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SERVICE QUALITY ON PATIENT EXPECTATION AND ACTUAL SERVICE RECEIVED AT GLEANEGAL KUALA LUMPUR

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Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business
Universiti Utara Malaysia
In Fulfillment of the Requirement for the Master of Science (Management)

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ABSTRACT

An improving patient satisfaction and service quality are very important in Gleneagles Hospital Kuala Lumpur. Although this hospital has increasingly number of patient but it is very important to understand patient needs and want and thus create long term and loyal customer. The aim of this study is to determine the relationship between patient expectations and actual service received towards the service offered. This is quantitative research method used to measure the five dimension of SERVQUAL model in service quality. Sample of three hundred and fifty set of questions paper used in this research distributed to inpatient and outpatient department in Gleneagles Kuala Lumpur. Results of the survey analysis revealed that there is a difference between pre and post service rendered to the patients. There is significant result in five dimension which is Assurance, Reliability, Responsiveness, Empathy. Nevertheless, there is no significant different result in Tangibility.

Keywords: service quality, patient expectation, actual service received

ABSTRAK

Memperbaiki dan meningkatkan mutu perhidmatan kepuasan pelanggan pesakit yang berkualiti adalah amat penting di Hospital Gleneagles Kuala Lumpur. Walaupun hospital ini mempunyai peningkatan bilangan pesakit tetapi ia adalah sangat penting untuk memahami keperluan pesakit dan mewujudkan hubungan jangka panjang yang setia. Tujuan kajian ini adalah untuk menentukan tahap kepuasan pesakit sebelum dan selepas mendapatkan perkhidmatan dan rawatan. Dengan mengunakan kaedah penyelidikan kuantitatif yang mengukur lima dimensi model SERVQUAL dalam kualiti perkhidmatan. Sebanyak tiga ratus lima puluh set soalan kertas yang diedarkan digunakan dalam kajian ini kepada pesakit dalam dan pesakit luar jabatan di Hospital Gleneagles Kuala Lumpur. Keputusan analisis kajian menunjukkan bahawa terdapat perbezaan di antara perkhidmatan sebelum dan selepas yang diberikan kepada pesakit. Terdapat hasil yang ketara dalam lima dimensi yang Keselamatan, Kebolehpercayaan, Tindakbalas dan Simpati. Walau bagaimanapun, tidak ada perbezaan yang ketara dalam sifat dpt Ketara kepada perkhidmatan seperti fasiliti dan lain-lain

Kata kunci: Servis kualiti, persepsi pesakit, tanggapan sebenar pesakit setelah mendapatkan rawatan

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF STUDY

Service quality has become a competitive advantage especially in private hospital health care services industry. The emphasizing on quality as it's become competitive advantage especially in private health care industry lead in patient satisfaction. An increasing knowledge and understanding of patient on their right seeking medical services especially from the private hospitals has led to improvement of service quality in the healthcare sector. Mpinganjira (2011) highlighted that due to high competitive environment in health care services the private hospital must focus on excellent business strategy, among which would concern the trait on demand.

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In this study of service quality and patient satisfaction in Gleneagles Kuala Lumpur, the SERVQUAL model by Parasuraman (1985) is used to measure the difference between expectation and actual service received as an indicator of customer satisfaction. In this research, a cross sectional and quantitative survey approach was employed to explore the quality received as perceived by customer. It is hoped that this research would lead to a better understanding of how Gleneagles Kuala Lumpur can focus on their service quality as a competitive advantage to their competitor.

In healthcare service it is important to understand patient need and want. According to Woodside (1989) cited in Peprah (2014), the basis of the needs and care of patients, especially in private hospitals is focused on customer satisfaction. psychological factors can affect the patient's healing and recovery process of patients therefore it becomes important to get as many aspects of patient satisfaction and therefore increased trust, loyalty and adherence to a health care provider by Calnan (1988). Peprah (2013) said health care provider must be very careful managing scarce health resources are allocated to maintain the health of the patient. Nevertheless, Jackson and Kroenke (1997), the development in patient satisfaction founds that healthcare service quality indicator aiding had discovered many aspects changes in service quality. The demand for services such as healthcare raise up considerably during the last half of the 20th century due to, among other things, the burden of illness, population segmentation and related healthcare consumption patterns by Ruff (2011). The demand for services is increasing and will continue to raise (Lamb, 2004).

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Private hospitals are go aboard on patient focused appliances rather than culture formed by the selective and decisions of medical expertise by Hendriks (2002). This was fully sustenance by Gitman & Mc Daniel (2005), Grönroos (2008) and Schermerhorn (2002) said service development is the key to improving customer satisfaction, especially modern world environment. This meets the requirements of and in accordance with the added value conscious customers. Over a year private hospital has really focus on maintaining and improving customer service quality to be above standard of clinical competence in order to change customer perception an understanding towards the health care service. Mostly in private hospital especially in Kuala Lumpur their service quality is rely on technical clinical

area such us diagnosis and procedure and the accuracy of treatment without focusing on quality of the service rendered to the patients. With increasingly awareness and global information and media now patient are more demanding and understand there right hence this tremendously affected the conceptual understanding of patient perceptions and positions for health care industry. Broad studies have been conducted to across a variety service industry in the market this include healthcare by Kumar, Kee & Manshor (2009), Moliver & Sancez (2003) Huat (2012) healthcare included by Choi (2005) and Gray (2007), to focus on bilateral relations and sub- concepts and prioritize customer needs and this has an effect on the comportment of potential customers.

