SERVICE QUALITY IN EARLY CHILD CARE CENTER. DOES PARENTS SATISFIED?

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ABSTRAK

Kajian ini mengkaji kesan kepuasan pelanggan terhadap kualiti perkhidmatan di Pusat Penjagaan Kanak-kanak terutamanya di Pusat Perkembangan Kanak-kanak Tunku Puteri Intan Safinaz (PPKKTPIS) yang terletak di Universiti Utara Malaysia, Sintok, Kedah dan Pewaris Generasi UniMAP di Kangar, Perlis bagi mengenal pasti sama ada mereka berpuas hati dengan perkhidmatan yang ditawarkan atau tidak. Antara objektif kajian ini adalah bagi mengenal pasti hubungan di antara kualiti perkhidmatan (kualiti kebolehpercayaan, kualiti empati, kualiti responsif, kualiti jaminan dan kualiti keboleh memahami) dan kepuasan pengguna terhadap perkhidmatan yang di tawarkan di kedua-dua pusat asuhan ini seperti yang terdapat pada rangka kerja kajian. Kajian ini dijalankan dengan menggunakan pendekatan kuantitatif di mana kaedah kajian soalan soal selidik telah digunakan dan diedarkan kepada setiap ibu bapa yang menghantar anak mereka di kedua-dua pusat jagaan ini. Soalan kajian soal selidik ini telah mengguna pakai instrumen SERVQUAL oleh Parasuraman et al., (1990) iaitu kualiti kebolehpercayaan, kualiti empati, kualiti responsif, kualiti jaminan dan kualiti keboleh memahami manakala kepuasan pelanggan diukur dari Best, (1977: 174). Seterusnya, data yang diperoleh dianalisa menggunakan perisian SPSS. Dari hasil kajian, kesimpulannya didapati bahawa hanya kualiti empati yang digunakan oleh Pusat Perkembangan Kanak-kanak Tunku Puteri Intan Safinaz dan Pewaris Generasi UniMAP boleh dianggap sebagai berkesan dan memuaskan pihak ibu bapa dari pelbagai perspektif berbanding empat kualiti yang lain. Selain itu, didapati ibu bapa lebih tertarik kepada faktor yuran yang jauh lebih murah dan jarak dengan tempat kerja yang lebih dekat dan memudahkan mereka. Kedua-dua faktor ini adalah antara faktor yang mendorong ibu bapa menghantar anak-anak mereka selain kualiti yang terdapat di dalam instrumen SERVQUAL.

Kata kunci: Kepuasan Pelanggan, Kualiti Perkhidmatan, SERVQUAL, Pusat Jagaan Kanak-Kanak.

ABSTRACT

This study investigates the effect of customer satisfaction on service quality in child care center especially in Pusat Perkembangan Kanak-kanak Tunku Puteri Intan Safinaz (PPKKTPIS) located in University Utara Malaysia, Sintok, Kedah and Pewaris Generasi UniMAP located in Kangar, Perlis in order to identify whether parents who are send their kids to both child care center are satisfied with services provided or not. The objectives of this study is to identify the relationship between service quality (reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality) and user satisfaction of services offered in both child care center as appear in the framework of study. This study was conducted using a quantitative approach where the questionnaire question survey method had been used and were distributed among entire parents which are send their child to both child care center. It was applied by adopting the SERVQUAL instruments by Parasuraman et al., (1990) which are reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality while customer satisfaction adopting from Best, 1977: 174). Next, the data were analyzed using SPSS software. From the findings of study, it was concluded that empathy quality applied by Pusat Perkembangan Kanakkanak Tunku Puteri Intan Safinaz and Pewaris Generasi UniMAP can be considered as effective and satisfactory by parents from difference perspectives other than other four dimensions. In addition, parents are more attracted to the fees that are much cheaper compared to fees to the other child care center and a distance to workplaces is much closer and convenience. These factors are the reasons for parents to sending their kids to both child care center rather than service quality in SERVQUAL instruments.

Keywords: Customer Satisfaction, Service Quality, SERVQUAL, Child Care Center.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

Generally in chapter one, there are discussion on an overview in background of the study generally mentioned about current situation when there are high demand in child care center in Malaysia because of both parents are working nowadays and some issues arise in child care industry when there are many cases on injury, negligence or death in child care center. Furthermore, the problem statement is focusing on the impact of satisfaction among parents towards service quality offered in child care center. In addition, it also highlighted on the research questions, research objectives which are focus on the relationship between service quality and customer satisfaction followed by significance of the study that explained on contributions to the body of knowledge and practical contributions to the owners, parents and government. Lastly, explained on scope and limitation arise in the study.

1.2 Background of the Study

Nowadays, parents are both working in order to survive and to fulfilling the current lifestyles as well because of rapid changes in education level and demographic profile. In long term, Malaysian will become very productive and economy will grow up by follow the economic demand. According to statistic from the Ministry of Women, Family and Community Development there are increased in percentage of women working in Malaysia that showed 44.7% in 1995 to 47.3 in 2004. For the past 20 years, the employment rate for women in Malaysia has remained below 50%, and was at 47.9% in 2011 and 49.5% in 2012. This was an "unusually low" rate of female participation in the labour force, when compared with other countries in the region such as Thailand (69.9%), Singapore (62.9%) and Indonesia (53.3%) in 2011. The low labour force participation rate also means that out of the 9,555,700 women of working age in 2011, only 4,575,300 were in the labour force. At the same time, International Business Report (IBR) from Grant Thonrton (2012) also stated that percentage of women who are working in Malaysia (40%) is the highest compared to Thailand (37%) and Singapore (36%). In reality, out of 26% from 40% of Malaysian women who are working as a policy maker is a key position in business and corporate sectors. Women who have taken time out of their careers for family obligations were finding it difficult to return to their work, as they were regarded as "less committed" than colleagues who did not leave their careers.

Because of this phenomenon, there is a high demand in early childhood care center and there is very fast growing in this industry from time to time. As competition among child care industry increased, delivering better services becomes ever more important (Perran Akan, 1995). According to Mahpul and Abdullah (2011), in view of balancing both work and family roles, they have recommended employer to provide childcare facilities at the workplace, flexible working hours and paid parental leave. Besides family support especially from spouse and other family members plays an important role in reducing work-family conflict. Childhood care center has become an essential component of life in our society and it is can make a significant different in children development and positive growth among them because children are the future generations who have the potentials to drive the economy of the country as leaders, entrepreneurs, economies, researchers and innovators later.

In Malaysian perspectives, child care can be refers to an arrangements for the care of children starting from new born to certain age of children before starting the primary school on age seven that include long day care in centers which is include home-based care and as well in child care centers. Normally, education program offered by child care center is actually for newborns up to six years old children. According to Early Childhood Care and Education (ECCE) in Malaysia (2006), it can separate into two types of age group which is 0 to 4 years and 4 to 6 years old. Ministry of Women, Family and Community Development (MWFCD) has responsibility for 0 to 4 years old children through Department of Social Welfare (Jabatan Kebajikan Masyarakat). While for 4 to 6 years old children is under Ministry of Education, Ministry of Rural and Regional Development and National Unity Department responsibilities. Department of Social Welfare also stated that registered care center is a care center that is registered under Section 6 of Act 506 while under Section 5 (1), no person shall conduct or participate in the management of a care center that is not registered under this Act and Section 5 (2) provides that any person who contravenes subsection (1) commits an offense.

In facts, there are many cases regarding incidents involving injury, negligence or death of babies or young children in child care center. The statistics from Department of Social Welfare, there are six babies died in nurseries on 2012 and till July 2013 there is seven babies deaths was reported. There is an increased in number of cases and this situation is very bad. Besides, the best quality services offered by child care

centers should be the highest priority in order to avoid any repeated bad thing arises in future. It is very important to ensure parents are satisfied with the service offered. This is to ensure its service caters environments that are psychologically stimulating and safe. From previous study, it shows there is significance positive relationship between service quality and customers satisfaction (Pankaj & Ranjan, 2014; George, Kostantinos & Sophia, 2014; Paramaporn, Atonio, & Ann, 2014)

The service quality in child care center should be high priority in our society and government to ensure children gets the best protection in order to satisfied parents. The care that children receive has powerful effects on their survival, growth and development (Iram & Butt, 2004). At the age of four years of life, the development of children is very critical because at this age they are very quick to remember and learn new things.

In conclusion, the increasingly awareness of the importance of early child care and education among parents are raise awareness of the important of quality service at child care center to promote professionalism among childcare providers and teachers for the proper care, development and education of young children. Currently, parents are pay higher and that is a reason why they are more demanding on quality in child care center. At the same time, parents become more educated and well informed how important the early years development of their kids. They are believed on balancing between quality and cost. However, for small minority parents that are not too concern on quality but satisfied if care is good and safe for their children (Grace & O'Cass, 2001). Even though, the decision to choose the best child care center is from

parents, it is difficult for them to make evaluations because they do not experience the service by theirself.

1.3 Problem Statement

There are reported studies focusing on customer satisfaction in service sectors including clinics (Pankaj, et al., 2014) and sport event (George, Kostantinos & Sophia, 2014), internet service provider (Paramaporn, et al., 2014), restaurant (Pun & Ho, 2001), hospitality industry (Mei, Dean & White, 1999; Alexandris, Dimitriadis & Markata, 2002), coffee outlet (Chua & Komaran, 2002), banks and credit unions (Allred & Addams, 2000; Jabnoun & Khalifa, 2005), tourism industry (Atilgan, Akinci & Aksoy, 2003), call Centre's (Dean, 2002) and dental care (Baldwin & Sohal, 2003), but there is less reported studies in that specifically explore the link between service quality and customer satisfaction in child care centers industry. In spite of demands, there is less research that is really concentrated on service quality in child care center rather than satisfaction from the perspectives of parents or guardians. So, these could be study further to understand the Malaysian scenarios. In addition, Agbor (2011) also mentioned that there is few researches has been conducted on this specific area so that this is a reason that there is a need to do more research on customer satisfaction and service quality alone.

