

**SERVICE QUALITY, CUSTOMER LOYALTY AND THE MEDIATING
EFFECTS OF CUSTOMER SATISFACTION TOWARDS AUDIT FIRMS :
PERSPECTIVE OF SMALL-MEDIUM ENTERPRISE (SMEs) COMPANIES IN
MALAYSIA**

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PERSPECTIVE OF SMALL-MEDIUM ENTERPRISE (SMEs) COMPANIES
IN MALAYSIA**

By

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**Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
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in Partial Fulfillment of the Requirement for the Master of Sciences
(International Accounting)**

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ABSTRAK

Matlamat utama kajian ini dijalankan adalah untuk menjelajahi hubungan di antara kualiti perkhidmatan, kepuasan and kesetiaan klien kepada firma audit di Malaysia. Model SERVQUAL telah digunakan untuk mengukur persepsi dan tanggapan oleh syarikat perusahaan kecil dan sederhana berpandukan kepada perkhidmatan audit yang telah disediakan oleh firma audit. Lima dimensi di dalam model SERVQUAL iaitu kebolehpercayaan, kebertanggungjawaban, jaminan, boleh nampak dan empati adalah digunakan untuk mengukur kualiti perkhidmatan di firma audit. Kajian ini dijalankan dengan menggunakan data utama ("primary data"). Temu bual telah dijalankan di sekitar kawasan di Sungai Petani di mana dua syarikat telah dipilih sebagai mewakili perusahaan kecil dan sederhana dan satu firma mewakili firma audit. Borang soal selidik telah diagihkan kepada 600 syarikat perusahaan kecil dan sederhana di Malaysia serta ia berdasarkan kepada nama syarikat yang telah disenaraikan di dalam Suruhanjaya Syarikat Malaysia (SSM) pada tahun 2013. Hasil daripada kajian ini mendapati syarikat perusahaan kecil dan sederhana menunjukkan tidak berpuas hati dengan kesemua lima dimensi kualiti perkhidmatan. Di samping itu, klien paling tidak berpuas hati adalah di dalam dimensi empati. Tambahan pula, kajian ini juga mendapati kepuasan pelanggan adalah pengantaraan penuh di dalam dimensi kebolehpercayaan dan hanya separuh pengantaraan di dalam dimensi kebertanggungjawaban. Di dalam kajian ini penulis cuba untuk menghuraikan ciri-ciri yang terdapat di dalam kualiti perkhidmatan dari sudut pandangan klien. Jadi penulis mengharap, kajian ini dapat membantu firma audit untuk lebih jelas serta mudah untuk memahami klien mereka. Hasilnya, firma audit boleh membuat tanggapan dan meramalkan apa yang klien inginkan berbanding hanya bertindak apabila klien tidak berpuas hati. Sehubungan dengan ini, hasil daripada kajian ini dapat digunakan oleh firma audit atau pengurusan untuk melaksanakan kualiti perkhidmatan yang lebih baik dan secara tidak langsung dapat mempengaruhi kesetiaan pelanggan ke atas perkhidmatan yang telah ditawarkan. Penulis telah mengguna pakai model di dalam pemasaran iaitu SERVQUAL dalam usaha untuk mengukur kualiti perkhidmatan oleh firma audit di Malaysia.

Kata kunci: Kualiti Perkhidmatan, Kepuasan Pelanggan, Kesetiaan Pelanggan, SERVQUAL, Syarikat Perusahaan Kecil dan Sederhana, Malaysia.

ABSTRACT

The purpose of this research is to explore the relationship between service quality, satisfaction and loyalty of the client to the audit firms in Malaysia. This paper uses a marketing model, SERVQUAL in order to measure service quality of audit firms in Malaysia. SERVQUAL model was used to measure the perceptions and expectations of small-medium enterprise companies on the services received from audit firms. The five dimensions of SERVQUAL model such as reliability, responsiveness, assurance, tangible and empathy were used to measure the service quality of audit firms. The research was conducted by using primary data. The interview sections were conducted only in area Sungai Petani where they represent two SMEs companies and one for audit firm. Meanwhile, questionnaires were sent to 600 SMEs companies in Malaysia as listed in Companies Commission of Malaysia (CCM) for year 2013. The finding of this study, on average, the small-medium enterprise companies were dissatisfied on all five dimensions of service quality, i.e. reliability, responsiveness, assurance, tangible and empathy. The most dissatisfied dimension was empathy due to clients' hoped audit firms able to improve and give more individualized attention, caring, provide reliable and prompt services. In addition, customers' satisfaction was found to mediate the relationship of reliability and customer loyalty and partial mediate in dimension of responsiveness. Consequently, the study defines the attributes of the quality services from the clients' perceptive. As a result, audit firms' needs are more clearly known and with better understanding of their clients. Finally, the audit firms will be in a better position to anticipate client's requirement and desire rather than to react to clients' dissatisfaction. In light of this, the results in five dimensions of service quality can be used by audit firms or other managements to perform better in relation to their service quality due to its ability to influence customer satisfaction.

Key words: Service Quality, Customer Satisfaction, Customer Loyalty, SERVQUAL, SMEs Companies, Malaysia.

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CHAPTER 1 : INTRODUCTION

1.1 Overview

The purpose of this study is to analyze *services quality, customer loyalty and the mediating effects of the customer satisfaction toward audit firms in Malaysia*. In particular, it will discuss five parts of service quality, i.e. empathy, assurance, responsiveness, reliability and tangible. This chapter presents the purpose of the study by first stating the problem statements, followed by research objectives, research questions, the significance and contributions of the study, definition of key terms and lastly, the organization of remaining chapters.

1.2 Background of the Study

Quality of service is a fundamental key for companies, which enables them to remain in the market and gain competitive advantages if the companies can provide best quality services to the customers (Carlzon, 1987; Rust & Oliver, 1994). To date, many firms such as audit firms have substantial proliferation in the market, especially in Malaysia. According to Price water house Coopers (PwC) report in 2012, approximately 450 Small-Medium Practitioner (SMPs) are available in Malaysia and the number increases to around 20 percent compare to the percentages in 2008, which means that the SMPs registered in Companies Commission in Malaysia (CCM) has increases to 90 firms in 2011. Hence, in order to ensure that they are able to succeed in the market, the high quality service should be attached together when performing the audit process. After taking these factors into consideration, the end result could enhance the company's

performance and lead to customer's loyalty (Lewis, 1994), and consequently, generate more profit (Gundersen, Heide & Olsson, 1996).

In order for firms to maintain success, good quality of service should be made a priority. Therefore, firms should practice plausible strategy such as based on customer-focused as part of compulsory approaches in order to monitor and analyse customers' satisfaction and the service quality. This is crucial for companies in which their main activities come from providing services (e.g. insurance, banking, audit firms, maintenance service, securities, hotel, tourism, brokerage and automobile especially in maintenance and repairing industries). In addition, past studies have shown that in business and marketing fields, the three elements of service quality, satisfaction and loyalty of the customers were essential to firms in which their main activities revolve around providing services. According to Oliver (1980), customers' satisfaction or dissatisfaction is based on past experience as a result from previous services and customers often regard their experiences in customer service for comparisons between the quality to expect that they will obtain from other firms.

Besides that, many previous researchers have concluded that there was a correlation between customer satisfaction and customer loyalty and it was dependant on service quality rendered to customers (Osman *et al.*, 2013; Rust *et al.*, 1993; Rosen *et al.*, 2012; Koobgrabe *et al.*, 2008; Ismail *et al.*, 2006 and Bongsu, 2004). This is because, companies that offer high service quality have prominent value to attract customer loyalty. In other words, companies should make it their objective to provide better

services that could deliver significant value to customers in order to exceed what customers need and expect from them. Despite having a strong vision in offering high quality services, there are also holes and shortcomings of providing great customer services that is sometimes difficult for companies to overcome especially for companies where the main industries are based on services.

Essentially, in the views of auditing, the vital issues often lies upon the dissatisfaction of clients, which are generally related to the quality of service that has been rendered (Sutton, 1993). This view is also supported by the US General Accounting Officer (GOA), where a survey study conducted in September, 2003, showed that half or approximately 50 percent of public companies were satisfied with the audit service. Interesting enough, the survey also found that around 65 percent of public companies in the US still appointed the same auditor at the same audit firm for more than 10 years. Furthermore, GOA also found that the quality of the service is an important attribute because most of the audit firms will be selected or sought based on this factor in order to assure the best quality of audit work provided during the audit task performance. In additon, GOA survey also revealed that the majority of public listed companies will continue to use non-audit services such as taxation, secretarial and others provided by the same audit firms if they are satisfied with the services offered.

Many previous authors knew and realized that audit quality is subsequent to audit service and that it plays an important role during the delivery of audit services. On the hand, few researchers have also investigated the charactarestics and features of service quality

(Carcello, Hermanson & McGrath, 1992; Sutton, 1993; Parasuraman *et al.*, 1985, 1991, 1994, 1998). DeAngelo (1981) has pointed out on his study, that factors such as size of a firm contributes as the proxy of audit quality due to company expertise and technology of employees. This is evidenced through big size of audit firms in Malaysia such as KPMG, PwC, Ernst & Young and Deloitte that are known as the “Big 4”. Furthermore, Behn *et al.* (1997) also studied the size of firm as proxy to audit firm but the study in addition, also investigated and examined the attribute of audit quality in relation to customers satisfaction. The study showed that the quality of audit service is all about positive interaction between audit firms and their audit committee, and at the same time, giving valuable feedbacks and being responsive towards the clients need when performing the audit task.

Due to lack of the empirical study in this area, especially since having SMEs companies as respondents, the study will thus, be conducted based on this topic and area. Therefore, the objective of this study is to investigate the relationship between dimensions of audit service quality, satisfaction and loyalty of the clients. For utilising the dimensions of service quality, this paper will also be applying marketing theory in order to investigate the audit quality service, satisfaction and loyalty of the customers. Consequently, this paper is expected to contribute added value in the audit and marketing literature towards the end of the study.

1.3 Problem Statements

This study utilized Small Medium Enterprise (SMEs) companies as respondents to provide data regarding their expectations and perceptions towards audit firms. Generally, audit firms tailor their professional services to many clients closely in order to solidify their relationship with the clients. Moreover, most clients depended on firms to deliver the quality of audit service especially regarding issues on “fair and view” audited financial statement, which protects the clients and prevents them (i.e. client) from the violation of rule and regulation stipulated by the government especially by the Inland Revenue Boards (IRB).

The general concept of ‘customers dissatisfied’ can create atrocious negative effects to the company if they cannot perform as how the customers want. Customers’ dissatisfaction can lead to wrong perceptions, create bad image and for the long-term, if these problems are not best solved in a timely manner, it can mitigate the profit margin of companies. Thus, one way of enhancing a company performance and efficiency for customers satisfaction is by investing some money on the latest technology, software upgrades and providing training to staff. In addition, companies that provide good service quality at a price higher than their competitor, this can also give significant impact towards customer satisfaction. Therefore, companies should prevent this issue from occurring by following the rules and regulations as well as referring to the price of each of its competitors surrounding them and produce better service quality than competitors in order to intrigue new clients and maintain existing clients.

In general, companies that provide services are aware that profit and prices are some of the important elements in providing the impetus for success. Unfortunately, Gonzales & Santamaria (2008) explained that there are still a lot of errors that can occur during the delivery of services and that persisted problem that are left unsolved does not just give zero benefit, it even creates a negative image to the company. This view is also supported by studies from Ha & Jang (2009), Javalgi & Moberg (1997), Ismail *et al.* (2006), Bongsu (2004) and Janadi & Al-Saggaf (2000), where they also state that the failure to provide better quality of services was due to greater expectation from the customers that exceeds the company's performance. The failure to meet the customer's expectation can disintegrate the relationship between the company and its customers.

According to Gronross (1983), when the service provider and the consumers are not in accordance, this situation can give rise to many factors that will affect their level of customers satisfaction. He also listed a numbers of reasons why the gaps of communication can arise between service provider and consumers:

- a) The company did not fulfill its promise
- b) Failure of the company to contact its customers
- c) Communication difficult to understand or what information to be delivered does not reach to the customers.
- d) The company does not listen to the feedback and complaints from the customers.

Consequently, in order to bridge the communication gaps from further prolonged, it is important for companies to anticipate what their customers think about their service and

make appropriate changes and improvement. Besides that, companies should also realize which strategies that can be used to satisfy the needs of customers. In addition, other factors such as time (i.e. fast respond), price, and cost also have the tendency to affect customers' satisfaction. If the services provided makes the customers have to wait or delay the delivery time, the company should apologize for their lack of punctuality as this is the best way to normalize their relations and to avoid catastrophic effects. Furthermore, giving apologies have also proven to be a great influence in creating customers' intention to buy back their services (Maxham, 2001; Boshoff & Leong, 1998). Many studies also agree with this issue reasoning that it is harder to manage and control the services since services resemble closer to intangible elements and no production process, which makes it difficult to measure, or in this case, controlling the external factors such as time constraints. It is also difficult to standardize because there is a wide scope and a large variation in services.

A study by Gonzales & Santamaria (2008) show that organizations also have numerous problems that needs be solved, which are: (1) How can a company implement a service recovery system? (2) How should the organization find out what kind of expectations do customers have? (3) Is it a wise action by combining different strategies to maximize the best results in the investigation of the customers' satisfaction? (4) Is it okay to incorporate different strategies that can enable them to change and improve the service quality dimension? In addition, a study by Bongsu (2004) also reported that it is compulsory for audit firms to adapt the quality of services so that they could stimulate the quality of existing services delivered to the clients. The study has used SERVQUAL

instrument to test the validity of service quality by audit clients, which focused on Public Listed Companies (PLCs) as respondents. The study also showed that reliability was the important variable in determining quality service. The main criticism at Bongsu (2004) was that this study only used 19 from 22 items of the SERVQUAL model and at the same time, ignored customer satisfaction as another variable. Thus, this study also used the instrument called SERVQUAL, to measure the dimension of service quality in audit firms in Malaysia

Essentially, SERVQUAL is a instrument for identifying and measuring based on the discrepancy between expectation and perception of customers, an important gap between services offered and services received. Therefore, to overcome its limitations, Ismail *et al.* (2006) studied in more detail regarding these topics, which is by using all 22 items and excluded non-audit service but using the same respondents, which is PLCs but they added value by including customers satisfaction as the control variable. The research conducted by Ismail *et al.* (2006) revealed the same result as with Bongsu (2004) where the reliability was the important variable in determining quality service. Moreover, both authors also highlighted the quality of service and customers loyalty were driven by customers' satisfaction when the auditor performed the audit task.

Due to the lack of the empirical study in these areas particularly in the SMEs companies in Malaysia, this paper topic will therefore, investigate the interrelationship between the service quality, customer satisfaction and customer loyalty towards audit firms in Malaysia. This study was conducted using 22 items of the SERVQUAL model, which

added values by including non-audit service and audit service for measuring of service quality offered by audit firms in Malaysia.

Although previous studies have not considered SMEs companies as a good sample because the SMEs companies did not use all of the services that were offered by audit firms (Ismail *et al.*, 2006), this study still employed SMEs as respondents because it was made effective by 1st January, 2008 that it is compulsory for all PLCs and SMEs to audit their financial reporting. Considering this fact, Haron *et al.* (2012) also found that 75 percent of SMEs client's in Malaysia have used non-audit service in the same audit firm to ensure their business become smoothly as planned. Due to the above reasons, this study was conducted to test whether this debated issue is still relevant or not regarding SMEs. Hence, 22 items of SERVQUAL will be used in this study. In addition, many past studies have shown the existence of relationship among satisfaction and loyalty of the customers (Anderson & Sullivan 1993; Cronin *et al.*, 2000; Shemwell, 1988; and Tayler & Barker, 1994).

1.4 Research Objectives

The purpose of the study is to investigate the three variables, which encompass the service quality, satisfaction and loyalty of the customers, and also the effect of mediating variable (i.e. customers' satisfaction) to the service quality, which leads to customers' loyalty. Therefore the objectives of this paper are as follows:

- 1) To identify the most relative important (i.e. expectation and perception) of five dimensions on audit service quality based on the SMEs' perspective.
- 2) To investigate the difference of SERVQUAL gap score in the five dimensions on the quality of service.
- 3) To investigate whether there is a relationship between service quality and customer satisfaction.
- 4) To examine whether there is a relationship between service quality and customer loyalty
- 5) To examine whether there is a relationship between customer satisfaction and customer loyalty.
- 6) To investigate the interrelationship among the quality of service, customers' loyalty and the mediating effects of customer satisfaction towards the audit firms in Malaysia.

1.5 Research Questions

This study was undertaken in order to answer and determine the following research questions:

- 1) What services are the most desired by the SMEs companies in the five dimension of service quality of audit firms in Malaysia?
- 2) Is there a difference of SERVQUAL gap score in the five dimensions on quality of service?
- 3) Is there a relationship between service quality and customer satisfaction?
- 4) Is there a relationship between service quality and customer loyalty?
- 5) Is there is a relationship between customer satisfaction and customer loyalty?
- 6) Is there an interrelationship between the service quality and customers' loyalty that is influenced by mediation effects of customer satisfaction towards audit firms in Malaysia?

1.6 Significance of the Study

It is very important to understand new concept of business practices in order to ensure the strategy developed by companies are effective and regulative in the marketing business. Moreover, the quality of service and customers' loyalty has been shown driven by customers' satisfaction. Therefore, this paper is hoped to shed lights of these issues.

In the service industry, customers will be classified as "loyal" if they have an intention to use the same service again. For example, the SMEs companies might tend to choose the same services offered by their audit firm more often than any other services in a particular period. By highlighting the word "choose", it thus, proves that the quality of service and clients' loyalty was driven by clients' satisfaction.

Based on previous studies, customers' loyalty can only be created when customers have past experience regarding the service. However, the high level of satisfaction expressed by customers towards the services they received does not necessarily mean that the customers preached loyalty, nor does it encourage them to continue to use the services provided by the company. In other words, satisfaction alone does not guarantee customers' loyalty.

In this study, the end results based on the respondents' feedback data can be looked as the actual gap score that existed from the customer expectation and customer perception to the service quality of audit firms and how this gap was able to create satisfaction and allow customers to become loyal. Besides that, this research can also serve as one of the

practical guidelines for the audit firms especially for Small-Medium Practitioners (SMP) in Malaysia. The result of this study will develop the service quality for the audit firms in Malaysia and ultimately enable to narrow down the gap that exists between expectation and perception of the clients toward the services provided.

Based on previous studies regarding other services (e.g. hotel, banking, maintenance and repair, tourism and etc.), if the result revealed the high score, this means that the company should be happy because customers are satisfied with their current service and vice versa. Consequently, this paper will also will give benefits to;

1.6.1 Benefit to Customers

The importance of delivering exclusive and superior service is becoming increasingly magnified as competition intensifies throughout the service quality. Today's business practice overlooks a superior service quality as the most attractive bait to gain and at the same time retain existing customers. The benefits to customers are so that they can attain better service and thus, become more loyal to the company.

1.6.2 Benefit to Practitioners

In Malaysia, most companies are utilizing the quality variable to gain competitive advantages in the global market. The companies capture and maximize customer satisfaction and create customer loyalty by improving the performance of the company, which can be measured by profit, revenue growth and cost savings.

The benefits to the company derived from this research study can be related to the increase in the market share, the increase in profit margins or cost reduction, the improvement in customer services, which can all boost efficiency and effectiveness in the business operations.

1.7 Definition of Key Terms

The following are some of the definition terms used in this study:

1.7.1 Service Quality

Brown *et al.* (1995) cited the quality of service as a reflection between service providers and customers. In addition, Lewis *et al.* (1983) stated that the service quality is more focused on meeting the customer's needs and requirements, and also how well the services matches customer's expectations. Parasuraman *et al.* (1988) has develop a namely SERVQUAL approach to measure perceptions and expectations of the customers' service quality. In SERVQUAL, the model encompasses five dimension of service quality, which are reliability, responsiveness, assurance, tangible and empathy.

1.7.2 Dimensions of Service Quality

- a) Reliability – Audit firms are able to complete the task as promised, timely and accurately.
- b) Responsiveness – The willingness of audit firms to guide, help and provide proper service to their clients.

- c) Assurances – Audit firms are able to create positive relationship with the clients such as building trust to increase client level of confidence when using their service. Assurance can also refer to the company expertise, knowledge, etiquette, courtesy of employees and how their ability to build the customers' trust and confidence.
- d) Tangible – Preparing or using advance physical facilities when performing services such modern technology, upgrade software and etc.
- e) Empathy - The extra service and it is more to spiritual practice such as providing individualized attention, caring, love and patience to the client.

1.7.3 Customer Satisfaction

Oliver (1980), Yi (1990), Wesbrook *et al.* (1991) and Um *et al.* (2006) highlighted customer satisfaction driven by two factors, which consist of i) past experience and ii) customer expectation to service provider and actual services that their will receive. Customer satisfaction will exists if the customers receive more than they expected on services.

