THE INFULENCE OF SERVCE QUALITY FACTORS ON CUSTOMER SATISFACTION AND DRINKING WATER QUALITY IN SYARIKAT BEKALAN AIR SELANGOR (SYABAS)

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**Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
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ABSTRACT

This research study develops a framework measuring the level of customer satisfaction through SERQUAL and drinking water quality at Syarikat Bekalan Air Selangor (SYABAS). The level of customer satisfaction is important for water conservation that complements existing supply and demand water management regimes. This study sets out to investigate the relationships among service quality, customer satisfaction, and corporate image to this Water industry.The study on customer satisfaction approach aims to achieve sustainability by changing how individuals think about water services and how water is provided to customers. The framework of indicators consists of qualitative descriptions of elements that should be present in SYABAS to successfully measure the level of satisfaction. These indicators fit into five themes level of customer satisfaction, customer experience, relationship among staff and customer, quality of works and the level of accountable. These indicators are also applied to evaluate the level of satisfaction of a case study (Kuala Lumpur, Petaling, Gombak and Hulu Langat) for its potential to measure the level of satisfaction towards water industry. The case study is compatible and equipped to measure and identify what does the customers feels and experienced through the quality of works provided by Syarikat Bekalan Air Selangor Sdn Bhd.

Keywords: SERQUAL, Customer Satisfaction, Drinking Water Quality SYABAS Kuala Lumpur,   Petaling, Gombak and Hulu Langat and customers.

ABSTRAK

Kajian penyelidikan membangunkan rangka kerja mengukur tahap kepuasan pelanggan melalui SERQUAL dan kualiti air minum di SYARIKAT Bekalan Air Selangor (SYABAS). Tahap kepuasan pelanggan adalah penting untuk pemuliharaan air yang melengkapkan bekalan yang sedia ada dan rejim pengurusan air permintaan. Kajian ini menetapkan untuk menyiasat hubungan antara kualiti perkhidmatan, kepuasan pelanggan, dan imej korporat kepada industri air ini.Kajian mengenai pendekatan kepuasan pelanggan bertujuan untuk mencapai kemampanan dengan menukar bagaimana individu berfikir tentang perkhidmatan air dan bagaimana air yang diberikan kepada pelanggan. Rangka kerja penunjuk terdiri daripada huraian kualitatif elemen-elemen yang perlu hadir dalam SYABAS berjaya mengukur tahap kepuasan. Penunjuk ini dimuatkan ke dalam lima tema tahap kepuasan pelanggan, pengalaman pelanggan, hubungan di kalangan kakitangan dan pelanggan, kualiti kerja dan tahap bertanggungjawab.Petunjuk ini juga digunakan untuk menilai tahap kepuasan bagi kajian kes (Kuala Lumpur, Petaling, Gombak dan Hulu Langat) untuk potensi untuk mengukur tahap kepuasan terhadap industri air. Kajian kes adalah serasi dan dilengkapi bagi mengukur dan mengenalpasti apakah yang pelanggan merasa dan mengalami melalui kualiti kerja-kerja yang disediakan oleh Syarikat Bekalan Air Selangor (SYABAS).

Kunci- kata : SERQUAL, Kepuasan Pelanggan, Kualiti Air Minum SYABAS Kuala Lumpur, Petaling, Gombak dan Hulu Langat dan pelanggan.

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

This study is regarding the relationship between service quality and customer satisfaction at SYABAS (Kuala Lumpur, Gombak, Petaling and Hulu langat. The researcher interested to study the "gap" between the customer's expectations of service and their perceptions of actual service performance at the water works. While there exist a large number of studies on commercial service quality, very few researchers have been preoccupied with the measurement of water service quality. Water services differ from commercial services with respect to some important characteristics. First, water services often enjoy a natural monopoly within a specific region. This implies that the users of such services often have to accept the level of prices and service quality offered. Second, water services involve a principal / contractor problem. While the water authority (principal) that subsidizes a water services may wish a high service quality standard, the company (agent) delivering the services may be less concerned about services quality in order to pursuit other objectives. This involves problems for the principal in monitoring the services quality level offered.

The trend of world markets has changed noticeably from agricultural to service markets (Asian Development Outlook, 2007). All of the service businesses are trying their best to improve their service quality in order to make customers satisfied with their

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services, especially in water works. Water works department now focus more on the quality standards in order to meet the basic needs and expectations of the customers. Once customers& requirements are clearly identified and understood, customer service officers are more likely to anticipate and fulfill their customers& needs and wants. The more satisfied the customers are, the more likely they are to return or prolong their corporate image.

At present, SYABAS has received several complaints from media and from the public regarding the service delivered. Customer satisfaction is highest priority for SYABAS. Customer service staffs are considered a supporting factor in determining customer satisfaction when deciding to return, to recommend the SYABAS, or in demonstrating loyalty to a particular business.

As mentioned above, service quality was determined as the subjective comparison that customers make between their expectations about a service and the perception of the way the service has been run. Parasuraman et al. (1985) defined service quality as; a function of the differences between expectation and performance along ten major dimensions. In later research, Parasuraman et al. (1988) revised and defined the service quality in terms of five dimensions: tangibility, reliability, responsiveness, assurance, and empathy. For example, Min and Min (1997) presented the idea that customer service officers have the attributes that are considered most important, particularly in forming the following impressions of service quality; tangibility (how well the SYABAS staff are dressed); reliability (ability to resolve

problems encountered by customers); responsiveness (convenience of making the reports, promptness of checking bills, guide information about water works); assurance (security and safety of customers in term water quality); & empathy (caring and individualized attention).

As mentioned earlier, a greater number of satisfied customers will make the SYABAS business more successful and more profitable. This study identified five factors of service quality by focusing on SYABAS, and explored the customers& expectations and perception levels of these services. The results of this quantitative assessment of service quality might provide some insights into how customers rate the service quality and assessed customers& satisfactions at Syarikat Bekalan Air Selangor.

Quality and customer satisfaction have long been recognized as playing a crucial role for success and survival in today's competitive market. Not surprisingly, considerable research has been conducted on these two concepts. Notably, the service quality and customer satisfaction concept have been linked to customer behavioral.

This paper is organized as follows: First the researcher discusses conceptualization of service quality, customer satisfaction and drinking water quality. Next, the researcher presents the empirical results from a study of a water industry in Syarikat Bekalan Air Selangor (SYABAS).

1.2 Background of the Organization

Syarikat Bekalan Air Selangor Sdn Bhd or better known as SYABAS was incorporated on 8 July 1996 under the Malaysian Companies Act, 1965 to undertake the privatization of water supply services in the State of Selangor and the Federal Territories of Kuala Lumpur and Putrajaya ('the Privatization').

SYABAS is an entity specifically incorporated for use as an implementation vehicle in respect to the privatization of the water supply and distribution systems in Selangor and Federal Territories of Kuala Lumpur and Putrajaya.

SYABAS was appointed by the State and Federal Governments to upgrade and enhance the water supply system and services in the State of Selangor under the Privatization concept in view of the previous management's financial constraint, ineffective management, poor water quality standards and inconsistent supply of treated water.

SYABAS was granted a concession by the Federal Government and the Selangor State Government to manage, operate and distribute quality clean water for a period of thirty years, commencing on 1st January 2005.

As the biggest water concessionaire in Malaysia, SYABAS was developed by a visionary entrepreneur who is backed by a team of professional, dedicated and skillful management with a penchant for innovation in excellent customer services as well as reshaping the landscape of the local utility industry.

The authorized share capital of SYABAS is RM100, 000,000.00 comprising 93,449,999 ordinary shares of RM1.00 each, one (1) Golden Share of RM1.00 and 655,000,000 redeemable cumulative preference shares ("RPS") of RM0.01 each, while the paid-up share capital of SYABAS is RM71, 550,001.00 comprising 65,000,000 ordinary shares of RM1.00 each, 655,000,000 RPS of RM0.01 each and one (1) Golden Share of RM1.00.

The shareholders of SYABAS are Puncak Niaga Holdings Berhad ("PNHB") holding 70% of the total equity shareholding in SYABAS, 15% equity shareholding held by Kumpulan Darul Ehsan Berhad ("KDEB") and the remaining 15% held by Kumpulan Perangsang Selangor Berhad ("KPS"). The Federal Government ("Government") through the Minister of Finance, Incorporated ("MOF") holds one (1) Golden Share in SYABAS.

It is anticipated that the State of Selangor Darul Ehsan and the Federal Territories of Kuala Lumpur and Putrajaya will continue to be a center of economic growth and thereby, the water demand in the states would continue to grow steadily. The current situation also provides opportunities for the PNHB Group to enhance the overall efficiency of the water industry in particular to reduce the high non-revenue water losses level and uplift the standard of service.

In line with its 'Customer First Policy', SYABAS has set up a Customer Service Centre (PUSPEL) to better service the consumers. PUSPEL is operational 24 hours and receives, Manages and resolves all consumers' complaints and queries in relation to water supply, water quality, water bills, water disruption, etc. Consumers can either

contact PUSPEL at the toll free line 1 800 88 5252 or send their complaints and enquiries via fax to 03- 2295 5168 or email to puspel@syabas.com.my.

The Contact Centre which is the nerve of PUSPEL operates 24/7 and one stop Centre basis. The unit is equipped with 60 qualified and well trained Call Centre Agents (CCA), telephony facilities with voice logger and automated call distribution (ACD) capabilities and PIVOTAL, call logging systems which provide focal interaction point between consumers and general public with SYABAS.

Domestic consumers classified under tariff code 10 ,17,18 and 21(domestic – BULK).Based on latest update from billing department of SYABAS on month of January 2013, total numbers of (Active + Disconnect) is mentioned as below:

TARIF	Dec -10	Dec-11	Dec-12	Jan-13
10 Domestic	1464528	1512801	1566231	1572970
17 Condominium	1309	1281	1667	1689
18 Apartment	902	868	815	815
21 Domestic-BULK	107	124	185	185

Table 1.1: Domestic active consumer at SYABAS.

1.3 Problem Statement

The purpose of the study is to identify the demographic profile of customers who as an individual domestic account with SYABAS at District (Kuala Lumpur, Petaling, Hulu Langat, and Gombak) measure the satisfaction level that gain from service provide by SYABAS. In addition, to further identify consumers' perceptions toward "To be the leading Water provider of Quality". Moreover to identify Promises made by SYABAS in providing excellent services to the consumers, especially through its Standard level of water quality, thereby learning and addressing the gap between what is promised and what is actually served in SYABAS.

Recently SYABAS has faced allot of negative perception from the consumer and media side. According to schedule disruption listed in SYABAS, area such as Kuala Lumpur, Gombak, Petaling and Hulu Langat is the major district which always troublesome by the water disruption and have large number of water accounts with SYABAS. Most of those district frequently affected by breakdown such as pipe burst and reservoir failure .Normally this kind of breakdown will took frame work of 1 month disruption and those affected area will be supply water by water tanker day and night.

