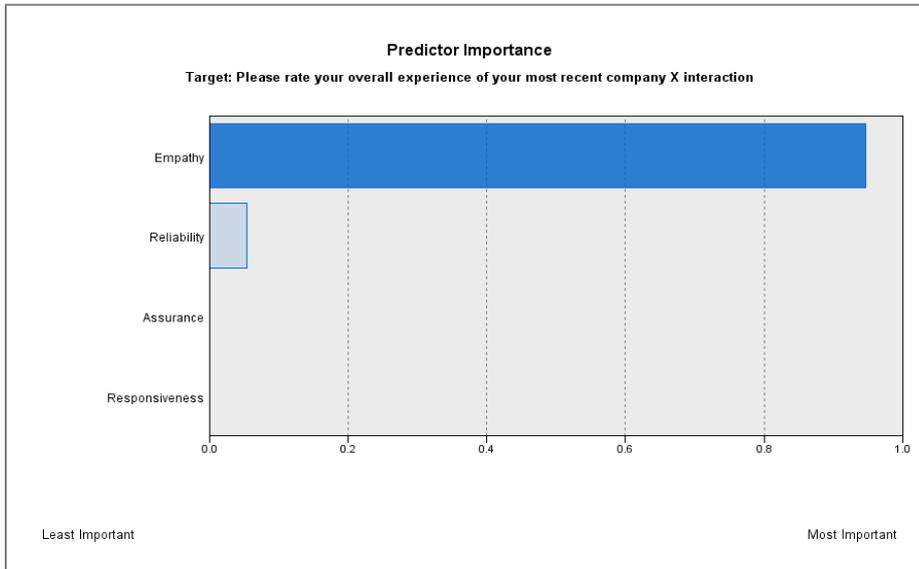
Figure 6-1: Predictor importance of service quality construct – South Africa



Assurance accounted for 62% of the predictor importance followed by Reliability with 38%.

Empathy was the only significant predictor of customer satisfaction for the British cohort as shown in figure 6-3 below:

Figure 6-2: Predictor importance of service quality construct – Britain



The South African result confirms Furrer et al.'s. (2000) finding that high power distance cultures require more Assurance. As the largest healthcare funder in South Africa the MNC is perceived as large and powerful within the South African market. In the investigated call centre service interactions the customers need benefit confirmation, benefit guidance or funding approval and are dependent upon the provider to give it. The control therefore lies with the (powerful) service provider. Furrer et al. (2000) explain that weaker customers require more assurance in their service relations with more powerful service providers.

The second most important predictor of satisfaction in South Africa was Reliability. Customers value Reliability more in markets where service failures are a common phenomenon (Furrer et al., 2000). The finding might imply South African customers have experience of service failures within their market. Therefore the literature and data findings suggest a history of bad experiences are embedded within South African culture.

South African customers rated their latest call centre service interaction with the MNC as 8.51 out of 10 on average. The MNC is therefore a highly rated service provider, but an unknowing benefactor to the history of bad experiences. The great value customers place on Assurance (defined by competence, credibility and security) and Reliability (defined by dependability and accuracy) speak of a society in need of better service.

Empathy's importance to British customers is aligned with the results from Donthu and Yoo (1998) who stated that higher individualistic cultures have higher expectations of Empathy from the service provider than more collectivist countries. This is contradictory to the conclusion reached by Furrer et al. (2000) who found a negative correlation between Empathy and individualism. Furrer et al. (2000) stated that customers in individualistic societies are independent, self-centred and ambitious leading to a high expectation of service quality aligned with their own work ethic. This self confidence negates the need for Empathy. Donthu and Yoo (1998) offered no clear explanation for their findings, but this research suggests that it is product driven.

This inquiry dealt with health insurance members primarily contacting call centres with claim related queries. These customers are more vulnerable - their conversation is centred around medical issues they've encountered individually or in their family. These customers require more Empathy from their service provider. Knowing this dependence, call centre agents would provide an improved service by conveying Empathy in the service call.

The lack of other service constructs indicated that British customers were not concerned by promises of accurate and dependable service or the willingness, helpfulness or competence of the call centre agent. Due to a legacy of a more competitive market; this inquiry proposes that British customers primarily demand individual attention, compassion and a caring attitude from their call centre service agent.

With a smaller market characterised by large state-owned entities together with the limited selection of good corporate offerings, has made South African customers more dependent on the few good firms who do exist.

The findings were that South African customers rated call centre service interactions higher than their British counterparts, that culture impacts the importance placed on service quality constructs and that service quality is the primary antecedent of customer satisfaction (from hypotheses 1a and 1b). In conclusion, cultural differences have a moderating effect on customer satisfaction scores.

The following three sections will address the impact customer characteristics have on customer satisfaction and service quality constructs.

6.2.3 Research question 3: Does age have a moderating effect on customer satisfaction scores within different cultures?

6.2.3.1 The effect of age on customer satisfaction

Both countries had increasing trends of satisfaction in correlation with age. This supports the findings from Bryant and Cha (1996) that older customers report higher customer satisfaction than younger customers. This increasing trend is shown in table 6-1 below:

Table 6-1: Satisfaction score by age band – ranked from lowest to highest

Age band	Proportion of respondents		MBR mean	
	SA	UK	SA	UK
18-34 (young)	27.76%	15.42%	8.13	4.65
35-54 (middle-aged)	40.41%	53.23%	8.65	5.77
55-99 (old)	31.84%	31.34%	8.68	6.67
	100.00%	100.00%	8.51	5.88

Within the South African market all three age bands reported average customer satisfaction scores in excess of 80%, ranging from 8.13 to 8.68 and positively correlated with age. However, hypothesis 3a revealed no statistically significant differences between the average satisfaction levels of customers from different age groups in the South African market.