1.7.4 Customer Loyalty

Customer loyalty refers to the regular customers who are always using the services providing by particularly company and have intention to use the particular service again. In addition, customers' satisfaction is typically derived from past experience when they have used the service (Oliver, 1980 and Crosby *et al.*, 1990).

1.7.5 SERVQUAL Approach

SERVQUAL as a tool for measuring quality of service by looking at the gaps between expectation and actual service received by customers. This study stimulates respondents to answer question about both their expectation and their perceptions towards audit services.

1.7.5.1 Customer Expectation

This involves factors that cannot be controlled such as word of mouth conversations, individual needs, past experiences related to audit services provided. In other words, the customers' prediction towards the service quality that should be offered by audit firms.

1.7.5.2 Customer Perception

Customers show satisfied or dissatisfied feelings based on the actual service they receive from audit firms.

1.8 Organization of Remaining Chapters

This chapter provides the background of service quality, satisfaction and loyalty of the clients to the audit firms in Malaysia. Chapter 2 presents the literature reviews, which will cover the overview of quality of service, SERVQUAL approach, customer satisfaction, customer loyalty and also discusses hypotheses that have been developed. Chapter 3 will explain the methodology of this study, which consists of design of the research, data sources and collection, and how the data will be analysis. The results of this study are discussed in Chapter 4 and finally Chapter 5 will present the summary and conclusion of this study.

CHAPTER 2 : LITERATURE REVIEW & THEORETICAL FRAMEWORK

2.0 Literature Review

This section consists of reviews on literature that exist in a number of journals and articles available relating to this study. It also explains the dependent variable, which are customer loyalty as well as the relationship between independent variables.

2.1 Introduction

Nowadays, services have rapidly grown in many countries and Malaysia is among them. A previous study by Carlzon (1987) mentioned that in order for companies to survive in the business market, the uniqueness of service strategy is required in their business where it can differentiate between companies and at the same time, create a competitive advantage. On the hand, many previous researchers also concluded that service quality plays an important role in order to create customer loyalty, generate profit, to be good in the stock performance and increase the value market share of the company (Alrousan *et al.*, 2013; Andreassen *et al.*, 1998; Bij *et al.*, 1999; Carcello *et al.*, 1992; Cronin *et al.*, 2000; DeRuyter *et al.*, 1998; Haron *et al.*, 2012; Hassan *et al.*, 2013; Maxham, 2001; Munusamy *et al.*, 2006; Osman *et al.*, 2013; Rosen *et al.*, 2012; Rizan, 2010 and Storbacka *et al.*, 1994)

In fact, for companies which its main activity is based on providing services as hotel, transportation, banking and financial sector i.e. including audit firms and etc., these companies are greatly in need of their own strategy to ensure that they keep leading in the markets. Furthermore, the strategy is important in order to make sure that company is

always one step ahead of their competitors, and to meet with customers' expectation toward the company services.

Since the current situation in business practices emphasizes the importance of service quality, the study *“service quality, customer loyalty and the mediating effects of customer satisfaction toward audit firms: perspective of SMEs in Malaysia”* was therefore, conducted. In summary, this paper discussed on how the service quality offered by the companies as the backbone to the satisfaction and loyalty of the customers.

2.2 Reviews of Related Literature

2.2.1 Service and Service Quality

Essentially, the concept and definition of service comes from business literature, which consents different authors to describe and debate the concept of services contrarily. Berry (1983) identifies services as an interaction of two or more parties, and it usually involves the interactions between service providers and customers that resulted satisfaction between both parties. On the other hand, Baker (2000) interprets service as “deed, process, and performance”.

Bolton *et al.* (1991) reviewed the definition of services and describe some of the characteristics of services in order to simplify and make it easier to understand the concept of services. Firstly, a service is a reflection of the company's performance. It occurred along with the creation of interaction and communication between customers and service providers during the undertaking

of delivery process (Dick *et al.*, 1994; Gronross, 1990; Ramsaran-Fowdar, 2007; and Zeitham *et al.*, 1990). Secondly, other factors such as physical or environmental resources have impact in influencing the ability of the companies to offer services to customers (DeRuyter *et al.*, 1998; Gronross, 1990; Yi, 1990; and Storbacks *et al.*, 1994). In other studies, Boshoff *et al.* (1998) and Bowen (2001) mentioned that services required by the customers area tool to solving problem and as a two-way communication among them.

Despite the many studies that have been conducted in the past in facilitating an understanding of the concepts in the services, there are still arguments and no consensus between the previous scholars in relation of the characteristic of service. However, the conceptualization of services can be categories in two groups (Oliver, 1980). Firstly, some of scholars depicted the concepts of services into the perspective of the service itself. This means that this approach distinguished between the services (i.e. intangible) from the goods (i.e. tangible).

Subsequently, Parasuraman *et al.* (1985) and Zeithaml *et al.* (1996) mentioned that there are three characteristics that become the basis when making comparison between services and goods (i.e. intangible, heterogeneous, simultaneous). However, according to Gronross (1990), the three basic characteristics of service are not universal in all services sectors.

The second approach according to some researchers were inclined to view the service from the customer's perspective of service, or services that are already provided to the customers where scholars are focused on the aesthetics value on the service that has been delivered to the customers. Essentially, this second approach has a combination of between tangible and intangible aspects that are able to influence customers' satisfaction during the deliverance of services (Gronroos, 1990; William *et al.*, 2006; Zedeck *et al.*, 1968 and Ramsaran-Fowdar, 2007). This approach demonstrated the customers' judgment towards services offered by the company. Normally, customers' evaluation comes from their past experience. If the customers' judgment and evaluation does not comply with the companies' accomplishment, this situation can affect the companies' success or failure in the business market (Shostack, 1994).

2.2.1.1 Conceptualization and Operation of Service Quality

Customer satisfaction is a complex component because it comprises of service quality that is offered by company. But based on this study, the customer does not see quality as a one-dimensional concept only. This view is also supported by a study by Parasuraman *et al.* (1991) in which he mentioned that to satisfy customers these five factors should be taken into consideration (i.e. reliability, responsiveness, assurance, tangible and empathy). The explanation of five dimensions will be discussed as below:

- (1) Reliability – companies have the capabilities and ability to perform what they promised to customers accurately,

successfully and dependably. Besides that, reliability also works to mitigate and maintain error-free records.

- (2) Responsiveness - companies have willingness to aid customers and at the same time, offer the best service to its customers such as prompt response and maintained professionalism.
- (3) Assurances - refer to the staff of the company such as their expertise, knowledge, etiquette, courtesy of employees and their ability to build the customers' trust and confidence.
- (4) Tangible - preparing or using advance physical facilities when performing the services such modern technology, upgrade software and etc.
- (5) Empathy - the extra service and it is more to spiritual practice such as providing individualized attention, caring, love and patience to the client.

Based on previous literature, these five dimensions were suitable for insurance, banking, audit firms, maintenances service, securities, hotel, tourism, brokerage and automobile fields especially in maintenance and repairing industries. Although many studies have been done of service quality, there is still no consensus and uniformity regarding the definition and conceptual of service quality. Essentially, Cronin & Taylor (1992) and Reeves & Bednar (1994) have highlighted the dimension of service quality based on what the researchers have focused during their studies.

The famous definition of service quality based on the traditional notion is that the quality perceived by customers is how the service received or offered are able to maximize their satisfaction (Parasuraman *et al.*, 1985). Many researchers agreed to her definition of service quality. Furthermore, Bitner & Hubbert (1994) also classified quality as the satisfaction customers' expressed after the receiving the service and based on the superiority of the current service rendered.

Previous studies from Gronroos (1984), Lewis & Booms (1983), and Parasuraman *et al.* (1985 and 1990) stated that the service quality is different from the traditional approach. While the traditional approach defines service quality based on what the customer expect and perceived, the definition of service quality is more than that. Customer expectation is about what the company should be or what service should the company offer (Zeithaml & Bitner, 2010). Generally, customer's satisfaction only can be produced if the company has ability to predict and anticipate based on what the customers desire from their services. In addition, in order to assess service quality dimension, several models have been developed by previous researchers. For example, Parasuraman *et al.* (1991) developed a model known as SERVQUAL, while Cronin & Taylor (1992) are known for their development of the model SERVPERF. Brown (1993) on the other hand is the founder of the Non-Difference model.

2.2.1.2 The SERVQUAL Approach

Parasuraman, Zeithmal and Berry continued their pioneering of service quality through the introduction of the SERVQUAL instrument in 1988 as a questionnaire to measure customers' perception of service quality. Quality of service can be interpreted as the gap that exists between customers' expectations of the companies' service while having the customer perceptions geared towards the actual services received by customers (Gronroos, 2007; Parasuraman *et al.*, 1988 and Ekinici, 2002). If the customer perception is more than customer expectation, this means that customer is satisfied with the recent service provided by company.

As mentioned above, Parasuraman *et al.* (1988) is the founder of the instrument to measure service quality known as the SERVQUAL model. The SERVQUAL instrument has 22 items and is separated in five parts and dimensions, which are i) reliability, ii) responsiveness, iii) assurance, iv) tangible, and v) empathy. This study also used five-point Likert scale and in the questionnaire, it is separated into two categories between customer expectation and customer perceived on service quality provided by the company.

Many researchers have conducted and using SERVQUAL instrument in their studies. This is because the use of SERVQUAL instrument can be applied in many industries such as in insurance, banking, audit firms, maintenances

service, securities, hotel, tourism, brokerage and automobile especially in maintenance and repairing industries.

This study has adopted the SERVQUAL approach proposed by Parasuraman *et al.* (1991). The SERVQUAL model is the approach used to analyze and explore customer expectations and perception of audit firms in Malaysia.

2.2.1.3 SERVQUAL Dimension

Previous study by Parasuraman *et al.* (1988) has identified 10 factors that influence the measurement and evaluation dimension of service quality. They are:

1) Tangibility

- It involves facilities in the firms, the appearance of an individual character, the equipment used in performing the work or other service facilities dimension.

2) Reliability

- Firms' ability to complete the task as promised, timely, reliable and work carried out accurately.

3) Responsiveness

- Staff on the firm has the intention and desire to help clients and at the same time, providing the proper services to them.

4) Communication

- Involves in maintaining clients' confidentiality and better understanding in communicating with the customers, especially in relation to foreign languages

5) Access

- Involves companies' tasks performance, which includes operations of task in a timely manner, strategic location, and availability of facilities to ease clients.

6) Competence

- It is more focused on the knowledge and skill of the individual in the firm itself and also the ability of the firms to deliver tasks successfully or efficiently.

7) Courtesy

- This factor is involved in aspects such as respect, courtesy, consideration, friendliness of staff and so on.

8) Credibility

- The quality of being honest, trusted, and believed in. This factor is important in order to build customer confidence. Firms that fail to implement this quality often faced challenges and adverse effects on the companies' reputation.

9) Security

- Provide safety feel to the customer from any danger, risk and doubt when dealing with company. This factor provides

security, financial security, physical safety and confidentiality to the customers.

10) Understanding or knowledge of customers

- This factor is related to the firm's effort to learn and understand their clients about what they desire and expect from the quality services offered by the firms. For example, giving more individual attention or recognizing and appreciating them as regular clients.

From the quantitative research phase in the development of SERVQUAL, the service quality dimension can be separated into five dimensions i.e. reliability, responsiveness, assurance, tangibility and assurance (Parasuraman *et al.*, 1991). These five dimensions are identified as follows:

- (a) Reliability – Audit firms are able to complete the task as promised, timely and accurately.
- (b) Responsiveness – The willingness of audit firms to guide, help and provide proper service to their clients.
- (c) Assurances – Audit firms are able to create positive relationship with the clients such as building trust to increase client level of confidence when using their service. Assurance can also refer to the company expertise, knowledge, etiquette, courtesy of

employees and how their ability to build the customers' trust and confidence.

(d) Tangible – Preparing or using advance physical facilities when performing services such modern technology, upgrade software and etc.

(e) Empathy - The extra service and it is more to spiritual practice such as providing individualized attention, caring, love and patience to the client.

2.2.2 Customer Satisfaction

Customer satisfaction is one of the most important aspects in order to make sure the long-term existence of companies. According to Oliver (1980), Yi (1990), Wesbrook *et al.* (1991) and Um *et al.* (2006), customer satisfaction are based on two aspects, which consist of i) past experience and ii) customer expectation to service provider and actual service that their will receive. Empirical studies by Crosby *et al.* (1990), Baker *et al.* (2000) and Sanchez *et al.* (2006) have proven that customers experience was indeed one of the aspects that play a role in influencing and motivating the intention to repurchase by the customer and at the same time, creating a positive relationship between them. Studies by Fornel (1992), Taylor *et al.* (2004) and Andreassen (1994) also agrees with the empirical studies and found that if the company is able to create customer satisfaction, the company will also be able to maintain the customer consumption patterns and can entice new customers for using their services. Therefore, it is possible for customer

satisfaction to be used as a benchmark and basic indicator to ensure the company's good prospects.

In addition, many previous researchers have also studied the quality of service and customer satisfaction using various methods as seen in studies from Bitner (1990) and Bitner *et al.* (1994). For example, Bitner (1990) use the expectation-disconfirmation model and attribution theory to articulate customer satisfaction from service encountered if they received lower perception than expectation. Subsequently, a positive disconfirmation indicates that customers are satisfied with the service provided while negative disconfirmation will show customers dissatisfied with the actual service they receive. Similarly, studies by Peter & Olson (1994) and Kotler (1996) showed that the amount of dissatisfaction is dependent on customer's involvement in two-way communication and interaction between two parties as well as how the current problems that arise during delivery service that can be solved.

Bitner (1990) also clarified the correlation between satisfaction and dissatisfaction on expectation of customers towards the company services. He explained that satisfaction of customers usually occurred when there was a positive disconfirmation on customer expectations. Positive disconfirmation would exist if the customers receive more than they expected on service, which often bodes well for the company, eventually attracting the customers back to using the same services provided. In addition, Homburg *et al.* (2008) and Andreassen *et al.* (1998)

demonstrated that satisfaction of customers is an integral part of the accumulated past experience from the purchase or use of goods and services.

2.2.3 Customer Loyalty

Loyalty in marketing view can be classified into two parts, i) attitude and ii) behavioral. Attitude dimension tell us about individual sense and feel on products and services provided by companies. This feeling is very important since it creates customer loyalty. In contrast, behavioral tell us about positive relationship and continuous relationship among companies and customers (Yi, 1990 and Day, 1969). Nowadays, the most important concept of customer loyalty is more preferential towards the behavioral dimension compared to the attitude dimension (Caruana, 2002; Kandampully *et al.*, 2000; Chen *et al.*, 2005 and Slattery, 2003).

According to Baron & Kenny (1986), Codotte *et al.* (1987), Grosby (1979), Donas (1982) and Berry (1983) loyalty is just like brand and the image “loyalty” relates with tangible goods. Loyalty leads customers towards repetitive purchase behavior against company products and services when the company provided the best service quality (Dick *et al.*, 1994; Bowen & Chen, 2001 and Finn, 2005). In contrast, Cronin & Taylor (1992) and Skogland & Siguaw (2004) found that relationship between service quality and customers was not significant.

According to Bloemer *et al.* (1995), the act of true loyalty is not only when customers have the intention of repurchasing or re-buying the brand, but also it is

more about commitment. There is a great influence and connection between customer loyalty and company's profit (Shankar *et al.*, 2003; Reicheld, 2003; and Baumann *et al.*, 2005). Consequently, Zeithaml *et al.* (1996) highlighted loyalty as a more important aspect than brand loyalty in building a long-term relationship between them.

Moreover, studies by Javalgi & Moberg (1997), DeReyter *et al.* (1998), Osman & Sentosa (2013), Haron *et al.* (2012) and Rosen & Suprenant (2012) have stated that it is not easy to identify loyalty in customers, rather, it a complex construction. The authors also suggested to conduct an approach to customer loyalty research by studying the dimension of word of mouth and customer sense and feeling on products and services

As a conclusion, variables such as service quality and customer satisfaction have factored in contributions leading to customer loyalty.

2.2.4 Quality of Services Offered by Audit Firms

Auditing is a process to collect, assess, and evaluate evidence in order to identify, investigate and determine the report, as well as to issue the report (i.e. financial statement audit) and viewed as fair, without biased judgments to the clients (Arens *et al.*, 2003; Day, 1969 and Kotler, 1996, 2000). Audited financial statement is really important to the companies not only as part of requirement to be fulfilled by the Malaysian government, but also it can build confidence among

investors or stakeholders when the financial statement of a company shows a true and fair view. At the end process of audit report, the representative auditor from audit firms will present the issuance report, which reflects the financial statement of the companies and judged for its qualification.

As we are all aware, the audit firms generally provide audit service as the primary service but they also provide non-audit services such as secretarial, taxation and consultant works. The explanations for non-audit services are as follow:

- i) Secretarial - client will be assisted and guided when preparing summation of document and forms to Companies Commission.
- ii) Taxation - client will be helped, guided and assisted during preparation of tax return; or audit firms will guide clients in planning their tax.
- iii) Consultant work - client will be formally advised regarding their business practice in order to follow the rules and regulations in Malaysia, and at the same time offered ideas, alternatives and professional opinions in solving the business problem.

Based on Donas & Eichensher (1982), Tounge & Wotton (1991), Bamber *et al.* (1993) and Chaney (1995), the quality of service provided by audit firms come from how they deliver the audit tasks. In other words, the service quality of audit firms is equal to the audit works during the issuance of audit opinion. DeAngelo (1981) pointed out that the audit quality could be interpreted as the ability of the

auditor to detect or reveal and report the breach in the company accounting system. However, in order to detect any breach occurred in the financial statement, it actually dependent on the capabilities and the technical audit firm itself. But, the service quality at the point of view by DeAngelo (1981) was different from the point of view by Parasuraman *et al.* (1985, 1988 and 1991) because DeAngelo looking audit quality by capabilities auditor itself to perform audit services while Parasuraman view service quality from customers perspective and based on customers' perception and expectation against services provided by the company.

Today, all companies are facing the same dilemma with the competitive pricing pressure, where from the perspective of audit firms, auditors are obligated to increase the quality of services and at the same time, they need to reduce the price or fees of the audit work in order to retain their clients. According to Moizer (1997) and Fuerman (2003), there are two proxies that can affect the audit firms and help retain existing clients in which the audit quality and service provided to clients. They are i) audit size and ii) audit fees. Furthermore, DeAngelo (1981) also agrees with the two studies and claimed that due to successful establishment of big audit firms as well as having more audit client, these big audit firms able to produce high quality of service and report any breach in the clients' accounting system. Failure to report or discover any error can render their quality of their service as well as their reputation as a large audit firm, which can lead them to lose more clients.

In addition to that, previous studies by Francis *et al.* (1986 and 2004), Craswell *et al.* (1991) and Rose (1990) are also in support of this view. Consequently, an audit firm that has more clients has a high probability of producing a high audit quality and service in order to maintain their reputation, brand name and long-term relationship with the clients. Factors pertaining the industry expertise and technical capabilities of audit firms such as using the latest technology, updated software as well as proper training staff, are also essential in order to gain more clients. The quality of audit service will decrease as audit tenure increase. A possible reason behind this is because, if a client has a long-term relationship with an audit firm or have appointed the same audit firm as their auditor for 10 years for example, there is a probability of less challenges and innovative due to failure to maintain professional attitude during delivery audit tasks (Kotler, 2000 and GOA, 2003).

2.2.5 The Service Quality Gap

Prior to the introduction of the SERVQUAL instrument, Parasuraman *et al.* (1985) has presented their Gap model in order to stimulate research into service quality.