Once there is a water breakdown the numbers of calls received by PUSPEL staff (contact Centre) will exceed to 4000 calls per day. Most of the SYABAS consumer   is well known about facilities provide by SYABAS and they fully utilized it when there is a disruption in area. (*Communicate the SYABAS staff through hotline: 1800-88-5252, SMS: 39222, email: puspel@syabas.com.my or via Facebook & twitter*)

Besides that, SYABAS also received complaints on drinking water quality. The numbers of complaints on drinking water quality will increase during the major pipe burst breakdown or reservoir shutdown. Customers are eager to know whether the water supplied by SYABAS is safe to drink and is not discolored.

1.4 Research Objectives

In conducting this research, the researcher had the following objective:

RO1: To examine the level of service quality at SYABAS (Kl, Gombak, Petaling & Hulu Langat)?

RO2: To evaluate the level of water quality at SYABAS (Kl, Gombak, Petaling & Hulu Langat)?

RO3: To determine the level of customer satisfaction at SYABAS (Kl, Gombak, Petaling & Hulu Langat)?

RO4: To investigate the relationship between service quality and customer satisfaction at SYABAS (Kl, Gombak, Petaling & Hulu Langat)?

1.5 Research Question

Specifically, this study addressed the following research questions:

RQ1: What is the level of service quality implemented at SYABAS (Kl, Gombak, Petaling & Hulu Langat)?

RQ2: What is the level of water quality provided by SYABAS (Kl, Gombak, Petaling & Hulu Langat)?

RQ3: What is the level of customer satisfaction towards service provided by SYABAS (Kl, Gombak, Petaling & Hulu Langat)?

RQ4: Is there any relationship between service quality and customer satisfaction at SYABAS (Kl, Gombak, Petaling & Hulu Langat)?

1.6 Significance of Study

The study is all about the measurement or service quality and product quality of SYABAS among customers perception. It is important to the organization to identify the level of customer satisfaction provided by SYABAS.A good feedback form customer's side will provide better improvement in service level in SYABAS. Customers need to be comfortable with the service provided by SYABAS to ensure that the organization followed according to the standard procedure.

This research also to ensure that SYABAS is more accountable in providing its services and also accountable to answer and provide explanation concerning its performance. The reason to this study is to identify set of dimensions in service quality that would be measurement of customer satisfaction.

The researcher also wants to contribute to the body of knowledge especially in the relationship between service quality and customer satisfaction. This study also will contribute to the improvement of the research, understanding of the theory and practice about SERVQUAL (Parasuraman, Zeithaml, & Berry, 1988).

Lastly, the researcher hopes this research can be as a reference by other researcher's in the future on water industry.

1.7 Limitation of the study

There are some limitations faced by researcher during the process of study. This study mainly focused on measuring domestic customer satisfaction with SYABAS (KUALA LUMPUR, PETALING, GOMBAK AND HULU LANGAT) service quality and product quality. . The respondents involved in this study were only the domestic customers. Are essential other customers of SYABAS that were not included in the scope of the present research. When the questionnaires were distributed to the respondents, it was difficult to collect the data in time. Some customers refused to participate in this survey. If the respondents were more willing to offer feedback, the results would have been useful for improving SYABAS service. The respondents in this

study included limitation 384 customers at the SYABAS, if the subjects were drawn more than 384 respondents from other types of customers, the result would be more generalized.

1.8 Definition of terms

Syarikat Bekalan Air Selangor Bhd (SYABAS)

SYABAS is stand for Syarikat Bekalan Air Selangor Sdn Bhd (SYABAS). SYABAS is anticipated that the State of Selangor Darul Ehsan and the Federal Territories of Kuala Lumpur and Putrajaya will continue to be a center of economic growth and thereby, the water demand in the states would continue to grow steadily.

Service Quality (SERVQUAL = SQ)

Zeithamal, Parasuraman and Berry defined service quality (SQ) as a topic for exploratory research study as early as in 1983 (Zeithamal, Parasuraman and Berry, 1990) and their study advanced important contributions to latter studies of service quality. They define service quality as the extent of discrepancy between customer's expectation or desires of services and their perception of the service they actually receive. Their cross sectional model (SERVQUAL) primarily a model to identify and measure service quality gaps, and it contained 10 original dimensions for evaluating service quality (Zeithamal, Parasuraman and Berry, 1990).

Tangibles

Tangibles are the appearance of physical facilities, equipment, personnel and communication materials used (Parasuraman et al., 1985).

Reliability

Reliability is the ability to perform the proposed service dependably and accurately. This includes such qualities as dependability, consistency, accuracy and "right first time" (Zeithaml et al., 1990).

Responsiveness

Responsiveness includes helpfulness, friendliness, warmth, willingness and openness (Zeithaml et al., 1990).

Assurance

It means the employees' knowledge, courtesy and ability to convey trust and confidence (Parasuraman & Zeithaml, 1988).

Empathy

Empathy is the caring individualized attention the firm provided to customers includes the approachability and ease of contact with the service providers and their efforts to understand the customer's needs (Parasuraman et al., 1985).

Degree of Customer Satisfaction (CS)

Customer satisfaction is determined by the overall feelings or attitude, a person has about a product after it has been purchased (Solomon et al., 1999). Customer satisfaction can thus be seen as an overall belief regarding a service transaction.

Previous research has suggested that service quality and customer satisfaction are distinct concepts (Oliver 1997: Taylor and Baker, 1994) and that there is a causal relationship between the two (Cronin and Taylor, 1992: Gotlieb et.al 1994: Spreng and Mackoy, 1996).

<u>Drinking water quality</u>

The quality of drinking-water is a powerful environmental determinant of health. Assurance of drinking-water safety is a foundation for the prevention and control of waterborne diseases. "Water quality" is a technical term that is based upon the characteristics of water in relation to guideline values of what is suitable for human consumption and for all usual domestic purposes, including personal hygiene. Components of water quality include microbial, biological, chemical, and physical aspects.

1.9 Summary

Introduction part consists of several sections. These include background of the study, statement of the problem, research objectives, and research questions, significance of the study, limitation of the study and definition of terms.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Kotler (1996) defined customer satisfaction as ' the level of a person's felt state resulting from comparing a products perceived performance or outcome in violation to his or her own expectation'. So customer satisfaction could be considered a comparative behavior between inputs beforehand and post obtainments. As the study focused on influence customers satisfaction towards level of service quality, customer satisfaction is defined as ' the levels of service quality performance that meets users expectation'. Westbrook (1980) suggested that future researchers propose multi items scale for measuring customer satisfaction, lowering measurement errors and improving the scale reliability at the same time. Sureshchandar et al. (2002) pointed out that customer satisfaction should be viewed a multi-dimensional construct and the measurement items should be generated with the same dimension of service quality.

According to University of Wisconsin Writing Center literature review defined as Critical analysis of a segment of a published body of knowledge through summary, classification, and comparison of prior research studies, reviews of literature, and theoretical articles. This chapter reviews the literature in three main areas: (1) previous studies and (2) Hypothesis and (3) Terms.

2.2 Customer Satisfaction

Rust & Oliver (1994) suggest that customer satisfaction or dissatisfaction as a "cognitive or affective reaction" that emerges as a response to a single or prolonged set of service encounters. Satisfaction is a "post consumption" experience which compares perceived quality with expected quality, whereas service quality refers to a global evaluation of a firm's service delivery system (Anderson & Fornell, 1994).

Service quality and customer satisfaction are inarguably the two core concepts that are at the crux of the marketing theory and practice. In today's world of intense competition, the key to sustainable competitive advantage lies in delivering high quality service that will in turn result in satisfied customers. The prominence of these two concepts is further manifested by the cornucopia of theoretical and empirical studies on the topic that have emanated over the past few years (Sureshchandar et al., 2002). Therefore, there is not even an iota of doubt concerning the importance of service quality and customer satisfaction as the ultimate goals of service providers (Sureshchandar et al., 2002).

Perceptions of service quality could occur at multiple levels in an organization, for example with the core service, physical environment, interaction with the service providers and et cetera (Bitner & Hubert, 1994). On the other hand, the customer's overall satisfaction with the services of the organization is based on (or a function of) all encounters/experiences of the customers with that organization. Similar to service quality, customer satisfaction can occur at multiple levels in an organization, e.g.

satisfaction with the contact person, satisfaction with the core service and satisfaction with the organization as a whole (Sureshchandar et al., 2002).

From this expectancy-confirmation/disconfirmation point-of-view, customer satisfaction happens in the case of a buyer's post-evaluation of a specific purchase experience (or experiences), contingent upon the buyer's quality perceptions and expectations, and confirmation/disconfirmation – the discrepancy between actual and expected quality (Yi, 1991). Customer satisfaction has generally been suggested to contain two such different dimensions as a transaction-specific evaluation approach and an overall, cumulative evaluation approach. That is, there exist two general conceptualizations of customer satisfaction in the literature (Anderson and Fornell 1993; Boulding et al. 1993; Yi, 1991).

Prior research has portrayed customer satisfaction as transaction-specific. Using this framework, customer satisfaction is seen as a post-consumption evaluative judgment of a particular purchase experience or activity (Bearden and Teel 1983; Cronin and Taylor 1992; Oliver 1980, 1993; Oliver and DeSarbo 1988). The theoretical rationale behind this framework is a variation of the expectancy-confirmation/disconfirmation paradigm (Prakash 1984; Oliver and Swan 1989).

One of the most important recent aspects of this customer satisfaction metric is that academics (Anderson 1994; Anderson and Sullivan 1993; Bryant and Cha 1996; Fornell 1992; Fornell and Johnson 1993; Fornell et al. 1996; Homburg and Giering 2001; Johnson and Fornell 1991; Mittal and Kamakura 2001) identify differences in

Customer satisfaction across individual customers and competitive settings (product or service categories and firms). For example, Bryant and Cha (1996) highlight the effects of such customer characteristics as age, gender, income, and education on levels of customer satisfaction. In addition to customer characteristics, industry characteristics (industry or category concentration and industry type) are shown to affect customer satisfaction levels.

2.3 Service Quality

The research literature of service quality has identified numerous models by different researchers across the world. Service quality has been defined as customers' overall impressions of an organization's services in terms of relative superiority or inferiority (Johnston, 1995). Further, service quality is considered to not only meet but to exceed customer expectations, and should include a continuous improvement process (Lloyd-Walker & Cheung, 1998).However, the SERVQUAL instrument (Parasuraman et al., 1988), a 22-item scale that measures service quality along five factors, namely reliability, responsiveness, assurance, empathy and tangibles, forms the foundation on which majority of other works have been built. In spite of such reprehension on the efficacy of SERVQUAL across different service settings, there is a general agreement that the 22 items are reasonably good predictors of service quality in its wholeness (Parasuraman et al., 1988).