Generally parents who are the customers in child care center, they satisfied and do a judgment based on the quality provided by child care center. This is because the quality of services has become an aspect of customer satisfaction and child care has become an essential component of life in our society nowadays. Generally, the main goal of customers is to maximize their satisfaction from what they spend money for (Agbor, 2011) because child care can make a significance difference in positive children development which is good for their future. There are several perspectives on quality which is child development perspectives, child adult ratio perspectives, government or regulatory perspectives, parent perspectives, staff and child care provider perspectives that need to consider when parents decide to send their children in care provider centers. Child care quality is now an essential service for majority parents nowadays and they absolutely rely on it to be accessible, affordable and of reasonable quality.

According to Robledo (2001), the most critical aspects for strategic management of service firm is customer satisfaction which is the essential for long term survival and long term success for service industry. This is relate with real scenarios when there are many cases regarding incidents involving injury, negligence or death of babies or young children in child care center but at the same time there is a high demand towards child care among parents and according from statistics by Department of Social Welfare, until last July, the overall child care center registered with JKM is only 2,400. An increase in the number of registered nurseries, namely in 2008, there were only 245 nurseries, increased to 373 in 2009, 483 in 2010, 819 in 2011 and 2,045 in year 2012. The latest, until August 2013, Department of Social Welfare reported that nearly 2,000 child care centers in the country have not registered with the Social Welfare Department. Furthermore, according to sources from Harian Metro, 19 November 2014 stated that based on JKM statistics, a total of 16 deaths in nurseries have been reported in the first ten months of year 2014 and most of death was because of choking, pneumonia or infection. Based on the report, ten cases from

six teen reported deaths are occurred in nurseries are not registered with JKM. Besides, until October 2014, there are 3,479 registered child care center with 13,710 nannies to take care of total 66,497 kids in Malaysia (Harian Metro, 19 November 2014).

This research is important for community to have better understanding on what child care should provide and what parents deserve to receive from what they spend. It means that parents are concern in balancing quality and cost when there is increasing in child care fees from year to year while the reports on bad incidents still exist in Malaysian society.

Besides, improvements in service quality are vital for the success of service based businesses (Ojo, 2010). It is also well documented in the literature that customers satisfaction is influence by service quality (Bayraktar, Tatoglu, Turkyilmaz, Delen, & Zaim, 2011; Ojo, 2010; Tam, 2012; Agbor, 2011).

In order to enhancing service quality, organizations can influence reliability quality (Pankaj, et al., 2014; Sultan & Ho, 2010). This is because service quality (reliability) and satisfaction are attitude driven whereby service quality is a long run overall evaluation and satisfaction is the outcome of overall evaluation.

According to Butt & Run (2010), there is a significant positive relationship between assurance quality and service quality that shows a stronger predictor when secure services is offered as well as trust and confident among customers are exist when done a research in private health service quality. In related study done by Ahmed and Shoeb (2009) on tangible quality shows that there is significant positive influence between tangible quality and customer satisfaction in public university in Bangladesh that shows when physical facilities, equipment, personnel and communication materials were satisfied customers.

There is a significant positive relationship between empathy quality and customer satisfaction (Sultan & Ho, 2010) while Hussein and Amal (2013), found that the empathy dimension had the highest value in comparison with other dimensions in SERVQUAL instruments and it is supported by Ioannis and Lymperopoulos (2009) stated that customers recommend a service provider only if they are satisfied and feel that employees empathies with them.

According to Suneeta and Koranne (2014) shows responsiveness quality is directly influence the customer satisfaction as well when a prompt service is provided in order to respond any customer needs. Suneeta and Koranne (2014), also mentioned that "high service quality is achieved by knowing operational process through identifying problems in service and defining measures for service performances and outcomes as well as level of customer satisfaction" and the results found that there is direct relationship between service quality and customer satisfaction. All of which are critical for a child care center success and long term sustainability.

1.4 Research Questions

Sample frame of Pusat Perkembangan Kanak-kanak Tunku Puteri Intan Safinaz (PPKKTPIS) and Pewaris Generasi UniMAP were reflecting the situation in this research that focus on service quality (reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality) as independent variables and customer satisfaction as dependent variable in this study. The following research questions will be address:

- a) what is the relationship between reliability quality and customer satisfaction?
- b) what is the relationship between assurance quality and customer satisfaction?
- c) what is the relationship between tangible quality and customer satisfaction?
- d) what is the relationship between empathy quality and customer satisfaction?
- e) what is the relationship between responsiveness quality and customer

satisfaction?

In answering these research questions above, the study aimed to prove if there are any other factors than service quality that affects customer satisfaction in child care center. At the same time to give some contribution on relationship between customer satisfaction and service quality.

1.5 Research Objectives

A research objective in this study is to examine the relationship between customer satisfaction and service quality in child care center with the purpose to respect to the service quality dimensions. More specifically, it attempts to achieve the following objectives as below:

- a) to determine the relationship between reliability quality and customer satisfaction
- b) to determine the relationship between assurance quality and customer satisfaction
- c) to determine the relationship between tangible quality and customer satisfaction
- d) to determine the relationship between empathy quality and customer satisfaction
- e) to determine the relationship between responsiveness quality and customer satisfaction

1.6 Significance of the Study

From a theoretical perspective, this study were contribute literatures in understanding deeply on the topics on service quality is child care center as well as parents satisfaction towards child care quality. This study can also be used as a reference or guidance for future research as there is currently limited research on this topic particularly in child care industry sectors in Malaysian scenarios.

While, from a practical implication standpoint this study may have contributed a number of practical implications especially for owners who are child care providers in understanding parents wants and needs in order to offered the best quality to their customers, parents who are customers and paid for the services provided and government as policy controller and policy maker in the industry in order to provide training as well as to avoid bad thing arise in child care center.

Owners or child care center providers or management can use the results from this research as a guideline in order to manage and react with their customers, staff and child accordingly. Besides, this study can be a guide for owners to follow the rules and regulations provided by the government and at the same time to make sure each staff attend enough training and qualified to serve the baby and kids. According to the rules and regulation under Child Care Centre Act 2012, the ratio between nanny and kids under age of one year is three kids, a nanny to kids aged one to three years is five kids and a nanny to kids aged three to four years is ten kids. This is stated by Department of Social Welfare. Besides, as said by Datin Paduka Chew Mei Fun who is Deputy Minister of Women, Family and Community, the criteria to be taken into account in the selection of nursery and nanny is training, experience, attitude and commitment.

Besides that, this study can be a guide for parents in choosing the best child care center for their child and parents is actually doing the best decision based on several factors which are reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality. Reality, this is a critical decision for them and normally the decision has been made by observation, perception and previous experience from other parents. It is very important to make sure their kids get a better early education development and best services as well. The reality is, parents can decide and choose what they want. So, there are high possibilities for them to switch and change to another child care center from time to time because they pay for it and deserve for high quality service. As mentioned by Pankaj et al., (2014) with many option available, customers can easily switch to different providers if they are not satisfied with the current service while Grace and O'Cass (2003) stated that there is possibilities for customers to switch to other child care center if they are unhappy.

1.7 Scope and Limitation of the Study

This study examines the service quality of two child care center which are PPKKTPIS and Pewaris Generasi UniMAP as a sample frame as the objective is to study the relationship between service quality (reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality) and customer satisfaction. All of these objectives are to answer the research question of the study.

Both sample frame had been chosen due to contribution towards local society to understand the real situation arise in local community. Focusing on both sample frames is the best decision to understand the best scenarios due to time constraint to gather a bigger sample. More precisely, the results might be more significance if the number of child care center is bigger. It is important to note that this study only consider SERVQUAL and several demographic measures which have five components of service quality as measurements. This is to avoid incorrect views or misunderstanding to the readers as they may feel that there are many other components of service quality that can be used as a framework to achieve the objectives.

Besides, both child care center provides large respondents compare to other child care center that exist surrounding because both are offering the service for all staff in their organizations which are purposely for UUM and UniMAP staff. According to Department for Social Welfare, for each child care center there are normally offering the services for below 20 kids at one time because of facilities limitations (shop lot or house in residential area). Meanwhile, majority of the respondents are not local community, there are comes from over Malaysia including Sabah Sarawak and there are few from overseas. Thus, the data collected should be more accurate because are representing the general and broad population.

1.8 Chapter Organization

This paper is organized in the following sequences starting with chapter one consist of discussion on an overview in background of the study that focus on current affairs about high demand in child care center in Malaysia because of both parents are working nowadays and some issues arise in child care industry when there are many cases on injury, negligence or death in child care center. Furthermore, the problem statement is focusing on the impact of satisfaction among parents towards service quality offered in child care center. In addition, it also highlighted on the research

questions, research objectives which are focus on the relationship between service quality and customer satisfaction followed by significance of the study that explained on contributions to the body of knowledge and practical contributions to the owners, parents and government. Lastly, explained on scope and limitation arise in the study.

While, in chapter two were explained details on literature related to the relationship between service quality and customer satisfaction which is independent variable (IV) and dependent variable (DV) for this research paper. Independent variables are adapting from Parasuraman et al., (1990) which are reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality. Then, these chapters highlight on general background of Pusat Perkembangan Kanak-Kanak Tunku Puteri Intan Safinaz located in UUM and Pewaris Generasi UniMAP as a sample frame for this research. Respondents are entire parents who are sending their child to these both child care center and next discuss on literatures about customer satisfaction, service quality, SERVQUAL instrument and previous study in order to provide the foundation for the development of research framework for this study which were be further discuss in chapter three.

Furthermore, in chapter three, on methodology part, overall is discussing on research method adopted in this study. It begins with the framework that showed the theoretical framework in order to illustrate the relationship between independent variables (reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality) and dependent variable (customer satisfaction). Next followed by research hypothesis, research design and data analysis. The purpose of this section is to provide a clear and complete description of the specific steps employed in this research.