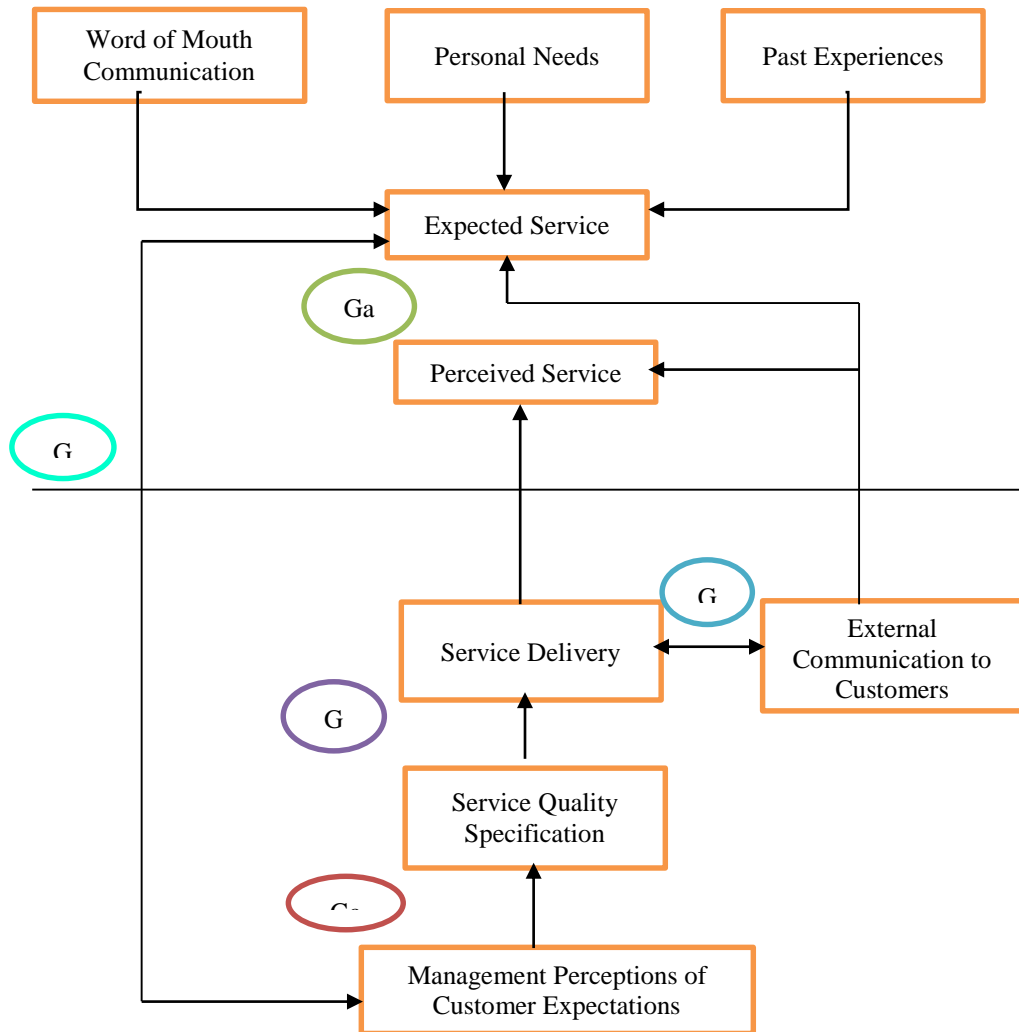


Figure 2.1: Conceptual Model of Service Quality
(Parasuraman *et al.*, 1985)

This model suggested five gaps as shown in Figure 2.1, and they are identified as:

Gap 1: Not able to predict what customer expects from companies' service

- The gap exists among management expectation and customer expectation as to what service should have been offered by a company.

Gap 2: Produce the wrong standard of service quality

- The gap exists among management expectation on what service should they offer to customer to match with a standard service quality in order to achieve customer satisfaction.

Gap 3: The Standardize Service

- The gap between service quality specifications does not match the service delivery to customers.

Gap 4: Not performing the services as promised

- The gap between service delivery and external communications to consumers.

Gap 5: The gap between customer expectations and perceptions

- The gap between the actual services offered by a company and services customers predicted and expected.

Figure 2.1 illustrates the conceptual model of service quality. This model attempts to explain why gaps can exist among the customers. One of the vital points is due to existence of hole between customers expect and perceive. Customer expectation can be defined as what services should be offered to them. On the other hand, customer perception (perceive) can be defined as what services are actually perceived by them. Hence, as company need to find solution to bridge this gap between customer

expectations and customer perceptions in order to foster positive relationship with the customers such as creating customer satisfaction can lead to customer loyalty (Lewis *et al.*, 1983; Parasuraman *et al.*, 1998; Lovelock *et al.*, 2007 and Alexandris *et al.*, 2002)

In another view of audit firms, service quality can also be interpreted as the ability of representative auditors to issue audit reports without biased opinion to their clients. Apart from that, a study by Ismail *et al.* (2006) was conducted using 115 PLCs in Malaysia, which focused on audit quality service, client satisfaction and client loyalty. The authors' found that the PLCs were not dissatisfied with four dimensions of service quality (i.e. reliability, responsiveness, assurance and empathy) and that the PLCs are only satisfied with tangible aspects like facilities and technology used by audit firms during the delivery of audit tasks. Furthermore, the most dissatisfied of the four dimensions of service quality was found empathy. This paper also found that a positive relationship exists between good service quality and customer loyalty.

Hence, this study was conducted with the intentions of exploring the same topic but in a different perspective using the SMEs companies in Malaysia instead of PLCs as respondents, and at the same time, include both audit and non-audit services offered by audit firm to examine.

2.3 Research Framework

2.3.1 Theoretical Framework

2.3.1.1 Disconfirmation Theory

Oliver (1980) developed a new theory and it became a foundation for other theories especially in customer satisfaction measurement. This theory is known as the disconfirmation theory. While he also explained that the disconfirmation theory as the discrepancy between what the customers expect and desires, Bitner (1990) defined disconfirmation theory as a fundamental theory to measure the level of customer satisfaction. Disconfirmation theory has been categorized into two parts as shown in Figure 2.2:

a) Expectation disconfirmation

The ritualistic customers regarding product or services offered by the company. Khalifa & Liu (2003) and McKinney *et al.* (2002) defined expectation as what the customers could anticipate and predict as oppose to what the company could offer to them.

b) Perceived (desire) disconfirmation

It is about the actual services received by customers whether the services that the company offered are able to satisfy their needs and desires. Perceived quality is also about judgments made by customers and it can occur when customers tries to compare

between past experiences and the latest services that they received (McKinney *et al.*, 2002, Spreng *et al.*, 1996).

As a conclusion, disconfirmation theory can be interpreted as the discrepancy or gap that exists as a result of perceptiveness, perceiver, expectation and desiration of services quality provided by company. This theory also elaborates on the direction i.e. positive or negative of disconfirmation between perceived and expectation against performance. Disconfirmation theory can occur in three forms and explanations regarding positive and negative disconfirmation are as below:

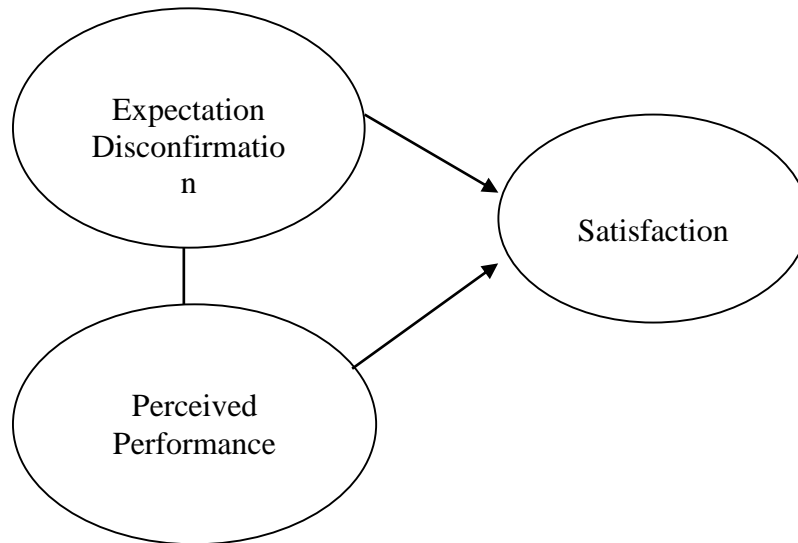


Figure 2.2: The Disconfirmation Theory (Oliver,1980 and Bitner, 1990)

- i. Positive disconfirmation
 - Perceived (perception) performance exceed than expectation ($P > E$)
- ii. Confirmation
 - Perceived (perception) performance meet with expectation ($P = E$)
- iii. Negative disconfirmation
 - Perceived (perception) performance below or not meet with expectation ($P < E$)

CHAPTER 3 : METHODOLOGY

3.0 Research Design and Methodology

3.1 Introduction

In this research, a questionnaire survey was conducted to examine the service quality, customer loyalty and mediating effects of customer satisfaction towards audit firms. The sample populations in this study have covered SMEs within Malaysia.

A questionnaire survey and interview have been applied to collect primary data. All of the questions especially part II, III and IV will be measured using five-point Likert scale, while the benchmark value were ranked from “strongly disagree” to “strongly agree”. The questionnaire was developed in English so that it will be understood by all respondents and to ensure accuracy and appropriateness.

3.2 Research Framework

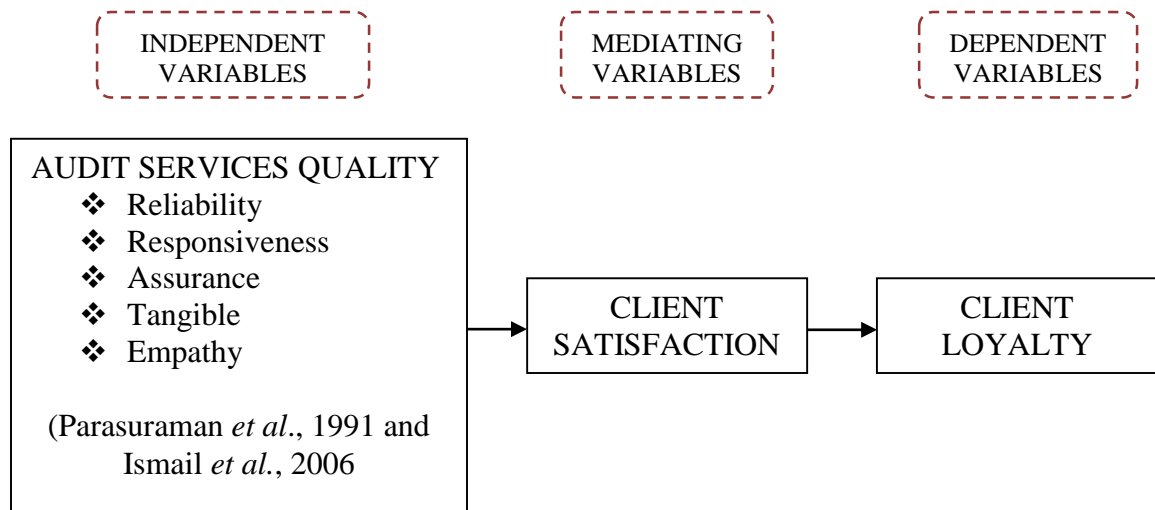


Figure 3.1: Research Model

As demonstrated in Figure 3.1, this model shows client satisfaction as the control variable among audit services quality and client loyalty. The services quality acts an independent variable whereas both client satisfaction and client loyalty act as mediator variable and dependent variable respectively. Thus, the concept of this research model is concord to the context of this study. This paper investigated the relationship between dimensions of service quality, satisfaction, and loyalty of the client when client satisfaction was made as mediator variable.

SERVQUAL model and questionnaire was used to evaluate and assess SMEs perceptions and expectations on service quality provided by audit firms. In shorts, due to measurements in SERVQUAL model, this study adopted dimensions of service quality by Parasurman, Berry & Zeithmel (1991) and few questions from Ismail *et al.* (2006) and made some adjustment (i.e. insert non-audit services) in the questionnaires to be more suitable with the current issues by referring to the survey monkey website in order to obtain the ideas¹. The summary of this model tells us how clients' satisfaction on service quality offered by audit firms when performing audit task are able to lead to client loyalty.

¹www.surveymonkey.com

3.3 Hypotheses Development

3.3.1 Differentiation of SERVQUAL Gap between Expectation and Perception of the Customer on Service Quality

According to studies by Bitner (1990) and Oliver (1980), the disconfirmation theory is a preamble theory to measure the level of customer satisfaction. This theory defines the discrepancy between what customer expects and desires. Furthermore, the disconfirmation theory is divided into three forms (i.e. positive disconfirmation, confirmation and negative disconfirmation) as seen in Figure 2.2.

Previous study by Bloemer *et al.* (1998) tested the five dimensions of service quality and found that reliability was regarded the most important factor, which is similar to the findings in studies by Bongsu (2004) and Parasuraman *et al.* (1991). In addition, findings by Ismail *et al.* (2006) revealed in five dimension of service quality, tangible as the least important factor for PLCs; this is because the “Big 4” audit firms in Malaysia has sufficient equipment and the latest technology to perform the audit task.

Many previous studies by Parasuraman *et al.* (1994), Behn, Carcello & Hermanson (1997), Bongsu (2004), Brookes (1995), Ismail *et al.* (2006) and Danaher & Haddrel (1996) demonstrated and provided empirical evidence to declare that there is certainly a gap between customer expectations and customer perception as a result of service quality. In addition, the overall findings by previous studies also showed that customer expectations that exceed customer

perception and that could lead to customer dissatisfaction. Therefore, the following hypotheses are presented below:

H₁: A gap exists between expectation and perception of the client on the service quality supplied by audit firms in Malaysia.

Specifically, the sub-hypotheses are:

H_{1a}: There is a difference between expectation and perception of the client on the service quality provided by audit firms especially in the dimension of reliability.

H_{1b}: There is a difference between expectation and perception of the client on the service quality provided by audit firms especially in the dimension of responsiveness.

H_{1c}: There is a difference between expectation and perception of the client on the service quality provided by audit firms especially in the dimension of assurance.

H_{1d}: There is a difference between expectation and perception of the client on the service quality provided by audit firms especially in the dimension of tangible.

H_{1e}: There is a difference between expectation and perception of the client on the service quality provided by audit firms especially in the dimension of empathy.

3.3.2 Relationship between Service Quality and Customer Satisfaction

Several empirical studies have proven that the quality of service is important in providing customer satisfaction. Based on previous studies by Bitner *et al.* (1994), Fornel *et al.* (1996), Zeithaml *et al.* (1996), Sivadas *et al.* (2000), Mentzer *et al.* (2001), Behn *et al.* (1997), Oliver (1997), Akbar & Perez (2009), Hossain & Leo (2008) and DeRuyter *et al.* (1998), relationship exists between services quality and customer satisfaction. Therefore, a higher services quality can lead to customer satisfaction and vice versa (Bij *et al.*, 1999; Cronin *et al.*, 2000 and Ridley, 1994).

Contrary to the belief in previous studies above, DeRuyter, Martin, & Bloemer (1998) opined that services quality is not be the most important thing to customers, which means that even though they receive poorly service quality, but it can still lead to customer satisfaction. The reason behind this is perhaps some customers put other factors such as price, availability of services and products as the most important aspects, rather than regarding just services quality. Nevertheless, the majority of scholars do acknowledge that the best quality of service provider to their customers are as fundamental to transform customer satisfaction.

A study conducted by Ismail *et al.* (2006) showed the dimensions for reliability, tangibility, assurance and empathy significant in recognition to customer loyalty. In contrast, Munusamy *et al.* (2010) studied on banking industries in Malaysia

and found that reliability, tangibles dan empathy were significant in gaining customer satisfaction. Thus, the following hyphoteses were included in the study:

H₂: The higher the services quality provided by the audit firms, the higher the clients satisfaction can be formed from the SMEs companies in Malaysia

Specifically, the sub-hypotheses are:

H_{2a}: There is significant relationship between the dimension of reliability and client satisfaction.

H_{2b}: There is significant relationship between the dimension of responsiveness and client satisfaction.

H_{2c}: There is significant relationship between the dimension of assurance and client satisfaction.

H_{2d}: There is significant relationship between the dimension of tangible and client satisfaction.

H_{2e}: There is significant relationship between the dimension of empathy and client satisfaction.

3.3.3 Relationship between Service Quality and Customer Loyalty

In the audit sector, services quality can be divided into two parts, which is audit services and non-audit services. Services provided by audit firms such as performing audit tasks can be translated as audit services. On the other hand, non-audit services refer to the other services provided by audit firm such as taxation, secretarial and consultant works.

Davis & Mandrodt (2008) explained that the principal reason for companies to provide good quality of services is due to meet customers' necessity and desire, or in other words, to bridge the gap between what customers expect and what customer perceive. Thus, this study was conducted to investigate the relationship between services quality and customer loyalty. A research study by Chen & Lee (2008) found that the dimension of services quality i.e. reliability, responsiveness, assurance, tangible and empathy play an important role in earning customer loyalty.

In addition, based on study by Liang (2008), a total of 308 hotel guests in the USA revealed that there exists a positive relationship between service quality provided and customer loyalty. On the other hand, studies by Rousan & Mohamed (2010), Clottey *et al.* (2008), Jamal & Anatassiadou (2007), Rizan (2010) and Kheng *et al.* (2010) revealed that services quality has a significant impact on customer loyalty.

Normally, clients expect a high level of services provided by audit firms. In this case, audit firms need to offer the best audit quality at all time, continuously, and consistently with its' customers. As a result, the best services quality offered by firms allows clients to become loyal to the firms. Therefore, this study issues on the following hypotheses:

H₃: The higher the services quality provided by the audit firms, the higher the probability of loyalty can be formed from the SMEs companies in Malaysia

Specifically, the sub-hypotheses are:

H_{3a}: There is a significant relationship between the dimension of reliability with client loyalty.

H_{3b}: There is a significant relationship between the dimension of responsiveness with client loyalty.

H_{3c}: There is a significant relationship between the dimension of assurance with client loyalty.

H_{3d}: There is a significant relationship between the dimension of tangible with client loyalty.

H_{3e}: There is a significant relationship between the dimension of empathy with client loyalty.

3.3.4 Relationship between Customer Satisfaction and Customer Loyalty

A company's success in the market is often dependent on how far it can provide customer satisfaction and gain customer loyalty. Cronin & Taylor (1992) mentioned in their study that services quality only has 20 percent of influence for customer to repurchase. This view is different with empirical studies by Blomer & Kasper (1995), Faullant *et al.* (2008), Lymperopoulus *et al.* (2008), Akbar *et al.* (2009), Mort *et al.* (2010), Chen & Lee (2008), Rizan (2010) and Liang (2008), whereby the authors found that the intention to repurchase and services quality do have a significant correlation with customer satisfaction on products and services offered by company. Moreover, Bloemer *et al.* (1998) and Stauss & Neuthaus (1998) found that customer satisfaction has a positive influence on customer loyalty.

Apart from that, a study by Faullant *et al.* (2008) revealed that a total of 6172 Alpine ski-resort customers found that customer satisfaction has a significant correlation with customer loyalty. Rizan (2010) has done a study on 160 passengers in Garuda as representatives for airlines industry in Indonesia and also found customer satisfaction related with customer loyalty. In another study, Akbar & Perez (2010) showed that 302 Telecommunication customers in Bangladesh also found that customer satisfaction has a greater impact to customer loyalty. Besides that, Lymperopoulus *et al.* (2008) conducted a study on 388 ferry passengers in Greece and revealed that customer satisfaction will lead to customer loyalty. Liang (2008) and Mort *et al.* (2010) also agreed with these views and

explained that customer loyalty is dependent on how far satisfied the customers' are towards the company performance or services.

Despite no empirical evidence in the relationship between customer loyalty and customer satisfaction in auditing industry especially in SMEs companies in Malaysia, the concept of customer satisfaction and loyalty can still be applied for clients who use audit services and how far satisfied the clients are with their auditor as well as how long the clients would still appoint the same auditor and/or use them for non-audit services. Therefore, the following hypothesis are presented:

H4: The higher the client satisfaction level is, the more loyal customers would be for SMEs companies in Malaysia.

3.3.5 Interrelationships between Service Quality, Customer Satisfaction, and Customer Loyalty

Many studies have found that a mediator affects customer satisfaction to customer loyalty and service quality. Akbar & Perez (2010) studied on 302 Telecommunication customers in Bangladesh and found that customer satisfaction acted as a control variable between service quality and customer loyalty. Kheng *et al.* (2010) studied on 238 bank customers, which showed significant interrelationships between customer satisfaction, customer loyalty and service quality. In another study Kumar *et al.* (2010) did on 100 bank customers in India, the findings revealed customers satisfaction to be driven from service quality, which leads to customer loyalty. On the hand, Ismail *et al.* (2006) found that clients satisfaction is only partial mediate with responsiveness and customer loyalty.

In addition, Cheng & Lee (2008), Olorunniwo *et al.* (2006), Storbacka, Strandvik & Gronross (1994) and Rust & Zahorik (1993) have done studies to test the influence of mediator variable, which is customer satisfaction on services quality and customer loyalty. The results revealed that there is a positive influence between each variables. This means that, customer satisfaction is a crucial factor to entice loyalty than dissatisfied customer.

As a conclusion, based on the previous studies by Rust & Zahorik (1993), Storbacka *et al.* (1994), Ismail *et al.* (2006), Akbar *et al.* (2009), Kheng *et al.*

(2010), Kumar *et al.* (2010), Olorunniwo *et al.* (2006) and Chen & Lee (2008), customer satisfaction has a great influence on services quality and customer loyalty. Thus, the following hypotheses are presented:

H₅: The interrelationship between services quality and client loyalty is affected by the mediating variable of client satisfaction towards audit firms in Malaysia.

Specifically, the sub-hypotheses are:

H_{5a}: The interrelationship between the dimension of reliability and client loyalty is affected by the mediating variable of client satisfaction towards audit firms.

H_{5b}: The interrelationship between the dimension of responsiveness and client loyalty is affected by the mediating variable of client satisfaction towards audit firms.

H_{5c}: The interrelationship between the dimension of assurance and client loyalty is affected by the mediating variable of client satisfaction towards audit firms.

H_{5d}: The interrelationship between the dimension of tangible and client loyalty is affected by the mediating variable of client satisfaction towards audit firms.