In traditional quality model (Parasuraman et al., 1988), quality is supposed to precede customer satisfaction. Perceived service quality has been defined by several researchers, but one of the most accepted definitions explains perceived quality as the difference between expectations and actual performance (Groonroos, 1982; Parasuraman et al., 1988). Quality can also be viewed as an overall judgment of the superiority or excellent of a product (Zeithaml, 1988).

From managerial perspective, service quality assist managers in identifying the importance of ensuring that efforts are made to "get the service right the first time" and to "meet or exceed customer expectations in the delivery of the service" (McDougall & Levesque, 2000).

Achieving customer satisfaction is the primary goal for most service firms today (Jones & Sasser, 1995). Increasing customer satisfaction and customer retention leads to improved profits, positive word-of-mouth, and lower marketing expenditures. Typically, service firms monitor customer satisfaction on an ongoing basis using Likert-type scales that measure customers' level of satisfaction based on their last service encounter (McDougall & Levesque, 2000).

SERVQUAL MODEL

CONSUMER

Word of mouth communications	Personal Needs	Past Experience

Expected Services

GAP 5

Perceived Services

MANAGEMENT

Service Delivery (Including Pre- & post contacts)

External Communications to Consumers

GAP 3   **GAP 4**

Translation of Perceptions into Service Quality Specs

GAP 1

GAP 2

Translation of Perceptions into Service Quality Specs
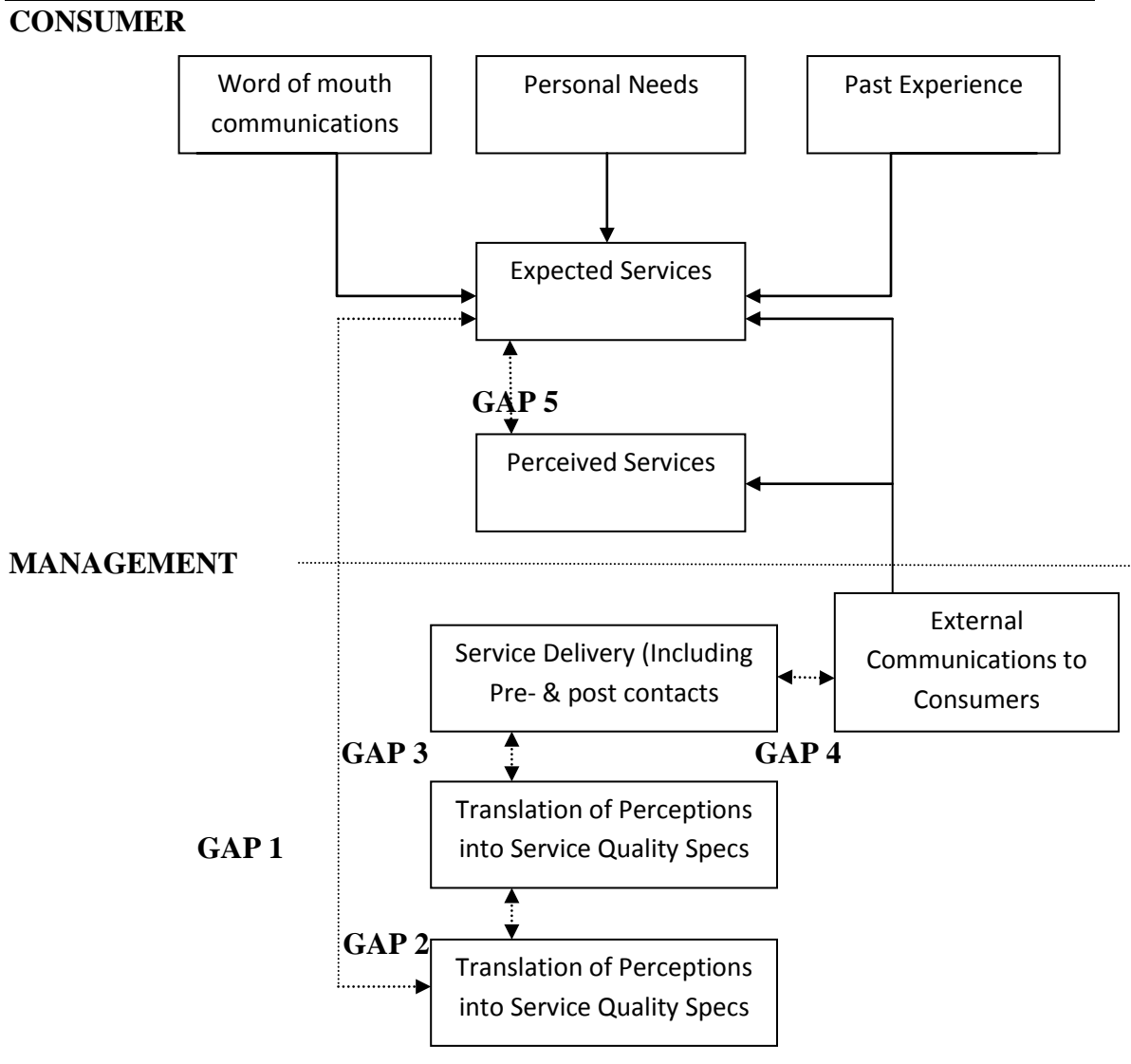
Figure 2.1: Conceptual framework of service quality and customer satisfaction.

Service quality is important as well. If companies produce a quality product without providing good service, it is not guarantee the company may maintain competitive advantage. Many researchers recognize that service quality can bring an organization a lasting competitive advantage (Moore, 1987; Lewis, 1989). Service quality, customer satisfaction and customer value have become the main concern of both manufacturing and service organizations in the increasingly intensified competition for customers in today's customer-centered era (Wang, Hing-Po, & Yang, 2004).

In SERVQUAL theory, the service quality is determined by customers who are engaged with the service. If customers are satisfied with the service, it means the service is good. The customer nowadays demanding better service as they think they deserve for it. They are not only insisting for a good service provided but also facilities must be up to date. Thus, the service provider must ensure that service is good and facilities are conducive for the customer. Understanding customers' satisfaction is crucial. Customer will go to the competitors if they do not receive the service they expect from one company (Graham, 1994).

Customer satisfaction can be defined as the customer's fulfillment response. Customer satisfaction includes the process of delivering the service (Oliver, 1993). Oliver (1993) made a distinction between the conceptual domains of service quality and customer satisfaction. This includes:

- The dimension for quality judgments are specific but satisfaction can result from any dimension;

- Expectations of quality are based on perception of excellence whereas a large number of non quality issues can help form of satisfaction judgments. For example perception of fairness and needs;

- Quality perception does not require experience but satisfaction judgment need experience with service provider

- Quality is believed to have fewer conceptual antecedents than satisfaction.
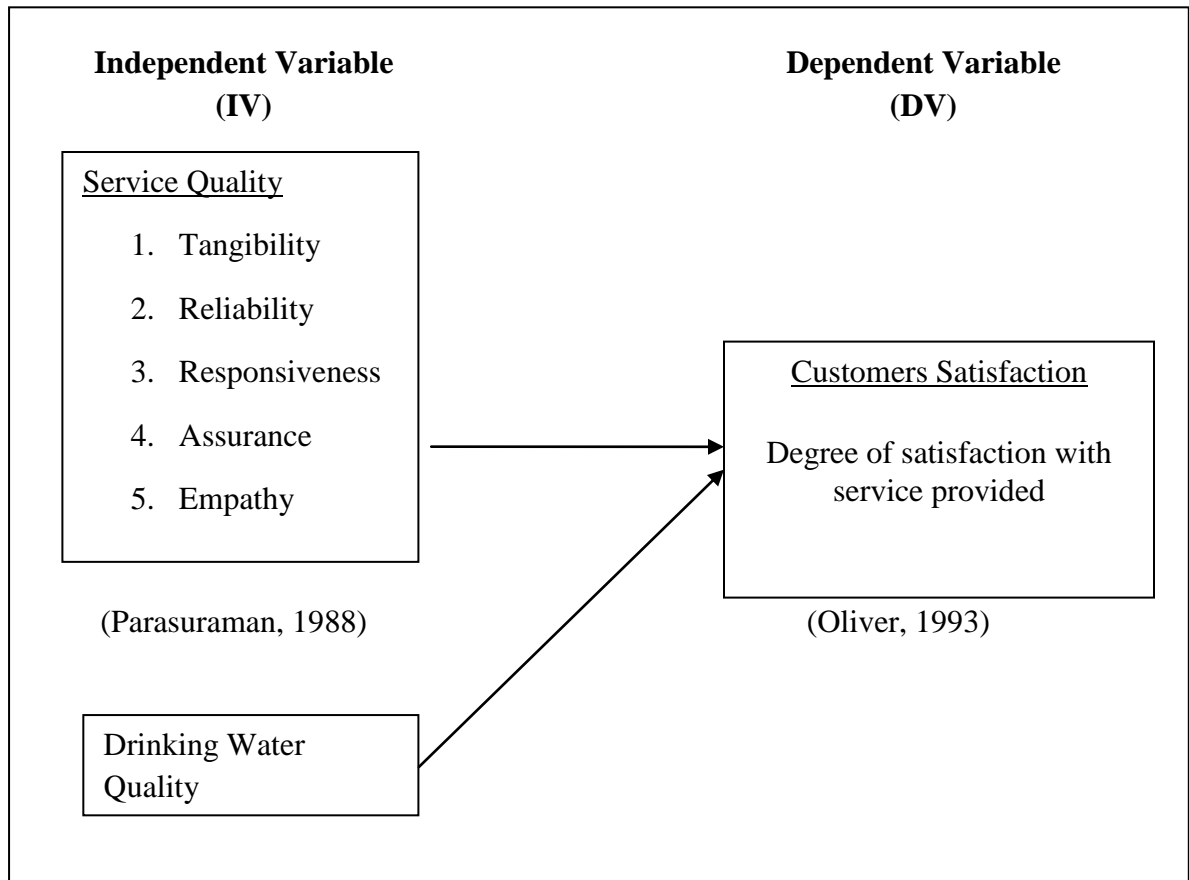
Figure 2.2: Conceptual framework of service quality and customer satisfaction.