Chapter Four discussed more on results and findings of data analysis obtained from data collected based on questionnaire question survey answering by parents in PPKKTPIS, UUM and Pewaris Generasi UniMAP. This study aims to achieve the research objective as well as answer the research questions as highlighted in chapter one previously. Based on the data from questionnaire question survey collected, various situations were noted that only empathy quality is satisfied by parents who are sending their kids in both child care center and this is highlighted in the following paragraphs. Other than that, there are other factors that influence these parent which are cheaper fees offered and distance is convenience for them.

Finally, chapter five covers on discussion and conclusions of the research then followed the relationship between each SERVQUAL instruments on customer satisfaction and the suggestion were made for future research.

1.9 Summary of the Chapter

This chapter describes the overall thesis as general basis and provides general description overalls starting with discussion on an overview in background of the study that focus on current affairs about high demand in child care center in Malaysia because of both parents are working nowadays and some issues arise in child care industry when there are many cases on injury, negligence or death in child care center. Furthermore, the problem statement is focusing on the impact of satisfaction among

parents towards service quality offered in child care center. In addition, it also highlighted on the research questions, research objectives which are focus on the relationship between service quality and customer satisfaction followed by significance of the study that explained on contributions to the body of knowledge and practical contributions to the owners, parents and government. Lastly, explained on scope and limitation arise in the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Chapter two were discuss on literature related to the relationship between service quality and customer satisfaction which is independent variable (IV) and dependent variable (DV) for this research paper. Independent variables are adapting from Parasuraman et al., (1990) which are reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality. Then, these chapters highlight on general background of Pusat Perkembangan Kanak-Kanak Tunku Puteri Intan Safinaz (PPKKTPIS) located in UUM and Pewaris Generasi UniMAP as a sample frame for this research. Respondents are entire parents who are sending their child to these both child care center and next discuss on literatures about customer satisfaction, service quality, SERVQUAL instrument and previous study in order to provide the foundation for the development of research framework for this study which were be further discuss in chapter three.

2.2 Background: Pusat Perkembangan Kanak-kanak Tunku Puteri Intan Safinaz (PPKKTPIS)

Pusat Perkembangan Kanak-kanak Tunku Puteri Intan Safinaz (PPKKTPIS), Universiti Utara Malaysia (UUM) is located nearly in playground and mosque in housing staff area in UUM Sintok, Kedah Darul Aman. PPKKTPIS was officiated by KDYMM Sultan Haji Abdul Halim Mu'adzam Shah on 21st September 1999 with a good and conducive environment for child development and early education. The main purpose of PPKKTPIS is to provide and give the best quality service for the entire staff in UUM and nearby community in Sintok area. Operating hours is from 7.30 am until 5.30 pm from Sunday to Thursday which are followed the UUM working hours. This is very convenience for UUM's staff.

Besides that, the objectives of activities conducted in PPKKTPIS are:

a) To add up the good value.

b) To add up the Islamic and positive value.

c) To help parents in advancing the child potentials especially in physical, intellect, social, emotion and spiritual potentials.

d) To give the early education in English language as a foundation for early education for kids.

In PPKKTPIS, teachers and teachers assistant are all trained by "Jabatan Kebajikan Masyarakat" dan "Jabatan Pendidikan Negeri". Ratios between teachers and kids are as follow:

For kids with age;		
<1 Years	1:4	
1 to 2 Years	1:5	
2 to 3 Years	1:7	
4 to 6 Years	1:14	

On 26th November 2014, there is convocation ceremony for six years old kids and on that day, there are few presentations in a stage such as singing and dancing from the entire kids to developed their confident level and skills.

Besides, other than daily child care services provided, there are many activities for kids along the way when PPKKTPIS also offered kindergarten, multimedia class, KAFA (Kelas Agama Fardhu Ain) class and transit services to their customers. On the Malaysian independent day, PPKKTPIS also tried to make a sense of patriotism by doing activities together with kids outside the classroom. For the year 2014, study tours had been done in Carnival Sungai Petani, Kedah and several places in Perlis such as "Ladang Anggur", "Taman Burung" and "Taman Ular. These are several activities that can enhance kids to learn a new thing with interesting environment.

2.3 Background: Pewaris Generasi UniMAP

Child Care under Pewaris Generasi UniMAP is located in Taman Mewah, Jalan Padang Behor, Perlis. It is control and managed by Assistant Vice-Chancellor Department under Corporate Communications unit. Generally, services provided are especially offering to UniMAP staff. Operating hours is from 7.15am to 5.30pm on Monday to Friday by followed the UniMAp's staff working hours.

The main purpose is to provide basic education to children by providing them with challenging future scenarios to be confronted later. Besides that, the objective is to provide exposure and initial the basics of behaviors and values that can be practiced in daily life and also to increase knowledge and imagination of children with surrounding environment. The mission is to give the best guidance to all ages of children, to offering the appropriate teaching, academic and spiritual learning and finally to physically and mentally fit while the vision is to be a productive child care in all aspects.

In Pewaris Generasi UNIMAP, the children are from as early as age 2 months to 6 years old. Teaching and learning are fully following the PERMATA curriculum. Other than care service provided, there are certain activities which are to helping children master in 3Ms (Membaca, Menulis, Mengira), those activities involving gross and fine motor activities such as physical and classroom activities. Lastly, there also provide multimedia activities by using computers in teaching and learning.

Other than daily child care services provided, Pewaris Generasi UNIMAP also offered a kindergarten and KAFA (Kelas Agama Fardhu Ain) class for kids from four years old to six years old and transit services are provided to seven years old to twelve years old kids.

Something special here is subsidy of RM100.00 will be given to parents who have total salary below RM4,500 a month and for parents with two kids, both are entitle for a subsidy. But, only one kid entitles for subsidy if parents who have total salary more than RM4,500.

2.4 Customer Satisfaction

Generally, marketing is commonly measuring the satisfaction among customers whereby company looked on customer's expectation towards the products or services offered. This is very useful in managing the organization or business and one of the key elements in business strategy. When customer satisfied, automatically it will effect on profitability on each business. However dissatisfied customers will impair business. According to Ojo (2010), customer satisfaction is a key success factor and long term competitive advantage for all business and industries while Bayraktar, et al., (2011) stated that customers tend to switch service providers if there are unhappy with current products or services.

Baldwin and Sohal (2003) defined that customer satisfaction who is patient in dental care is their perceptions of outcomes or service delivery while according to Dean (2002), customer satisfaction is actually referring to customer loyalty as well when customers received services according to what they are expected. It's also supported by Tam (2012) stated that customers tend to rely on their expectations to evaluate their satisfaction with the product or service. Furthermore, it also may effects the sales and profitability at the same time will reflect the customer loyalty. In term of child care provider perspectives, customer satisfaction is really important in order to avoid the possibilities for customers to switching to another child care centers (Grace & O'Cass, 2003). Importantly, in achieving long tern success, the key idea is how the competitiveness can be along with quality and customer satisfaction.

"Satisfying customers is one of the main objectives of every business. Businesses recognize that keeping current customers is more profitable than having to win new ones to replace those lost (Naik, Gantasala & Prabhakar 2010)".

In general, customer satisfaction is how products and services supplied by company or organization meet or surpass of customer expectation. Customer satisfaction can also be shown by how many repeat customers who are refers to loyalty (Dean, 2002) in order for company or organization to survive in service industry for long term success. It is helpful in understanding the important dimensions of service quality required for customer satisfaction. This is because customer satisfaction is an important issue for marketing manager, especially those in service industry (Bennett & Rundle-Thiele, 2004).

According to Timothy, Lerzan, Tor and Demitry (2006), customer satisfaction in early childhood care is important as is will affect the government in making policy. Parent satisfaction also will affect the early childhood care business result. It is clear that contribution of customer satisfaction or parent's satisfaction to childcare is important and has been accepted as truism without any doubt as it affect its business.

Interestingly, according to Bennett and Rundle-Thiele (2004), satisfaction is used as a common marketing benchmark for organization to measure their performance. Moreover, according to Agbor (2011), a person who is customers especially when they buy product or service, they always aimed to maximize their satisfaction. In order to develop a customer satisfaction survey, Katcher (2003) said that the input need always get from the customers first to complete the survey form and it should become part of how to conduct business, not as isolated event.

In order to succeed and survive in competitive industry especially in child care center industry, satisfied customers is important as they are important stakeholders in any company or organization. At the same time, if any small increase in satisfied customers actually will boost their loyalty as well (Bowen & Chen, 2001) and this is the extreme satisfied customers marketing power to lead sales to increase. In understanding the customer satisfaction concept, below is the comprehensive model for customer model adapting from Jeon and Choi (2012) explained that customers satisfaction are influenced by interaction quality and outcome quality. It is also well explained that when customers are satisfied, it were created trust for the brand, product and quality as well as to become a loyalty customers.



Figure 2.1 *Customer Model.*

The relationship between service quality and customer satisfaction are well established (Zeithaml et al., 1996; Bayraktar, et al., 2011; Ojo, 2010; Tam, 2012; Agbor, 2011). Pankaj, et al., (2014); Sultan and Ho (2010) proposed a direct relationship between reliability quality and customer satisfaction when there is a child care center ability to perform the promised service dependably and accurately. Furthermore, Butt and Run, (2010) reported that assurance quality is a stronger predictor when secure services is offered as well as trust and confident among customers are exist. According to Ahmed and Shoeb (2009) stated that tangible quality were positive influencing customer satisfaction when physical facilities, equipment, personnel and communication materials were satisfied customers.

Empathy quality (Sultan & Ho, 2010) and responsiveness quality (Suneeta & Koranne, 2014) are directly influence the customer satisfaction as well when prompt services is provided in order to respond customer needs.

2.5 Service Quality

Customers are more concerned with perceived quality compared to objective quality as they value a product using what they receive which are quantity, convenience and quality as well as what they give which are money and time (Pankaj et al., 2014). As child care center increase, service quality and customers satisfaction become crucial. Pankaj et al., (2014) also mentioned that with many option available, customers can easily switch to different providers if they are not satisfied with the current service. It is supported by Grace and O'Cass (2003) stated that there is a possibility for customers to switch to other child care center. In other words, when customers are happy with the current or previous services, they tend to tend to have greater satisfaction towards service provider.