A similar but more pronounced increasing trend in correlation with age was observed amongst British customers. To disprove the null hypothesis of 3b that there were no statistically significant differences between the average satisfaction levels of customers from different age groups within the British market, a Kruskal-Wallis test was initially used. The hypothesis was rejected, proving that there were differences between the three age groups. However, the test did not reveal the direction of the finding. To test whether old customers have higher satisfaction ratings than young customers a one tailed Mann Whitney test were used.

The alternative hypothesis stated that customer satisfaction was higher for old customers, compared to middle aged customers and middle aged customers in turn had higher satisfaction scores than young customers. This could not be proven as middle aged customers were not significantly different from the young group or significantly different from the old group on scoring satisfaction. However, the median satisfaction score from the old group was statistically significantly higher than the median score of the young group. Therefore the alternative hypothesis as laid out in hypothesis 3b does not hold, but it was proven that old British customers have higher customer satisfaction scores than young British customers.

The results from the South African sample fails to confirm but does not clearly contradict the findings from Bryant and Cha (1996), Mittal & Kamakura (2001), Choi et al. (2005), Anderson et al. (2008) who stated that satisfaction increases with age.

A partial explanation for the South African results was the respondent gender compilation. Literature suggests young people rate service lower than older people. Bryant and Cha (1996) and Mittal and Kamakura (2001) stated females rate service higher than males. Therefore a high proportion of young females within this age group will increase the average satisfaction score above a similar group consisting of men and women in equal proportions. Within the young South African age group, 76.4% were female which skewed the results.

Should there exist a higher proportion of males within the old age group, the opposite effect would result: the age band would score lower than a similar group consisting of men and women in equal proportions. Within the old South African age group, 57.7% were male which skewed the results. The net effect of these proportional disparities was a smoother, more moderate increase between age band groups, which resulted in them not being statistically significantly different from each other.

The results from the British sample showed an empirical difference between satisfaction judgments of call centre customers below age 35 to those aged 55 and older. This confirmed the findings from Bryant and Cha (1996), Mittal & Kamakura (2001), Choi et al. (2005) and Anderson et al. (2008) who stated old customers express higher satisfaction than young customers.

The age of 55 was pivotal in Bryant and Cha's (1996) explanation as to why satisfaction increases with age. They claimed that members of the US society which were 55 years or older in 1994 had higher satisfaction levels due to their experiences of shortages in the depression and WWII eras (Bryant & Cha, 1996). This inquiry's finding within the British sample refutes the hardship theory. Of the British respondents 55 years or older in 2012, 73% were born between 1948 and 1957. Within the United Kingdom it was noted that after 1948 unemployment remained low and the late 1940s till the early 1970s was a long period of prosperity (Lambert, 2012). They would therefore not have experienced the hardship as described by Bryant and Cha (1996). It can therefore be argued that the theory put forward by Bryant and Cha (1996) to explain their findings was perhaps not the only explanation.

The explanation proposed for this phenomenon is that the "new" perception of what constitutes good service changes over time, while customers' judgment of satisfaction becomes less demanding after a certain age. Bryant and Cha (1996) noted a marked upward shift in customer satisfaction at the age of 44, followed by an even more pronounced increase at age 55 (p.24). This

relates to the simple reason given by Choi et al. (2005): young people might just have unrealistically high expectations.

Within the British sample this inquiry proved that for call centre service interactions, age affects customer satisfaction - as people age, their satisfaction levels increases. The findings from the South African sample did not confirm the hypothesis, but showed a similar trend.

6.2.3.2 The effect of age on importance of perceived service quality constructs

The relative importance of SERVPERF constructs in determining customer satisfaction was proven to vary by age band within both country cohorts (hypotheses 3c and 3d). In the South African market young customers valued Reliability highest, followed by Assurance. The young cohort in the British market valued Responsiveness most in determining their satisfaction level. Therefore young South Africans valued the ability to perform the promised service dependably and accurately, while young British customers valued prompt service and call centre agents' willingness to help above everything else (Etgar & Fuchs, 2009).

Middle aged South Africans valued Assurance highest, followed by Empathy. The capability of call centre agents to provide competent, courteous and credible service was valued above everything else (Etgar & Fuchs, 2009). These attributes provide middle aged South Africans with a feeling of security they desire. Their British counterparts valued Empathy highest with Assurance a distant second. For these middle aged customers the primary concern was the call centre's ability to provide caring and capable individual attention (Etgar & Fuchs, 2009).

"Old" South Africans valued Assurance first and Empathy second, while their British counterparts valued Empathy as the only service quality that matters. In both countries the call centre's ability to understand the customer and communicate in a caring way is appreciated, but in the South African market the competence of employees and their ability to convey trust and security is deemed pivotal.