H_{5e}: The interrelationship between the dimension of empathy and client loyalty is affected by the mediating variable of client satisfaction towards audit firms.

3.4 Research Design

3.4.1 Type of Study

Exploratory studies were employed throughout the whole research paper. According to Sekaran *et al.* (2009) and Zikmund *et al.* (2010), an exploratory study can usually be used when only little is known about the circumstances and that information was also insufficient, in which cannot be obtained from the past authors. Moreover, both authors also explained that exploratory study could be appropriately applied when facts are identified but need more information to develop a theoretical framework. The novelty of this study is depicted through examinations and investigations of both services provided by audit firms (i.e. audit service and non-audit service). Since there are very few literatures and past studies pertaining this area, this study was conducted in hope it gives significant value two both parties between business practitioners and customers.

Quantitative data method was chosen for this study. Sekaran *et al.* (2009) described quantitative method as data collected to prove theories. The main point in the discrepancy between qualitative and quantitative research is that qualitative research is more in-depth while quantitative research examines the problem more broadly. In addition, qualitative research is related to inductive approach while quantitative research related to deductive approach. This study was conducted using quantitative method in order to gather a lot of data. Hence, the questionnaires were used and distributed to respondents (SMEs) who have been using services provider by audit firms.

3.4.1.1 Research Approach

According to Zikmund *et al.* (2010) the two most vital methods for gathering knowledge are through induction and deduction approaches. The induction approach identifies information obtained from the survey, which will then be interpreted and used to create new theories. On the hand, the deductive approach starts with reading and understanding the theory before formulating hypotheses to be tested in reality.

The research process in this study can be best described using a deductive approach. The theory of Conceptual Model of Service Quality was first sought and understood before the present study was conducted to test the theory in reality. The present study was conducted using methodology adapted from Parasuraman *et al.* (1985) and it matched with audit perceptive.

3.4.2 Source of Data

For this study, data will be collected using primary and secondary data. The descriptions are as the following:

3.4.2.1 Primary Source of Data

Sekaran *et al.* (2009) said that information obtained first-hand by the research on the variable interest for the specific purpose of the study. The present study employed interviews and distribution of questionnaire to the SMEs in Malaysia.

3.4.2.2 Secondary Source of Data

According to Sekaran *et al.* (2009), secondary data refers to the information gathered from existing sources. Similarly, the present study referenced past works from books, government publications of economic indicator and statistical abstract in the field of service quality, customer satisfaction and customer loyalty. Apart from that, the present study also viewed annual report from CCM for view the list of SMEs in Malaysia.

3.4.3 Unit of Analysis

The unit of analyses for this study is by using SMEs companies in Malaysia especially in audit and account department, finance department and administrative department for those who has experiences involving with audit firms and have used services provided by them.

3.4.4 Population Frame

Based on a study by Sekaran *et al.* (2009), the population is defined as the overall covering the group and event. In this paper, the population is comprised of SMEs companies in Malaysia who have experienced using audit services from the audit firms that they have appointed. The respondents consist of audit and account department, finance department and administrative department.

3.4.5 Sample and Sampling Technique

The present study employed SMEs companies as the respondents. There were 687,500 companies registered with Companies Commission of Malaysia (CCM) on 31 March 2013, and 1,500 were selected from those with paid up capital ranging between RM 10,000 to RM 25,000,000. The range capital up was based on report issue by the SME Corporation Malaysia Secretarial to the National Council SMEs Development Council, 2013². The range of paid up capital was selected in order to reflect the size of SMEs. The list of companies was made available by the CCM web site.³

Data on the type of auditors, amount of audit fees, and any industry were extracted from the annual report of the selected companies. Since the annual reports of CCM companies were not available on-line, the data were collected manually at the CCM premise. Out of 1,500 companies selected in the sample, only 1,351 companies are usable. The data on 149 companies were incomplete,

² 'Guideline for New SMEs Definition'; available at:

[http://www.smecorp.gov.my/vn2/sites/default/files/Guideline for New SME Definition 7Jan2014.pdf](http://www.smecorp.gov.my/vn2/sites/default/files/Guideline%20for%20New%20SME%20Definition%207Jan2014.pdf)

³<http://www.ssm.com.my>

hence, were excluded from the sample. About 600 companies were randomly selected from the list of sample size (i.e. ID SMEs companies by extracting in Microsoft Excel) that was deemed appropriate (Sekaran *et al.*, 2009).

Table 3.2 showed the distribution of sample by industry. Based on Table 3.2, companies in the financing represented 50 percent, the manufacturing industry represented 25.4 percent and wholesale and retail trade, restaurant and hotel represented 13.4 percent of the sample.

Table 3.2: The Distribution of Sample by Industry

| No | Industry | N | % |
|--------------|--|--------------|---------------|
| 1 | Agriculture, Hunting, Forestry and Fishing | 29 | 2.1 |
| 2 | Mining and Quarrying | 1 | 0.1 |
| 3 | Manufacturing | 343 | 25.4 |
| 4 | Electricity, Gas and Water | 6 | 0.4 |
| 5 | Construction | 52 | 3.8 |
| 6 | Wholesale and Retail Trade, Restaurant and Hotel | 181 | 13.4 |
| 7 | Transport and Communication | 26 | 1.8 |
| 8 | Financing, Insurance, Real Estate, Investment and Business Service | 676 | 50.0 |
| 9 | Community, Social and Personnel Service | 15 | 1.1 |
| 10 | Activities not adequately defined | 22 | 1.6 |
| Total | | 1,351 | 100.00 |

3.5 Data Collection and Administration

3.5.1 Data Collection Method

The present study used two methods for collecting data. The methods as discussed as below.

3.5.1.1 Interview

The first method is by interview. The purpose of interview is to collect data as it helps to minimize bias such as different in wording or interpretations and may affect the research. There are two companies from the area Sungai Petani that were selected for the interview. Both companies were listed name of SMEs in Malaysia and they were Zahara Eye Enterprise and EUPE Enterprise. At Zahara Eye Enterprise, the interview was carried out with the managers, Ms Wan Nur Sabariah Wan Osman while the interview at EUPE Enterprise was carried out with Finance Manager, Ms Lim Wincci. These companies were chosen for the study because they represent clients who have experience using audit service. Besides, an interview was also conducted with the manager of OTP & CO, Mr. Oii Tse Piao for additional information. The OTP & CO. was selected as it represents medium audit firms because many SMEs companies appointed medium audit firms for the external auditing services. The interview was conducted using structured interview. Zikmund *et al.* (2010) defined a structured interview as interviewers having a list of questions to be asked to the respondents.

3.5.1.2 Questionnaires

The questionnaire was distributed to the respondents, which included a letter of confirmation from UUM as a proof that this study is solely to scholars only. Table 3.3 presents the process of data collection from this study.

3.5.1.3 Data Collection Procedures

| Duration | Activities |
|----------|--|
| Week 1 | A total of 600 questionnaires were distributed to respondents via post. Three weeks of duration was given to respondents to complete the questionnaires. |
| Week 3 | Due to time constraints, follow ups were done via emails with 26.33% returned either by email or postage. More than 20% respondents returned the questionnaire, which marked a success since it exceeds 20% respondents of return rate. |

Table 3.3: Data Collection Procedures

In this paper, 600 questionnaires were distributed to the SMEs companies in Malaysia by using post and the respondents were by random selection. Several factors were taken into consideration such as incomplete questionnaires and the percentage of the return rate, which is only 26.33 percent. The results from the present study showed that most of respondents come from the financial department (46 respondents or approximately 29.1 percent) followed by the account department (38 respondents or approximately 24.1 percent).

3.6 Measurement/Instrumentation

3.6.1 Questionnaire Design

The questionnaires were designed based on services quality measurement. There are several measurements of services quality such as Non-Difference (Brown, 1993), SERVQUAL (Parasuraman *et al.*, 1991) and SERVPERF (Cronin & Taylor, 1992).

The present study has adapted the SERVQUAL approach as suggested by Parasuraman *et al.* (1991) to measure the expectation and perception of the clients of audit firms in Malaysia. The SERVQUAL model was selected because its reliability and validity has been tested by previous researchers. In light of this, all 22 items in the SERVQUAL model will be applied to measure the dimension of five services quality.

As mentioned in chapter 2, Parasuraman *et al.* (1998) constructed the SERVQUAL model, an instrument used to measure services quality. The SERVQUAL instrument has 22 items and is separated into five parts and dimensions which are reliability, responsiveness, assurance, tangible and empathy. This study also used five-point Likert scale and the questionnaire is separated into two categories between expectation and perceiver of the customers on service quality provided by firms. The classification of each items was shown in Table 3.4. There were a few modifications made from the original question by Parasuraman *et al.* (1991) in order to match the views of audit firms.

The structure of the questionnaire was categorized into four sections. The first section covered the demographic of respondents such as age, religion, gender, department and qualification. In section two, it was more based on the clients experienced with the audit service. The respondents' were asked about what the actual services their received and what other expectation and how audit firms could improve their current service to be better. Section three and four were about respondents feedback whether they were satisfied or not with the current services offered by firms and does it could lead to clients' loyalty.

| Dimensions | Statement |
|-------------------|------------------|
| Reliability | Items 1 to 5 |
| Responsiveness | Items 6 to 9 |
| Assurance | Items 10 to 14 |
| Tangibles | Items 15 to 17 |
| Empathy | Items 18 and 22 |

Table 3.4: Classification of items

Table 3.5 represented the dimensions for five service quality by audit firms based on the perspective of SMEs companies in Malaysia as a benchmark to measure quality service offered by audit firms. All items in the questionnaire were measured by using five-point Likert scale as suggested by Fisher (2007, P. 195), with the value ranked from 'strong disagree' to 'strongly agree'. A seven-point Likert scale was not applied for this study as it can make respondents bored to answer and this bit of an impact on the results in this study. The results from the

data were interpreted as suggested by Koobgrabe *et al.* (2008) as showed in Table 3.6.

As mentioned previously, the questionnaire was designed into two parts, which represented the expectation and perceptions of the client audit firms. Client expectation refers to clients predictions of what services should audit firms offered. On the other hand, client perception refers to the actual service that was already delivery to the clients. Further details on the dimensions of five services quality is shown in Appendix I.

Table 3.5: Service Quality Dimension

| Dimension | Definition |
|------------------|---|
| Reliability | Audit firm able to completed the task as promised, timely and accurately. |
| Responsiveness | The willing of audit firm to guidance, help and provide proper service to their clients. |
| Assurance | Audit firm able to create positive relationship to clients such build trust increase client level of confidence when using their service. |
| Tangible | Preparing or using advance physical facilities during perform the services such modern technology, upgrade software and etc. |
| Empathy | The extra service and it like more to spiritual such as provide individualized attention, caring, love and patient to the client |

| The average between | Interpretation of respondent opinion |
|----------------------------|---|
| 4.21-5.00 | The most |
| 3.41-4.20 | At much |
| 2.61-3.40 | Moderate |
| 1.81-2.60 | Less |
| 1.00-1.80 | At the least |

Table 3.6: An Interpretation of the Likert Scale
(Koobgrabe *et al.*, 2008)

The second variable in the present study, was customer satisfaction. Generally, many past researchers such as Bitner (1990) and Bolton & Drew (1991) have already tested and constructed a single measure by using traditional methods. In this paper, clients' satisfaction was measured by single questions but it was able to reflect the overall view of satisfaction based on current services offered by audit firms. The measurements included five-point Likert scale as suggested by Fisher (2007) and interpretation based on Koobgrabe *et al.* (2008). Table 3.7 presented the items dimension of client loyalty, which consisted of four items. This questionnaire was adopted from Ismail *et al.* (2006) and it was measured based on five-point Likert scale.

Table 3.7: Client Loyalty Items, (Ismail *et al.*, 2006)

| Items to measure client loyalty | |
|--|---|
| 1 | I say positive thing about audit firm to other people |
| 2 | I intend to continue being a client of audit firm for long time to come |
| 3 | I will encourage friends and relatives to use the service offered by the audit firm |
| 4 | To me, the audit firm clearly is able to provide the best service |

3.6.2 Validation of Instruments

This section elaborates the validity and reliability of questions that were distributed to the respondent (i.e. SMEs). According to Sekaran *et al.* (2009), reliability was used to test consistency and stability, and Cronbach's alpha (α) will be used to represent how well the items are set positively to each other. On the other hand, to test for validity, it was compulsory to use exploratory factor analysis. The results from this analysis can be used to measure whether the concept or questionnaire for each dimensions emerge or not. The validity can be established when two distinctly different concepts are not correlated to each other (e.g. reliability, responsiveness, assurance, tangible and empathy).

3.7 Data Analysis Techniques

3.7.1 Descriptive Analysis

Zikmund *et al.* (2010) said that descriptive analysis is like a pattern and a general trend in a data set (e.g. mean and standard deviation). It is useful to make a general observation about the data collected. In descriptive analysis, the frequency for each score value is displayed as shown in Table 4.1.

3.7.2 Hypothesis Testing

To test the IV (service quality), MV (client satisfaction) and DV (client loyalty), regression and multi regression was used to measure the whether the relationship was significant or not.

3.7.3 Inferential Statistic : Regression Analysis

Tool to measure relationship between variable. In theory, a positive relationship occurs when the value Coefficient (β) shows positive value. The scales interpret by David (1971) was applied in this study.

Table 3.8: An Interpretation of the Coefficient (β), (David, 1971)

| The average between | Interpretation of respondent opinion |
|---------------------|--------------------------------------|
| 0.80- and above | Very strong relationship |
| 0.50-0.79 | Strong relationship |
| 0.30-0.49 | Moderate relationship |
| 0.10-0.29 | Low relationship |
| 0.01-0.09 | Very low relationship |

3.7.4 Paired t-test

Paired t-test was used on this research. Based on Zikmund *et al.* (2010), Sekaran *et al.* (2009) and Pallant (2005), the t-test is used when to find the significant between discrepancies of two set score such as to find the result for event before and after. In this paper, paired t-test was used to find discrepancy between clients' expectations and clients' perceptions toward audit services. If the value of t-test indicated in negative values, the results show that clients was dissatisfied with current service provided by audit firms in Malaysia.

3.7.5 Multiple Regressions

Multiple regression analysis was used to obtain the results of IV (service quality) on the DV (customer loyalty) that was tested on a continuous scale. Coakes (2013) highlighted all of the assumptions in multi regression such as normality,

linearity, homoscedasticity, multicollinearity and heteroscedasticity, which can be accessed through regression analysis. In order to test client satisfaction as the mediating effects on the audit service quality and client loyalty in this study, the hierarchical regression was applied in the present study (Ismail *et al.*, 2006). Baron & Kenny (1986) and Judd & Kenny (1981) have discussed four step in establishing the mediating variable:

- a) Model 1 or Step 1 - Treats client satisfaction as DV and quality of five dimensions as IV and show either significant or not.
- b) Model 2 or Step 2 - Treats as client loyalty as DV and service quality of five dimension as (IV) and show either significant or not and this model should absence the client satisfaction as mediator.
- c) Model 3 or Step 3 - Treats as client loyalty as DV and client satisfaction as (IV) and show ether significant or not.
- d) Model 4 or Step 4 - Treats as client loyalty as DV, service quality of five dimension and client satisfaction as IV.

3.8 Summary of the Chapter

The chapter contains the illustrated of the methodology that is used in the research and highlighted the development of hypotheses for testing the purposes during the course of the study. Furthermore, it also describes the hypotheses formulation, research methodology, the research design and data analysis.

CHAPTER 4: RESULTS & DISCUSSION

4.0 Overview

This section will presents the results and the findings using regression results and hierarchical results. A total of 600 questionnaires were distributed to SMEs in Malaysia but only 158 respondents answered and submitted back to researcher. The data analysis was using two statistical tools (i.e. descriptive statistics and inferential statistics). The first tool, which is the descriptive statistics, was used to find the frequency of respondents. On the other hand, inferential statistics tool was used for perform regression in order to answer the hypothesis. The result for each tool is explained in the following categories:

- a) Demographic of respondents
- b) Descriptive of respondents
- c) Hypothesis testing - assessment whether decision accepted or not.

The results for this analysis were used to summarize several finding.

4.1 Normality Test

The data was checked for normal distribution. It was found that several data were negatively skewed. Thus, data was corrected using transformation process.

4.2 Missing Data

Missing data was checked and was replaced using SPSS Missing Data by using Coding Code 9.99.999.

4.3 Profile of Respondents

4.3.1 Frequency Analysis

The objective of conducting frequency analysis is to measure the number of the respondents with different values, which can be interpreted in percentage values (Sekaran *et al.*, 2009)

4.3.2 The Demography of Respondents

As shown in Table 4.1, the analysis was performed on the respondents' gender, department, age, race, religion and level of study. Based on Table 4.1, a total of 39.1 percent represented male respondents while 60.1 percent were female respondents. The highest number of percentage is 29.1 percent, which was represented by the department of account while the lowest number of percentage lied in the department of administrative, which 8.9 percent. The age group between 36 to 44 years old was the highest, which was 38 percent while the lowest age group was over 55 year, which was only 4.4 percent. The Chinese were ranked as the largest number of the respondents at 35.4 percent, followed by the Malay at 31.0 percent, Indian at 29.1 percent and other race at 4.4 percent. In relation to religion, respondents of Buddhist religion showed the highest group which was 29.1 percent while the lowest number of percentage went to other religion, which was 4.4 percent. In terms of the level of study, the highest number of percentage was 59.5 percent, which was represented by the Undergraduates, followed by Master at 18.4 percent, other at 17.7 percent and PhD at 4.4 percent.

| Classification | | Frequency | Percentages (%) |
|-----------------------|-------------------|------------------|------------------------|
| Gender | Male | 63 | 39.9 |
| | Female | 95 | 60.1 |
| Department | Audit | 28 | 17.7 |
| | Financial | 38 | 24.1 |
| | Account | 46 | 29.1 |
| | Administrative | 14 | 8.8 |
| | Other | 32 | 20.3 |
| Age | Below 25 year old | 25 | 15.8 |
| | 25-35 year old | 31 | 19.6 |
| | 36-45 year old | 60 | 38.0 |
| | 46-55 year old | 35 | 22.2 |
| | Over 55 year old | 7 | 4.4 |
| Race | Malay | 49 | 31.1 |
| | Chinese | 56 | 35.4 |
| | India | 46 | 29.1 |
| | Other | 7 | 4.4 |
| Religion | Islam | 42 | 26.6 |
| | Buddhist | 46 | 29.1 |
| | Christian | 35 | 22.2 |
| | Hindu | 28 | 17.7 |
| | Other | 7 | 4.4 |
| Level of study | PhD | 7 | 4.4 |
| | Master | 29 | 18.4 |
| | Undergraduate | 94 | 59.5 |
| | Other | 28 | 17.7 |

Table 4.1: Demographic statistics (N=158)

4.4 Goodness of Measures

4.4.1 Construct Validity

To test for validity, it was compulsory to use exploratory factor analysis. The results from this analysis can be used to measure whether the concept or questionnaire for each dimensions emerge or not.

4.4.2 Result of Exploratory Factors Analysis

➤ Independent Variable – Service Quality (Perception)

The Principal Axis Factoring (PFA) was used to analyze the five dimensions data with Varimax rotation on data received from 158 respondents. In addition, Kaiser-Meyer Olkin (KMO) was employed to measure if sampling sufficiency had suggested that sample was factorable (KMO = 0.661). The results of Varimax rotation of the dimension in services quality (i.e. perception) were shown in Table 4.2.

According the Hair *et al.* (2010), if the sampling is above than 300, the factor loading can be accepted if more than 0.30 (FL=> 0.30). However, if the sampling is below 300, the factor loading can be accepted if more than 0.45 (FL=> 0.45). For this research, the sample size was about 158; hence, a factor loading of more than 0.45 was accepted. Thus, based on Table 4.2, it can be concluded that all factors loading are accepted and can be used for this research.

| Item Code | Items | Factor Loading |
|------------------------------------|--|----------------|
| Dimension 1 : Reliability | | |
| BP_REL_1 | The audit firm able to perform their service within certain time as promised | 0.878 |
| BP_REL_2 | The audit firm is dependable when providing services | 0.976 |
| BP_REL_3 | The audit firm has staffs that are technically able to perform the service | 0.815 |
| BP_REL_4 | The audit firm is sympathetic and reassuring towards client's problem | 0.833 |
| BP_REL_5 | Report prepared by my audit firm are easily to understood | 0.724 |
| Dimension 2: Responsiveness | | |
| BP_RES_6 | My audit firm provides prompt service | 0.682 |
| BP_RES_7 | My audit firm provides timely service | 0.872 |
| BP_RES_8 | Employees of my audit firm has willingness to help their clients | 0.807 |
| BP_RES_9 | My audit firm does inform my organization exactly when services will be performed | 0.761 |
| Dimension 3: Assurance | | |
| BP_ASS_10 | The organization can trust to the employees of the audit firm | 0.860 |
| BP_ASS_11 | My organization experienced confidentially on transaction with the employees of the audit firm | 0.814 |
| BP_ASS_12 | The employees of audit firm are courtesy and etiquette | 0.823 |
| BP_ASS_13 | The employees of audit firm received enough support from their organization to perform their task well | 0.809 |
| BP_ASS_14 | The service offered by audit firm appropriate with the fees charged | 0.677 |
| Dimension 4: Tangible | | |
| BP_TAN_15 | The audit firm have modern equipment with the latest information technology | 0.911 |
| BP_TAN_16 | The physical facilities are visually appealing | 0.814 |
| BP_TAN_17 | The staff of audit firm dress appropriately to show professionalism | 0.770 |
| Dimension 5: Empathy | | |
| BP_EMP_18 | My audit firm does not provide my organization with | 0.792 |

| | | |
|-----------|---|-------|
| | individual attention | |
| BP_EMP_19 | The employees of my audit firm do not know the needs of my organization | 0.932 |
| BP_EMP_20 | My audit firm does not have my organization's best interest at heart | 0.866 |
| BP_EMP_21 | My audit firm does not visit my organization at time to convenient us | 0.887 |
| BP_EMP_22 | My audit firm has proper document of the audit work performed | 0.607 |

Table 4.2: Factors analysis for items in client's perception of the service quality actually offered by audit firm (independent variable) (N=158)

➤ Independent Variable – Service Quality (Expectation)

The Principal Axis Factoring (PFA) was used to analyze the five dimensions data with Varimax rotation on data received from 158 respondents. In addition, Kaiser-Meyer Olkin (KMO) was employed to measure if sampling sufficiency had suggested that sample was factorable (KMO = 0.756). The results of Varimax rotation of the dimension in services quality (i.e. perception) were shown in Table 4.2.