According to Prasanth, Pramod, Jagathy and Christian (2015) stated that service quality is a concept that relevant in both manufacturing and services sector, the remarkable growth in the later sector makes the study of service quality within the sector more attractive.

A number of studies in service quality have enriched the services marketing domain over the last three decades or so. Most of these studies have concentrated their findings on the dimensionalities of service quality across industries, cultures, and firms (Sultan & Ho, 2010). According to Shahin and Dabestani (2010), service quality is crucial to the success of any service organization. High quality of frontline employees is integral to the excellence of firms because the service provided by such employees reflects the image of the organization and affects customer perceptions of service quality (Cheung & To, 2010). The conceptual definition of service quality developed by Parasuraman, Zeithaml and Berry (1988) has been largely employed for comparing excellence in the service encounters by customers. Through the same study, they view service quality as an overall evaluation similar to attitude, and satisfaction as a specific service transaction.

Service quality has been defined as a consumer attitude reflecting the perceived overall superiority and excellence in the process and outcome of a service provider (Parasuraman, 1988). Bitner (1990) defined service quality as the customers' overall impression of the relative inferiority/superiority of a service provider and its services and is often considered similar to the customer's overall attitude towards the company. While, through study by Zeithaml and Bitner (2003), the authors defined service quality as a global judgment or attitude relating to the superiority of a service.

The quality service also regarding the consumer expectations on service environments, process and the output quality they can see themselves and received (Low & Lee, 2002). Hence, service quality plays a critical role in adding value to the overall service experience (Lau et al., 2005)

According to Kumar et al., (2009), service quality is defined as the gap between customers' expectation of service and their perception of the service experience. A service quality gap exists when there is a shortfall in which the service provider would like to close (Lewis et al., 1994). In other words, service quality is customer's evaluation on service or something that they are received which is integrated evaluation and continuous evaluation that customers give to product and services.

From a customers' standpoint, service quality has process quality and output quality (Liu, 2008). Yu (2002) expressed that service quality is subjective perception customers produced by comparing their pre service expectation and real experience. This concept is similar with Parasuraman et al., (1985), "Service Quality is defined as difference of customers' pre-service expectation and post-service perception". If service quality equal to customer pre expectation, the service has pre-perceived quality (Liu, 2008).

2.6 Dimension of Service Quality (SERVQUAL)

The dimensional approach to service quality provides an understanding of quality dimensions and its relevant features (Sultan & Ho, 2010). SERVQUAL was developed in the mid-1980s by Zeithaml, Parasuraman and Berry which is means to measure the scale of quality in the service sectors. The SERVQUAL scale, consists of 22 items representing five dimensions, was originally applied in five service settings: retail banking, credit card services, repair and maintenance of electrical appliances, long-distance telephone services, and title brokerage.

Subsequently, the scale has been used to measure service quality in a wide variety of service environments (Riadh Ladhari, 2009). The service quality model or the 'GAP
model' developed by a group of authors Parasuraman, Zeithaml and Berry at Texas and North Carolina in 1985, highlights the main requirements for delivering high service quality. It identifies five 'gaps' that cause unsuccessful delivery. SERVQUAL was originally measured on 10 aspects of service quality: It measures the gap between customer expectations and experience.

The basic assumption of the measurement was that customers can evaluate a firm's service quality by comparing their perceptions with their expectations. SERVQUAL has its detractors and is considered overly complex, subjective and statistically unreliable. Customers generally have a tendency to compare the service they 'experienced' with the service they 'expect'. If the experience does not match the expectation, there arises a gap. Nyeck, Morales, Ladhari, and Pons (2002) stated the SERVQUAL measuring tool "remains the most complete attempt to conceptualize and measure service quality". The main benefit to the SERVQUAL measuring tool is the ability of researchers to examine numerous service industries such as healthcare, banking, financial services, and education (Nyeck, et al., 2002).

According to Parasuraman, et al., (1988) in theory of the determinants of service quality, five dimensions represent the different between consumer expectations and perceptions of a firm performance along each quality dimension. Perceived quality is a function of the magnitude and direction of the five perceptual dimensions as shown in Figure 2.2.



Figure 2.2 Theory of the Determinants of Perceived Quality

Reliability quality is an ability to perform the promised service dependably and accurately, assurance quality is a competence of the system and its credibility in providing courteous and secure services. It also refer to staff or employees ability to inspire trust and confident among customers, tangible quality is an appearance of physical facilities, equipment, personnel and communication materials which is staff appearance, empathy quality is approachability, ease of access and effort taken to understand customer needs and responsiveness quality is a willingness to help customers and provide prompt service in order to respond customer needs (Parasuraman et al., 1990).

SERVQUAL model is widely used by researcher in order to measure the service quality. According to research done by Butt and Run (2010), SERVQUAL model is a measurement to measure the Malaysian private health service quality. The similar research in banks is done by Kumar, Kee and Charles (2010), where the study is to look on service quality between conventional and Islamic banks in Malaysia. In this study, the same model had been used as measurement.

A research done by Hussein and Amal (2013), found that cronbach alpha for five service quality dimensions (tangibles, reliability, responsiveness, safety and empathy) were high and the SERVQUAL instrument proved to be reliable, valid and appropriate in doing a research on service quality in Saudi public and private hospitals.

Furthermore, mostly research to study relationship between service quality and customers satisfaction are using SERVQUAL instrument. This is supported by research had been done by Angelos & Nancy (2014); Pankaj et al., (2014); Paramaporn et al., (2014) and George et al., (2013) that shows that there are relationship between reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality towards customers satisfaction in clinics, sport event, internet service provider and hospital.

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Besides that, in measuring university service quality in the International branch of Amir Kabir University in Iran, 102 students in five different courses were asked to complete a SERVQUAL questionnaire (Abili, Thani & Afarinandehbin, 2012) while research done by Ahmed and Shoeb (2009), service quality of public university library in Bangladesh was measured by using the same instrument model from its users viewpoint.

Gounaris (2005), SERVQUAL is used to measure assessing perceived service quality in business-to-business (b2b) context from four different service industries. In a related study based from SERVQUAL instrument is done by Curry and Sinclair (2002) in assessing the quality of physiotherapy services.

According to Riadh Ladhari (2009), who is doing research on the SERVQUAL scale for measuring service quality found that SERVQUAL remains a useful instrument for service-quality research based on paper reviews for 20 years period since 1988 to 2008 of research on the SERVQUAL which studies are selected from well-known databases and SERVQUAL or RATER (Reliability, Assurance, Tangible, Empathy, Responsiveness) is a service quality framework.

2.7 Previous Study

Regarding the relationship between customer satisfaction and service quality, Wilson, Zeithmal, Bitner and Grembler, (2008) as Figure 2.3 below, suggested that service quality, product quality and price will affect customer satisfaction while service quality will comes from five dimensions which is reliability, responsiveness, assurance, empathy and tangible which is complies with the idea of Parasuraman et al., (1990) in SERVQUAL instrument. This theory explains SERVQUAL (reliability, responsiveness, assurance, empathy and tangibles) as a service quality. Furthermore, service quality, product quality and price lead to customer satisfactions which are effected by two factors which are situational factor and personal factor which finally be reflects on customer loyalty.



Figure 2.3 Customer Perceptions of Quality and Customer Satisfaction.

According to the research had been done by Keiningham, Aksoy, Andreassen and Estrin (2006) to investigate the relationship between parent satisfaction and child retention at a childcare provider among 1003 respondents who is childcare clients in USA. The results found that parent satisfaction is most important to child retention when the child is very young which birth to one year of age is. But as children increase in age, however parent satisfaction becomes increasingly less predictive of children continued enrolment at a childcare facility.Sample consists of 10 interviews

which were interviewed in person or by telephone to staff of childcare center from all over United States. From the interview, the results show that age of children itself might effects what parent needs. It also shows that customer satisfactions are different between each parent because each of them has different expectation as different parent have different needs.

A research done by Paramaporn, et al., 2014 to investigate the relationship between service quality and their relationship with internet service provider (ISPs) customers revealed that quality was positively associated with service quality.

According to Grace and O'Cass (2003), who are done a study on choice, switching and search behavior in child care services among child care switchers in Australia, the result found that significance finding between choice, switching and post-switching dimensions. The sample consists of 84 total surveys by using self-administrated survey instrument.

In a related study, Kang (2006) examined the integration of technical and functional quality in hierarchical structure by using the popular service-quality instrument, SERVQUAL. This study had been done among 19 mobile phone users in Korea who are recruited by direct interception in shopping mall. The study found that a two-component model yields which is functional quality and technical quality are better fit than a model that concentrating on functional quality alone.

Another study that revealed similar direction of relationship was conducted by Baldwin and Sohal (2003), among dental care patient at The Royal Dental Hospital

Melbourne that engage in service quality and patient satisfaction. The questionnaire also based from SERVQUAL instrument.

While, according to research done by Dean (2002) in call centers in Australia which is customers from bank and insurance company as respondents, found that both perceptions of quality and customer orientation of the call center were related to loyalty to the providing organizations and perceptions of quality partially mediated the customer orientation to loyalty relationship.

"Most companies are adopting quality management programs which aim at improving the quality of their products and marketing processes, because it has been proven that quality has a direct impact on product performance, and thus on customer satisfaction (Kotler et al., 2002, p. 8)".

In study to investigate the degree to which behavioral intentions could be explained by service quality dimension among 205 customers of two hotels in north Greece by Alexandris, Dimitriadis and Markata (2002), indicates that service quality significantly correlated with behavioral intentions.

According to Allred A.T and Addams H.L (2000) founded that half of their respondents surveyed reported that they had stopped using financial service providers because of poor service performance and decision was made because bank failed to provide adequate service.

In similar study done by Wang and Shieh (2006) in CJCU Library to measure the relationship between three variables (customer satisfaction, service quality and service loyalty) concluded that the overall service quality has a significantly positive effects on overall users satisfaction. In fact, the perceived important of service quality dimensions has no significant different among institutes and status. In addition, library needs to improve certain issues in order to improve and gain users satisfaction.