These results indicate that people's satisfaction "anchors" changes over time. A clear distinction by life cycle was therefore present. It also showed that what people in different life cycles value also varies by country. Call centre managers armed with this knowledge and suitable routing technology could segment call centres into specialist teams to meet the unique service quality demands of each customer age group.

From the results discussed in this section, it was shown that age has a moderating effect on customer satisfaction scores within the British market, but not within the South African market. In

conclusion, the research question on whether age has a moderating effect on customer satisfaction scores was only partially supported.

6.2.4 Research question 4: Does gender have a moderating effect on customer satisfaction scores within different cultures?

6.2.4.1 The effect of gender on customer satisfaction

The results of hypotheses 4a and 4b were rejected. Therefore both South African and British females have significantly higher levels of customer satisfaction than men. These findings are in line with the research results by Bryant and Cha (1996) and Mittal and Kamakura (2001), while it serves to contradict and further isolate the research of Dimitriadis and Maroudas's (2007) who found the opposite to hold true. Therefore in call centre service interactions, in both a developed and emerging market, gender had a significant impact on customer satisfaction.

The satisfaction differences observed in both countries are not only statistically significant, but have practical implications. South African females rate call centre service 7.5% higher than their male counterparts while the mean difference in the British market was 8.9%. These differences in satisfaction levels could have substantial monetary implications if acted on. Gruca and Rego (2005) stated that a single percent change in customer satisfaction equated to a \$55 million gain or loss in cash flow for an average Fortune 500 firm. Therefore improvements in the perceived service quality and perceived value experienced by males could increase the MNC's customer satisfaction levels - translating into a large positive increase on the MNC's income statement.

Two explanations for this phenomenon were found in the literature. Bryant and Cha (1996) explained this phenomenon as women being better evaluators of their personal needs, while Mittal and Kamakura (2001) said women were more likely to refrain from being truthful about negative experiences than men. These will now be discussed in line with the results from this query.

Within studied call centres, the calls generally consisted of claims, benefit and funding queries. The theory that higher satisfaction judgments are explained from women being better evaluators of their needs is therefore not applicable – yet they rated service interactions higher than men. As such, this research contradicts Bryant and Cha's (1996) reasoning as it does not hold within all industries. Mittal and Kamakura's (2001) explanation seems more applicable: women are more likely to refrain from being truthful about negative experiences than men.

Research by Stedham and Yamamura (2004) found gender specific differences in Hofstede's dimensions of national culture within the United States and Japan. They empirically proved women score lower on the individualism dimension than men, making them more collectivist in nature (Stedham & Yamamura, 2004). Based on this finding, this research suggests that the reason why

women have higher judgments of satisfaction than men are because they have lower levels of individualism than men. This means their expectations are lower than their male counterparts (Donthu & Yoo, 1998). With lower expectations the likelihood of being dissatisfied decreases which results in higher satisfaction scores (Donthu & Yoo, 1998).

Based on the results discussed females have significantly higher levels of customer satisfaction than men in call centre service interactions.

6.2.4.2 The effect of gender on importance of perceived service quality constructs

The results in section 5.5.4 showed the CHAID models do not support hypotheses 4c and 4d. Therefore, no significant variations were found in the importance of perceived service quality constructs by gender in both countries. Within the South African market both female and male customers put the highest weighting on Assurance while in the British market both sexes placed the highest value on Empathy. The importance of Assurance and Empathy within the two markets was explained in section 6.2.1.2 as the need for trust, reliability and competence in South Africa and the need for personal interest, care and attention within the British market.

In conclusion, the inquiry found clear support for gender impacting customer satisfaction.

6.2.5 Research question 5: Does socio-economic status have a moderating effect on customer satisfaction scores within different cultures?

6.2.5.1 The effect of socio-economic status on customer satisfaction

The results of hypotheses 5a and 5b were not rejected. Therefore, within both the South African and British markets, the alternative hypotheses that more affluent customers report significantly lower satisfaction scores than lower income customers were not confirmed.

A reason for these results is the pricing of the product. The respondents in this inquiry were able to afford private health insurance which is perceived as a luxury product in both countries. In 2010 8.7 million (17.6%) South Africans (Statistics South Africa, 2011) and 7.2 million (approximately 11.2%) United Kingdom (Brindle, 2010) residents were covered on private health insurance in 2012. This implies private health insurance customers are already part of the socio-economic elite within their respective markets and therefore not that dissimilar on this construct.

From the literature one could expect the insured population studied in this inquiry should have lower satisfaction scores than the uninsured population on service interactions in general (Bryant & Cha, 1996; Anderson et al., 2008).

Similarly, call centre managers of private health insurance companies should expect lower satisfaction scores than other industries. It also has human resource management implications as

call centre agents within this industry should be of a very high standard to address the higher customer expectations. Managers should acknowledge this differentiation as necessitating a premium when acquiring individuals with this superior skill set.

6.2.5.2 The effect of socio-economic status on importance of perceived service quality constructs

The importance of service quality dimensions were proven to vary by socio-economic status in both South African and United Kingdom markets. Within the South African sample Assurance was the primary service quality construct of the low (SE₁) and middle (SE₂) socio-economic groups, while Empathy was of primary importance to high socio-economic group (SE₃) customers.