According the Hair *et al.* (2010), if the sampling is below than 300, the factor loading can be accepted if more than 0.45 (FL=> 0.45). For this research, the sample size was about 158; hence, a factor loading of more than 0.45 was accepted. Thus, based on Table 4.3, it can be concluded that all factors loading are accepted and can be used for this research.

| Item Code | Items | Factor Loading |
|------------------------------------|--|-----------------------|
| Dimension 1 : Reliability | | |
| BE_REL_1 | I expect the audit firm able to perform their service within certain time as promise | 0.908 |
| BE_REL_2 | I expect the audit firm is dependable when providing services | 0.920 |
| BE_REL_3 | I expect the audit firm has staffs that are technically able to perform the service | 0.887 |
| BE_REL_4 | I expect the audit firm is sympathetic and reassuring towards client's problem | 0.786 |
| BE_REL_5 | I expect the report prepare by the audit firm are easily to understand | 0.854 |
| Dimension 2: Responsiveness | | |
| BE_RES_6 | I expect the audit firm provides prompt service | 0.849 |
| BE_RES_7 | I expect audit firm provides timely service | 0.819 |
| BE_RES_8 | I expect employees of the audit firm have willingness to help their clients | 0.858 |
| BE_RES_9 | I expect the audit firm do inform my organization exactly when services will be perform | 0.799 |
| Dimension 3: Assurance | | |
| BE_ASS_10 | I expect my organization can trust to the employees of the audit firm | 0.826 |
| BE_ASS_11 | I expect my organization experienced confidentially on transaction with the employees of the audit firm | 0.884 |
| BE_ASS_12 | I expect the employees of audit firm are courtesy and etiquette | 0.754 |
| BE_ASS_13 | I expect the employees of audit firm receive enough support from their organization to perform their task well | 0.845 |
| BE_ASS_14 | I expect the service offered by audit firm appropriate with the fees charged | 0.826 |
| Dimension 4: Tangible | | |
| BE_TAN_15 | I expect the audit firm have modern equipment with latest information technology | 0.909 |
| BE_TAN_16 | I expect the physical facilities are visually appealing | 0.817 |
| BE_TAN_17 | I expect the staff of audit firm dress appropriately to show professionalism | 0.738 |
| Dimension 5: Empathy | | |
| BE_EMP_18 | I expect the audit firm provide my organization | 0.831 |

| | | |
|-----------|--|-------|
| | with individual attention | |
| BE_EMP_19 | I expect the employees of the audit firm know the needs of my organization | 0.945 |
| BE_EMP_20 | I expect the audit firm have my organization's best interest at heart | 0.875 |
| BE_EMP_21 | I expect the audit firm visit my organization at time to convenient us | 0.905 |
| BE_EMP_22 | I expect the audit firm has proper document of the audit work performed | 0.618 |

Table 4.3: Factors Analysis for items in client's expectation regarding what the services an audit firm should be (independent variable) (N=158)

4.4.3 Reliability Test

The main reason for reliability test was conducted is because it minimizes the bias (error free) and at the same time to ensure the consistency in measurements from the various items in the instrument (e.g. questionnaire). The reliability is a very crucial part in order to help assess the “goodness” of a measure.

Besides that, Nunally (1967) and Sekaran *et al.* (2009) defined reliability as a measurement to know the degree consistent and stability. In addition, Nunally (1967) suggested that the range of a model of reliability between 0.5 and 0.6 would suffice. Moreover, he has also provided the following rules of thumb as showed in table 4.4:

Table 4.4: The interpretation of reliability, Nunally (1967)

| The average between | Interpretation of respondent opinion |
|----------------------------|---|
| Above 0.90 | Excellent |
| 0.80 - 0.89 | Good |
| 0.70 - 0.79 | Acceptable |
| 0.60 - 0.69 | Questionable |
| 0.50 – 0.599 | Poor |
| Below 0.50 | Unacceptable |

As shown in table 4.5, the result showed that the Cronbach's alpha (α) value ranging from 0.6 to 0.955 has fulfilled the minimum requirement of level reliability as suggested by Nunally (1967).

Table 4.5: Cronbach's (α) score

| Variable | Dimension | Number of items | Cronbach α | Total |
|-----------------------|------------------|------------------------|-------------------------------------|-------------------------|
| Expectation | Reliability | 5 | 0.866 | Overall 0.971 |
| | Responsiveness | 4 | 0.903 | |
| | Assurance | 5 | 0.916 | |
| | Tangibles | 3 | 0.930 | |
| | Empathy | 5 | 0.955 | |
| Perception | Reliability | 5 | 0.734 | Overall 0.844 |
| | Responsiveness | 4 | 0.851 | |
| | Assurance | 5 | 0.890 | |
| | Tangibles | 3 | 0.911 | |
| | Empathy | 5 | 0.688 | |
| Customer Satisfaction | | 1 | 0.83 | |
| Customer Loyalty | | 4 | 0.940 | |

4.5 Descriptive Analysis

4.5.1 Major Variable (Mean, Standard Deviation)

Zikmund *et al.* (2010) said that descriptive analysis is like a pattern and a general trend in a data set (e.g. mean and standard deviation). For instance, as Table 4.6 showed descriptive statistic for all variables. The highest mean for perception was tangible at 3.7764 and the lowest mean was represented by responsiveness empathy at 2.8987. Subsequently, the highest mean for expectation was reliability 4.3823 and the lowest one was tangible at 3.9557. Other means such as customer loyalty showed mean at 3.6203 while customer loyalty showed mean at 3.0095.

| | N | Mean | Standard Deviation |
|-----------------------|-----|--------|--------------------|
| Perception | | | |
| Reliability | 158 | 3.5418 | 0.66248 |
| Responsiveness | 158 | 3.0696 | 0.86505 |
| Assurance | 158 | 3.4759 | 0.85499 |
| Tangibles | 158 | 3.7764 | 0.93884 |
| Empathy | 158 | 2.8987 | 0.90343 |
| Expectation | | | |
| Reliability | 158 | 4.3823 | 0.39960 |
| Responsiveness | 158 | 4.1899 | 0.32225 |
| Assurance | 158 | 4.2722 | 0.33876 |
| Tangibles | 158 | 3.9557 | 0.59854 |
| Empathy | 158 | 4.1481 | 0.40581 |
| Customer Satisfaction | 158 | 3.6203 | 0.77054 |
| Customer loyalty | 158 | 3.0095 | 0.95724 |

Table 4.6: Descriptive statistic

4.6 Non-Response Bias Analysis

Table 4.7: Non-Response Bias Analysis

| | Mean Difference | t-value | Sig |
|----------------|------------------------|----------------|------------|
| Reliability | 0.00462 | 0.055 | 0.957 |
| Responsiveness | 0.00954 | 0.096 | 0.924 |
| Assurance | 0.02 | 0.201 | 0.841 |
| Tangible | 0.00523 | 0.048 | 0.962 |
| Empathy | -0.12462 | -1.298 | 0.199 |
| Satisfaction | 0 | 0 | 1 |
| Loyalty | -0.01538 | -0.112 | 0.911 |

*Notes: ** significant at 0.05 level; *** significant at 0.01; * significant level at 0.10*

The purpose of non-response bias analysis was to measure that there are no significant difference of motivation or interest exists between clients who submitted earlier and late. The data were analyzed by using paired t-test analysis. In addition, the data of client's who submitted earlier the questionnaires were taken between the ranges of 1 until 65, whilst the client's data for who submitted late of the questionnaire were taken between the ranges of 93 until 158. In table 4.7, the result showed that there is no significant difference between clients early and late responses.

Besides, the demographic information of both early and late responses were compared. The demographic items are age, race, religion, level of education and the department in which the respondents work. The result of the t-test between the two group still show insignificant different (the result of the t-test can be found in appendices ii, page 164). Thus, it can concluded that there is no systematic different between the two group and that both group can be analyzed together.

4.7 Major Findings (Hypothesis Testing)

The most relative important (i.e. expectation and perception) of five dimensions on audit service quality based on perspective SMEs.

| Dimension | Perception (P) | Expectation (E) | Ranking (P) | Ranking (E) |
|----------------|----------------|-----------------|-------------|-------------|
| Reliability | 3.5418 | 4.3823 | 2 | 1 |
| Responsiveness | 3.0696 | 4.1899 | 4 | 3 |
| Assurance | 3.4759 | 4.2722 | 3 | 2 |
| Tangibles | 3.7764 | 3.9557 | 1 | 5 |
| Empathy | 2.8987 | 4.1481 | 5 | 4 |

Table 4.8: Means score for perception and expectation and ranking based on relative importance

As shown in Table 4.9, all scores of SERVQUAL gap for each dimension are negative. The results indicated that there existed a gap between customer expectation and customer perception.

General speaking, the existence of these gaps were because their (i.e. client) expectation towards audit services provided by audit firms exceeded than what was actually offered by the audit firms. Essentially, the results for the five dimensions of service quality can be used by audit firms or other managements to perform better pertaining their services quality since it was shown able to influence customer satisfaction.

Table 4.8 presented the relative importance of the dimension of service quality (SERVQUAL) to small-medium enterprise companies based on the mean score of their expectation. The reliability dimension scored the highest mean, which was

around 4.3823 and it was ranked the as the most important. The results from the present study are similar to findings from Bongsu (2004), Ismail *et al.* (2006) and Rahim *et al.* (2010). While the least important in SERVQUAL dimension was tangible, where the mean score showed 3.9557. This result is also similar to findings by Parasuraman *et al.* (1991) and Ismail *et al.* (2006).

b) Hypothesis Testing

i) Hypothesis 1

H₁: A Gap exists between expectation and perception of the client on services quality supplied by the audit firms in Malaysia.

Specifically, the sub-hypotheses are:

H_{1a}: There is a difference between expectation and perception of the client on services quality provided by audit firms especially in the dimension of reliability.

H_{1b}: There is a difference between expectation and perception of the client on services quality provided by audit firms especially in the dimension of responsiveness.

H_{1c}: There is a difference between expectation and perception of the client on services quality provided by audit firms especially in the dimension of assurance.

H_{1d}: There is a difference between expectation and perception of the client on services quality provided by audit firms especially in the dimension of tangible.

H_{1e}: There is a difference between expectation and perception of the client on services quality provided by audit firms especially in the dimension of empathy.

Paired t-test was used in this research. Based on previous studies by Zikmund *et al.* (2010), Sekaran *et al.* (2009) and Pallant (2005), t-test is used when to find the significant between discrepancy of two set score such as to find the result for event before and after. Therefore, this study was to use t-test to compare the mean between perception and expectation for SERVQUAL dimensions. Nevertheless, as illustrated in Table 4.9, SERVQUAL GAP could be computed by respondents' perception to subtract respondents' expectation (P-E). At the end of result, if the findings indicate positive SERVQUAL score, this means that the respondents' perception is above than the respondents' expectation and vice versa.

As shown in Table 4.9, the total SERVQUAL Gap overall score for audit firms rated by small-medium enterprise companies were - 0.83716. This result indicates that client expectation was greater than their perception or in other words, what the services rendered by audit firms were not meeting with what the clients had wanted or needed (i.e. small-medium enterprise). Furthermore, the Table 4.9 also showed that the greatest gap score was represented by empathy dimension of -1.2494 and followed by responsiveness dimension of score gap at -1.2230. The smallest gap score was tangible dimension.

Paired t-test showed negative signs as results, which showed the same indication as discussed above (i.e. client expect more service quality of audit firm than what services their received now). For instance, respondents of this research (i.e. small-medium enterprise) were not satisfied with all variable of service quality offered by audit firm. As a conclusion, the hypotheses presented in the present study were accepted based on the value of “existence” of gap between clients’ expectation and client’s perception. If the clients were satisfied with the current services that were provided by audit firms in term of services rendered, the gap would not exist. On the other hand, there was no significant between client expectation and their perceptions. Hence, $H_{1a} - H_{1e}$ were supported. So, overall H_1 were supported.

Table 4.9: Comparison of mean result of SERVQUAL gap

| Dimension | Perception (P) | Expectation (E) | SERVQUAL GAP | t-value | Result |
|------------------|---------------------------|----------------------------|-------------------------|----------------|---------------|
| Reliability | 3.5418 | 4.3823 | -0.8405 | -20.335*** | Dissatisfied |
| Responsiveness | 3.0696 | 4.1899 | -1.1230 | -19.966*** | Dissatisfied |
| Assurance | 3.4759 | 4.2722 | -0.7963 | -13.451*** | Dissatisfied |
| Tangibles | 3.7764 | 3.9557 | -0.1793 | -2.356** | Dissatisfied |
| Empathy | 2.8987 | 4.1481 | -1.2494 | -19.970*** | Dissatisfied |
| Overall | 3.35248 | 4.18964 | - 0.83716 | | |

Notes: Gaps = perception (P) – expectation (E); ** significant at 0.05 level; *** significant at 0.01; * significant level at 0.10

ii) Hypothesis 2

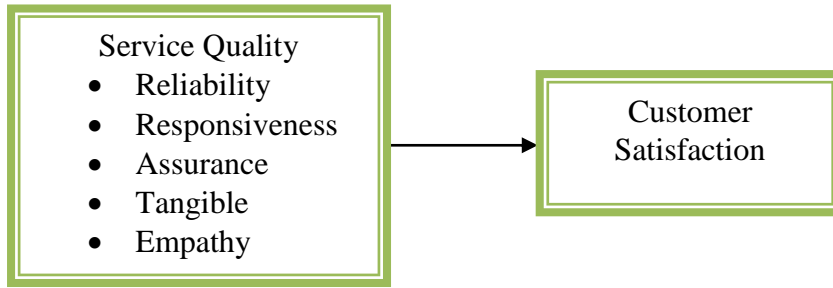


Figure 4.1: Associated relationship of service quality (IV) and customer satisfaction (MV)

H_2 : The higher the services quality provided by the audit firms, the higher the level of clients satisfaction can be formed from the SMEs companies in Malaysia

Specifically, the sub-hypotheses are:

H_{2a} : There is a significant relationship between the dimensions of reliability and client satisfaction.

H_{2b} : There is a significant relationship between the dimensions of responsiveness and client satisfaction.

H_{2c} : There is a significant relationship between dimensions of assurance and client satisfaction.

H_{2d} : There is a significant relationship between the dimensions of tangible and client satisfaction.

H_{2e} : There is a significant relationship between the dimensions of empathy and client satisfaction.

Table 4.10 presented the regression results of services quality and client satisfaction. The hypotheses were initially built to test whether there is a direct relationship between IV (i.e. service quality) and MV (client satisfaction). R square values indicated the percentages number that the independent variables have influence on the dependent variable. The table showed that 60 percent of the independent variable explained the dependent variables in the study and while the other 40 percent of dependent variable was explained by other variables. Besides that, the adjusted R^2 of 0.600 referred to the 60 percent in client satisfaction, which can be predicted by services quality dimension of audit firms.

Table 4.10 showed results for Reliability ($\beta = 0.652$; $p < 0.01$; t-value = 10.004), Responsiveness ($\beta = 1.049$; $p < 0.01$; t-value = 18.227) and Assurance ($\beta = 0.166$; $p < 0.05$; t-value = 2.375). The positive sign for coefficient (β) means that there was an increase in level of satisfaction and reliability, responsiveness and assurance were found to have a significant effect on client satisfaction. Besides that, this model also showed significant values ($F = 327.754$; $p < 0.01$) for the rest of dimension, which are Tangible ($\beta = -0.310$; $p < 0.01$; t-value = -7.644) and Empathy ($\beta = -0.048$; $p > 0.05$; t-value = -1.0665). The negative sign of coefficient (β) value is interpreted as there was a decrease in level of satisfaction. In short, a higher value in tangible dimension would result in a decrease in client satisfaction. The dimension of empathy was found to have no significant effect to client satisfaction. Hence, hypothesis H_{2a} , H_{2b} , H_{2c} , H_{2d} are supported and H_{2e} , rejected. So the overall finding can be concluded that the services quality provided by audit firms can relatively affect the client satisfaction. Thus, H_2 was supported.

Table 4.10: Regression result of service quality and client satisfaction

| Independent Variable | Coefficient β | t-value | Sig | Remark |
|---|---------------------------------------|----------------|------------|---------------|
| Reliability | 0.652 | 10.004 | 0.000*** | Supported |
| Responsiveness | 1.049 | 18.277 | 0.000*** | Supported |
| Assurance | 0.166 | 2.375 | 0.019** | Supported |
| Tangibles | -0.310 | -7.644 | 0.000*** | Supported |
| Empathy | -0.048 | -1.065 | 0.289 | Not Supported |
| R^2 | 0.607 | | | |
| Adjusted R^2 | 0.600 | | | |
| F -statistic: | 327.754 | | | |
| Sig. F | 0.000 | | | |
| Notes: **significant at 0.05 level; *** significant at 0.01 | | | | |

iii) Hypothesis 3

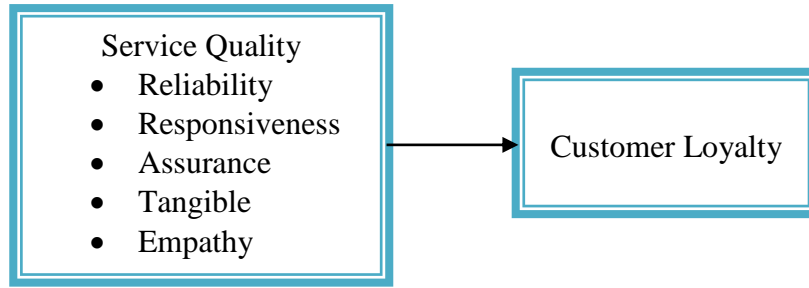


Figure 4.2: Associated relationship between service quality (IV) and customer loyalty (DV)

H_3 : The higher the service quality provided by the audit firms, the higher the probability of loyalty can be formed from the SMEs companies in Malaysia

Specifically, the sub-hypotheses are:

H_{3a} : There is a significant relationship between the dimension of reliability with client loyalty.

H_{3b} : There is a significant relationship between the dimension of responsiveness with client loyalty.

H_{3c} : There is a significant relationship between the dimension of assurance with client loyalty.

H_{3d} : There is a significant relationship between the dimension of tangible with client loyalty.

H_{3e} : There is a significant relationship between the dimension of empathy with client loyalty.

The adjusted R² of 0.753 referred to the 75.5 percent of IV of variance towards client loyalty. Besides that, this model significant ($F = 96.669$; $p < 0.01$). The results for each dimension such as Reliability ($\beta = 0.520$; $p < 0.01$; $t\text{-value} = 4.147$), Responsiveness ($\beta = 0.345$; $p < 0.01$; $t\text{-value} = 2.887$), Assurance ($\beta = 0.595$; $p < 0.01$; $t\text{-value} = 4.094$), Tangible ($\beta = 0.280$; $p < 0.01$; $t\text{-value} = 3.314$) and Empathy ($\beta = 0.415$; $p < 0.01$; $t\text{-value} = 4.414$) were found to show a positive association with client loyalty. Hence, H_{3a}, H_{3b}, H_{3c}, H_{3d} and H_{3e} are supported. Overall, the audit quality services showed an effect to client loyalty and thus, H₃ is supported.