According to the following studies (Brooks, Lings, & Botschen, 1999; Fick & Ritchie, 1991; Marc & McDaniel, 1993; Nitin et al., 2005; Parasuraman et al. 1985, 1988, 1991, 1994; Sahney, Banwet, & Karunes, 2004; Susan & Theron, 1995; Zeithaml & Bitner, 2003), the SERVQUAL scale includes 5 dimensions which in turn comprise 22 items; the definitions of all 5 dimensions are shown in Table 1

5 Dimensions	SERVQUAL Definition
Tangibility	The appearance of physical facilities, equipment, personnel dress, communication materials, the seller's outward appearance, exterior design, location & accessibility, all kinds of tools that are used for providing service.
Reliability	The ability to perform the promised service dependably and accurately, reliability involves in consistency of performance and dependability. It means that the firm performs the service right the first time. It also means that the firm honors its promises. Reliability of service designates the seller's capability to supply the promised outputs at the stated level.
Responsiveness	The willingness to help customers and provide prompt service, responsiveness concerns the willingness or readiness of employee's to provide service. It involves timeliness of service. Responsiveness refers to the corporation's capability to respond to and satisfy the customer's wishes. A willingness to react and reaction speed play a vital role in the service responsiveness.
Assurance	The knowledge and courtesy of employees and their ability to inspire trust and confidence including competence, courtesy, credibility, and security, Service assurance relates to the seller's capability to deliver the output, specifically in terms of the knowledge, politeness and trustworthiness of the employees and the service firms.
Empathy	The caring individualized attention that the firm provides its customers including access ability, communication and understanding the customer. Service empathy characterizes both the seller's willingness and capability to respond to individual customer desires.

Table 2.1: Definition of SERQUAL

2.4 Relationship between Service Quality and Customer Satisfaction.

Ruyter et al. (1997) modified the SERVQUAL scale and empirically tested the health care service of chiropractic care, attempting to determine the relationship between service quality and customer satisfaction. The results suggest that service quality should be treated as an antecedent of customer satisfaction. Brady et al. (2001) employed LISREL analysis to study customers of fast food restaurants in America and Latin America. The results indicated that there was a certain relationship between service quality and customer satisfaction based on different cultured background. In addition, service quality had significantly impact on customer satisfaction. Sureshandar et al. (2002) found that service quality and customer satisfaction were highly related.

Since customer satisfaction has been considered to be based on the customer's experience on a particular service encounter, (Cronin & Taylor, 1992) it is in line with the fact that service quality is a determinant of customer satisfaction, because service quality comes from outcome of the services from service providers in organizations. Another author stated in his theory that "definitions of consumer satisfaction relate to a specific transaction (the difference between predicted service and perceived service) incontrast with 'attitudes', which are more enduring and less situational-oriented," (Lewis, 1993, p. 4-12) this is in line with the idea of Zeithaml et al (2006, p. 106-107).

Regarding the relationship between customer satisfaction and service quality, Oliver (1993) first suggested that service quality would be antecedent to customer satisfaction regardless of whether these constructs were cumulative or transaction-

specific. Some researchers have found empirical supports for the view of the point mentioned above (Anderson & Sullivan, 1993; Fornell et al 1996; Spreng & Macky 1996); where customer satisfaction came as a result of service quality.

In relating customer satisfaction and service quality, researchers have been more precise about the meaning and measurements of satisfaction and service quality. Satisfaction and service quality have certain things in common, but satisfaction generally is a broader concept, whereas service quality focuses specifically on dimensions of service.(Wilson et al., 2008, p. 78). Although it is stated that other factors such as price and product quality can affect customer satisfaction, perceived service quality is a component of customer satisfaction (Zeithaml et al. 2006, p. 106-107).

This theory complies with the idea of Wilson et al. (2008) and has been confirmed by the definition of customer satisfaction presented by other researchers. It has been proven from past researches on service quality and customer satisfaction that Customer satisfaction and service quality are related from their definitions to their relationships with other aspects in business. Some authors have agreed to the fact that service quality determines customer satisfaction. Parasuraman et al., (1985) in their study, proposed that when perceived service quality is high, then it will lead to increase in customer satisfaction. Parasuraman (1995) and they acknowledged that "Customer satisfaction is based upon the level of service quality that is provided by the service providers" (Saravana & Rao, 2007, p. 436, Lee et al., 2000, p. 226.

More evidence of this relationship has been proven by past researches. As a result of the definition of customer satisfaction presented by Lewis, (1993, p. 4-12), Sivadas & Baker-Prewitt (2000, p. 73-82) used a national random telephone survey of 542 shoppers to examine the relationship between service quality, customer satisfaction, and store loyalty within the retail department store context. One of the results was that service quality influences relative attitude and satisfaction with department stores. They found out that there is a relationship between customer satisfaction and service quality.

In line with the findings of Sivadas & Baker-Prewitt (2000, p. 73-82), Su et al., (2002, p. 372) in their study of customer satisfaction and service quality, found out that; these two variables are related, confirming the definitions of both variables which have always been linked. They also dictated that service quality is more abstract because it may be affected by perceptions of value or by the experiences of others that may not be so good, than customer satisfaction which reflects the customer's feelings about many encounters and experiences with service firm. (Su et al., 2002, p. 372).

In addition to what the other researchers have found out from customer satisfaction and service quality, some other authors Wang & Hing-Po (2002), went into details to bring in customer value in the study of the relationship between customer satisfaction and service quality. Their study used SERVQUAL model in measuring service quality in China's mobile phone market, but with modification on the basis of focus group discussions and expert opinions to reflect the specific industry attributes and the special culture of China. Emphasis was then paid to the study of the dynamic relationships among service quality, customer value, customer satisfaction and their

influences on future behaviors after the key drivers of customer value and customer satisfaction were identified.

With regards to the above statistics; Kuo (2003) conducted a research on service quality of virtual community websites with the purpose of constructing an instrument to evaluate service quality of virtual community websites and to have a further discussion of the relationship between service quality dimensions and overall service quality, customer satisfaction and loyalty.

The researcher used Factor analysis, t-test, and Pearson correlation analysis to analyze the data collected from college students of three major universities in Taiwan. One of the results was that" on-line quality and information safety is positively related to the overall service quality, customer satisfaction, and loyalty, but the service quality level of this dimension was the poorest. " (Kuo, 2003, 461-473).

2.5 Drinking Water quality

Drinking water quality has always been SYABAS' top priority. Water quality results reported in the year ended 31st December 2011 indicated that SYABAS has continued to meet the high standards set out in the Ministry of Health's National Standard for Drinking Water Quality and its Quality Assurance Programmed (QAP). It also complies with the requirement of the Mandatory Levels of Service specified under the Concession Agreement with the Federal Government and the State Government of Selangor.

Any number of water quality measurements can serve, and have already been used, as indicators of water quality. However, there is no single measure that can describe overall water quality for any one body of water, let alone at a global level. As such, a composite index that quantifies the extent to which a number of water quality measures deviate from normal, expected or 'ideal' concentrations may be more appropriate for summarizing water quality conditions across a range of inland water types and over time.

Although there is no globally accepted composite index of water quality, some countries and regions have used, or are using, aggregated water quality data in the development of water quality indices. Most water quality indices rely on normalizing, or standardizing, data parameter by parameter according to expected concentrations and some interpretation of 'good' versus 'bad' concentrations. Parameters are often then weighted according to their perceived importance to overall water quality and the index is calculated as the weighted average of all observations of interest (e.g., Pesce and Wunderlin, 2000; Stambuk-Giljanovic, 1999; Sargaonkar and Deshpande, 2003; Liou et al., 2004; Tsegaye et al., 2006). Pesce and Wunderlin (2000) compared the performance of three water quality indices on the Suquía River in Argentina. All three indices were calculated using observations for 20 different parameters that were normalized to a common scale according to observed concentrations and expected ranges. The 'objective' and 'subjective' indices were then calculated as a function of the normalized values, the relative weight assigned to each parameter, and, in the case of the subjective index, a constant that represented the visual impression of the contamination level of a monitoring station. In a study similar to the Argentinean one, Stambuk-Giljanovik

(2003) compared the performance of several water quality indices for Croatian waters. All indices are similar to the objective index used in Argentina in that field measurements were normalized, or scored, on a parameter by parameter basis according to their observed concentrations and then a weighted average index was calculated from the normalized values. The indices were tested with data for nine water quality parameters collected monthly over one year at 50 sites in Croatia. Examination of the different water quality indices found that two modified arithmetic indices were best suited for discriminating sites according to water quality condition (good versus poor).

Liou et al. (2004) developed an index of river water quality in Taiwan that is a multiplicative aggregate function of standardized scores for temperature, pH, toxic substances, organics (dissolved oxygen, BOD, ammonia), particulate (suspended solids, turbidity), and microorganisms (faecal coliforms). The standardized scores for each water quality parameter are based on predetermined rating curves, such that a score of 100 indicates excellent water quality and a score of 0 indicates poor water quality. The index relies on the geometric means of the standardized scores.

Tsegaye et al. (2006) developed a chemical water quality index based on data from 18 streams in one lake basin in northern Alabama that summed the concentration of seven water quality parameters (total nitrogen, dissolved lead, dissolved oxygen, pH, and total, particulate and dissolved phosphorus) after standardizing each observation to the maximum concentration for each parameter.

Kim and Cardone (2005) developed a water quality index that evaluates changes in water quality over time and space. The Scatter score index identifies increases or decreases in any water quality parameter over time and/or space. It does not rely on water quality standards or guidelines and can include an unlimited number of parameters. It was developed primarily to detect positive or negative changes in water quality around mining sites in the United States, but could be applied to non-impacted sites as well.

Water quality issues and the connection to public health; drinking water quality guidelines and minimum standards; types of contaminants and their indicators; water quality testing: physical, chemical and biological; selection of appropriate testing methodology and equipment; developing a water quality testing plan; record keeping, interpreting results, and reporting; and household water treatment options for developing countries.

Drinking water must be clear and does not have objectionable taste color and odor. It must be pleasant to drink and free from all harmful organism, chemical substances and radionuclides in amounts, which could constitute a hazard to the health of the consumers. The water supplied by SYABAS through the tap is definitely safe for consumption and it complies with the National Drinking Water Quality Standards issued by Ministry of Health Malaysia (MOH). In fact, the treated water supplied by SYABAS is so safe that it is drinkable directly from the tap. However, SYABAS will continue to strive to improve further on water quality to meet the quality standards as required by the customers.

To ensure water quality is in accordance with stipulated standards, officials from MOH collect an average of 1,000 water samples monthly from sampling stations throughout Selangor, Kuala Lumpur, and Putrajaya, which are thereafter sent to the Chemistry Department for analysis to ensure compliance. In addition to that, SYABAS' Water Quality Division also carries out its own in-house water sampling and testing using independent accredited testing laboratories to ensure standards are maintained at all times.

At present, MOH allows for some limited residual content of aluminum, iron, and manganese in treated water supplied by water treatment operators that are not visible to the naked eye but still safe for consumption by World Health Organization's (WHO) standards. These permitted residual contents are the ones usually captured by the household filters causing them to precipitate and form a slimy and brown to black color layer on the surface of filters.

2.6 Independent variable

The independent variables include service quality related to tangibility, reliability, responsiveness, assurance and empathy. Parasuraman et al. (1988), developed a 22-item instrument, recognized as SERVQUAL, which has become widely used as a generic instrument for measuring quality.