Within the United Kingdom sample Empathy was the primary service quality construct of the low (SE₁) and high (SE₃) socio-economic groups, while Reliability was of primary importance to middle socio-economic group (SE₂) customers. The importance placed on Reliability by the middle socio-economic group should be noted as it implies they place the highest value in call centre agents performing the promised service dependably and accurately (Etgar & Fuchs, 2009).

The importance South African customers from the highest socio-economic group placed on Empathy was an interesting finding. High earning South African customers value the same quality measures of caring, individualised attention and understanding as the majority of British customers. The high earning South African individuals in this study have climbed to the highest rungs of the income ladder. To get there the majority had to be ambitious, competitive and sought individual rewards. It therefore seems that South African customers within the top socio-economic group have a different culture than the rest of the South African sample. The attributes these high earning South Africans required to achieve their socio-economic position aligns with Donthu and Yoo's (1998) attributes of an individualistic society. Donthu and Yoo (1998) stated individualistic societies stress job specialisation, individual rewards and competition and will rate Empathy highly.

Extending this reasoning to the level of the individual, South Africans at the top of the socio-economic pyramid are more individualistic than lower socio-economic groups. They do not require Assurance like other South Africans as they have higher benefits in their medical insurance, guaranteeing more cover and a wider choice of healthcare providers. They have confidence they can see the specialists they wish to see and receive care in the hospitals they choose, with little or no additional fees paid from their own pocket.

A second explanation resides with customer education level. Health insurance policies have many facets and fairly complex details. To fully understand the benefits, customers need to study their policy documents annually – getting to grips with the new benefits and policy changes. If the customer does not understand the benefit, they would need to contact the call centre for an

explanation. The highest socio-economic group will typically also be the most highly educated. Anderson et al. (2008) noted that income was often used as a proxy for education and served as an indication for “in-depth information processing” (p.369). This high level socio-economic group will therefore understand the intricate details of their insurance benefits better than lower socio-economic groups and will contact the call centre from a better informed / higher power position.

Based on these two reasons high socio-economic status customers in South Africa have more confidence that their queries will have a positive outcome. Their benefits are full or close to full coverage while the answers provided by the call centre will require less explanation since the rules, procedures and processes described will already be relatively well understood.

In conclusion, the inquiry found no support that socio-economic status impacts customer satisfaction. The explanation for this finding is that the price of the insurance products controls socio-economic levels within the data. Low income earners were not in this dataset as they can not afford the products offered.

6.2.6 Research question 6: Is national culture the primary predictor of customer satisfaction in terms of the four customer factors tested in this research?

6.2.6.1 Measuring cultural differences in customer satisfaction, controlling for gender

Hypothesis 6 was tested in order to isolate the impact of national culture and the three customer characteristic factors of age, gender and socio-economic status on customer satisfaction. The multiple regression model took the four factors tested in research questions 2, 3, 4 and 5 and quantified their impact in predicting customer satisfaction scores in the absence of perceived service quality variables.

National culture’s predictive importance was 66%, followed by age (banded) and gender. The findings also served to confirm the findings from hypotheses 5a and 5b that socio-economic status did not influence customer satisfaction.

In conclusion it was proven that by combining the results from hypothesis 2a, 2b and 6 national culture had a moderating impact on customer satisfaction across national borders and its impact outweighs that of customer characteristics of age, gender and socio-economic status. The pivotal impact national culture has on customer satisfaction in call centres across national borders was therefore proven.

6.3 Research limitations

The study only considered two countries. The impact of product complexity on the perception of service quality cannot be taken into account as operational differences between each of the analysed business units were not evident initially.

6.4 Summary of research findings

The table below provides a summary of the research questions posed and the answers this inquiry found:

Table 6-2: Summary of research findings

	Research question	Supported
RQ ₁	Is perceived service quality the main antecedent of customer satisfaction in a call centre service interaction?	Yes
RQ ₂	Does cultural difference have a moderating effect on customer satisfaction scores?	Yes
RQ ₃	Does age have a moderating effect on customer satisfaction scores within different cultures?	Partially supported
RQ ₄	Does gender have a moderating effect on customer satisfaction scores within different cultures?	Yes
RQ ₅	Does socio-economic status have a moderating effect on customer satisfaction scores within different cultures?	No
RQ ₆	Is national culture the primary predictor of customer satisfaction in terms of the four factors tested in this research?	Yes

The research showed that four of the research questions were supported, one was partially supported and one was not supported. The conclusions reached based on these findings will be discussed in the following chapter.

7. Conclusion

7.1 Introduction

This chapter presents a number of recommendations arising from the research and identifies areas for future research. In this study the customer was treated as a unique contributor and evaluator of the service interaction. The findings will be discussed in terms of their organisational (managerial) and theoretical implications.

The purpose of this research was to

- 1) determine whether national culture played a moderating role in customer satisfaction within call centres serving customers across national borders.
- 2) In order to reach this conclusion the concepts of, and distinction between customer satisfaction, service quality and perceived service quality had to be understood.
- 3) Subsequently the way these concepts are measured had to be understood. The researcher needed to understand call centres; what differentiates these telephone calls from other service interactions and how customer evaluations and satisfaction judgments would differ within this environment.
- 4) The concept that the customer is a co-creator of value in a service interaction required understanding.
- 5) The role customer characteristics play in affecting the service interaction valuation had to be understood.
- 6) Finally the researcher had to understand the impact a customer's national culture have on valuating service interactions and making the judgment of satisfaction.