For instance, a study by Suneeta and Koranne (2014), mentioned that "high service quality is achieved by knowing operational process through identifying problems in service and defining measures for service performances and outcomes as well as level of customer satisfaction" and the results found that there is direct relationship between service quality and customer satisfaction.

A study done by Pankaj, et al., (2014) found that there was dissatisfaction among the students regarding the tangibles of the clinic, with more than 50 percent favouring upgrading. There was satisfaction among the respondents regarding the availability of the doctor after clinic hours, but contact details for the clinic staff were not easily accessible on campus. More than 60 percent of respondents were satisfied with the cleanliness of the campus clinic. More than 50 percent felt that the campus clinic was not equipped to deal with emergencies efficiently. At the same time, 90 percent of respondents reported the availability of referral facilities in case of emergencies.

Based on research done by Zeithaml et al., (1996); Bayraktar, et al., (2011); Ojo, (2010); Tam, (2012); Agbor, (2011) stated that there are a positive relationship between service quality and customer satisfaction in several service provider by using

SERVQUAL (reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality) instrument as measurement.

In related study, Pankaj, et al., (2014); Sultan and Ho (2010) proposed a direct relationship between reliability quality and customer satisfaction when there is a child care center ability to perform the promised service dependably and accurately. Furthermore, Syed, Syed & Ayesha, (2015) stated that results of regression analysis indicate that reliability quality dimensions of service quality have significant positive effect on job satisfaction but there are argument by Pankaj, et al., (2014) stated that a research done in clinics found that customers we're not satisfied with facilities where more than 40 percent said that their clinic lacked of modern equipment, sufficient chairs and beds and that facilities were not visually appealing as customers satisfaction. Therefore:

H1: There is a positive relationship between reliability quality and customer satisfaction

Furthermore, Butt and Run, (2010) reported that assurance quality is a stronger predictor when secure services is offered as well as trust and confident among customers are exist. In related study, Syed et al., (2015) stated that results of regression analysis indicate that assurance quality dimensions of service quality have significant positive effect on job satisfaction. Therefore:

H2: There is a positive relationship between assurance quality and customer satisfaction

According to Ahmed and Shoeb (2009) stated that tangible quality were positive influencing customer satisfaction when physical facilities, equipment, personnel and communication materials were satisfied customers. This finding is consistent with Syed et al., (2015) found that results of regression analysis indicate that tangible quality dimensions of service quality have significant positive effect on job satisfaction. Therefore:

H3: There is a positive relationship between tangible quality and customer satisfaction

Empathy quality (Sultan & Ho, 2010) showed there is positive relationship between empathy quality and customer satisfaction while according to Syed et al., (2015) found that he dimensions of responsiveness and empathy are found insignificant in responding to the requirements of customers when results of regression analysis indicate that all dimensions of service quality have significant positive effect on job satisfaction except empathy quality. Therefore:

H4: There is a positive relationship between empathy quality and customer satisfaction

Responsiveness quality (Suneeta & Koranne, 2014) is directly influence the customer satisfaction as well when a prompt service is provided in order to respond any customer needs. Syed et al., (2015) found that results of regression analysis indicate that responsiveness quality dimensions of service quality have significant positive effect on job satisfaction but Hussein and Amal (2013) found that employee

humanitarian attitude, courtesy and communication skills dealing (responsiveness quality) with the patients ranked last in private hospitals. Therefore:

H5: There is a positive relationship between responsiveness quality and customer satisfaction

2.8 Summary of the Chapter

This chapter provides an overview of the direct perception of service quality and customer satisfaction through previous studies that have been conducted. SERVQUAL measurement was described in details for better understanding since this is a key instrument in this study. From the literatures review, several research hypotheses were proposed in order to propose the research framework in chapter three.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

In this chapter three on methodology part, overall is discussing on research method adopted in this study. It begins with the framework that showed the theoretical framework in order to illustrate the relationship between independent variables (reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality) and dependent variable (customer satisfaction). Next followed by research hypothesis, research design and data analysis. The purpose of this section is to provide a clear and complete description of the specific steps employed in this research.

3.2 Theoretical Framework

Based on the literature review and in line with the research questions and objectives of this study on chapter one, the framework was develop and shows in figure 3.1. The independent variables (IV) is referring to the service quality based on SERVQUAL instrument which is reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality (Parasuraman et al., 1990) while the dependent variable (DV) is referring to the customer satisfaction (Best, 1977: 174).

The study proposed the following research framework to define the relationship between research variables as below:



Figure 3.1 Research Framework adopted from Theory of the Determinants of Perceived Quality.

3.3 Research Hypothesis

The following hypothesis of this research has been developed from previous literature in chapter two and will be tested in Chapter 4. The null hypothesis (Ho) and alternate hypothesis (H1) are as follows:

Reliability Quality

- H10: There is a positive relationship between reliability quality and customer satisfaction
- H1A: There is a negative relationship between reliability quality and customer satisfaction

Assurance Quality

- H2o: There is a positive relationship between assurance quality and customer satisfaction
- H2A: There is a negative relationship between assurance quality and customer satisfaction

Tangible Quality

- H30: There is a positive relationship between tangible quality and customer satisfaction
- H3A: There is a negative relationship between tangible quality and customer satisfaction

Empathy Quality

- H40: There is a positive relationship between empathy quality and customer satisfaction
- H4A: There is a negative relationship between empathy quality and customer satisfaction

Responsiveness Quality

- H50: There is a positive relationship between responsiveness quality and customer satisfaction
- H5A: There is a negative relationship between responsiveness quality and customer satisfaction

3.4 Research Design

Numerous researches believed that the research universally can be perceived as a systematic process to find out things. To achieve the purposes of research, appropriated research design must be developed. Welman and Kruger (1999) and Allison et al., (2007) defined research as a systematic inquiry that is reported in a form that ensured the research result and methods to be available to others. Welman and Kruger (1999) highlighted that research problem related to some of the difficulties that researchers experience in the context of either theoretical or practical situation.

The study is to determine the relationship between service quality (reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality) and customer satisfaction in child care center. In this study, we have applied correlational research design to conduct a descriptive research by using survey research design which used SERVQUAL model to analyze the customer satisfaction in child care center services provided. A survey research questionnaire of 22 items has been used to collect the data of 116 parents in PPKKTPIS and Pewaris Generasi Unimap. The survey research design is a very valuable tool for assessing opinions and trends even on a small scale.

3.5 Questionnaire Design

This study were used the questionnaire in three sections to measures each variables. The first section will focus on socio-demographics profile questions in personal details section which is ages, employment, numbers of child, education level and household income range among respondents.

While the second section will refer to customer satisfaction and service quality by using questionnaire adopted based on well-known and widely used measure which is adopted from Parasuraman, et al., (1988) by using SERVQUAL item scale that focuses on five dimensions which are; reliability (ability to perform the promised service dependably and accurately), assurance (competence of the system and its credibility in providing a courteous and secure services), tangible (appearance of physical facilities, equipment, personnel and communication materials), empathy (approachability, ease of access and effort taken to understand customer needs) and responsiveness (willingness to help customers and provide prompt service) as measurement. Each item of scale consist of five-point Likert scales with 1=strongly disagree and 5=strongly agree.

Finally, in third section will ask on customer satisfaction adopted from Best (1977: 174) which is comprised on four questions. Each item of scale consist of five-point Likert scales with referring to 1=strongly disagree and 5=strongly agree.

According to Best (1977:174) as below in figure 3.2 shows that with score 1.00 to 1.80 is referring to the lowest satisfaction level, score 1.81 to 2.61 shows the low satisfaction level, score 2.62 to 3.41 represent the average satisfaction level, score 3.42 to 4.21 shows the good satisfaction level and lastly from score 4.22 to 5.00 refer to the very good satisfaction level.

SCORE	LEVEL OF SATISFACTION
1.00 - 1.80	Lowest Satisfaction
1.81 – 2.61	Low Satisfaction
2.62 -3.41	Average Satisfaction
3.42 - 4.21	Good Satisfaction
4.22 - 5.00	Very Good Satisfaction

Figure 3.2 *Classification of Satisfaction Level.*

All measures in each section are proved to be valid and reliable after doing pilot test and will follow by Cronbachs Alpha coefficient in SPSS among 30's respondents.

3.5.1 Sampling

A population can be defined as including all people or items with the characteristic one wish to understand. Because there is very rarely enough time or money to gather information from everyone or everything in a population, the goal becomes finding a representative sample (or subset) of that population. Sample is a subset of a population. A sample frame is list of population elements from which a sample can be drawn. As mentioned by Hague and Harris (1993), a sampling frame should meet the following criteria which are; frame should contain a list of members of the defined population; frame should be complete and up to date; no element listed more than one; information given on the frame provides adequate means for stratifying the sample.

Thus, a total populations is comes from the entire parents which is send their child to child care center in PPKKTPIS, UUM and Pewaris Generasi UniMAP. They were all assign to answer the questionnaires question.

3.5.1.1 Sample size

The total population is 116 from both child care center which is 80 parents from PPKKTPIS and another 36 parents from Pewaris Generasi UniMAP. According to Krejcie and Morgan (1970) table, sample size is 86 for each 110 peoples and 92 for each 120 peoples. This sample size is sufficient to represent the whole population in this study. Krejcie and Morgan (1970) table shows:

Ν	S	Ν	S	Ν	S	Ν	S	Ν	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384
Note N	is nonula	tion size							

Note: N is population size S is sample size

Figure 3.3 *Krejcie and Morgan Table*

3.5.1.2 Procedure and Data Collection

Data were collected through research questionnaire to be answer by parents. This is a part of quantitative research study and convenience sample when questionnaire is distributed to all parents who are sending their child to both child care center in PPKKTPIS, UUM and Pewaris Generasi UniMAP. Parents name list given by the both child care center administrators, each one equally likely to be selected. It was conducted about three weeks between 3rd to 21st March 2014 and total 116 research questionnaire were distributed.