2.7 Dependent Variable

The dependent variable represents the measure that reflects the outcome of the research study. From the service quality, the outcome is the customer satisfaction. The instrument to measure customer satisfaction was adapted from work of (Oliver, 1993). Since the original items were developed for the automobile buying experience, it is necessary to modify the items to relate to this study.

2.8 Research Hypotheses

"Hypotheses are single tentative guesses, good hunches –assumed for use in devising theory or planning experiments intended to be given a direct experimental test when possible". (Eric Rogers, 1966). "A hypothesis is a conjectural statement of the relation between two or more variables". (Kerlinger, 1956). "Hypothesis is a formal statement that presents the expected relationship between an independent and dependent variable."(Creswell, 1994). "It is a tentative prediction about the nature of the relationship between two or more variables." "A hypothesis can be defined as a tentative explanation of the research problem, a possible outcome of the research, or an educated guess about the research outcome."(Sarantakos, 1993: 1991). "Hypotheses are always in declarative sentence form, an they relate, either generally or specifically , variables to variables." "An hypothesis is a statement or explanation that is suggested byknowledge or observation but has not, yet, been proved or disproved."(MacleodClark J and HockeyL 1981).

The following hypotheses were formulated for this study;

H1:   There is a relationship between tangibility and customer satisfaction at SYABAS (KL, Gombak, Petaling & Hulu Langat)

H2:   There is a relationship between reliability and customer satisfaction at SYABAS (KL, Gombak, Petaling & Hulu Langat)

H3:   There is a relationship between responsiveness and customer satisfaction at SYABAS (KL, Gombak, Petaling & Hulu Langat)

H4:   There is a relationship between assurance and customer satisfaction at SYABAS (KL, Gombak, Petaling & Hulu Langat)

H5:   There is a relationship between empathy and customer satisfaction at SYABAS (KL, Gombak, Petaling & Hulu Langat)

H6:   There is a relationship between water quality and customer satisfaction at SYABAS (KL, Gombak, Petaling & Hulu Langat)

2.9 Summary

Chapter two is about literature review that the researcher has done to provide better understanding on the study that has been done. This chapter involved literature review on Service Quality (SERQUAL), drinking water quality and customer satisfaction.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The aim of this section is to explain methods used in carrying out this research, how the research was design and reasons for the choices. Thus the chapter begins with the author's preconceptions, choice of study and perspective. The research philosophies follows, then research Approach, research design, and the chosen research strategy. The research technique and paradigm are also presented in this chapter. The chapter also presents the questionnaire structure and explains data collection method. The chapter ends with the analysis method and precision measurement.

3.2 Research Framework

Based on the literature review, a two level analysis has been employed to draw causal inferences regarding the postulated relationship among the studied variables. The first level investigated whether customer satisfaction has been mediating the relationship between customers' perceived service quality and water quality, and the direct relationship between trust and customer satisfaction. At the second level, the researchers have tried to investigate both direct and mediated (indirect) relationship between customers' perceived service quality, and water quality where customer satisfaction has been identified as a mediating variable, and also the direct relationship.

If customers agree that they are satisfied and give the reasons for satisfaction as service quality; service quality dimension has significant relationship with service quality and customer satisfaction, then a conclusion could be drawn that service quality has a significant relationship with customer satisfaction and with service quality dimensions. Based on these, the research hypotheses were on the fact that service quality dimension. The present paper developed a conceptual framework (see figure 1), which aims to examine the predictive ability as well as the nature and strength of relationship between service quality, Customer satisfaction and water quality. All construct were conceptualized to fit better into the current study setting. Based on original view of Parasuraman, Zeithaml and Berry (1985), service quality was conceptualized as a function for the differences between satisfaction level on service quality and water quality presented by SYABAS and its overall images.

3.3 Research design

The sampling method that is going to use in this research would be convenience sampling method is chosen because a wider number of populations can't be accessed due to time or cost constraints. The target population will be focused on account holder from district KL, Petaling, Gombak and Hulu Langat. Pilot testing was conducted using small convenience sample of 40 respondents, including the SYABAS executive levels employees who checked for any ambiguities and confusion in the first draft of the questionnaire. The total numbers of questionnaire are 384 copies. The reason researcher selected 384 copies to be distributed are because according to Small Sample Techniques (The NEA research Bulletin, December 1960). If the number of population is more than

1000000 about 384 questionnaires is needed to be distributed so that the data can be more accurate and can reliable to represent the target population. The respondents were informed that their participation was on a voluntary basis and all information provides would be kept private and confidential. The questionnaire placed in SYABAS counter (enquiry) at main selected respective district for a week. The researcher then briefly explained the nature and requirement of the survey before the respondent filled up the questionnaire.

3.4 Operational definition

The operational definition makes the abstract qualities concrete. It describes the observable characteristics of a variable the things that the researcher can observe or measure directly. The things you can see and measure are visible representations of the abstract qualities. The operational definition has 3 parts: it gives concrete definitions for abstract qualities, it names the values of the variable, and it assigns a number to each value of the variable. Customer satisfaction is dependent variable.

There are six dimensions in service quality and they were tangibility, responsiveness, assurance, empathy and reliability and water quality is the independent variable as it can be stand its own and no need to rely on other dimension in contrast customer satisfaction is dependent variable where its depends on the outcomes of service and product quality results. The questionnaire are design by referring to journal article and literature review that are available on the net and SYABAS website itself .Based on a five point scale whereby, 1= strongly disagree, and 5= strongly agree, participants rated their degree of satisfaction with the service and water quality provided by SYABAS.

3.5 Measurement of Variable / Instrument

Using a structured questionnaire, the researcher measures the basic constructs- service quality, water quality and customer satisfaction. To ensure the content validity of the measures, a thorough review of the relevant literature was undertaken. Based on the questionnaire the measurement that applies is in scale (Likert scale) this instrument is more convenience to researcher to collect data more smooth and easy. The respondents are SYABAS account holder who participates in this research.

The questionnaire for this research consists of three sections which are as follows:

Section A   : Background of respondents
Section B   : (1) Tangibility
               : (2) Empathy
               : (3) Responsiveness
               : (4) Reliability
               : (5) Assurance
Section C   : Water Quality (Customer Satisfaction)
Explanation for each section:

Section A   : Collects demographic date of respondents that is in the close ended form. The demographic data are basically gender, race, and marital status and account number.

Section B   : Question regarding the five dimensions with service quality.

Section C   : Overall customer satisfaction on water quality

The questionnaire implements a five point Likert Scale to collect the data. The ratings of the scale are as follow:

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

In order to achieve a reasonable response rate, the questionnaire is designed and takes into consideration the following:

1. Allow the respondents to remain anonymous.

2. The questionnaire will be written on simple English do   that those poor in English can answer it.

3.6 Reliability of Instrument

According to Sekaran (2006), the reliability of a measure is established by testing for both consistency and stability which the instrument measures the concept and helps to assess the "goodness" of a measure. Cronbach's alpha is a reliability coefficient that indicated how well the items in a set are positively correlated to one another. Cronbach's alpha is computed in terms of the average inter-correlations among the items measuring the concept. The closer Cronbach's alpha is to 1, the higher the internal consistency reliability (Sekaran, 2006). The result is highly reliable if the Cronbach's α value is between 0.70 and 0.98. It also supported by Kerlinger & Lee (2000) the reliability of .5

and .6 is acceptable for social and science research. However, it should be disregarded if the Cronbach's α value is below 0.35 (Wortzel, 1979).

Reliability for pilot study is conducted, service quality (.970) and customer satisfaction (.578). It is supported by Kerlinger & Lee (2000) the reliability of .5 and .6 is acceptable for social and science research. Moreover, the size of pilot study's respondents is small with 40 respondents only.

3.7 Validity of Instrument

Validity of the instrument is conducted to ensure that the questionnaires are relevant to the respondents before distributing by researcher. The instrument was viewed by supervisor of the researcher due to his experience which was related to service quality and customer satisfaction.

The purpose of viewing content validity is to check for error and ambiguity. Feedback from supervisor is to make necessary changes in the question before sending the questionnaires to the respondents at the counter of SYABAS.

Additionally, the researcher validated the questionnaire with other academician who is an expert in this study and Manager from PUSPEL, SYABAS (Contact Center). Pilot study was conducted at among employees at SYABAS (executive levels). The questionnaires were answered by 40 respondents.

3.8 Reliability Analysis

The reliability analysis was conducted by computing Cronbach' Alpha for each measure. The reliability of a measure indicates the stability and consistency of the instrument in measuring a concept and helps to assess the goodness of a measure (Sekaran, 2006).

Degree of Reliability	Cronbach's Alpha
Excellent	.90 to 1.0
Good	.80 to .89
Acceptable	.70 to .79
Questionable	.60 to .69
Poor	.50 to .59
Unacceptable	< .50

Table 3.1: Interpreting of Cronbach's Alpha Values

From the table 3.1 above, the excellent degree of reliability shows by value of Cronbach's Alpha more than .90 and above based on *George & Mallery (2003), Guidelines for.* The range of .80 to .89 is classified as good whereas the range of .70 to .79 is classified as acceptable. However, the range of .60 to .69 is questionable while .50 to .59 could be considered as poor. The range of .5 and less is unacceptable.

Table 3.2 shows the Cronbach's Alpha for each independent variables and dependent variables. From the table, the Cronbach's Alphas for independent variables has been listed in the range of .80 to .90. This indicates that the Cronbach's Alphas for these variables of actual study can be classified as good and excellent. However, the

Cronbach's Alpha for Customer Satisfaction is .606, which is in the range of questionable but still can be considered as acceptable values of reliability.

The possibility that contributed to low value of Cronbach's Alpha for Customer Satisfaction is because the respondents were just tick at "Strongly Agree" without read properly the question in the Section C. This is because some of the question had negative relationship questions that may trick the respondents. In the future the researcher will use more direct questionnaires for a better result. Please refer to the appendix to view the questionnaires.

Construct	Past Study	Pilot Study	Actual Study	Source
Service Quality	(Mohd Nor, 2011) Service Quality (.954) *Tangibility* (.895) *Reliability* (.723) *Responsiveness* (.786) *Assurance* (.926) *Empathy* (.824)	Service Quality (.970) *Tangibility* (.868 *Reliability* (.898) *Responsiveness* (.897) *Assurance* (.936) *Empathy* (924.)	Service Quality (.974) *Tangibility* (.492) *Reliability* (.566) *Responsiveness* (.578) *Assurance* (.689) *Empathy* (.684)	(Parasuraman, Zeithaml, & Berry, 1988)
Customer Satisfaction	Degree of customer satisfaction (.887)	Degree of customer satisfaction (.578)	Degree of customer satisfaction (.797)	(Oliver J. , 1993)

Table 3.2: Reliability of past study, pilot study and actual study

3.9 Sample and Data Collection

The sample in this study consists of respondents who are users of the SYABAS water services. Researcher used the simple random sampling method to determine the sample. A questionnaire was distributed equally to 384 customers through the four main district counters (Kuala Lumpur, Gombak, Petaling and Hulu Langat). Out of a total of 384 questionnaires, only 132 were useable. The questionnaire consists of four parts. The first part consisted of the respondent's socio demographic variable. The second and third parts were based on the respondent's expectation and perception on service quality. The third part is based on quality of drinking provide by SYABAS and the final part is about overall customer satisfaction.