Table 4.11: Regression result of service quality and client loyalty

| Independent Variable | Coefficient | t-value | Sig | Remark |
|---|--------------------|----------------|------------|---------------|
| Reliability | 0.520 | 4.147 | 0.000*** | Supported |
| Responsiveness | 0.345 | 2.887 | 0.004*** | Supported |
| Assurance | 0.595 | 4.094 | 0.000*** | Supported |
| Tangibles | 0.280 | 3.314 | 0.001*** | Supported |
| Empathy | 0.415 | 4.414 | 0.000*** | Supported |
| R ² | 0.761 | | | |
| Adjusted R ² | 0.753 | | | |
| F-statistic: | 96.699 | | | |
| Sig.F | 0.000 | | | |
| Notes: **significant at 0.05 level; *** significant at 0.01 | | | | |

iv) Hypothesis 4

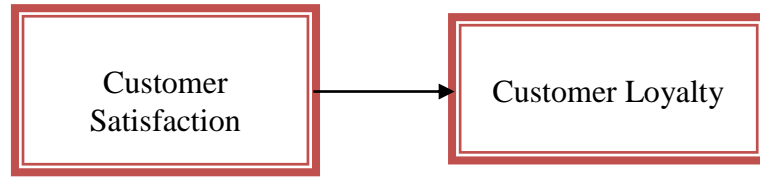


Figure 4.3: Associated relationship of customer satisfaction (MV) and customer loyalty (DV)

H₄: The higher the level of client satisfaction, the higher the loyalty by SMEs companies in Malaysia

Table 4.12 presented the results of regression analysis for client satisfaction and client loyalty. The adjusted R^2 of 0.53 indicated that 53.3 percent of client satisfaction was relevant to and was associated with client loyalty and significant ($F = 178.287$, $p < 0.01$). Besides that, coefficient (β) showed a positive relationship between two variables, with coefficient (β) demonstrated as the higher value of customer satisfaction on services quality provided by audit firm create the higher of the client loyalty to that audit firm especially to their auditor ($\beta = 0.907$, $p < 0.01$, $t\text{-value} = 13.352$). The findings from the present study showed that a higher level of customer satisfaction lead to a strong customer loyalty by SMEs companies in Malaysia. Therefore, H_4 is supported.

Table 4.12: regression result of client satisfaction and client loyalty

| Independent Variable | Coefficient β | t-test | Sig | Remark |
|--------------------------------|---------------------|--------|----------|-----------|
| Client satisfaction | 0.907 | 13.352 | 0.000*** | Supported |
| R ² | 0.533 | | | |
| Adjusted R ² | 0.530 | | | |
| F-statistic: | 178.287 | | | |
| Sig.F | 0.000 | | | |
| Notes: *** significant at 0.01 | | | | |

v) Hypothesis 5

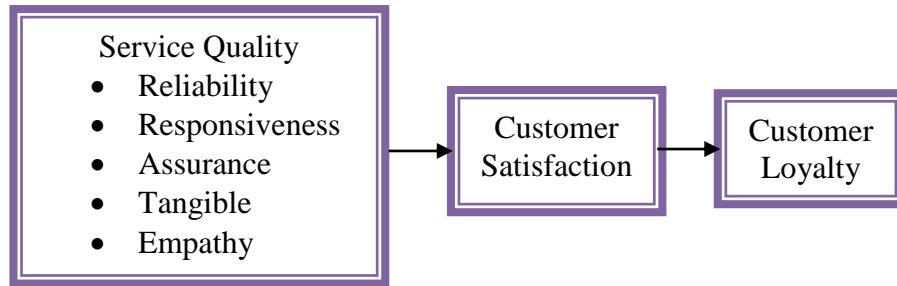


Figure 4.4: Associated relationship of service quality (IV) customer satisfaction (MV) and customer loyalty (DV)

H₅: The interrelationship between services quality and client loyalty is affected by the mediating variable of client satisfaction towards audit firms in Malaysia.

Specifically, the sub-hypotheses are:

H_{5a}: The interrelationship between the dimension of reliability and client loyalty is affected by the mediating variable of client satisfaction towards audit firms.

H_{5b}: The interrelationship between the dimension of responsiveness and client loyalty is affected by the mediating variable of client satisfaction towards audit firms.

H_{5c}: The interrelationship between the dimension of assurance and client loyalty is affected by the mediating variable of client satisfaction towards audit firms.

H_{5d}: The interrelationship between the dimension of tangible and client loyalty is affected by the mediating variable of client satisfaction towards audit firms.

H_{5e}: The interrelationship between the dimension of empathy and client loyalty is affected by the mediating variable of client satisfaction towards audit firms.

These hypotheses were tested using multiple regression analysis to obtain the results of IV (service quality) on the DV (customer loyalty) that was tested on a continue scale. Coakes (2013) highlighted all of the assumptions in multi regression such as normality, linearity, homoscedasticity, multicollinearity and heteroscedasticity, which can be accessed through regression analysis. Consequently, the present study utilized client satisfied as the mediator to test whether this variable gives significant effect of services quality to client loyalty. Mediator can be defined as an independent variable that affects the mediator and then affect to outcome (Ramayah, 2005). In order to test client satisfaction as the mediating effect on the audit service quality and client loyalty in this study, the hierarchical study was applied in the present study (Ismail *et al.*, 2006). Baron

& Kenny (1986) and Judd & Kenny (1981) has discussed for step in establishing the mediating variable:

- ❖ Model 1 or Step 1 - Treats client satisfaction as DV and service quality of five dimensions as IV and show either significant or not.
- ❖ Model 2 or Step 2 - Treats as client loyalty as DV and service quality of five dimension as (IV) and show either significant or not and this model should absence the client satisfaction as mediator.
- ❖ Model 3 or Step 3 - Treats as client loyalty as DV and client satisfaction as (IV) and show ether significant or not.
- ❖ Model 4 or Step 4 - Treats as client loyalty as DV, service quality of five dimension and client satisfaction as IV.

Table 4.14 presented the result of hierarchical regression in order to identify the mediating effects. The first model treats client loyalty as DV and service quality of five dimension as (IV). The result shows that IV such as Reliability ($\beta = 0.652$; $p < 0.01$; t-value = 10.004), Responsiveness ($\beta = 1.049$; $p < 0.01$; t-value = 18.277), Assurance ($\beta = 0.166$; $p < 0.05$; t-value = -7.644) and Tangible ($\beta = -0.310$; $p < 0.01$; t-value = -7.644) were found significant to client satisfaction. Thus, the findings indicated that reliability, responsiveness, assurance, and tangible have fulfilled the requirement in step 1. Meanwhile, Empathy ($\beta = -0.048$; $p > 0.05$; t-value = -1.065) was found not significant, which indicated that empathy has not fulfilled the requirement in step 1.

Besides that, the second model presented client loyalty as DV and services quality of the five dimension as (IV) and absences client satisfaction as mediator variable. The result showed IV such as Reliability ($\beta = 0.520$; $p < 0.01$; $t\text{-value} = 4.147$), Responsiveness ($\beta = 0.345$; $p < 0.01$; $t\text{-value} = 2.887$), Assurance ($\beta = 0.595$; $p < 0.01$; $t\text{-value} = 4.094$), Tangible ($\beta = 0.280$; $p < 0.01$; $t\text{-value} = 3.314$) and Empathy ($\beta = 0.415$; $p < 0.01$; $t\text{-value} = 4.414$) were found to have significantly associated with client loyalty. Thus, this finding indicated reliability, responsiveness, assurance, tangible and empathy have fulfilled the requirement in step 2. But it should be noted that the dimension of empathy was found insignificant for the step 1. Due to this reason, the dimension of empathy was rejected because it had not fulfilled the requirements as suggested by previous studies by Judd *et al.* (1981) and Baron *et al.* (1986).

Apart from that, the third model presented client loyalty as DV and client satisfaction as (IV). The results found that there is a positive relationship between client satisfaction and client loyalty ($\beta = 0.907$; $p < 0.01$; $t\text{-value} = 13.352$).

In the fourth model, client loyalty was presented as DV, while services quality of five dimensions and client satisfaction were presented as IV. The result showed that Responsiveness ($\beta = 0.178$; $p < 0.01$; $t\text{-value} = 0.0834$), Assurance ($\beta = 0.569$; $p < 0.01$; $t\text{-value} = 3.841$) and Tangible ($\beta = 0.330$; $p < 0.01$; $t\text{-value} = 3.3312$) and Empathy ($\beta = 0.423$; $p < 0.01$; $t\text{-value} = 0.941$) were found significantly relationship with client satisfaction and loyalty. In contrast, Reliability ($\beta = -0.084$; $p > 0.05$; $t\text{-value} = -0.479$) did not have a significant relationship with the client satisfaction and client loyalty.

Based on previous studies by Judd & Kenny (1981), Baron & Kenny (1986) and Ramayah (2005), the results in the present study can be categorized to be partial or full mediate depending on few circumstances:

- 1) Full mediation – when at the end of result is no longer significant
- 2) Partial mediation – when at the end of result shows still significant but the value of (β) or Sig decreased.

Table 4.13: Summary of regression analysis

| DV: Client Loyalty | | | |
|--------------------|------------------|---------------|-------------------|
| | Without Mediator | With Mediator | Conclusion |
| Reliability | 0.652*** | -0.084 | Full Mediation |
| Responsiveness | 1.049*** | 0.178*** | Partial Mediation |
| Assurance | 0.166*** | 0.569*** | No Mediation |
| Tangibles | -0.310*** | 0.330*** | No Mediation |
| Empathy | -0.048 | 0.423 | No Mediation |

Notes: **significant at 0.05 level; *** significant at 0.01;
* significant level 0.10

In addition, the findings from Table 4.13 and the summary results from Table 4.14 might be useful for scholars to understand more regarding the mediator effect. Table 4.13 shows the result for variables without mediator and variables with mediator, as suggested by Ramayah, (2005). Furthermore, Judd & Kenny (1981), Baron & Kenny (1986) and Ramayah (2005) explained in their studies that client satisfaction can be seen fully mediate between reliability and client loyalty. Hence, hypothesis H_{5a} is supported. On the other hand, the result table 4.13 and 4.14 shows that there existed a significant relationship between responsiveness and client satisfaction when client satisfaction was made a control although the value of (β) decline. Thus, this means client satisfaction

partial mediates between responsiveness and client loyalty. Hence, hypothesis H_{5b} is partial supported. Subsequently, for the other dimensions like assurance, tangible and empathy, there were no mediating effects due to not fulfill the requirement for each step. Hence, H_{5c}, H_{5d} and H_{5e} are rejected.

Table 4.14: Hierarchical regression result of service quality, client satisfaction and client loyalty

| Dependent variable (client satisfaction and client loyalty)# | | | | | | | | | |
|--|------------------------|-----------|------------------------|----------|------------------------|-----------|------------------------|----------|-------------------|
| Independent Variable | MODEL 1 | | MODEL 2 | | MODEL 3 | | MODEL 4 | | RESULT |
| | Coefficient β | <i>t</i> | Coefficient β | <i>t</i> | Coefficient β | <i>t</i> | Coefficient β | <i>t</i> | |
| Reliability | 0.652 | 10.004*** | 0.520 | 4.147*** | | | -0.084 | -0.479 | Full Mediation |
| Responsiveness | 1.049 | 18.277*** | 0.345 | 2.887*** | | | 0.178 | 0.834*** | Partial Mediation |
| Assurance | 0.166 | 2.375** | 0.595 | 4.094*** | | | 0.569 | 3.841*** | No Mediation |
| Tangibles | -0.310 | -7.644*** | 0.280 | 3.314*** | | | 0.330 | 3.312*** | No Mediation |
| Empathy | -0.048 | -1.065 | 0.415 | 4.414*** | | | 0.423 | 4.447*** | No Mediation |
| Client Satisfaction | | | | | 0.907 | 13.352*** | 0.159 | 0.941*** | |
| R2 | 0.607 | | 0.761 | | 0.533 | | 0.762 | | |
| Adjusted R2 | 0.600 | | 0.753 | | 0.530 | | 0.753 | | |
| <i>F</i> -statistic: | 327.754 | | 96.699 | | 178.287 | | 80.669 | | |
| Prob. <i>F</i> -statistic | 0.000 | | 0.000 | | 0.000 | | 0.000 | | |

Notes: **significant at 0.05 level; *** significant at 0.01; * significant level 0.10

For the explanation of each model, see page 101.

4.8 Discussion Findings

Objective 1: To identify which one as most relative important (i.e. expectation and perception) of five dimensions on audit service quality based on perspective SMEs.

The results for the present study showed that of all the dimensions of the five services quality, the dimensions represented by reliability was ranked the as most important for expectation by clients on what actual service their desire and want from the audit firms. The least important of the five dimensions was represented by tangible. The findings from the present study are similar with the findings by previous studies such as Parasuraman *et al.* (1991), Ismail *et al.* (2006) and Alrousan *et al.* (2013). The highest ranking in reliability and assurance in this finding indicated that small-medium enterprise companies (SMEs) expect audit firms to able to perform the tasks as promised, independent, timely, accurately.

Moreover, from clients' perspective, tangible dimension such as modern equipment and physical facilities were found not important for audit services from audit firms. However, after subtracting between perception and expectation, it was then found that clients in SMEs companies were not satisfied with dimension of tangible. This finding contradicts with the findings by Ismail *et al.* (2006) and Harron *et al.* (2012) where client were found satisfied with the tangible dimensions but also least important by client expectation. The findings by Ismail *et al.* (2006) by using public listed companies (PLCs) as their respondents said that most PLCs clients used the services of the big 4 audit firms that were already equipment with modern technology. On the other hand, according to

DeAngelo (1981), the size of audit firms affect the quality of audit services, for instance, the Big 4 firms have greater number of client, hence, those large audit firms need to perform tasks properly to enhance the quality of audit services. Nevertheless, a research study conducted by Haron *et al.* (2012) highlighted that at most 75 percent of SMEs in Malaysia used (small-medium practitioner) SMPs services to perform audit tasks. Due to this reason, the present study used SMEs as respondents and the result of this finding showed similarity with results found by Ismail *et al.* (2006).

As a conclusion, a bigger size of audit firms provided the better audit services and audit quality than SMPs. However, according to Arneet & Danoes (1971), it is not fair for make judgment of audit quality based on the size of audit firms, since their professional standard and qualification can sometimes be argued. Therefore, the findings in this study show that to make client satisfied with the audit service provided, the audit firms should also consider reliability at all times as the main point when delivery audit tasks.

4.8.1 Hypothesis Testing

4.8.1.1 Result of Regression Analysis

Objective 2: To investigate the difference of SERVQUAL gap score in the five dimension on quality of service.

The overall SERVQUAL GAP score for audit firms rated by small-medium enterprise companies were - 0.8372. This result indicates that client expectation was greater than their perception or in other words, what the services rendered by audit firms were not meeting with what the clients had wanted or needed Furthermore, the greatest gap score was represented by empathy dimension of -1.2494 followed by responsiveness dimension of score gap at -1.2230. The smallest gap score was tangible dimension.

Although clients of audit firm were found willing to continue the same service with the current audit firms, the clients have hoped that the audit firms could improve the service quality provided currently in all aspect of the five dimensions (i.e. reliability, responsiveness, assurance, tangible and empathy) in order to enhance client satisfaction. The results indicated that the audit firms especially their auditors that were able to give individualized attention, caring, provide reliable and prompt service, have more knowledge and were dependable when performing the services, were

able to build trust and confident level among the customers and audit firms simultaneously. In this research, the findings also revealed that the empathy dimension scored the highest gap and showed great unsatisfactory values. The results in this finding are similar to studies Bongsu (2004) and Parasuraman *et al.* (1991). As a conclusion, respondents hoped and would like to see an improvement or values added particularly in these dimensions.

Objective 3: To investigate whether there is a relationship between service quality and customer satisfaction.

The results in this study revealed that reliability, responsiveness, assurance, tangible have a relationship with the service quality and client satisfaction but empathy was not found to be significantly relationship. Furthermore, this paper also found that negative of (β) value for tangible dimensions, it depicted that any improvements was made in the dimensions of tangible will lead to decrease in the level of client satisfaction. It may be due to client feels the technology used during audit work was performed will resulted in the relationship in terms of direct communication be limited such as no more caring, love and individualized attention.

Based on the overall findings in the present study, it can be concluded that services quality provided by audit firms have relative effects on client satisfaction. The results was found similarly to results from past studies by Parasuraman *et al.* (1991), Mosahab (2006), Bitner & Hubert (1994) and Fornerl (1992) with services quality positively relationship with customer satisfaction. In Malaysia point of view, Bongsu (2004), Ismail *et al.* (2006) and Haron *et al.* (2012) have found positive association among services quality and client satisfaction.

Objective 4: To examine whether there is a relationship between service quality and customer loyalty

The dimensions of services quality such as reliability, responsiveness, assurance, tangible and empathy were found to have a positive association with client loyalty. Based on the overall findings in the present study, it can be concluded that services quality have relationship with client satisfaction. Previous studies by Rizan (2010), Rousan *et al.* (2010), Chen & Lee (2008), Jamal (2007), Kheng *et al.* (2010) and Liang, (2008) have summarized in their studies where service quality was found to have a strong impact and positive relationship with customer loyalty.

Objective 5: To examine whether there is relationships between customer satisfaction and customer loyalty.

The positive coefficient show positive relationship between two variables while the positive sign demonstrated the higher level of customer satisfaction on services quality provided by audit firm, which affluence high level of client loyalty to audit firms especially to their auditor. The findings from the present study are consistent to findings from previous studies by Parasuraman *et al.* (1991), Ismail *et al.* (2006), Haron *et al.* (2012), Mosahab (2006), Caruana (2002), Hassan *et al.* (2013) and Osman *et al.* (2013), where the level of client satisfaction often led to client loyalty.

Objective 6: To investigate quality of service, customers loyalty and the mediating effects of customer loyalty toward audit firms.

Results from the present study showed that client satisfaction have fully mediates with the relationship of reliability and client loyalty. Moreover, this study also showed that the client satisfaction was found partially mediates in correlation between responsiveness and client loyalty when client satisfaction was made as a control variable. The partial mediates of client satisfaction on service quality (i.e. responsiveness) and client loyalty means that the level of satisfaction will increase if audit services quality has higher in responsiveness such as providing prompt service, time service and inform firms first before performing audit services. Thus, the overall hypotheses in this study showed that there exists the mediation effect of client satisfaction on services quality, which leads to client loyalty. Besides that, the studies by Parasuraman *et al.* (1990), Ismail *et al.* (2006), Bongso (2004), Haron *et al.* (2012), Alrousan, (2003), Andreason (1994), Caruana (2002), Osman & Sentosa (2012) and Rahim *et al.* (2010) also show that reliability has partial or full mediation when customer satisfaction was made as control variable.

4.9 Summary of Findings (Hypothesis)

Table 4.15 simply showed the overall hypotheses that have been tested in this study. The summary of each hypothesis are as the following:

| Table 4.15 : Summary of Findings (Hypothesis) | |
|--|------------------------|
| Hypothesis | Supported/ Rejected |
| <u>Hypothesis 1</u> | |
| H ₁ : A gap exists between expectation and perception of the client on the service quality supplied by audit firms in Malaysia. | Supported |
| <i>Specifically, the sub-hypotheses are:</i> | |
| H _{1a} : There is a difference between expectation and perception of the client on the service quality provided by audit firms especially in the dimension of reliability. | Supported |
| H _{1b} : There is a difference between expectation and perception of the client on the service quality provided by audit firms especially in the dimension of responsiveness. | Supported |
| H _{1c} : There is a difference between expectation and perception of the client on the service quality provided by audit firms especially in the dimension of assurance. | Supported |
| H _{1d} : There is a difference between expectation and perception of the client on the service quality provided by audit firms especially in the dimension of tangible. | Supported |
| H _{1e} : There is a difference between expectation and perception of the client on the service quality provided by audit firms especially in the dimension of empathy. | Supported |
| <u>Hypothesis 2</u> | |
| H ₂ : The higher the services quality provided by the audit firms, the higher the clients satisfaction can be formed | Supported |

from the SMEs companies in Malaysia.

Specifically, the sub-hypotheses are:

| | |
|--|-----------|
| H _{2a} : There is significant relationship between the dimension of reliability and client satisfaction. | Supported |
| H _{2b} : There is significant relationship between the dimension of responsiveness and client satisfaction. | Supported |
| H _{2c} : There is significant relationship between the dimension of assurance and client satisfaction. | Supported |
| H _{2d} : There is significant relationship between the dimension of tangible and client satisfaction. | Supported |
| H _{2e} : There is significant relationship between the dimension of empathy and client satisfaction. | Rejected |

Hypothesis 3

| | |
|--|-----------|
| H ₃ : The higher the services quality provided by the audit firms, the higher the probability of loyalty can be formed from the SMEs companies in Malaysia. | Supported |
|--|-----------|

Specifically, the sub-hypotheses are:

| | |
|--|-----------|
| H _{3a} : There is a significant relationship between the dimension of reliability with client loyalty. | Supported |
| H _{3b} : There is a significant relationship between the dimension of responsiveness with client loyalty. | Supported |
| H _{3c} : There is a significant relationship between the dimension of assurance with client loyalty. | Supported |
| H _{3d} : There is a significant relationship between the dimension of tangible with client loyalty. | Supported |
| H _{3e} : There is a significant relationship between the dimension of empathy with client loyalty. | Supported |

Hypothesis 4

| | |
|--|-----------|
| H ₄ : The higher the client satisfaction level is, the more loyal | Supported |
|--|-----------|

customers would be for SMEs companies in Malaysia.