The research showed that four of the research questions were supported, one was partially supported and one was not supported. The moderating impact of three customer characteristics on customer satisfaction and perceived service quality were tested. Strong evidence was found to support that gender impacted judgments of satisfaction. Female customers reported significantly higher customer satisfaction scores than males.

Partial evidence was found that customer satisfaction increases with age, with the theory proven in the British, but not in the South African market. No support was found for the theory that socio-economic status affects customer satisfaction in call centre interactions. Given the high priced

health insurance product, this query might have inadvertently controlled for income which served as proxy for socio-economic status.

The inquiry found clear support that perceived service quality is the main antecedent of customer satisfaction in a call centre service interaction, as it explained more than 70% of variation in the customer satisfaction scores.

Based on hypotheses formulated on cultural literature and without the use of any new cultural data, cultural differences were found to have a moderating effect on customer satisfaction scores. South African customers not only rated call centre service interactions higher than their British counterparts, but culture impacted the importance customers placed on different service quality constructs. Finally it was proven that of the four factors of age, gender, socio-economic status and national culture tested, national culture was the primary predictor of customer satisfaction. This finding strengthens the finding of Research Question 2 to clearly prove that national culture has a moderating effect on customer satisfaction scores.

Using this knowledge, the study gave insight into the influence of national cultural on customers' evaluations of call centre services, relating it to studies performed across other industries to confirm or contrast previous findings.

At a general level it was found that service firms with the ability to leverage cultural factors in their call centres can create competitive advantages for themselves. However, MNCs trying to implement these changes are hindered by the scarcity of empirical investigations into how customers in different countries evaluate call centre services. Call centres serving emerging markets face the added frustration of a lack of evidence on customer satisfaction and perceived service quality from other service providers in their market.

7.2 Suggestions and recommendations for further research

7.2.1 General managerial implications

The findings of this inquiry contribute towards more efficient management of service environments and more specifically a call centre service environment. Marketing managers need to be culturally sensitive when comparing results from different markets. Managers should therefore consider setting different satisfaction targets in different nations as some satisfaction targets may never be achieved due to some cultural groups being less likely to express pleasure (Morgeson III et al., 2011). Strategy around the entry into new national markets should also consider the cultural implications. Differences between the current service operations meeting the requirements of the current cultural segments and those of the new market, should be investigated.

Service managers entering culturally distant markets should as a starting point evaluate the culture based on the Hofstede (1991) or GLOBE (2004) cultural dimensions. It would be prudent for these MNCs to conduct their own cultural study in the specific industry within the market they consider entering. This pre-entry analysis of culture can be thought of in a similar way as a Porter's (1998) five forces analysis. Porter's (1998) model identified five competitive forces which assist to determine the relative attractiveness of a market or industry. At a granular level this research shows the need of analysing the additional factor of customer culture. Culture can either be investigated as a barrier to entry within the Porter model, or as a separate factor when MNCs enter culturally distant markets.

From a service perspective the research will ensure customers' unspoken needs are understood and met from day one. From a marketing perspective these customer needs and the ability to satisfy them can be targeted in promotional material. Finally, managers need to financially quantify changes required to adapt to the servicing level requirements of the new culture for decision making purposes.

7.2.1.1 Market segmentation

It was proven that the ranking of service quality constructs can be predicted on the basis of cultural and customer characteristic differences. Therefore customers can be segmented according to the service quality construct valued most important. This provides unique marketing and service opportunities. The marketing department could distribute more focussed material based on the needs of the customer segment. Young South African males in middle or high socioeconomic groups need to be sent occasional marketing material on the Reliability of the company and the services they provide. Old British females of any socio-economic group needs more frequent marketing material conveying care and interest in their needs according to the construct of Empathy.

7.2.2 Call centre management

7.2.2.1 Technological market segmentation at point of service

Call centres are perceived as strategic assets to manage, differentiate and expand the brand through delivering exceptional service quality (Miciak & Desmarais, 2001). For both countries the data indicated that there are segments where improvement can be targeted. Technological segmentation will enable the call centre voice prompts to send customers to different specialist groups within the call centre.

Young males who are the hardest segment to please could be routed to a predefined group of call centre agents who are best suited to handle their needs. Women aged 55 and older might not

require any specific routing as they are the easiest to please. This technology and routing will have cost implications for the company as it will require both technology outlay and recruitment implications. However, the benefits of a one percent increase in customer satisfaction levels have been shown to increase company return on investment (Gruca & Rego, 2005).

This inquiry proposes that a cost-benefit analysis be undertaken to investigate this. The findings from this paper also have training and recruiting implications for call centres. These will be discussed with a specific focus on the South African MNC's experience from where it could be extrapolated to call centres in general.

7.2.3 Company specific managerial implications

There appears to be a misalignment of perceptions internally and externally in South African call centres. Managers' perceptions of the service levels of the South African call centre servicing the British market are higher than the ranking of their clients. The favourable results of the South African call centre are rather from the lower expectations of the society within which they operate. As such the societal expectations determine the perceived service quality which in turn decides satisfaction levels. Armed with the knowledge of this research, adjustments and enhancements can be made to the MNC's service design, staff recruitment and training.