3.9.1 Sampling Frame

The research sample is drawn from the list of domestic customers provided by the directory of billing department (Jan 2013) from SYABAS organization. The sampling frame was helpful to the researcher to determine the number of current total domestic water users at SYABAS Kuala Lumpur, Petaling, Gombak and Hulu Langat.

District	Number of domestic account holder (Active + Disconnect)
Kuala Lumpur	196,386
Petaling	463,036
Gombak	274,361
Hulu Langat	222,097
Total Number of account holder	1155880

Table 3.3: Domestic account holder in respective district

3.9.2 Population

Population refers to the target people, events or this of interest that researcher wants to investigate (Sekaran, 2006). The population of the research sample is the domestic account holder at SYABAS Kuala Lumpur, Petaling, Gombak and Hulu Langat. The participating consumers in the survey were been selected based on accessibility, familiarity, and willingness to participate in the study.

The ever increasing demand for research has created a need for an efficient method of determining the sample size needed to be representative of a given population. In the article "Small Sample Techniques," the research division of the National Education Association has published a formula for determining sample size. Regrettably a table has not been available for ready, easy reference which could have been constructed using the following formula. The researcher had used Small-Sample Techniques. (*The NEA Research Bulletin*,Vol. 38 (December, 1960), p. 99) to determine the sampel size for the population more than 1000000.

3.10 Data Collection

The primary data is a firsthand data that is originally get from this study outcome. Meanwhile the secondary data are sources of the data that already exists that publish on the web or on hardcopy normally secondary data collected from previous study done by another researcher around the globe.

The primary data is taken from the questionnaire that has been distributed as the original source for this study. The secondary data normally are easily obtained from the internets and journals. Added the thesis, Journals, articles from other scholars and authors are used for this study.

3.11 Data collection and Analysis

Data analysis involves checking the data, transform, developing and documenting a database structure that integrates the various measures. For this study, measurement program (SPSS version 16.0) is used to analyze the data and findings. From here, conclusion and recommendation for this study can be developed and ease to be knowledgeable source for study purpose. Statistical tools that are used are basically percentage distribution and frequency, reliability testing and descriptive analysis findings in the form of table and bar chart. These tools eventually enable this study to analyze the data obtained.

Note: SPSS (Statistical Package for the Social Science)

Date	Procedures
14th May 2013	Questionnaires have been distributed for pilot test
21nd to 28th May 2013	Questionnaires have been distributed and data have been collected
28th May 2013 to 9th June 2013	Data have been analyzed

Table 3.4: Data Collection Procedures

3.12 Unit of Analysis

A unit of analysis is the subject to be included in the study (Salkind, 2009). The data from this survey will have to be aggregated to see how many consumers have a positive impact on service and water quality performed by SYABAS. Hence, the unit of analysis is the individual domestic account holder at SYABAS (Kuala Lumpur, Petaling, Gombak and Hulu Langat)

3.13 Data Analysis

Data was analyzed using Statistical Package for Social Science (SPSS) Version 18.0. This study used the descriptive statistic to summarize the demographic data, the analysis includes displaying frequencies and for all demographic profile variables in Section A of the questionnaires (Shariff & Deni, 2005). The Pearson Correlation analysis was carried out next to determine the relationships between service quality and customer satisfaction. A Pearson correlation will indicate the direction, strength, and significance of the relationships of all variables in the study.

Research Objective (RO)	Concept/ Construct	Measurement	Scale of Measurement	Statistic
To evaluate the service quality at (Kuala Lumpur, Gombak, Petaling & Hulu Langat?	Service quality is measured by five elements of tangibility, reliability, responsiveness, assurance and empathy (Parasuraman, 1988).	1. What is the level of service quality at SYABAS, (Kuala Lumpur, Gombak, Petaling & Hulu Langat?	Interval	Mean, Standard Deviation
To determine the level of customer satisfaction	The level of customer satisfaction measures the attitude of the respondent	What is the level of customer satisfaction towards service provided SYABAS, (Kuala Lumpur, Gombak, Petaling & Hulu Langat?	Interval	Mean, Standard Deviation
To analyze the relationship between the dimension service quality and customer satisfaction	H1: There is a relationship between tangibility and customer satisfaction at SYABAS H2: There is a relationship between reliability and customer satisfaction at SYABAS H3: There is a relationship between responsiveness and customer at SYABAS H4: There is a relationship between assurance and customer satisfaction at SYABAS H5: There is a relationship between empathy and customer satisfaction at SYABAS, H6: There is a relationship between drinking water quality and customer satisfaction at SYABAS,			Pearson Correlation Coefficient Multiple Regression

Table 3.5: Data Analysis

3.14 Summary

This chapter discussed about research design, sampling frame, population, sampling technique, sample size, unit of analysis, data collection procedures, instrument, reliability and validity of instrument and plan for data analysis.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter outlines the results of data analysis obtained from the data collected from respondents. The main purpose of this study is to study the relationship between service quality/ drinking water quality and customer satisfaction at Syarikat Bekalan Air Selangor which include involvement tangibility, reliability, responsiveness, assurance, empathy and drinking water quality as the independent variable, and customer satisfaction as the dependent variable. This study aims to achieve the research objectives as well as answers the research questions highlighted in chapter one. In addition, this study intends to verify the hypotheses made in chapter two.

The statistical method of descriptive analysis was conducted to describe the profile of respondents which includes; gender, marital status, age, race and selected account numbers. This chapter also illustrates the reliability test made to the instruments used using Cronbach Alpha. The researcher also conducted Pearson Correlation to determine the existence of any relationships between the independent variable and dependent variable. Additionally, Regression Analysis was conducted to examine which dimensions of independent variables is the most important to explain customer satisfaction.

4.2 Return Rate of Questionnaires

It's nice to think that most of customers happily answer the questionnaire; after all, the information is to benefit the researcher. Unfortunately, some customers don't have the time; others will earmark it for later and forget about it; others will start it and get called away.

Questionnaires were personally distributed by the researcher to the selected counter SYABAS around 384 copies. Only 132 (34%) questionnaires were returned by the respondents and 252 (66%) of the questionnaires were not successfully collected. The return rate (34%) was acceptable where if there was at least 34% response rate to survey therefore the researcher had obtained enough response from the population (Johnson, 2010).

	N	**Percent**
Total Questionnaires	384	100%
Number of Usable Questionnaires	132	34%
Number of Uncollected Questionnaires	252	66%

Table 4.1: Survey return rate

4.3 Demographic characteristic of the participants

A total of 384 set of questionnaire were distributed and at the end only 132 set of questionnaire were received,70 set of the questionnaire were rejected due to incomplete answered by the respondent and balance 182 were not return back by the counter SYABAS during the process of collecting data. This is due to no feedback and willingness to answer the questionnaire.

Demographic Character	Variables	Frequency	Percent (%)
Gender	Male	79	59.8
	Female	53	40.2
	Total	**132**	**100**

Table 4.2: Respondents Gender

Table 4.2 indicates the gender of respondents from the study. The findings show that the majority of the respondents were male with (59.8%) and followed by female with (40.2%). Thus, it can be concluded that the gender for this study, the male respondents is slightly high than the female respondents.

Demographic Character	Variables	Frequency	Percent (%)
Age	20 -30years	41	31.1
	31-40 years old	50	37.9
	41-50 years old	30	22.7
	51 years and above	11	8.3
	Total	**132**	**100**

Table 4.3: Respondents Age

Table 4.3 shows that majority of the respondents were aged of 31 to 40 years old representing 37.9% of the total number of 132 respondents. 31.1% of the respondents aged 20 to 30years, 22.7% of the total between the ages of 41-50 years old, whereas 8.3% of the respondents aged of 51 years old and above. It indicates that most of the respondents who involved in this study were aged 31-40 years old.

Demographic Character	Variables	Frequency	Percent (%)
Marital Status	Single	50	37.9
	Married	82	62.1
	Divorced	0	0
	Total	**132**	**100**

Table 4.4: Respondents Marital Status

The above table 4.4 shows that there are slightly different between the two marital statuses which are married or single for the respondent who participated in this research. From the pie chart we can assume that 62.1% of the respondent who participated in this

research are already married and have their own family and the balance 37.9% of the respondent are still single. Hence by referring to this data, the researcher can conclude that Customer of SYABAS is among the married and single individual. Thus there are no any strong indicators that can show the SYABAS customers are more toward neither single individual nor married individual.

Demographic Character	Variables	Frequency	Percent (%)
Race	Malay	38	28.8
	Chinese	60	45.5
	Indian	34	25.8
	Others	0	0
	Total	**132**	**100**

Table 4.5: Respondents Race

The above table 4.5 shows that, most of the respondent that successfully recorded and participated in this research is from the race of Chinese and this race represent 46%of the total respondent that participated followed by Malay at the second highest which is cover 29% followed by Indian which is 25% from the total percentage of the respondent.

Demographic Character	Variables	Frequency	Percent (%)
Account Number	0000-KL	38	28.8
	1000-Gombak	35	26.5
	2000-PJ	29	22
	4000-Hulu Langat	30	22.7
	Total	**132**	**100**

Table 4.6: Respondents Account Number

The above table shows that percentage of respondent's feedback from selected district.28.8% of respondent were cooperate in this survey to collect data and they represent the district KUALA LUMPUR and followed by the lowest respond from district PETALING with the number of 22%.

4.4 Reliability Test

Reliability test is necessary to be conducted to indicate the extent to which it is without bias or error free hence to ensure the consistency of the measurement across time and various item included in the study. With the reliability test "goodness" of the measure is indicated. Cronbach Alpha is a reliability coefficient indicates how well the items are positively related to each other. The closer the value to 1, the more reliable the items is (sekaran, 2005).

Section	Variable	Cronbach Alpha
B	Reliability	.566
	Assurance	.689
	Empathy	.684
	Tangibility	*.492*
	Responsiveness	.578
C	Drinking Water Quality	.959
D	Customer Satisfaction	.797

Table 4.7: Shows the coefficient of the variable

The above table shows that drinking water quality is more positively related to the customer satisfaction with the significant .959.It means drinking water quality is more reliable compare to other variable. Tangibility is below the range .492 so it's not significant for the studies.