To check the reliability and validity of the questionnaire, pilot test had been done among 30's respondents. The data is running by using Cronbachs Alpha coefficient in Statistical Products and Solutions Services (SPSS) software. Each question below 0.6 is considering as poor and will be modified with some minor rewording after pilot test to improve the respondents understanding while answered the questionnaire survey question distributed.

Research accuracy is based from research instrument that will be use and that's why research instrument should absolutely valid and reliable. When Cronbach Alpha value is higher, it means that the scale had the reliability. The instrument will be valid if that instrument use able to be test what researchers want to be tested while reliable instruments should can be trust if that instrument is consistent even though it is tested repeatedly. To get the valid and reliable research instrument for qualitative and quantitative variable, instrument should be test earlier before it is be use.

In order to distribute the questionnaire, the researcher was administrating face-to-face method to make sure the participants will understood the questions and style of answering. Each set of questionnaire will be collect on the next day by staff in both nurseries and kindergarten to avoid and minimize the possibilities where set of paper missing and not been returned.

Both the customer satisfaction and service quality scales were translated in Malay language by professional translators and were revised and proved read by two academics. A qualified Malay teacher were finally reviewed the questions in order to ensure the appropriate language and comprehensiveness questions had been done.

3.6 Pilot Study

Questionnaire tested among 30 respondents in order to check the questionnaire survey question and some minor editing on wording will be did before it will distribute to sample respondents. Pilot study involved reliability test for each instrument by using the Cronbach's Alpha reliability coefficients. According to Sekaran (2000), reliability less than 0.60 is considered as poor, 0.70 is acceptable and over 0.80 is good.

No. of Item	Variable	Cronbach's Alpha	Remarks
4	Customer Satisfaction	0.775	Acceptable
5	Reliability Quality	0.848	Good
4	Assurance Quality	0.826	Good
4	Tangible Quality	0.806	Good
5	Empathy Quality	0.612	Poor
4	Responsiveness Quality	0.229	Poor

Table 3.1Reliability Coefficient for Multiple Item in Pilot Study (n=30)

Each question below 0.6 is considering as poor and will be modified. Some minor rewording will be doing after pilot test. Research accuracy is based from research instrument that will be use and that's why research instrument should absolutely valid and reliable.

Four questions on responsiveness quality is 0.229 Cronbach's Alpha and five questions on empathy quality is 0.612 Cronbach's Alpha where both of measure shows as poor. This is because both of measurement in responsiveness quality and empathy quality is using reverse coded and because of that reason, some respondents might be confuses and did not understand the questions well. Rewording had been done.

3.7 Data Analysis

To run the data, the proposed model is using SPSS version 20.0 because of the completeness and widely used. This study had been tested on mean, standard deviation, t-tests to verify any links or relationship between service quality and customer satisfaction, analyses of variance (ANOVAs), correlations and reliability coefficients with Cronbach's alpha. Finally, the outputs from SPSS software were

transferred into Microsoft Word and Microsoft Excel to manage and present the documentation, table and graph accordingly.

In this research study, Pilot study was done among 30 respondents following by descriptive statistic and normality test. Next reliability test and correlation analysis finally followed by regression analysis.

3.8 Summary of the Chapter

This chapter proposed the research framework in order to illustrate the relationship between independent variables (reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality) and dependent variable (customer satisfaction). The purpose of this section is to provide a clear and complete description of the specific steps employed in this research especially in research hypothesis, research design and data analysis.

CHAPTER FOUR

RESULTS AND FINDINGS

4.1 Introduction

In this chapter four, discussion is more on results and findings of data analysis obtained from data collected based on questionnaire question survey answering by parents in PPKKTPIS, UUM and Pewaris Generasi UniMAP. This study aims to achieve the research objective as well as answer the research questions as highlighted in chapter one previously. Based on the data from questionnaire question survey collected, various situations were noted that only empathy quality is satisfied by parents who are sending their kids in both child care center and this is highlighted in the following paragraphs. Other than that, there are other factors that influences these parent to send their kids in both child care which are cheaper fees offered and distance is convenience for them.

4.2 Response Rate

Generally, response rate can be referring as return or completion rate by the respondents who is answered the survey questions distributed and normally will be present in percentage form.

According to the Table 4.2, it shows the summary of questionnaires distributes along the data collection process in this study. About 116 copies were distributed in both child care center which is 80 in PPKKTPIS and 36 in Pewaris Generasi UniMAP, but only 63 or 78.75 percent from PPKKTPIS and another 27 or 75 percent from Pewaris Generasi UniMAP are collected. According to the table, the remaining 17 or 21.25 percent of questionnaires from PPKKTPIS were not return and incomplete. Besides, only 9 or 25 percent of questionnaires from Pewaris Generasi UniMAP were not return and incomplete.

	Distributed questionnaires		Collected questionnaires		Unreturned questionnaires	
	Total	Percent (%)	Total	Percent (%)	Total	Percent (%)
PPKKTPIS	80	100	63	78.75	17	21.25
Pewaris Generasi UniMAP	36	100	27	75	9	25

Table 4.2

4.3 Descriptive Analysis

Descriptive statistics were done to describe the characteristic of respondents which is referring to mean and standard deviation for all variables which is independent or dependent variable. The general purpose in doing descriptive statistical analysis is to transformed raw data into a form of analysis in order to make it easy to understand and interpret.

Frequency statistics under descriptive analysis is used to present the main characteristic of the sample which is referring to demographic profiles. According to Sekaran (2010), stated that frequency analysis is the nominal variable of the interest which is obtained for each independent variable. This analysis produces frequency tables showing frequency counts and percentages of the values of demographic factors.

Results summary from first section in questionnaire question which is demographic section were representing in frequency number and percentage. This is to represent and illustrate the demographical data as below that includes group of age, employment, number of child, education level and household income. The demographic table includes age group, employment, and numbers of child, education level and household income. Totally, the frequency is 90 respondents and the summary on respondent background can be seen in table 4.3 as shown.

Table 4.3Background Information of the Respondents

Demographics		Frequency	Percentage (%)
	18-25 years	4	4.4
	26-35 years	59	65.6
Age Group	36-45 years	26	28.9
	46-55 years	1	1.1
	More than 55 years	4	4.4
-	Executive/Senior Management	4	4.4
Employment	General Administration/ Supervisory	22	24.4
	Civil Service	40	44.4
	Professional	19	21.1
	Self-employed/Business Owner	4	4.4
	Unemployed/Housewife/Retired	1	1.1
	1-3	80	88.9
	4-6	9	10.0
Numbers of Child	7-9	1	1.1
	More than 9	0	0
	Primary School	0	0
	High School	19	21.1
Education Level	Diploma	16	17.8
	Degree	19	21.1
	Master	25	27.8
	PHD/ DBA	11	12.2
	1500 and below	10	11.1
	1501-2500	13	14.4
Household Income	2501-4000	31	34.4
	4001-6000	14	15.6
	More than 6000	22	24.4

Table 4.3 shows that out of 90 respondents, 59 (65.6 percent) respondents were ages from 26 to 35 years old followed by 26 (28.9 percent) respondents are 36 to 45 years old. 4 (4.4 percent) respondents were from 18 to 25 years old and another 4 (4.4 percent) respondents were more than 55 years old. 1 respondents referring to 1.1 percent is from 46 to 55 years old.

Table shows the distribution of respondents based on parent's employment. The largest respondents is in civil service which is 40 respondents referring to 44.4 percent followed by 22 or 24.4 percent respondents in general administration or supervisory. The third largest is respondents employed as professional which is 19 or 21.1 respondent followed by 4 or 4.4 percent respondent in each executive/senior management and self-employed/business owner. Lastly, another 1 or 1.1 percent respondents is under unemployed/housewife/retired category.

The distribution of respondents based on number of child shows the majority 80 respondents or 88.9 percent only has currently 1 to 3 children, 9 or 10 percent respondents with 4 to 6 children followed by 1 or 1.1 percent respondent with children 7 to 9 person. There is no respondent with children above than 9 persons.

The distribution of respondents based on education level shows the 25 or 27.8 percent respondents holding a master level followed by 19 or 21.1 percent holding each high school and degree level. 16 or 17.8 percent respondents are diploma holder and other 11 or 12.2 percent respondents with PHD or DBA holder.

The distribution of respondents based on monthly household income shows the 31 or 34.4 percent respondents earn from RM 2501 to RM 4000 household income per month followed by 22 or 24.4 percent respondents earn about more than RM 6000 per month. 14 or 15.6percent respondents earn about RM 4001 to RM 6000 per month while 13 or 14.4 respondents earn only RM 1501 to RM 2500 per month. Only 10 or 11.1 percent of respondents earn below than RM 1500 per month.

4.3.1 Reliability Analysis

Reliability test includes in descriptive statistic and according to Sekaran (2003), it is mainly used to measure how consistent and stable the variable. Reliability analysis allows us to study the properties of measurement scales and the items that make them up. The reliability analysis procedure calculates a number of commonly used measures of scale reliability and also provides information about the relationships between individual items in the scale.

Through the Likert Scale designed in questionnaires survey, Cronbach's Alpha reliability coefficient can be analyzed to get the Cronbach's Alpha value. The value is to shows how well the questionnaires surveys are positively correlated to each other between independent and dependent variables. According to Sekaran (2003), the reliability coefficient value almost to 1.00 means better, value less than 0.60 is poor, 0.70 is acceptable, those over 0.80 are good and 0.90 above is excellent.

Table 4.4Reliability Test

No of Item	Study Variables	Cronbach's Alpha	Remarks
4	Customer Satisfaction	0.813	Good
5	Reliability Quality	0.823	Good
4	Assurance Quality	0.789	Acceptable
4	Tangible Quality	0.744	Acceptable
5	Empathy Quality	0.728	Acceptable
4	Responsiveness Quality	0.504	Poor

Results represent in Table 4.4 shows the reliability test analysis for each variable. From the table, Cronbach's Alpha for dependent variable which is customer satisfaction is 0.813, tangible quality (independent variable) is 0.744, reliability quality (independent variable) is 0.823, responsiveness quality (independent variable) is 0.504, assurance quality (independent variable) is 0.789 and empathy quality (independent variable) is 0.728.