7.2.3.1 Recruiting

The South African market call centre requires agents who are trustworthy and competent. The quality of South African call centre agents working with South African customers appears adequate to handle the less demanding customer needs. The decision whether to route calls in this market is a harder sell given the average satisfaction score of 8.51 (out of 10).

As such the value-adds need to be offset against the costs required for technology and recruitment "upgrades". It should be noted that there is a hidden cost of re-work (based on call centre failures). The failures are picked up by a separate team of customer relationship managers, the cost of which resides within their own cost centre. When pricing the segmentation / routing model, the impact of escalations and re-work along with head count of customer relationship managers, should be factored in.

The British call centre requires agents who are empathetic to the needs of the customers and make them feel cared about. Even though the construct of Empathy was the most important predictor of customer satisfaction in the British market, the other three constructs also scored poorly and the average satisfaction score was only 5.88 out of 10. South African call centre agents working on British business need to operate at much higher performance levels than they may be accustomed to in South Africa.

These individuals should have the ability and competence to handle a claim from start to finish with minimal need to escalate and with a very high first call resolution rate. The skills required are possibly limited to graduates which will demand higher remuneration (Borowitz, 2012). Technological routing of calls to specialist call centre teams should be considered.

7.2.3.2 Training

Regular training for call centre managers and service agents will enable service teams to better meet customer expectations. Call centre agents servicing the South African market needs to convey competence, reliability and the ability to get problems resolved. This needs to be conveyed through suitable language, phrases used and tone of voice.

Cultural training should form a significant part of the training call centre agents servicing the British market receives. The majority of the MNC's call centre agents spoke English as a second language (Borowitz, 2012). More training on the appropriate use of language to convey care and interest are required.

By focussing on cultural sensitivity and awareness training, call centre managers servicing offshore clients will be able to better manage cultural differences. By narrowing the cultural gap between the customer and the call centre agent, a better trust relationship can be built.

7.2.3.3 Performance management

Customer feedback, measured by customer satisfaction and service quality surveys, should form the primary source to measure a call centre agent's performance. Operational metrics are still used in service performance measurement, but should mostly serve as early warning indicators for service failure. It should not form a large percentage of the agent's rating and bonus structure.

7.2.3.4 Customer segmentation

Customer feedback is also used to enhance and update the customer segmentation model. Based on the segmentation model, recruitment receives information on the service qualities which the market currently demands. The human resource department can therefore adjust their criteria to employ talent with the skills the market demands. In a similar manner, call centre instructors will put more emphasis on teaching the skills required to better satisfy the latest customer needs. The combined effect is a much quicker response to market demands. Based on the findings this will lead to higher customer satisfaction, which in turn will result in retained market share (Jaiswal, 2008) less complaints (Robinson & Morley, 2006) and higher profits (Morgeson III et al., 2011).

7.2.3.5 The Call centre management model

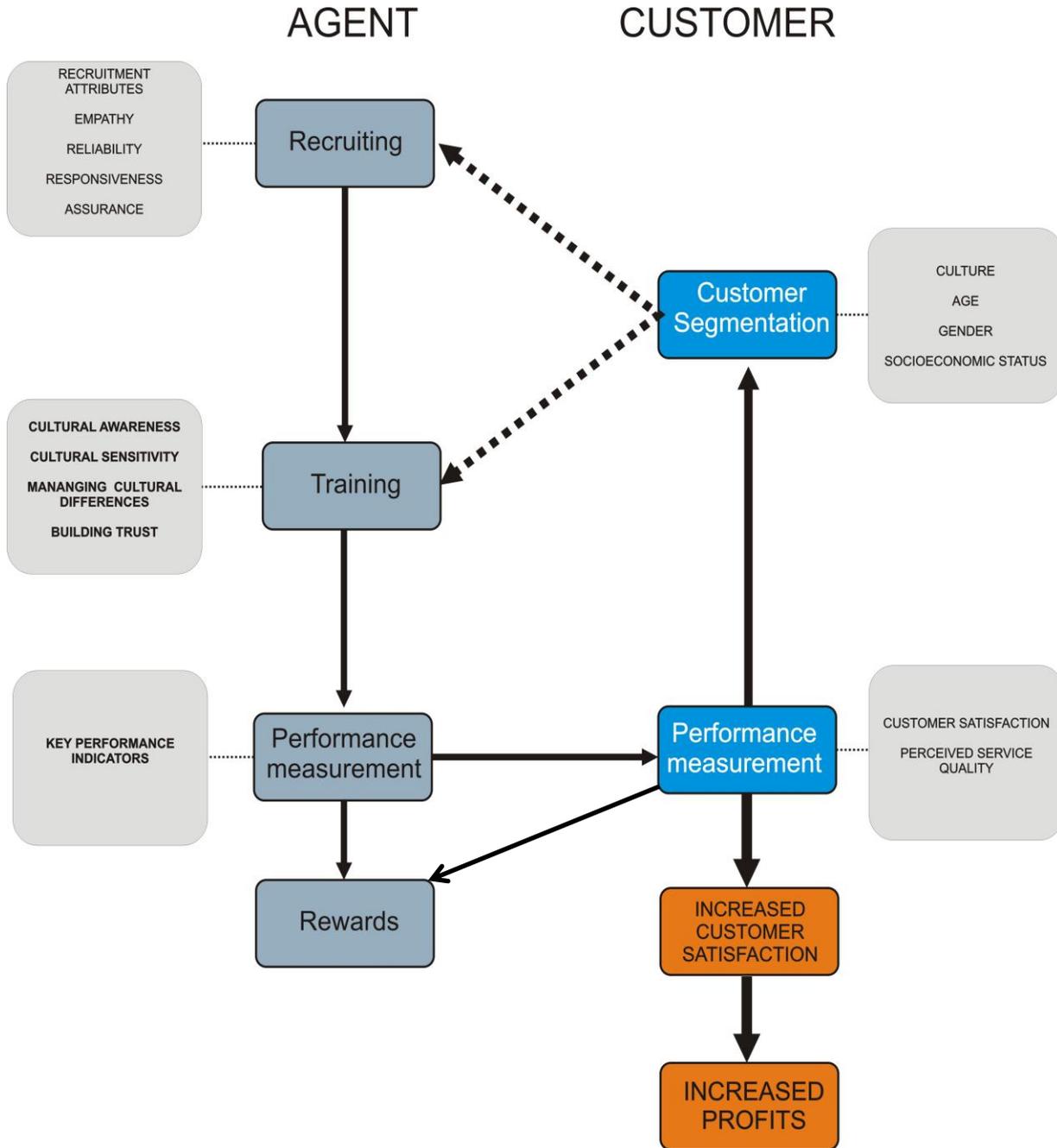
Based on these findings, this research proposed a call centre management model. This model, shown in figure 7.1, guides call centre managers on successfully implementing the research findings into their call centres.