Note:

Below 0.5	Not significant
Range between 0.5- 0.7	Satisfaction
Above 0.7	Reliable

4.5 Descriptive Statistic

In SERVQUAL theory, the service quality is determined by customers who are engaged with the service. Service quality comprises of five factors which are tangibility, reliability, responsiveness, assurance and empathy. The analysis of descriptive statistic is being used for determining the level of service quality at SYABAS (Kuala Lumpur,

Gombak, Petaling and Hulu Langat). Table below indicates the overall summary of the descriptive statistical analysis for all factors of service quality.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
RELIABILITY	132	15.00	25.00	20.4167	3.81048
ASSURANCE	132	12.00	20.00	16.4924	2.71972
EMPATHY	132	15.00	25.00	20.6894	3.40662
TANGIBILITY	132	12.00	20.00	16.5606	2.74420
RESPONSIVENESS	132	9.00	15.00	12.4545	2.07994

Table 4.8: Mean and standard deviation for variables

Table 4.8 displays mean and standard deviation for each variable in independent variable (Tangibility, assurance, empathy, reliability, responsiveness and drinking water quality dimension) and dependent variable (degree of customer satisfaction dimensions).The sample size for all variables was 132 respondents. There are minimum, maximum, mean and standard deviations. From the study it shows that the highest mean of service quality are empathy which are 20.6894 and standard deviation of 3.40662. Meanwhile the lowest is responsiveness with a mean of 12.4545 and standard deviation of 2.07994.

The analysis of descriptive statistic is being used for determining the level of customer satisfaction at SYABAS (Kl, Gombak, Petaling & Hulu Langat) to determine the level of customer satisfaction, the respondents were asked to complete the questionnaires in Section C, Drinking water Quality

Variable	Min	Max	M	SD
Water Quality	15.00	20.00	20.4318	3.32970

Table 4.9: Descriptive Statistic of Drinking Water Quality

Table above table Indicates the result of the min, max, mean, standard deviation for customer's satisfaction level towards drinking water quality.

The analysis of descriptive statistic is being used for determining the level of customer satisfaction at SYABAS (Kuala Lumpur, Gombak, Petaling and Hulu Langat). To determine the level of customer satisfaction, the respondents were asked to complete the questionnaires in Section C, Customer Satisfaction. Table 4.8 indicates the result of the min, max, mean, standard deviation for customer satisfaction level.

Customer Satisfaction	Min	Max	M	SD
SYABAS is very convenient	3.00	5.00	4.1061	.67967
SYABAS exceedingly professional among utilities company in Malaysia.	3.00	5.00	4.1742	.71512
SYABAS responsive towards our current water issues.	3.00	5.00	4.0530	.66899
SYABAS customer service representatives are well trained.	3.00	5.00	4.0530	.66899
As an esteem utility company, SYABAS employees is to fulfill its consumers' needs all the time	1.00	5.00	3.6288	.96824

Table 4.10: Descriptive Statistic of Customer Satisfaction

From table 4.10, it points out that most of the respondents said that SYABAS exceedingly professional among utilities company in Malaysia (mean, 4.1742 and standard deviation, .71512) and also said that SYABAS is very convenient (mean, 4.1061 and standard deviation, .67967) and SYABAS responsive towards our current water issues and SYABAS customer service representatives are well trained with the rank in (mean, 4.0530 and standard deviation, .66899).

Table 4.11 illustrates the overall customer satisfaction with mean, 20.0152 and standard deviation, 2.78213.

	Min	Max	M	SD
Overall Customer Satisfaction	14.00	25.00	20.0152	2.78213

Table 4.11: Descriptive Statistics of Overall Customer Satisfaction

4.6 Ranking

		MEAN	AVERAGE MEAN	RANK
RELIABILITY	1.Providing service as promised	4.0833		
		4.0833		
	2. Sincere in solving the problem.	4.0833	4.0833	6
	3. Performing service right the first time.	4.0833		
	4. Providing service at the promised time.	4.0833		
	5. Maintaining error free records.			
ASSURANCE	6. Employees who instill confidence in customers.	4.1061		
		4.1061		
	7. Customers feel comfortable interacting with employees.			
	8. Employees who are consistently courteous.	4.1061	4.123	4
	9. Employees who have the knowledge to answer customer questions.	4.1742		
EMPATHY	10. Employees who give customers individual attention.	4.1742		
	11. Employee who dealing			

	with customer in caring fashion.	4.1061		
	12. Having the customer's best interest in heart.	4.1742	4.1379	3
	13. Employees who understand the needs of their customers.	4.0608		
	14. Having business hour convenient to customer.	4.1742		
TANGIBILITY	15. SYBAS reception desk employees are neat appearing	4.1061		
	16. The staff uniforms are clean.	4.1742		
	17. The staff provides you service with smile.	4.1061	4.14015	2
	18. Materials associated with the service such as pamphlets or statement provided at SYABAS counters is informative and very helpful to customers.	4.1742		
RESPONSIVENSS	19. The staff responds to your request quickly.	4.1742		
	20. SYABAS gives your prompt service.	4.1742	4.1515	1
	21. The SYABAS staffs are willing to help customers.	4.1061		
DRINKING WATER QUALITY	22. Drinking water supplied by SYABAS is safe to drink.	4.1061		
	23. Drinking water supplied by SYABAS has pleasant taste.	4.0303		
	24. Water equipment and machinery such as pipes and	4.0227	4.08636	5

	meter installed by SYABAS are durable and high quality.				
	25. The level of water pressure is normal for daily usage.	4.0985			
	26. Turbidity in SYABAS drinking water is controlled.	4.1742			

Table 4.12: Show the variable by ranked

The table at previous page had shown the overall results of the respondent level of service quality towards SYABAS from domestic customers in Kuala Lumpur, Gombak, Petaling and Hulu Langat area, from the table the researcher see that Responsiveness is the highest rank of all this because according to the calculation done this variable shown the highest score which is 4.1515 followed by Tangibility at the second place with score 4.14015, Empathy at third place with the total number score 4.1379 and followed by Empathy features at the fourth 4.123 and at fifth drinking water quality and last place is Reliability with score 4.0833, this response are confirmed due to the average mean score divide by each of the variable.

RESPONSIVENSS	1
TANGIBILITY	2
EMPATHY	3
ASSURANCE	4
DRINKING WATER QUALITY	5
RELIABILITY	6

However need to be reminding that all the variable are important, because even though the variable might at lower ranking but still the variable are among the important criteria that need to be focus.

4.7 Bivariate Correlation Analysis

The reason bivariate correlation analysis conducted in the study is the bivariate correlation analysis measures the relationship between two variables. The researcher conducted a study to explore the relationship between service quality and customer satisfaction. This analysis was done to identify the relationship possibility between the two variables. Bivariate correlation analysis in this study was conducted by using Pearson's Correlation Coefficient. Based on Sekaran (2006), Pearson's correlation is used to describe the strength and the direction of linear relationship between two variables.

In this study, bivariate correlation analysis was used to answer research questions three, which is to determine the relationship between service quality and customer satisfaction.

Before the statistical analysis was conducted, there are some underlying assumption needs to be considered before proceeding the analysis. The underlying assumptions for statistical test chosen by the researcher are explained below.

Assumption for Bivariate Correlation

Most of statistical test requires assumptions regarding the variables used in the analysis. This was done by analyzing the results from assumptions before going further into statistical analysis. When the assumptions are not met the result, the results may not be trusted resulting in overestimation or underestimation of significant (Myers & Well, 2002). Therefore, it is crucial to conduct the preliminary data analysis on each variable to examine the assumptions of normality and homogeneity of variance, linearity and to identify any outliers or the extreme values in data set. There are probabilities to eliminate or transform data if the assumptions are not met.

Service Quality dimensions consist of five elements which are tangibility, reliability, responsiveness, assurance and empathy. The dimension of customer satisfaction consist only one element which is degree of customer satisfaction. The researcher conducted the Pearson Correlation analysis with the independent variable and dependent variable.

Nom	Variables	1	2	3	4	5	6	7
1	Reliability	1						
2	Assurance	.838**	1					
3	Empathy	.863**	.990**	1				
4	Tangibility	.861**	.996**	.997**	1			
5	Responsiveness	.872**	.988**	.997**	.998**	1		
6	WQ	.789**	.975**	.961**	.964**	.952**	1	
7	CS	.763**	.926**	.924**	.921**	.913**	.931**	1

*Notes: **Correlation is significant at the 0.01 level (1-tailed)*
Table 4:13: Correlation between independent variables (tangibility, reliability, responsiveness, assurance, and empathy), drinking water quality and dependent variable (customer satisfaction)

Note:

0.0-0.2	Very weak
0.2-0.4	Weak
0.4-0.6	Moderate
0.6-0.8	Strong
0.8-1.0	Very strong

Cohen (1988) pointed out that the "r" value suggests the strength relationship between two variables as the table below.

Degree of Correlation	"r" values
Small Correlations	-0.10 to -0.29 and +0.10 to +0.29
Medium Correlations	-0.30 to -0.49 and +0.30 to +0.49
Large Correlations	-0.50 to -1.00 and +0.50 to +1.00

Table 4:14: Cohen's guidelines for interpreting correlation based on "r" value

Based on the table 4.13, it shows the relationship between independent variables and dependent variable. The findings were used to determine whether the hypotheses are supported or rejected. Cohen's (1988) guideline was used to provide the explanation on the strength of the relationship in terms of value of Pearson Correlation (r) and the direction of the relationship for the variables used in the study. The interpretation of the correlation coefficient is showed in Table 4.12. Based on the Table 4.11, there is a positive and significant relationship between service quality and customer satisfaction ($r = .931$, $p < .01$).

The Research Question Three predicted that there is a positive relationship between service quality and customer satisfaction SYABAS (Kuala Lumpur, Gombak, Petaling and Hulu Langat. The result of the study specified that there was a positive and significant relationship between service quality and customer satisfaction. All of elements of service quality which are tangibility, reliability, responsiveness, assurance and empathy significantly correlate with customer satisfaction. Therefore, the Research Question Three is supported.

Additionally, the multiple regressions were used to answer the hypotheses developed based on research questions. Multiple regressions were used to address which variables in a set of variables is the best predictor of an outcome. In this study, multiple regressions were used to explore which variables in service quality namely tangibility, reliability, responsiveness, assurance, empathy and drinking water quality is the best predictor of customer satisfaction.

4.8 Multiple Regression Analysis

Regression analysis was conducted to discover the relationship between the variables. Multiple Regression analysis is conducted to recognize which among the independent variables that explained most variance in the dependent variable. Regression is an extension of bivariate correlation and a measure of association between two quantitative variables. This method of statistical test is only possible with interval or ratio data. According to Pallant (2007), multiple regressions allow prediction of a single dependent continuous variable form a group of independent variables.This analysis leads to answer research questions; to examine the relationship between service quality (tangibility, reliability, responsiveness, assurance and empathy) and customer satisfaction. Multiple regressions evaluate which dimension of service quality that influences customer satisfaction.