Since value for Customer Satisfaction (dependent variable) is 0.813, the results shows that the variables used were accurate and able to measure satisfaction of customers. While, for independent variable which is consists of five items shows the score results over 0.70 and this results are obtained good and reliable values. The independent variables are: tangible quality (independent variable) is 0.744, reliability quality (independent variable) is 0.744, reliability quality (independent variable) is 0.823, assurance quality (independent variable) is 0.789 and empathy quality (independent variable) is 0.728. This is except for independent variable responsiveness quality with Cronbach's Alpha score 0.504 is consider as poor because four items under responsiveness quality is reverse coded question and respondent might be confuse.

From the result of Cronbach's Alpha reliability coefficients value, the conclusion is dependent and independent variables used in the study are positively correlated to each other and were approximates as good.

4.3.2 Mean, Minimum, Maximum, Standard Deviation

In statistics analysis, minimum and maximum value can be defined as lower and higher value to shows and represent the greatest and least elements of a sample while mean can be defined as an average value by sum all the collections of numbers and divide by how many numbers. Standard Deviation shows how much variation from average. The lower standard deviation value shows that data is very close to mean value while the higher standard deviation value represents the data points are spread out over a large range of values.

Variables	Ν	Min	Max	Mean	Standard Deviation
Customer Satisfaction (DV)	90	2.50	5.00	3.6833	0.55561
Reliability Quality (IV)	90	3.20	5.00	4.4776	0.44175
Assurance Quality (IV)	90	2.75	5.00	4.1861	0.55278
Tangible Quality (IV)	90	3.25	5.00	4.3028	0.41308
Empathy Quality (IV)	90	3.40	5.00	4.1956	0.46153
Responsiveness Quality (IV)	90	3.25	5.00	4.2417	0.43777

 Table 4.5

 Mean, Minimum, Maximum, Standard Deviation

Table 4.5 presents customer satisfaction (dependent variable), tangible quality (independent variable, reliability quality (independent variable), responsiveness quality (independent variable), assurance quality (independent variable) and empathy quality (independent variable). The column labeled as N represents the number of

cases in data collected. Minimum and Maximum columns represents the range of variables.

Table 4.5 above shows minimum number of respondents answering customer satisfaction (dependent variable) is 2.50. From the value it can be conclude there are respondents are disagreeing with customer satisfaction variable question and almost all either agreed or strongly agreed on the variable. This is by using the 5-likert scale given from 1 to 5.

While for independent variable; tangible quality (minimum 3.25); reliability quality (minimum 3.20); responsiveness quality (minimum 3.25); empathy quality (minimum 3.40) indicates that some of respondents agree and almost all either are strongly agreed that the tangible quality may be independent variable for customer satisfaction while assurance quality with minimum 2.75 shows that some respondents are disagree. The minimum of reliability quality is 3.20 which showed that respondents are disagreed on those questions variable. In conclusion, the maximum value of these three variables is 5.00.

In the Mean column from the table shown, mean is represent as the average answer which are mean for customer satisfaction is 3.6833, tangible quality is 4.3028, reliability quality is 4.4776, responsiveness quality is 4.2417, assurance quality is 4.1861 and empathy quality is 4.1956. Generally the mean results found that the respondents are agreed with the question.

In the Standard Deviation column, the values represent the variability which referring to measure the reliability in the distribution of a variable. It is to identify how the data is concentrated around the mean value. If standard deviation value is smaller means that it is more concentrated. The standard deviation value for customer satisfaction (dependent variable) is 0.55561, while, standard deviation for each independent variable are; tangible quality is 0.41308, reliability quality is 0.44175, responsiveness quality is 0.43777, assurance quality is 0.55278 and empathy quality is 0.46153. As a results from the standard deviation values, mean is around 3.6833 to 4.4776 that shows the responses or feedback from respondent accepted as concentrated.

4.4 Inferential Analysis: Pearson Correlation

To make sure there are any overlapping between variables, correlation analysis were done before testing on multiple regression to identify the significant of each variables. This is to identify the positive or negative relationship for each variable to describe the relationship.

The statistical test that belongs to this inferential analysis is means, correlations and regression analysis. According to Davis (1997) the purpose of this inferential test is to find a correlation between at least two continuous variables as rules as below:

 0.70 and above
 V

 0.50 - 0.69
 St

 0.30 - 0.49
 M

 0.10 - 0.29
 Lo

 Below 0.10
 V

Very Strong Relationship Strong Relationship Moderate Relationship Low Relationship Very Low Relationship

Table 4.6Pearson Correlation Statistics

	IV	IV	IV	IV	IV	DV
Independent Variable						
Tangible Quality	1					
Reliability Quality	.679**	1				
Responsiveness Quality	.430**	.531**	1			
Assurance Quality	.461**	.437**	.416**	1		
Empathy Quality	.437**	.479**	.634**	.464**	1	
Dependent Variable						
Customer Satisfaction	0.257*	0.190	0.217*	0.183	0.384**	1
**. Correlation is signific	cant at the	0.01 level (2	2-tailed).			

*. Correlation is significant at the 0.05 level (2-tailed)

Table 4.6 above shows that the relationship between five independent variables (tangible, reliability, responsiveness, assurance and empathy), and dependent variable (Customer Satisfaction). The correlation between tangible quality and customer satisfaction shows by R-value which is 0.257 or 25.7 percent at 99 percent confident interval, it means that it is a low relationship. Then correlation between reliability quality and customer satisfaction is 0.190 or 19.0 percent at 99 percent confident interval means the low relationship. Thirdly, the correlation between responsiveness quality and customer satisfaction, R-value is 0.217 or 21.7 percent at 99 percent confident interval, it means that this value represents low relationship. Next, the correlation between assurance quality and customer satisfaction, R-value is 0.183 or 18.3 percent and lastly the correlation between empathy quality and customer satisfaction, R-value is 0.384 or 38.4 percent which shows the moderate relationship.

Even though the R-value shows a low and moderate relationship, it is still significant. This is referring to the Correlation is significant at the 0.01 level (2-tailed) and Correlation is significant at the 0.05 level (2-tailed). Supported by Keiningham, Aksoy, Andreassen and Estrin (2006) found that parent satisfaction is most important to child retention when the child is very young which birth to one year of age is. But as children increase in age, however parent satisfaction becomes increasingly less predictive of children continued enrolment at a childcare facility. From the interview done by Keiningham, et al., (2006), the results show that age of children itself might effects what parent needs. It also shows that customer satisfactions are different between each parent because each of them has different expectation as different parent have different needs.

4.5 Multiple Regression Analysis

Multiple regression analysis is to evaluate relationship between several independent variables (reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality) and dependent variable (customer satisfaction). From the regression analysis result, these are the formulated regression function as below.

Table 4.7	
Relationship between Service Quality and Customer Satisfaction	

Independent Variable Service Quality	Dependent Variable Customer Satisfaction
Tangible Quality	0.168
Reliability Quality	-0.075
Responsiveness Quality	-0.056
Assurance Quality	-0.014
Empathy Quality	0.389*
R ²	0.164
Adjusted R ²	0.114
F Value	3.290

Note: Significant levels: **p<0.01; *<0.05

Table 4.7 showed the beta coefficient is 0.168 for Tangible Quality, Reliability Quality is -0.075, Responsiveness Quality is -0.056, Assurance Quality is -0.014 and

Empathy Quality is 0.389. R-Square is the proposition of variance in dependent variable (customer satisfaction) which could be predicted from the independent variables (service quality). This value indicates that 16.4% of the variance in customer satisfaction can be predicted from the variables of service quality which are tangible quality, reliability quality, responsiveness quality, assurance quality and empathy quality.

As predictors are added to the model, each predictor will explain some of the variance in the dependent variable. One could continue to add predictors to the model which would continue to improve the ability of the predictors to explain the dependent variable, although some of this increase in R-Square would be simply due to chance variation in that particular sample. The value of 16.4% may increase if these study using more than one independent variable to predict customer satisfaction. Meanwhile, the adjusted R-Square attempts to yield a more honest value to estimate the R-Squared for the population. The value for R-Square was 0.164 while the value for Adjusted R² is 0.114.

There are three dimension of SERVQUAL depicts a negative link with the customers' satisfaction; Reliability (r=-0.075, =0.05) Responsiveness (r=-0.056, =0.05) and Assurance (r=-0.014, =0.05). This peculiar judgment produced negative beta coefficient values; whereas a negative beta coefficient means that a 1 unit positive standard deviation change in independent variable is expected to result in a negative beta coefficient change in dependent variable. Therefore, the negative values reveal that customers do not consume good quality from both nurseries. Besides, most of customer does not agree that services provided by both nurseries could satisfy them.

Similarly, dimension Tangibility of SERVQUAL indicates not significant relationship with customer satisfaction. For this result, customer do not agree that tangibility services (e.g.: furniture, electric and electronic attributes etc) provided by nurseries could meet up their satisfaction. There is a significant relationship between dimension Empathy of SERVQUAL (r=0.389, p=0.05) and customers' satisfaction. The results deliver meaning that customer perceived emptiness of nurseries service provider able to satisfy them.

All in all, SERVQUAL Reliability, SERVQUAL Responsiveness, SERVQUAL Assurance and SERVQUAL Tangibility is p>0.05 and this value shows that this is not significant and positively affected to Customer Satisfaction and hypotheses are not supported. Conversely, the beta coefficient for SERVQUAL Empathy is 0.389 (p<0.05) and this is significant and hypothesis is supported. Table 4.8 were shows the summary of hypothesis testing.