The function of each of the sections within the model were explained in the previous four sections. The following explanation provides a brief description of the flow of the model based on the intelligence collected from the research findings.

The model is partitioned into two halves, recognising the importance of both the customer and the call centre agent in achieving a successful service outcome. Call centre agents are recruited with the goal of matching the agent's talents with the specific service quality attribute in demand from the company's customers. Call centre agents receive cultural training to make them aware of and sensitive to the cultural differences which exist.

Performance measurement and reward takes operational metrics into account, but are primarily focussed on customer feedback through customer satisfaction and service quality surveys. Customer feedback is used to measure the results of the interventions and to segment the customer base on factors like culture, age and gender. The segmentation provides information of what is required by the customers and in which quantities. This information feeds back into the recruiting and training departments of the call centre and the process repeats.

Figure 7-1: Call centre management model



7.3 Academic implications

From an academic perspective this paper adds to the research done in the fields of national cultural differences, market segmentation, service quality measurement and international business.

Overall results show that the adjusted SERVPERF questionnaire is a useful measure to assess customer satisfaction of call centre services in both emerging and developed markets. This research demonstrates that incorporating customer characteristics into models used to evaluate customer satisfaction adds a richer perspective of the mechanics of value creation. This implies that in managing customer satisfaction, knowledge of the operational service concepts, service quality as well as the unique customer's characteristics is required to create a complete picture of the co-creation process of customer satisfaction.

7.4 Research limitations and directions for future research

7.4.1.1 Limitations

The study was limited by the lack of individual customer cultural data which would have enabled this research to compare Hofstede's dimensional scores to those observed in South African and British health insurance markets.

A second limitation was the point in time view (snapshot) of customers. It restricts researchers from determining the problems more clearly and applying interventions to monitor results. A third limitation was that the study was based on data from only two countries and one industry. Despite its limitations the study provides a strong methodological framework for further research and will remain valid even if new service quality constructs are discovered.

7.4.1.2 Direction for future research

Effect of customer characteristics on customer satisfaction and perceived service quality

- The contradictory finding that males had higher satisfaction judgments in the Greek public sector (Dimitriades & Maroudas's, 2007) should be explored further to try and define its root cause. International, national and especially emerging market studies into gender impact's on satisfaction judgment of public sector service providers are required.
- The impact of socio-economic status consisting of income and education on perceived service quality require more research. Findings from the literature are ambiguous and a need for clarity is required. Studies across industries, with customers from different countries are required to provide clarity.

Studies within developing markets

- More studies on perceived service quality and the resulting construct of customer satisfaction are required within developing market service providers. This research could be across many industries or limited to call centre service providers.

National culture: its impact on customer satisfaction and perceived service quality

- In the field of cultural research the two latest cultural dimensions of long term orientation (Hofstede, 1991) and indulgence versus restraint (Minkov & Hofstede, 2011) should be researched in more countries. The largest gap exists within emerging markets. Given its recent publication, studies on the dimension of indulgence versus restraint are currently rare. The impact of these two cultural dimensions on determining perceived quality constructs should be empirically tested, creating a richer predictive model.
- The impact of culture on service quality perception using results from the more recent GLOBE (2004) study is an area of research which is perhaps the most exciting. These analyses could be used to confirm or disconfirm recent findings (this inquiry included) which still used Hofstede's (1980, 1991) seminal models.
- Research into the impact of Globe's (2004) nine dimensions of culture on the SERVPERF constructs of perceived service quality could also serve to map Globe dimensions into Hofstede's (1980, 1991) dimensions. Additionally the necessity of nine compared to the current six dimensions as proposed by Minkov and Hofstede (2011) could be analysed.