In order to detect the presence of autocorrelation in the residuals from a regression analysis, the Durbin-Watson test statistic was used. The value of the Durbin-Watson statistic lies between 0 and 4, with a midpoint of 2 (Durbin & Watson, 1950). Durbin and Watson (1950) also stated that, a value of 2 indicates there appears to be no

autocorrelation. If the Durbin-Watson statistics is substantially less than 2, there is evidence of positive serial correlation. For this study, Durbin-Watson value did not violate the autocorrelation assumptions.

Service Quality Dimensions (reliability, assurance, empathy, tangibility and responsiveness) drinking water quality and Customer satisfaction.

H1: Tangibility of service quality is the strongest significant towards customer satisfaction.

H2: Responsiveness of service quality is the strongest significant towards customer satisfaction.

H3: Reliability of service quality is the strongest significant towards customer satisfaction.

H4: Empathy of service quality is the strongest significant towards customer satisfaction.

H5: Assurance of service quality is the strongest significant towards customer satisfaction.

H6: Drinking water quality of service quality is the strongest significant towards customer satisfaction.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.937[a]	.878	.873	.99110	1.841

a. Predictors: (Constant), Total_W5, Total_R5, Total_R15, Total_A5, Total_E5
b. Dependent Variable: Total_C5

Table 4.15: Regression analysis between quality dimension and drinking water quality on customer satisfaction.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	890.201	5	178.040	181.250	.000[b]
	Residual	123.768	126	.982		
	Total	1013.970	131			

a. Dependent Variable: Total_C5
b. Predictors: (Constant), Total_W5, Total_R5, Total_R15, Total_A5, Total_E5

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.008	.547		7.322	.000
	Total_R5	-.015	.049	-.021	-.312	.755
	Total_A5	.783	.312	.765	2.507	.013
	Total_E5	1.717	.399	2.103	4.299	.000
	Total_R15	-2.464	.679	-1.842	-3.628	.000
	Total_W5	-.070	.137	-.084	-.512	.610

a. Dependent Variable: Total_C5

Table 4.16: Regression analysis between service quality and customer satisfaction

Table 4.15 demonstrates the multiple regression analysis between service quality dimensions, drinking water quality and customer satisfaction. The result point out that R square is at .878 and independent variables (tangibility, reliability, responsiveness, assurance, empathy and drinking water quality) explain 87.8 percent of the variance (R Square) in the customer satisfaction which it is significant where sig. of F value is .000. In addition, Durbin Watson value is 1.841 where it lies within the range of 1.5 to 2.5. Based on table 4.16, the researcher found that empathy and responsiveness variable equation emerged as significant predictor of customer satisfaction. It is evident that the most influential independent variable on customer satisfaction is the empathy (β=2.103). Therefore, the findings of this analysis accepted H_4 and H_5 which there is a significant relationship between empathy / responsiveness and customer satisfaction (β=2.103, $p<0.05$) and (β=.765, $p<0.05$).

4.9 Summary

This chapter illustrated the results and findings of the study in describing and answering all research questions that were identified from Chapter One. The findings of the study included demographic information of the respondents such as their gender, race, age, marital status and account number of selected SYABAS district. The next section discussed the findings of the study which answered all the research questions and tested hypotheses. The results obtained perhaps to increase the understanding of the researcher and others on the relationship between service quality, drinking water quality and customer satisfaction.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter focuses on the discussions about the outcomes of the findings obtained in Chapter Four. It comprises the analysis of demographic background, the relationship between service quality and customer satisfaction. The researcher answered all the research questions of the study.

5.1.1 Conclusion for Demographic Background

For the demographic background, the respondents were the one who came and dealt at the counter SYABAS. Very of the respondents willingly cooperated with the researcher to answer the questionnaires. The data were collected from 132 respondents after the distribution of 384 questionnaires at the counter of SYABAS, (Kuala Lumpur, Gombak, Petaling and Hulu Langat). The response rate is only (34%).

The percentage of gender is dominated by male. Most of the respondents were the age of 31-40 years old. Most of the respondents are married couples who highly visited counter SYABAS. Most of the respondents participate are Chinese consumers.

5.1.2 Conclusion for Research Questions

This section presented on the conclusion based on the analysis of findings in order to answer Research Question One, Research Question Two and Research Question Three as well as developed hypotheses.

Research Question 1:

What is the level of service quality implemented at SYABAS (Kuala Lumpur, Gombak, Hulu Langat and Petaling)?

There are five factors that consist of reliability, responsiveness, assurance, empathy and tangibility. The analysis of descriptive statistic was applied to determine the level of service quality at SYABAS (Kuala Lumpur, Gombak, Hulu Langat and Petaling). There are minimum, maximum, mean and standard deviations. From the study it shows that the highest element of service quality is responsiveness and empathy is the lowest element of service quality.

Research Question 2:

What is the level of water quality provided by SYABAS (Kl, Gombak, Petaling & Hulu Langat)?

Based on the outcome from the customer point of view, drinking water provide by SYABAS is safe to drink. Customers do agree that the level of water pressure at housing area is pleasant to daily use Mean 4.0985 SD .77025.

Research Question 3:

What is the level of customer satisfaction towards service provided by SYABAS (Kl, Gombak, Petaling & Hulu Langat)?

Based on the findings, it was found that the level of customer satisfaction at SYABAS, (Kl, Gombak, Petaling & Hulu Langat) is high by mean score of 20.0152 (SD = 2.78213). It can be concluded that most of the respondents who dealt at the counter of SYABAS (Kl, Gombak, Petaling & Hulu Langat said SYABAS exceedingly professional among utilities company in Malaysia (mean, 4.1742 and standard deviation, .71512) and also said that SYABAS is very convenient (mean, 4.1061 and standard deviation, .67967) and SYABAS responsive towards our current water issues and SYABAS customer service representatives are well trained with the rank in (mean, 4.0530 and standard deviation, .66899).

Research Question 4:

Is there any relationship between service quality and customer satisfaction at SYABAS (Kl, Gombak, Petaling & Hulu Langat)?

Multiple regression analysis was used to answer the question which service quality (SERVQUAL) dimensions contribute significantly to customer satisfaction. The finding indicates that the independent variables explain 87.8 percent of the variance (R Square) in the customer satisfaction which it is significant where sig. of F value is .000. That empathy and responsiveness variable equation emerged as significant predictor of customer satisfaction. It is evident that the most influential independent variable on

customer satisfaction is the empathy (β=2.103) Hence, the findings of this analysis accepted H_4 and H_5 which there is a significant relationship between empathy / responsiveness and customer satisfaction (β=2.103, p<0.05) and (β=.765, p<0.05)

Summary

As a conclusion, SERVQUAL might not be the only factor that contributes to the customer satisfaction. A hypothesis is an explanation, tentative and unsure of itself, for specific phenomena about which you have questions. A well-crafted hypothesis very often suggests the best way to perform the research and gives researcher clues as to research design. In summary, H4 and H5 were strongly supported and the proposed framework of the present study was able to demonstrate strong explanatory power. Notably, this study provides evidence for the direct effect of service quality and customer satisfaction suggested by the literature review. The counter staff may well be trained to be more tangibility and sensitive to customers' needs and provide a service with a pleasant smile in the face. In addition, SYABAS staffs can also be improved by providing better customers individual attention.

H1:   There is a relationship between tangibility and customer satisfaction at

SYABAS (KL, Gombak, Petaling & Hulu Langat)?

Based on H1, there is no relationship between tangibility and customer satisfaction at SYABAS (Kl, Gombak, Petaling & Hulu Langat).This is because the significant level is below the expected value. It's indicated that there was s significantly negative relationship between customer satisfaction and tangibility. This variable is excluded from the survey list.

H2:   There is a relationship between reliability and customer satisfaction at

       SYABAS (Kl, Gombak, Petaling & Hulu Langat)

According to H2 developed by researcher on this study, there is no positive relationship

between reliability and customer satisfaction at SYABAS (Kl, Gombak, Petaling & Hulu

Langat) (β=-0.21, p<0.05) and rejected H$_2$.

H3:   There is a relationship between responsiveness and customer satisfaction at

       SYABAS (Kl, Gombak, Petaling & Hulu Langat)

This is a question, and questions fail to satisfy criterion of customer satisfaction: They

are not predictive statements. Hence, a question is not a hypothesis and it's rejected (β=-

1.842, p<0.05)

H4:   There is a relationship between assurance and customer satisfaction at

       SYABAS (Kl, Gombak, Petaling & Hulu Langat)

According to Parasuraman et al., (1985, p.48) the higher (more positive) the perception

(P) Minus expectation (E) score, the higher the perceived service quality and thereby

leading to a higher level of customer satisfaction. In this regard, the gap scores were

calculated based on the difference between the consumers' perceptions and expectations

of services offered by SYABAS.H4 is positively significant variable in service quality

which is highly rated by SYABAS (β=.765, p<0.05)

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H5:   There is a relationship between empathy and customer satisfaction at

SYABAS (Kl, Gombak, Petaling & Hulu Langat)

Variable Empathy is high and implies that customers expect a lot from the SYABAS. Looking at the individual dimensions researcher realize that customers expect a lot from the empathy dimension with a score of (β=2.103, p<0.05).Hence this shows that this dimension is very important when measuring service quality in SYABAS. Generally H4 is highly accepted in this survey.

H6:   There is a relationship between water quality and customer satisfaction at

SYABAS (Kl, Gombak, Petaling & Hulu Langat)

The drinking water quality dimension also has score below the significant level. Customers are therefore very sensitive to how reliable and assuring SYABAS is in providing good drinking water quality. Generally, the expectations are fairly low since the variable rated (β=-.084, p<0.05).

5.2 Recommendations and Future Research

The study was conducted among domestic customers at SYABAS (Kuala Lumpur, Petaling Gombak and Hulu Langat) to investigate the customer' satisfaction with the effect of service quality and drinking water quality.This study was limited to domestic customers in SYABAS (Kuala Lumpur, Petaling Gombak and Hulu Langat). Future study should be different sampling units which are more generalizable and conduct the study at 10 districts of SYABAS. Therefore, it is recommended for future research to study in a bigger scope of population especially in other six district under

SYABAS such as (Klang, Hulu Selangor, Kuala Selangor,Kuala Langat,Sabak Bernam and Sepang). It would be more interesting to see the result from the customer who coming in varies of living and culture background in Selangor. The studies too can expertise by involving other water account holder such as commercial, government sector, and shipping. Since, the current study have used SPSS 16 to identify the relationship between the service quality, drinking water quality and satisfaction, it is interestingly if the study include moderating variable in future.

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