Table 4.8

Summary of the Hypothesis Testing Result

	Hypothesis	Result
H1	There is a positive relationship between reliability quality and customer satisfaction	Rejected
Н2	There is a positive relationship between assurance quality and customer satisfaction	Rejected
Н3	There is a positive relationship between tangible quality and customer satisfaction	Rejected
H4	There is a positive relationship between empathy quality and customer satisfaction	Accepted
Н5	There is a positive relationship between responsiveness quality and customer satisfaction	Rejected
There were insignificant and negatively affected between reliability quality and customer satisfactions and hypothesis are not supported. Therefore, first null hypothesis is rejected: There is a positive relationship between reliability quality and customer satisfaction.

There were insignificant and negatively affected between assurance quality and customer satisfactions and hypothesis are not supported. Therefore, second null hypothesis is rejected: There is a positive relationship between assurance quality and customer satisfaction.

There were insignificant and negatively affected between tangible quality and customer satisfactions and hypothesis are not supported. Therefore, third null hypothesis is rejected: There is a positive relationship between tangible quality and customer satisfaction.

There were significant and positively affected between empathy quality and customer satisfaction. Therefore, fourth null hypothesis is accepted: There is a positive relationship between empathy quality and customer satisfaction.

There were insignificant and negatively affected between responsiveness quality and customer satisfactions and hypothesis are not supported. Therefore, fifth null hypothesis is rejected: There is a positive relationship between responsiveness quality and customer satisfaction.

As the conclusions, there were insignificant and negatively affected between several service qualities which are reliability quality, assurance quality, tangible quality and responsiveness quality with customer satisfactions and hypothesis are not supported. Only empathy quality shows significant and positively affected between empathy quality and customer satisfaction. Thus, null hypothesis is accepted.

4.6 Summary of the Chapter

This chapter discussed on results and findings of data analysis obtained from data collected based on questionnaire question survey answering by parents in PPKKTPIS, UUM and Pewaris Generasi UniMAP in order to achieve the research objective as well as to answered the research questions as highlighted in chapter one previously. Several data analysis had been done by using SPSS software such as response rate, descriptive analysis, inferential analysis and multiple regression analysis and lastly come out with the results.

CHAPTER 5

DISCUSSION AND CONCLUSIONS

5.1 Recapitulation

This study is to test the relationship between five dimensions of SERVQUAL with customer satisfaction among parents in two child care center located in Sintok, Kedah and Kangar, Perlis. This study is to examine the relationship between service quality (reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality) and customer satisfaction as stated in research objectives.

Service qualities provided by the nurseries are not major contributor to their satisfaction. Based on the finding, most of the customer does not perceived a quality service from the nurseries. To clarify, only one dimensions of SERVQUAL namely empathy has greater score than other dimensions of SERVQUAL.

Further, correlation analysis showed that three dimensions of SERVQUAL namely tangibles, responsiveness, and empathy are positively associated with satisfaction and two dimensions which are assurance and reliability negatively linked with satisfaction.

Regression analysis also showed that only empathy quality has a significant relationship with customers' satisfaction. Through the open ended question, parents' stated other factors (other than SERVQUAL) play significant roles to determine their

satisfaction, such as distance from nurseries to workplace, reasonable price and internal marketing by workplace. Altogether, service quality is a very subjective aspect to be measure accurately. This is supported by Pankaj, et al., (2014) that found that clinic's location was convenient, with more than 60 percent supporting its location are satisfied with this factor. In a related study, Angelos and Nancy (2014) stated that especially from factor structure, service quality influence far exceeds convenience and price in determining overall satisfaction while research done by Hussein and Amal (2013), found that the best service quality in private hospitals was convenience and easily accessible locations. Besides, Datin Paduka Chew Mei Fun who is Deputy Minister of Women, Family and Community also said that cheaper fees and distance are the factors for parents to send their children to child care center (Harian Metro, 19 November 2014).

5.2 Relationship of SERVQUAL on Customer Satisfaction

5.2.1 Reliability Quality and Customer Satisfaction

Basically, reliability measures speed and accuracy of the service. There are five items measuring this variable. Based on the study findings, reliability quality has insignificant relationship and positively affected to customer satisfaction and hypothesis are not supported. This finding is consistent with study done by Pankaj, et al., (2014) shows that customers we're not satisfied with facilities where more than 40 percent said that their clinic lacked of modern equipment, sufficient chairs and beds and that facilities were not visually appealing as customers' satisfaction. Overall, the customers agreed to conclude that both of the nurseries do not fully reliable while delivering their service. However, all dimensions are important to customers. This is because quality measurement is subjective, and the valuation depends on individual view.

This study recommended nurseries to hire more staff to facilitate the existing service. More staff could facilitate segregation of duties of the nurseries. For example, administrative, operation (care and teaching), technical (chef, technician). Reliability must be designed into services and be included in all aspects of business.

Besides, facilities and building should be well maintained and managed from time to time in order to make sure kids and babies are comfortable for their development.

5.2.2 Assurance Quality and Customer Satisfaction

In dealing with human being, staff awareness, politeness and their potential to deliver faith and self-belief are the core aspect. Therefore, there are four items measure this variable. Based on the study findings, assurance quality has insignificant relationship and positively affected to customer satisfaction and hypothesis are not supported. Overall, the customers agreed to conclude that both of the nurseries do not fully satisfy their assurance quality in delivering their service. In details, both of the nurseries failed to create trust and confidence to their customers. If a service provider is highly skilled, but customers don't see that, their confidence in that provider will be lower and their assessment of that provider's service quality will be lower.

Therefore, this study suggested training should be given to staff so that they can perform well during their job task. Nurseries must communicate their expertise and competencies – before they do the work. Routine supportive supervision of program staff is another important element of managing quality services. Regular supportive supervision is essential to helping staffs understand and adhere to standards.

5.2.3 Tangible Quality and Customer Satisfaction

Tangibility is physical facilities, equipment, and appearance of personnel. There are four items measure this variable. Based on the study findings, tangible quality has insignificant relationship and positively affected to customer satisfaction and hypothesis are not supported. Overall, the customers agreed to conclude that both of the nurseries no need to rely on their physical appearances in order to satisfy them. Even though this is the least important dimension, appearance matters. Just not as much as the other dimensions. However, the danger is for service providers to make everything look sharp, and then fall short on Reliability or Responsiveness.

Even we could not see the service provided, tangibility quality is an emotional responses. Attractiveness of student uniform can be good example of the emotional response towards the provided service. Therefore, nurseries should able to design their students' uniform so that could assist in delivering the value of intangible service. This includes, keeping the design up to date according to current demand.

5.2.4 Empathy Quality and Customer Satisfaction

There are five items measure this variable. Based on the study findings, empathy quality has significant relationship with customer satisfaction. The findings verified that the dimension of Empathy is an essential component of caring about customers, staff, and nurseries. This finding is consistent with Hussein and Amal (2013), found that the empathy dimension had the highest value in comparison with other dimensions in SERVQUAL instruments. Customers also agreed that Empathy is a vital dimension which contributes to their satisfaction. Nurseries service provider can be as important as how it was done. Perhaps, the nurseries staff should be trained how to interact with customers and their end-users because empathy is essential in dealing with customers who are upset or angry. Even a brief session during initial orientation helps. Anything to help them understand their impact on customers' assessment of service quality. As stated by Ioannis and Lymperopoulos (2009), customers recommend a service provider only if they are satisfied and feel that employees empathies with them.

While hiring staff, nurseries should include empathy as criteria especially when hiring the teacher. It helps to have empathic people on the team, who will more naturally feel how something is "as important to you as it is to me." Other than that, keeping a work diary increases natural motivation by improving self-analysis, perception, and overall engagement with given task. It will improve and maintain staffs ability to empathize with customers.

5.2.5 Responsiveness Quality and Customer Satisfaction

In addition to continuously improving product quality, nurseries need to take various steps to improve its responsiveness and its customer service capabilities. For this reason, four items were enforcing to verify it. Based on the study findings, reliability quality has insignificant relationship and positively affected to customer satisfaction and hypothesis are not supported. Customers' of the nurseries views that the dimension of Responsiveness is not really important to meet their satisfaction. In related study, this finding is consistent with Hussein and Amal (2013), found that employee humanitarian attitude, courtesy and communication skills dealing (responsiveness quality) with the patients ranked last in private hospitals.

For that reason, longitudinal study seems the most suitable technique to meet this quality. By providing survey form, nurseries could welcome their customer to response with them; customer could simply state any unsatisfied services or further suggestion.

5.3 Suggestion for Future Research

This study only carried out the two child care center which is Pusat Perkembangan Kanak-Kanak Tunku Intan Safinaz and Pewaris Generasi UniMAP. Both of them are located at northern Malaysia. Their customer responses are took as samples to represent the total population. Thus, further study is recommended to implement more participation from others child care center all over Malaysia including Sabah and Sarawak because there are rapid development of business in this industry and data collected will be more accurate. Besides, there are many child care center all over Malaysia including private and offered by government such as KEMAS and PERMATA. Furthermore, data collected can be expended in both which are in villages and towns. By expend this research, data collected might be different and a comparison can be done between villages and town results. Certainly, the child care center will provide their service properly to meet the maximum customer satisfaction.

In order to assist nurseries in improving their service quality, future study suggested conducting longitudinal survey of child care center in Malaysia should be conducted, which would elicit the changing patterns of customers' needs and desires. In the hope that ongoing improvement could be done. Customers' assessments include expectations and perceptions across all five SERVQUAL dimensions. Nurseries need to work on all five, but emphasize them in order of importance. If sacrifices must be made, use these dimensions as a guide for which ones to rework. Also, nurseries can use SERVQUAL dimensions in determining specific customer and site needs.

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Finally, future research should be conducted to use others instruments in order to measures the quality in child care center such as image and past experience (Sultan & Ho, 2010), customer service, information support, privacy and security (Paramaporn, et al., 2014). It should be investigate all these relationship in order to get better understanding on effects of service quality in a more challenging customer environment.

5.4 Summary of the Chapter

This chapter has been discussed on discussion and conclusions of the research as recapitulation then followed explained on relationship between each SERVQUAL instruments (reliability quality, assurance quality, tangible quality, empathy quality and responsiveness quality) on customer satisfaction and the suggestion were made for future research.

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