Hypothesis 5

| | |
|--|-----------|
| H ₅ : The interrelationship between services quality and client loyalty is affected by the mediating variable of client satisfaction towards audit firms in Malaysia. | Supported |
|--|-----------|

Specifically, the sub-hypotheses are:

| | |
|---|-----------|
| H _{5a} : The interrelationship between the dimension of reliability and client loyalty is affected by the mediating variable of client satisfaction towards audit firms. | Supported |
|---|-----------|

| | |
|--|-------------------|
| H _{5b} : The interrelationship between the dimension of responsiveness and client loyalty is affected by the mediating variable of client satisfaction towards audit firms. | Partial Supported |
|--|-------------------|

| | |
|---|----------|
| H _{5c} : The interrelationship between the dimension of assurance and client loyalty is affected by the mediating variable of client satisfaction towards audit firms. | Rejected |
|---|----------|

| | |
|--|----------|
| H _{5d} : The interrelationship between the dimension of tangible and client loyalty is affected by the mediating variable of client satisfaction towards audit firms. | Rejected |
|--|----------|

| | |
|---|----------|
| H _{5e} : The interrelationship between the dimension of empathy and client loyalty is affected by the mediating variable of client satisfaction towards audit firms. | Rejected |
|---|----------|

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary of the results that were obtained from the analysis carried out from the present study. This chapter also provides suggestions for future works.

5.1 Summary

Services businesses have been growing rapidly in the recent decades, at the same time, customer demand for high quality services is increasing. For this reason, quality plays a crucial role in leading customer satisfaction. The company should always be in update and know what the customers desire and expect from their services. Due to these reasons, this research was conducted to examine the correlation between services quality and satisfaction loyalty of the client. The SERVQUAL instrument, developed by Parasuraman *et al.* (1988), has been applied in designing the questionnaires by using five dimensions of service quality: tangibility, reliability, responsiveness, assurance, and empathy.

Data collected from questionnaires were distributed to 600 SMEs companies in Malaysia who have experiences using audit firm services. The questionnaires were aimed to determine the level of customers' expectation and perception towards the services quality of audit firms. This study also focused on examining the gap between customer's expectation and their perception of audit firms' services quality. The findings from the present study show that there exists gaps among clients. The reason behind this is

because their (i.e. client) expectation toward audit services provided by audit firms exceed than what is actually offered by audit firms. Essentially, the results of the five dimensions of services quality can be used by audit firms or other managements to perform better pertaining their services quality as it can influence customer satisfaction.

On the other hand, this paper also found that the reliability, responsiveness and assurance are important dimensions, but the most important dimension based on client expectation was reliability. This shows that audit firms should consider improve their services quality by performing the job as promised, being dependable, provide reports that are easier for client to understand and always stress integrity to their staff in order to stimulate client satisfaction. So in general, the companies shall have the high probability of using other non-audit services such as taxation, secretarial practise and etc., if the clients are satisfied with the quality of service received from the their appointed audit firms.

Although companies realize that it is difficult to close the gap between customer expectation and perception as a result of audit firms not being able to fulfill what of the clients want, the managements can still add value or improve their present service quality during delivering audit procedures. The audit firms should also always monitor and provide necessarily training to their staff in order to improve skill, knowledge, and professionalism when performing the tasks. During the training, issues or other agenda should be included such as confidence level, using the latest standard in accounting or auditing and practicing courtesy. In addition, audit firms also need to provide necessary

audit tasks to their clients. The audit firms should also provide time lines and let the clients know the time needed to complete the audit process.

The conclusion of the present study is based on the results and findings from the research questions, which include three variable services quality (IV), client satisfaction (MV) and also client loyalty (DV). The details are elaborated as in point 5.2.

5.2 Discussion and Conclusion

- 1) What services are the most desired by the SMEs companies in the five dimension of service quality of audit firms in Malaysia?

Based on the means from the study's findings it can be summarized that the ranked in reliability and assurance in this finding are the most important. The results also indicate that clients expect audit firm to be able to perform the task as promised, independent, timely, accurately. The least important for the five dimensions was tangible such as modern equipment and physical facilities.

- 2) What is the biggest score gaps in the SERVQUAL instrument where is it based on dimension of five service quality?

The total of SERVQUAL results show negative sign amount (P-E). This result revealed that services offered by audit firm did not meet with what clients want or need. The greatest gap score was empathy, followed by responsiveness. The

smallest gap score was tangible dimension. Despite that, clients of audit firms are willing to continue the service with the current audit firms as long as auditors can improve individualized attention, caring, provide reliable and prompt service, be more knowledgeable and are dependable when performing the service. All these efforts will allow both parties to build trust and confidence level among them.

3) Does exist the relationship between service quality and customer satisfaction?

The result in the present study found that reliability, responsiveness, assurance, tangible have relationship between service quality and client satisfaction but empathy was not found not to be significant. So the overall finding showed that services quality provided by audit firms have a relative effect on client satisfaction.

4) Does a relationship between service quality and customer loyalty exists?

All dimensions of services quality (i.e. reliability, responsiveness, assurance, tangible, empathy) were found significantly relationship with the client loyalty. So, the overall this finding concluded that services quality is relationship to client satisfaction.

- 5) Is there a relationship between customer satisfaction and customer loyalty?

The result showed value of $p < 0.01$ and value of beta (β) show positive sign, which means that high satisfaction on service quality offered by audit firms will lead client loyalty.

- 6) Is there a interrelationship among services quality and customer loyalty influenced by mediation effects of customer satisfaction towards audit firms?

The result showed that client satisfaction has fully mediates with the relationship of reliability and client loyalty. This study also showed that the client satisfaction was found partially mediates in correlation between responsiveness and client loyalty when client satisfaction was made as a control variable.

5.3 Recommendation Future Research

For future works, researcher would like to suggest a few ideas for other researchers who want to do similar topic. The following are made to add value of the future research. In the present study, research was conducted on five dimensions of service quality and SME companies as respondents by adopting SERVQUAL instrument in order to analyze the relative important of the five dimensions to client satisfaction and loyalty. Therefore, it is suggested that for future studies, investigation can be done on only one attribute in the five dimension of service quality offered by audit firms during delivery audit task. The last suggestion is to do research by adopting other questionnaires using other methods such as SERVPERF by Cronin & Taylor (1992) or Non-Difference by Brown (1993) and to test whether it has an effect on the relationship between client satisfaction and client loyalty.

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Appendix I

Questionnaire



**COLLEGE OF BUSINESS
UNIVERSITI UTARA MALAYSIA**

Dear respondents,

This questionnaire about to study **SERVICE QUALITY, CUSTOMER LOYALTY AND THE MEDIATING EFFECTS OF CUSTOMER SATISFACTION TOWARDS AUDIT FIRMS: PERSPECTIVE OF SMALL-MEDIUM ENTERPRISE (SMEs) COMPANIES IN MALAYSIA**. Please answer honestly and carefully all items in the questionnaire as it will influence the results of the research. Information obtained from this questionnaire **WILL BE TREATED AS STRICTLY CONFIDENTIAL** and will be used solely for academic purposes.

After done answering this questionnaire, please sent back to me via email (dinspy@yahoo.com.my) or post this survey to at the my address as below:

Mohamad Fazzarudin Bin Mohamad Sabri

B.61 LadangKupang,

09200 Kupang, Kedah.

Your participation is highly appreciated and thanks you for your support.

Mohamad Fazzarudin Bin Mohamad Sabri

Matric No: 813425

MSc. International Accounting

PART A: DEMOGRAPHIC RESPONDENTS

This section is about background of respondents' details. Please answer all questions frankly and honestly. Remember that your answer will be anonymous. Your answer will help in the analysis of the survey results. Please circle at an answer that matches your opinion.

1. GENDER :

- a) Male
- b) Female

2. YOUR DEPARTMENT

- a) Auditor
- b) Financial
- c) Accounting
- d) Administrative
- e) Other _____

3. AGE

- a) Below 25 year old
- b) 25-35 year old
- c) 36-45 year old
- d) 46-55 year old
- e) Over 55 year old

4. RACE

- a) Malay
- b) Chinese
- c) Indian
- d) Others _____

5. RELIGION

- a) Islam
- b) Buddhist
- c) Hindu Christian
- d) Others _____

6. LEVEL OF STUDY

- a) PhD
- b) Masters in
- c) Undergraduate (Course name)
- d) Other _____

PART B: SURVEY OF YOUR EXPECTATIONS AND PERCEPTIONS TOWARD SERVICE QUALITY OF AUDIT FIRM

The following tables contain the feature that relate to your feelings and experiences as a client of audit firm. Please tick mark (/) in each feature that is close to your view of service quality's you expectation and perception towards audit firm.

- a) Level of PERCEPTION defines as what of the service quality actually offered by audit firm

The score level are described as 5 = strongly agree, 4 = agree, 3 = somewhat agree, 2 = disagree and 1 = strongly disagree

| Dimension | Level of Perception | | | | |
|--|----------------------------|---|---|---|---|
| Reliability | 1 | 2 | 3 | 4 | 5 |
| 1. The audit firm able to perform their service within certain time as promised | | | | | |
| 2. The audit firm is dependable when providing services | | | | | |
| 3. The audit firm has staffs that are technically able to perform the service. | | | | | |
| 4. The audit firm is sympathetic and reassuring towards client's problem | | | | | |
| 5. Report prepared by my audit firm are easily to understood | | | | | |
| Responsiveness | | | | | |
| 6. My audit firm provides prompt service | | | | | |
| 7. My audit firm provides timely service | | | | | |
| 8. Employees of my audit firm has willingness to help their clients | | | | | |
| 9. My audit firm does inform my organization exactly when services will be performed | | | | | |
| Assurance | | | | | |
| 10. The organization can trust to the employees of the audit firm | | | | | |
| 11. My organization experienced confidentially on transaction with the employees of the audit firm | | | | | |
| 12. The employees of audit firm are courtesy and etiquette | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| 13. The employees of audit firm received enough support from their organization to perform their task well | | | | | |
| 14. The service offered by audit firm appropriate with the fees charged | | | | | |
| Tangibles | | | | | |
| 15. The audit firm have modern equipment with latest information technology | | | | | |
| 16. The physical facilities are visually appealing | | | | | |
| 17. The staff of audit firm dress appropriately to show professionalism | | | | | |
| Empathy | | | | | |
| 18. My audit firm provide my organization with individual attention | | | | | |
| 19. The employees of my audit firm know the needs of my organization | | | | | |
| 20. My audit firm have my organization's best interest at heart | | | | | |
| 21. My audit firm visit my organization at time to convenient us | | | | | |
| 22. My audit firm has proper document of the audit work performed | | | | | |

- b) Level of EXPECTATION defines as what the of the services of an audit firm should be

The score level are described as 5 = strongly agree, 4 = agree, 3 = somewhat agree, 2 = disagree and 1 = strongly disagree

| Dimension | Level of Perception | | | | |
|---|---------------------|---|---|---|---|
| Reliability | 1 | 2 | 3 | 4 | 5 |
| 1. I expect the audit firm able to perform their service within certain time as promised | | | | | |
| 2. I expect the audit firm is dependable when providing services | | | | | |
| 3. I expect the audit firm has staffs that are technically able to perform the service. | | | | | |
| 4. I expect the audit firm is sympathetic and reassuring towards client's problem | | | | | |
| 5. I expect report prepare by audit firm are easily to understood | | | | | |
| Responsiveness | | | | | |
| 6. I expect the audit firm provides prompt service | | | | | |
| 7. I expect the audit firm provides timely service | | | | | |
| 8. I expect the employees of audit firm has willingness to help their clients | | | | | |
| 9. I expect audit firm does inform my organization exactly when services will be performed | | | | | |
| Assurance | | | | | |
| 10. I expect my organization can trust to the employees of the audit firm | | | | | |
| 11. I expect my organization experienced confidentially on transaction with the employees of the audit firm | | | | | |
| 12. I expect the employees of audit firm are courtesy and etiquette | | | | | |
| 13. I expect the employees of audit firm received enough support from their organization to perform their task well | | | | | |
| 14. I expect the service offered by audit firm appropriate with the fees charged | | | | | |
| Tangibles | | | | | |
| 15. I expect the audit firm have modern equipment with latest information technology | | | | | |
| 16. I expect the physical facilities are visually appealing | | | | | |
| 17. I expect the staff of audit firm dress appropriately to | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| show professionalism | | | | | |
| Empathy | | | | | |
| 18. I expect the audit firm provide my organization with individual attention | | | | | |
| 19. I expect the employees of the audit firm know the needs of my organization | | | | | |
| 20. I expect the audit firm have my organization's best interest at heart | | | | | |
| 21. I expect the audit firm visit my organization at time to convenient us | | | | | |
| 22. I expect the audit firm has proper document of the audit work performed | | | | | |

PART C: YOU'RE SATISFACTION TOWARD SERVICE PROVIDED BY THE AUDIT FIRM TO YOUR ORGANIZATION

Please tick mark (/) in each feature that is close to your opinion.

The score level are described as 5 = strongly agree, 4 = agree, 3 = somewhat agree, 2 = disagree and 1 = strongly disagree

| Features | Level of Scale | | | | |
|---|----------------|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| 1. In general I am satisfied with my audit firm | | | | | |

PART D: CUSTOMER LOYALTY

The following tables contain the question that relate to your feelings about the service quality offered by audit firm that can lead your loyalty. Please tick mark (/) in each feature that is close to your opinion.

The score level are described as 5 = strongly agree, 4 = agree, 3 = somewhat agree, 2 = disagree and 1 = strongly disagree

| Features | Level of Scale | | | | |
|---|----------------|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| 1. I say positive thing about audit firm to other people | | | | | |
| 2. I intended to continue being a client of audit firm for long time to come | | | | | |
| 3. I will encourage friend and relatives to use the service offered by audit firm | | | | | |
| 4. To me, the audit firm clearly is able to provide the best service | | | | | |

Appendix II

Raw Data

SPSS

Demographic Respondent

Gender

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | Male | 63 | 39.9 | 39.9 | 39.9 |
| | Female | 95 | 60.1 | 60.1 | 100.0 |
| | Total | 158 | 100.0 | 100.0 | |

Department

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------|-----------|---------|---------------|--------------------|
| Valid | Audit | 28 | 17.7 | 17.7 | 17.7 |
| | Financial | 38 | 24.1 | 24.1 | 41.8 |
| | Account | 46 | 29.1 | 29.1 | 70.9 |
| | Administrative | 14 | 8.9 | 8.9 | 79.7 |
| | Other | 32 | 20.3 | 20.3 | 100.0 |
| | Total | 158 | 100.0 | 100.0 | |

Age

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------|-----------|---------|---------------|--------------------|
| Valid | < 25 year | 25 | 15.8 | 15.8 | 15.8 |
| | 25-35 year | 31 | 19.6 | 19.6 | 35.4 |
| | 36-45 year | 60 | 38.0 | 38.0 | 73.4 |
| | 46-55 year | 35 | 22.2 | 22.2 | 95.6 |
| | > 55 year | 7 | 4.4 | 4.4 | 100.0 |
| | Total | 158 | 100.0 | 100.0 | |

Race

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---------|-----------|---------|---------------|--------------------|
| Valid | Malay | 49 | 31.0 | 31.0 | 31.0 |
| | Chinese | 56 | 35.4 | 35.4 | 66.5 |
| | Indian | 46 | 29.1 | 29.1 | 95.6 |
| | Other | 7 | 4.4 | 4.4 | 100.0 |
| | Total | 158 | 100.0 | 100.0 | |

Religion

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | Islam | 42 | 26.6 | 26.6 | 26.6 |
| | Buddhist | 46 | 29.1 | 29.1 | 55.7 |
| | Christian | 35 | 22.2 | 22.2 | 77.8 |
| | Hindu | 28 | 17.7 | 17.7 | 95.6 |
| | Other | 7 | 4.4 | 4.4 | 100.0 |
| | Total | 158 | 100.0 | 100.0 | |

Level

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---------------|-----------|---------|---------------|--------------------|
| Valid | PhD | 7 | 4.4 | 4.4 | 4.4 |
| | Master | 29 | 18.4 | 18.4 | 22.8 |
| | Undergraduate | 94 | 59.5 | 59.5 | 82.3 |
| | Other | 28 | 17.7 | 17.7 | 100.0 |
| | Total | 158 | 100.0 | 100.0 | |

Factor Analysis Result – Principal Axis Factoring (PFA)

1) Service Quality (Perception)

KMO and Bartlett's Test

| | | |
|--|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .661 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 2114.151 |
| | df | 231 |
| | Sig. | .000 |

Rotated Component Matrix^a

| | Component | | | | |
|-----------|-----------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 |
| BP_REL_1 | .878 | | | | |
| BP_REL_2 | .976 | | | | |
| BP_REL_3 | .815 | | | | |
| BP_REL_4 | .833 | | | | |
| BP_REL_5 | .724 | | | | |
| BP_RES_6 | | | | .682 | |
| BP_RES_7 | | | | .872 | |
| BP_RES_8 | | | | .807 | |
| BP_RES_9 | | | | .761 | |
| BP_ASS_10 | | | .860 | | |
| BP_ASS_11 | | | .814 | | |
| BP_ASS_12 | | | .823 | | |
| BP_ASS_13 | | | .809 | | |
| BP_ASS_14 | | | .677 | | |
| BP_TAN_15 | | | | | .911 |
| BP_TAN_16 | | | | | .814 |
| BP_TAN_17 | | | | | .770 |
| BP_EMP_18 | | .792 | | | |
| BP_EMP_19 | | .932 | | | |
| BP_EMP_20 | | .866 | | | |
| BP_EMP_21 | | .887 | | | |
| BP_EMP_22 | | .607 | | | |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

b) Service Quality (Expectation)

KMO and Bartlett's Test

| | | |
|--|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .756 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 2183.316 |
| | Df | 231 |
| | Sig. | .000 |

Rotated Component Matrix^a

| | Component | | | | |
|-----------|-----------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 |
| BE_REL_1 | .908 | | | | |
| BE_REL_2 | .920 | | | | |
| BE_REL_3 | .887 | | | | |
| BE_REL_4 | .786 | | | | |
| BE_REL_5 | .854 | | | | |
| BE_RES_6 | | | | .849 | |
| BE_RES_7 | | | | .819 | |
| BE_RES_8 | | | | .858 | |
| BE_RES_9 | | | | .799 | |
| BE_ASS_10 | | | .826 | | |
| BE_ASS_11 | | | .884 | | |
| BE_ASS_12 | | | .754 | | |
| BE_ASS_13 | | | .845 | | |
| BE_ASS_14 | | | .826 | | |
| BE_TAN_15 | | | | | .909 |
| BE_TAN_16 | | | | | .817 |
| BE_TAN_17 | | | | | .738 |
| BE_EMP_18 | | .831 | | | |
| BE_EMP_19 | | .945 | | | |
| BE_EMP_20 | | .875 | | | |
| BE_EMP_21 | | .905 | | | |
| BE_EMP_22 | | .618 | | | |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Reliability Test for dependent and independent variable

1) Reliability (Perception)

Reliability Statistics

| | |
|------------------|------------|
| Cronbach's Alpha | N of Items |
| .866 | 5 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|----------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| BP_REL_1 | 14.1013 | 7.302 | .632 | .852 |
| BP_REL_2 | 14.0000 | 6.904 | .772 | .816 |
| BP_REL_3 | 13.9557 | 7.164 | .790 | .814 |
| BP_REL_4 | 14.4873 | 7.907 | .702 | .839 |
| BP_REL_5 | 14.2911 | 7.010 | .599 | .867 |

2) Responsiveness (Perception)

Reliability Statistics

| | |
|------------------|------------|
| Cronbach's Alpha | N of Items |
| .903 | 4 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|----------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| BP_RES_6 | 9.2595 | 6.792 | .826 | .858 |
| BP_RES_7 | 9.3101 | 6.457 | .787 | .875 |
| BP_RES_8 | 9.2911 | 6.679 | .743 | .892 |
| BP_RES_9 | 8.9747 | 7.885 | .830 | .873 |

3) Assurance (Perception)

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .916 | 5 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-----------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| BP_ASS_10 | 13.7468 | 11.681 | .754 | .904 |
| BP_ASS_11 | 13.9114 | 11.699 | .891 | .876 |
| BP_ASS_12 | 13.5823 | 12.156 | .781 | .898 |
| BP_ASS_13 | 13.7722 | 11.642 | .876 | .879 |
| BP_ASS_14 | 14.5063 | 12.532 | .645 | .926 |

4) Tangible (Perception)

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .930 | 3 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-----------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| BP_TAN_15 | 7.6772 | 4.386 | .872 | .884 |
| BP_TAN_16 | 7.5823 | 4.028 | .902 | .861 |
| BP_TAN_17 | 7.3987 | 4.993 | .804 | .939 |