7.5 Concluding remarks

Characteristics of national cultures have frequently been claimed to influence service quality perception and customer satisfaction. This inquiry investigated this claim by analysing a multinational company's call centre servicing two markets across national borders. Empirical support for the effect of national culture on perceived service quality and customer satisfaction was found.

The influence of customer characteristics on service quality perception and customer satisfaction was also investigated finding empirical proof that females report higher levels of satisfaction than males. The importance customers placed on service quality constructs were proven to vary by age and socio-economic status. Using the combined findings on culture and customer characteristics, call centres are able to segment their customer base. This allows call centres to better meet

customers' individual requirements and increase the level of satisfaction they experience with the service provider.

A model for managing a call centre using these findings was designed, described and displayed. Call centre managers implementing this model should expect increased customer satisfaction, fewer complaints, less re-work and subsequent cost savings.

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Appendix A. Example of Survey

Service

This section contains 15 statements about X's service. Please indicate to what degree you agree with the statements made on a scale from 1 to 7, where 1 is "I strongly disagree" and 7 is "I strongly agree".

I strongly disagree	1	2	3	4	5	6	7	I strongly agree
---------------------	---	---	---	---	---	---	---	------------------

Reliability

When we promised to do something by a certain time, we do so

1	2	3	4	5	6	7
---	---	---	---	---	---	---

We show sincere interest in solving our customers' problems

1	2	3	4	5	6	7
---	---	---	---	---	---	---

We perform services right the first time

1	2	3	4	5	6	7
---	---	---	---	---	---	---

We provide correct/accurate information to our customers

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Responsiveness

We provide prompt services to our customers

1	2	3	4	5	6	7
---	---	---	---	---	---	---

We are always willing to help our customers

1	2	3	4	5	6	7
---	---	---	---	---	---	---

We are never too busy to respond to our customers' request

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Assurance

Our behaviour instils confidence in customers

1	2	3	4	5	6	7
---	---	---	---	---	---	---

We can be trusted by our customers

1	2	3	4	5	6	7
---	---	---	---	---	---	---

We are consistently courteous to our customers

1	2	3	4	5	6	7
---	---	---	---	---	---	---

We have the required knowledge to answer our customers' questions

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Empathy

We give individual attention to our customers

1	2	3	4	5	6	7
---	---	---	---	---	---	---

We have our customers' best interest at heart

1	2	3	4	5	6	7
---	---	---	---	---	---	---

We understand the specific needs of our customers

1	2	3	4	5	6	7
---	---	---	---	---	---	---

We have convenient working hours

1	2	3	4	5	6	7
---	---	---	---	---	---	---

General

The second section contains 2* questions about your experience with X's service.

Please rate your overall experience of your most recent interaction (out of 10, with 10 being "perfect")

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

How likely would you be to recommend this company to friends, colleagues or family? (out of 10, with 10 being "definitely")

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

* Results from the second question covered the construct of loyalty which was omitted from this research as it would have given this research too wide a scope

Appendix B. Cronbach's alpha results

Table 8-1: Reliability statistics – South African cohort

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.980	.980	15

Table 8-2: Item-total statistics – South Africa

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
We provide prompt service	84.99	297.500	.851	.837	.978
We are always willing to help	84.90	299.338	.866	.875	.978
We are never too busy to respond	84.99	298.975	.816	.758	.979
Our behaviour instils confidence	84.92	297.752	.905	.884	.978
We can be trusted	85.07	292.876	.903	.875	.978
We are consistently courteous	84.80	304.043	.861	.798	.978
We have the required knowledge	84.92	299.026	.875	.821	.978
We keep our promises	85.09	296.139	.852	.785	.978
We show sincere interest	84.95	296.854	.915	.871	.978
We perform services right the first time	85.22	289.924	.854	.819	.979
We provide correct/accurate information	85.06	292.771	.880	.855	.978
We give individual attention	84.93	297.409	.932	.885	.977
We have our customers' best interest at heart	85.23	292.901	.860	.864	.978
We understand the specific needs	85.17	293.413	.890	.884	.978
We have convenient working hours	84.90	309.551	.755	.651	.980

Table 8-3: Reliability statistics – British cohort

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.985	.985	15

Table 8-4: Item-total statistics – Britain

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
We provide prompt service	63.58	656.505	.917	.897	.984
We are always willing to help	63.49	658.301	.934	.914	.984
We are never too busy to respond	63.53	668.780	.896	.850	.984
Our behaviour instils confidence	63.69	652.176	.946	.953	.984
We can be trusted	63.68	653.788	.951	.951	.983
We are consistently courteous	63.03	676.789	.828	.778	.985
We have the required knowledge	63.49	666.261	.901	.871	.984
We keep our promises	63.68	660.040	.883	.885	.984
We show sincere interest	63.60	656.431	.922	.893	.984
We perform services right the first time	63.87	655.317	.927	.898	.984
We provide correct/accurate information	63.56	664.878	.878	.824	.985
We give individual attention	63.46	663.250	.926	.888	.984
We have our customers' best interest at heart	63.83	655.991	.924	.926	.984
We understand the specific needs	63.81	659.207	.916	.909	.984
We have convenient working hours	63.04	694.643	.693	.561	.987

Appendix C. Example of CHAID dendrogram

Please rate your overall experience of your most recent company X interaction