5) Empathy (Perception)

Reliability Statistics

| | |
|------------------|------------|
| Cronbach's Alpha | N of Items |
| .955 | 5 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-----------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| BP_EMP_18 | 12.1392 | 16.286 | .897 | .941 |
| BP_EMP_19 | 12.4430 | 16.771 | .868 | .946 |
| BP_EMP_20 | 12.0253 | 16.331 | .900 | .940 |
| BP_EMP_21 | 12.1772 | 17.153 | .923 | .939 |
| BP_EMP_22 | 11.4430 | 15.293 | .830 | .957 |

6) Overall (Perception)

Reliability Statistics

| | |
|---------------------|------------|
| Cronbach's Alpha | N of Items |
| .971 | 22 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item- Total Correlation | Cronbach's Alpha if Item Deleted |
|-----------|-------------------------------|-----------------------------------|---|--|
| BP_REL_1 | 70.1456 | 277.628 | .661 | .970 |
| BP_REL_2 | 70.0443 | 276.043 | .743 | .970 |
| BP_REL_3 | 70.0000 | 278.064 | .732 | .970 |
| BP_REL_4 | 70.5316 | 278.480 | .828 | .970 |
| BP_REL_5 | 70.3354 | 277.944 | .576 | .971 |
| BP_RES_6 | 70.7342 | 272.400 | .739 | .970 |
| BP_RES_7 | 70.7848 | 268.616 | .773 | .969 |
| BP_RES_8 | 70.7658 | 266.219 | .851 | .969 |
| BP_RES_9 | 70.4494 | 278.580 | .719 | .970 |
| BP_ASS_10 | 70.1203 | 268.259 | .802 | .969 |
| BP_ASS_11 | 70.2848 | 269.008 | .893 | .968 |
| BP_ASS_12 | 69.9557 | 270.705 | .815 | .969 |
| BP_ASS_13 | 70.1456 | 271.208 | .798 | .969 |
| BP_ASS_14 | 70.8797 | 274.629 | .634 | .971 |
| BP_TAN_15 | 70.1013 | 266.920 | .797 | .969 |
| BP_TAN_16 | 70.0063 | 265.815 | .779 | .969 |
| BP_TAN_17 | 69.8228 | 272.644 | .698 | .970 |
| BP_EMP_18 | 70.8354 | 264.329 | .903 | .968 |
| BP_EMP_19 | 71.1392 | 269.242 | .785 | .969 |
| BP_EMP_20 | 70.7215 | 266.419 | .848 | .969 |
| BP_EMP_21 | 70.8734 | 270.226 | .840 | .969 |
| BP_EMP_22 | 70.1392 | 263.802 | .762 | .970 |

7) Reliability (Expectation)

Reliability Statistics

| | |
|---------------------|------------|
| Cronbach's Alpha | N of Items |
| .734 | 5 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item- Total Correlation | Cronbach's Alpha if Item Deleted |
|----------|-------------------------------|-----------------------------------|---|--|
| BE_REL_1 | 17.4367 | 2.732 | .610 | .651 |
| BE_REL_2 | 17.5949 | 2.637 | .469 | .700 |
| BE_REL_3 | 17.4367 | 2.642 | .675 | .628 |
| BE_REL_4 | 17.8924 | 2.912 | .293 | .774 |
| BE_REL_5 | 17.2848 | 2.702 | .516 | .680 |

8) Responsiveness (Expectation)

Reliability Statistics

| | |
|---------------------|------------|
| Cronbach's Alpha | N of Items |
| .851 | 4 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item- Total Correlation | Cronbach's Alpha if Item Deleted |
|----------|-------------------------------|-----------------------------------|---|--|
| BE_RES_6 | 9.0267 | 3.771 | .700 | .807 |
| BE_RES_7 | 8.9533 | 4.206 | .681 | .819 |
| BE_RES_8 | 8.9667 | 3.603 | .741 | .789 |
| BE_RES_9 | 9.0333 | 3.777 | .657 | .827 |

9) Assurance (Expectation)

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .890 | 5 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-----------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| BE_ASS_10 | 15.0333 | 5.657 | .703 | .872 |
| BE_ASS_11 | 14.9533 | 5.239 | .803 | .849 |
| BE_ASS_12 | 14.8933 | 5.693 | .652 | .884 |
| BE_ASS_13 | 14.8733 | 5.480 | .772 | .857 |
| BE_ASS_14 | 14.9133 | 5.368 | .732 | .866 |

10) Tangible (Expectation)

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .911 | 3 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-----------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| BE_TAN_15 | 8.0000 | 1.554 | .833 | .865 |
| BE_TAN_16 | 7.9367 | 1.346 | .824 | .879 |
| BE_TAN_17 | 7.7975 | 1.589 | .823 | .874 |

11) Empathy (Expectation)

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .688 | 5 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|-----------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| BE_EMP_18 | 16.6392 | 2.602 | .446 | .640 |
| BE_EMP_19 | 16.9241 | 2.606 | .638 | .554 |
| BE_EMP_20 | 16.6266 | 2.962 | .376 | .666 |
| BE_EMP_21 | 16.6709 | 2.490 | .588 | .568 |
| BE_EMP_22 | 16.1013 | 3.544 | .188 | .724 |

12) Overall Expectation

Reliability Statistics

| | |
|---------------------|------------|
| Cronbach's Alpha | N of Items |
| .844 | 22 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item- Total Correlation | Cronbach's Alpha if Item Deleted |
|-----------|-------------------------------|-----------------------------------|---|--|
| BE_REL_1 | 88.1646 | 37.922 | .489 | .835 |
| BE_REL_2 | 88.3228 | 38.118 | .344 | .840 |
| BE_REL_3 | 88.1646 | 37.208 | .610 | .831 |
| BE_REL_4 | 88.6203 | 36.823 | .497 | .834 |
| BE_REL_5 | 88.0127 | 36.981 | .560 | .832 |
| BE_RES_6 | 88.4810 | 39.181 | .223 | .845 |
| BE_RES_7 | 88.5316 | 37.728 | .418 | .837 |
| BE_RES_8 | 88.2215 | 38.033 | .362 | .839 |
| BE_RES_9 | 88.5633 | 37.713 | .411 | .837 |
| BE_ASS_10 | 88.1139 | 39.643 | .205 | .844 |
| BE_ASS_11 | 88.4620 | 37.906 | .385 | .838 |
| BE_ASS_12 | 88.4557 | 38.848 | .238 | .845 |
| BE_ASS_13 | 88.5253 | 36.480 | .591 | .830 |
| BE_ASS_14 | 88.2785 | 40.572 | .034 | .852 |
| BE_TAN_15 | 88.7722 | 36.827 | .529 | .832 |
| BE_TAN_16 | 88.7089 | 37.138 | .406 | .838 |
| BE_TAN_17 | 88.5696 | 37.113 | .499 | .834 |
| BE_EMP_18 | 88.5380 | 37.486 | .370 | .839 |
| BE_EMP_19 | 88.8228 | 37.319 | .505 | .834 |
| BE_EMP_20 | 88.5253 | 37.729 | .414 | .837 |
| BE_EMP_21 | 88.5696 | 34.960 | .756 | .822 |
| BE_EMP_22 | 88.0000 | 40.038 | .150 | .846 |

13) Loyalty

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .940 | 4 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| D_LOY_1 | 8.8608 | 8.388 | .918 | .904 |
| D_LOY_2 | 8.9304 | 7.798 | .852 | .928 |
| D_LOY_3 | 9.3228 | 9.226 | .859 | .926 |
| D_LOY_4 | 9.0000 | 8.229 | .834 | .931 |

Descriptive Analyze

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|-----|---------|---------|--------|----------------|
| BP_REL_MEAN | 158 | 2.20 | 4.60 | 3.5418 | .66248 |
| BP_RES_MEAN | 158 | 1.50 | 5.00 | 3.0696 | .86505 |
| BP_ASS_MEAN | 158 | 1.80 | 4.80 | 3.4759 | .85499 |
| BP_TAN_MEAN | 158 | 1.33 | 5.00 | 3.7764 | .93884 |
| BP_EMP_MEAN | 158 | 1.20 | 4.40 | 2.8987 | .90343 |
| BE_REL_MEAN | 158 | 3.80 | 5.00 | 4.3823 | .39960 |
| BE_RES_MEAN | 158 | 3.50 | 5.00 | 4.1899 | .32225 |
| BE_ASS_MEAN | 158 | 3.60 | 4.80 | 4.2722 | .33876 |
| BE_TAN_MEAN | 158 | 3.00 | 5.00 | 3.9557 | .59854 |
| BE_EMP_MEAN | 158 | 3.20 | 5.00 | 4.1481 | .40581 |
| C_SAT | 158 | 2.00 | 5.00 | 3.6203 | .77054 |
| LOY_MEAN | 158 | 1.25 | 4.75 | 3.0095 | .95724 |
| Valid N (listwise) | 158 | | | | |

Non-Response Bias

Paired Samples Test

| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---------|-----------------------------|--------------------|---------|--------|---|----------------|--------|----|-----------------|
| | | | | | 95% Confidence Interval of the Difference | | | | |
| | | | | | Mean | Std. Deviation | | | |
| Pair 1 | REL_B65 - REL_A65 | .00462 | .68201 | .08459 | -.16438 | .17361 | .055 | 64 | .957 |
| Pair 2 | RES_B65 - RES_A65 | .00954 | .79872 | .09907 | -.18838 | .20745 | .096 | 64 | .924 |
| Pair 3 | ASS_B65 - ASS_A65 | .02000 | .80296 | .09960 | -.17896 | .21896 | .201 | 64 | .841 |
| Pair 4 | TAN_B65 - TAN_A65 | .00523 | .87958 | .10910 | -.21272 | .22318 | .048 | 64 | .962 |
| Pair 5 | EMP_B65 - EMP_A65 | -.12462 | .77420 | .09603 | -.31645 | .06722 | -1.298 | 64 | .199 |
| Pair 6 | SAT_B65 - SAT_A65 | .00000 | .82916 | .10284 | -.20545 | .20545 | .000 | 64 | 1.000 |
| Pair 7 | LOY_B65 - LOY_A65 | -.01538 | 1.10739 | .13736 | -.28978 | .25901 | -.112 | 64 | .911 |
| Pair 8 | GENDER_B65 - GENDER_A65 | -.01538 | .83838 | .10399 | -.22313 | .19236 | -.148 | 64 | .883 |
| Pair 9 | DEPART_B65 - DEPART_A65 | -.03077 | 1.74077 | .21592 | -.46211 | .40057 | -.143 | 64 | .887 |
| Pair 10 | AGE_B65 - AGE_A65 | .00000 | 1.57123 | .19489 | -.38933 | .38933 | .000 | 64 | 1.000 |
| Pair 11 | RACE_B65 - RACE_A65 | -.01538 | 1.13870 | .14124 | -.29754 | .26677 | -.109 | 64 | .914 |
| Pair 12 | RELIGION_B65 - RELIGION_A65 | .01538 | 1.57611 | .19549 | -.37516 | .40593 | .079 | 64 | .938 |
| Pair 13 | LEVEL_B65 - LEVEL_A65 | .00000 | .98425 | .12208 | -.24389 | .24389 | .000 | 64 | 1.000 |
| Pair 14 | AVERAGE_B65 - AVERAGE_A65 | -.01129 | .42396 | .05259 | -.11634 | .09376 | -.215 | 64 | .831 |

Hypothesis 1 -different SERQVUAL gap

a) Mean of dimension independent variable

| Descriptive Statistics | | | | | |
|------------------------|-----|---------|---------|--------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| BP_REL_MEAN | 158 | 2.20 | 4.60 | 3.5418 | .66248 |
| BP_RES_MEAN | 158 | 1.50 | 5.00 | 3.0696 | .86505 |
| BP_ASS_MEAN | 158 | 1.80 | 4.80 | 3.4759 | .85499 |
| BP_TAN_MEAN | 158 | 1.33 | 5.00 | 3.7764 | .93884 |
| BP_EMP_MEAN | 158 | 1.20 | 4.40 | 2.8987 | .90343 |
| BE_REL_MEAN | 158 | 3.80 | 5.00 | 4.3823 | .39960 |
| BE_RES_MEAN | 158 | 3.50 | 5.00 | 4.1899 | .32225 |
| BE_ASS_MEAN | 158 | 3.60 | 4.80 | 4.2722 | .33876 |
| BE_TAN_MEAN | 158 | 3.00 | 5.00 | 3.9557 | .59854 |
| BE_EMP_MEAN | 158 | 3.20 | 5.00 | 4.1481 | .40581 |
| Valid N (listwise) | 158 | | | | |

b) Paired t-test

Paired Samples Test

| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|--------|---------------------------|--------------------|----------------|-----------------|---|----------|---------|-----|-----------------|
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | | Lower | Upper | | | |
| Pair 1 | BP_REL_MEAN - BE_REL_MEAN | -.84051 | .51956 | .04133 | -.92215 | -.75886 | -20.335 | 157 | .000 |
| Pair 2 | BP_RES_MEAN - BE_RES_MEAN | -1.12025 | .70526 | .05611 | -1.23108 | -1.00943 | -19.966 | 157 | .000 |
| Pair 3 | BP_ASS_MEAN - BE_ASS_MEAN | -.79620 | .74405 | .05919 | -.91312 | -.67928 | -13.451 | 157 | .000 |
| Pair 4 | BP_TAN_MEAN - BE_TAN_MEAN | -.17932 | .95670 | .07611 | -.32966 | -.02899 | -2.356 | 157 | .020 |
| Pair 5 | BP_EMP_MEAN - BE_EMP_MEAN | -1.24937 | .78641 | .06256 | -1.37294 | -1.12579 | -19.970 | 157 | .000 |

Hypothesis 2 – service quality and customer satisfaction

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .649 ^a | .607 | .600 | .22815 |

a. Predictors: (Constant), EMP_MEAN, TAN_MEAN, REL_MEAN, RES_MEAN, ASS_MEAN

ANOVA^a

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|-----|-------------|---------|-------------------|
| 1 Regression | 85.303 | 5 | 17.061 | 327.754 | .000 ^b |
| Residual | 7.912 | 152 | .052 | | |
| Total | 93.215 | 157 | | | |

a. Dependent Variable: C_SAT

b. Predictors: (Constant), EMP_MEAN, TAN_MEAN, REL_MEAN, RES_MEAN, ASS_MEAN

Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--------------|-----------------------------|------------|---------------------------|---------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | -2.042 | .154 | | -13.267 | .000 |
| REL_MEAN | .652 | .065 | .407 | 10.004 | .000 |
| RES_MEAN | 1.049 | .057 | .748 | 18.277 | .000 |
| ASS_MEAN | .166 | .070 | .115 | 2.375 | .019 |
| TAN_MEAN | -.310 | .041 | -.282 | -7.644 | .000 |
| EMP_MEAN | -.048 | .045 | -.036 | -1.065 | .289 |

a. Dependent Variable: C_SAT

Hypothesis 3 – service quality and customer loyalty

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .872 ^a | .761 | .753 | .47579 |

a. Predictors: (Constant), EMP_MEAN, TAN_MEAN, REL_MEAN, RES_MEAN, ASS_MEAN

ANOVA^a

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|-----|-------------|--------|-------------------|
| 1 Regression | 109.452 | 5 | 21.890 | 96.699 | .000 ^b |
| Residual | 34.409 | 152 | .226 | | |
| Total | 143.861 | 157 | | | |

a. Dependent Variable: LOY_MEAN

b. Predictors: (Constant), EMP_MEAN, TAN_MEAN, REL_MEAN, RES_MEAN, ASS_MEAN

Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | -3.178 | .321 | | -9.900 | .000 |
| REL_MEAN | .520 | .136 | .310 | 4.147 | .000 |
| RES_MEAN | .345 | .120 | .198 | 2.887 | .004 |
| ASS_MEAN | .595 | .145 | .332 | 4.094 | .000 |
| TAN_MEAN | .280 | .085 | .205 | 3.314 | .001 |
| EMP_MEAN | .415 | .094 | .251 | 4.414 | .000 |

a. Dependent Variable: LOY_MEAN

Hypothesis 4 – customer satisfaction and customer loyalty

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .730 ^a | .533 | .530 | .65601 |

a. Predictors: (Constant), C_SAT

ANOVA^a

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|-----|-------------|---------|-------------------|
| 1 Regression | 76.726 | 1 | 76.726 | 178.287 | .000 ^b |
| Residual | 67.135 | 156 | .430 | | |
| Total | 143.861 | 157 | | | |

a. Dependent Variable: LOY_MEAN

b. Predictors: (Constant), C_SAT

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -.275 | .251 | | -1.094 | .276 |
| | C_SAT | .907 | .068 | .730 | 13.352 | .000 |

a. Dependent Variable: LOY_MEAN

Hypothesis 5 – service quality, customer satisfaction and customer loyalty

1) Model 1

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .649 ^a | .607 | .600 | .22815 |

a. Predictors: (Constant), EMP_MEAN, TAN_MEAN, REL_MEAN, RES_MEAN, ASS_MEAN

ANOVA^a

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|-----|-------------|---------|-------------------|
| 1 Regression | 85.303 | 5 | 17.061 | 327.754 | .000 ^b |
| Residual | 7.912 | 152 | .052 | | |
| Total | 93.215 | 157 | | | |

a. Dependent Variable: C_SAT

b. Predictors: (Constant), EMP_MEAN, TAN_MEAN, REL_MEAN, RES_MEAN, ASS_MEAN

Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--------------|-----------------------------|------------|---------------------------|---------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | -2.042 | .154 | | -13.267 | .000 |
| REL_MEAN | .652 | .065 | .407 | 10.004 | .000 |
| RES_MEAN | 1.049 | .057 | .748 | 18.277 | .000 |
| ASS_MEAN | .166 | .070 | .115 | 2.375 | .019 |
| TAN_MEAN | -.310 | .041 | -.282 | -7.644 | .000 |
| EMP_MEAN | -.048 | .045 | -.036 | -1.065 | .289 |

a. Dependent Variable: C_SAT

Model 2

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .872 ^a | .761 | .753 | .47579 |

a. Predictors: (Constant), EMP_MEAN, TAN_MEAN, REL_MEAN, RES_MEAN, ASS_MEAN

ANOVA^a

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|-----|-------------|--------|-------------------|
| 1 Regression | 109.452 | 5 | 21.890 | 96.699 | .000 ^b |
| Residual | 34.409 | 152 | .226 | | |
| Total | 143.861 | 157 | | | |

a. Dependent Variable: LOY_MEAN

b. Predictors: (Constant), EMP_MEAN, TAN_MEAN, REL_MEAN, RES_MEAN, ASS_MEAN

Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | -3.178 | .321 | | -9.900 | .000 |
| REL_MEAN | .520 | .136 | .310 | 4.147 | .000 |
| RES_MEAN | .345 | .120 | .198 | 2.887 | .004 |
| ASS_MEAN | .595 | .145 | .332 | 4.094 | .000 |
| TAN_MEAN | .280 | .085 | .205 | 3.314 | .001 |
| EMP_MEAN | .415 | .094 | .251 | 4.414 | .000 |

a. Dependent Variable: LOY_MEAN

2) Model 3

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .730 ^a | .533 | .530 | .65601 |

a. Predictors: (Constant), C_SAT

ANOVA^a

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|-----|-------------|---------|-------------------|
| 1 Regression | 76.726 | 1 | 76.726 | 178.287 | .000 ^b |
| Residual | 67.135 | 156 | .430 | | |
| Total | 143.861 | 157 | | | |

a. Dependent Variable: LOY_MEAN

b. Predictors: (Constant), C_SAT

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -.275 | .251 | | -1.094 | .276 |
| | C_SAT | .907 | .068 | .730 | 13.352 | .000 |

a. Dependent Variable: LOY_MEAN

3) Model 4

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .873 ^a | .762 | .753 | .47597 |

a. Predictors: (Constant), C_SAT, TAN_MEAN, EMP_MEAN, REL_MEAN, ASS_MEAN, RES_MEAN

ANOVA^a

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|-----|-------------|--------|-------------------|
| 1 Regression | 109.652 | 6 | 18.275 | 80.669 | .000 ^b |
| Residual | 34.209 | 151 | .227 | | |
| Total | 143.861 | 157 | | | |

a. Dependent Variable: LOY_MEAN

b. Predictors: (Constant), C_SAT, TAN_MEAN, EMP_MEAN, REL_MEAN, ASS_MEAN, RES_MEAN

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -2.852 | .472 | | -6.047 | .000 |
| | REL_MEAN | -.084 | .175 | -.042 | -.479 | .633 |
| | RES_MEAN | .178 | .214 | .102 | .834 | .000 |
| | ASS_MEAN | .569 | .148 | .317 | 3.841 | .000 |
| | TAN_MEAN | .330 | .100 | .241 | 3.312 | .001 |
| | EMP_MEAN | .423 | .094 | .256 | 4.477 | .000 |
| | C_SAT | .159 | .169 | .128 | .941 | .000 |

a. Dependent Variable: LOY_MEAN