Malaysia has been upturned to Malaysia Healthcare Travel Council to promote and assisting the growth of Malaysian healthcare segmentation so as to infiltrate the global market. So that in raising Malaysian profiles as a leading provider of quality health care for global citizen and strive to create value added especially in private partnership domestically and international. The idea of this case study is to focus on customer or patient satisfaction they received in term of service quality from private hospital in Kuala Lumpur based on SERVQUAL method. Being a pioneer to private hospital in Kuala Lumpur, this study to emphasizes on customer or patient satisfaction as a whole that can recommend to improving or improvise the process or quality related to patient satisfaction which private healthcare sector can no extensively depend on its reputation for clinical excellence only. Being the best provider of a high standard of medical care or appointing highly competent medical professionals is just a part of the contribution towards a patient's hospital experience. Jabnoun and Chaker (2003) maintain that, besides medical care, patients also need 'customer care.

Significantly this study is to identify those service quality scopes that can contribute to Gleneagles Kuala Lumpur managers in improving service delivery in the healthcare industry with the aim of prosperous patient satisfaction. The individual feedback in service quality dimensions considered in this study hopefully will identify trend on patients' decision to choose a hospital for future admissions and also to increase customer or patient loyalty through understanding their behavior. The insight achieved will enlighten private hospital management on client service management and the patient assessment of their experience in the hospital is important and is regarded as a business model and market strategy to invite predict the design of future behavior of the design at patient expectation for private hospitals. Lastly, the study attempts to lay a background from which a more relevant assessment tool, for future research and quality improvement programs in private hospitals, can be formulated.

1.2 PROBLEM STATEMENT

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Returning patients is an important factor to a private hospital to keep on operating for a longer period. However in recent years the number of returning patients has decreased slowly in Gleneagles Kuala Lumpur. Competition in the private hospital sector is also high as the numerous private hospitals in the area of Kuala Lumpur. Patients seek medical services from the private hospitals as they perceived the service quality is much better than the public hospital. Public hospitals are serving the masses and the queue is very long. Therefore it is postulated that the level of service quality expected by the patients and the actual service quality received may give an indication to Gleneagles Kuala Lumpur of the service quality the hospital is offering to their patients cum customers. The management

needs to understand patients' perceptions and their feeling after getting actual service rendered in Gleneagles Kuala Lumpur. Without this information, the hospital may not able to fully understand patient needs and wants that satisfy them. Perhaps improving service quality will increase patient loyalty added value at competitive advantage in market place.

1.3 RESEARCH QUESTIONS

Based on the SERVQUAL model, the following research questions is formulated to guide this study.

RQ1: What is the difference between expectation and actual service received on reliability?

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RQ2: What is the difference between expectation and actual service received on assurance?

RQ3: What is the difference between expectation and actual service received on tangibles?

RQ4: What is the difference between expectation and actual service received on empathy?

RQ5: What is the difference between expectation and actual service received on responsiveness?

1.4 RESEARCH OBJECTIVES

Based on the research questions formulated earlier, the following research objective is outline.

RO1: To examine the difference expectation and actual service received on reliability.

RO2: To examine the difference between expectation and actual service received on assurance.

RO3: To examine the difference between expectation and actual service received on tangibility.

RO4: To examine the difference between expectation and actual service receive on empathy.

RO5: To examine the difference between expectation and actual service received on responsiveness.

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1.5 SCOPE AND LIMITATION OF THE STUDY

This study is conducted with certain limitation and scope. First, the focus of this study is on one private hospital organization, specifically the Gleneagles Kuala Lumpur. Second, the respondents are the in-patients and out-patients of the hospital. The questionnaire distributed to the out-patient and in-patient department may not be versatile and represent the whole hospital. As a privately run organization, the access to the information is challenging as some of the data or information is categorized and classified under the Private Data Protect Act clause. Third, the variables focused in this study are based on the SERVQUAL model namely Reliability, Assurance, Tangibility, Empathy and Responsiveness. The dependent variable is the difference between expectation and actual service received. Lastly, the size of the questionnaire that could be collected back depends largely on the cooperation of the patients.

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1.6 DEFINITION OF THE KEY TERMS

Service quality: Parasuraman (1985) said quality of service can be differentiated between services predicted or estimated by expectations and actual service received. Zeithaml, Parasuraman and Berry (1990), to determine customer perceptions of service quality that meet or exceed customer driven focus. This is evidenced for example if nurse treat patients with love and attention and courteous to patient demand and maintain professionalism.

Gleneagles Hospital Kuala Lumpur: Gray (2007) said private hospital offer a service that is also focus on marketing strategy business as a service to health care and treatment, with this it is also keen to maximize shareholder profits. One of them is which Gleneagles Kuala Lumpur. Private healthcare is as mainly an intensive care and have a good quality for the comfort -conscious priority and attention from private medical practitioners Gray (2007). Gleneagles Kuala Lumpur hospital has been launched by our fifth former Prime Minister Tun Dr. Mahathir Mohamed officially functioned on 16 December 1997. The location was strategic and in place in the heart of the city on the Delegation Row of Jalan Ampang.

Khazanah National as the new stakeholders and subsidiary of Parkway Healthcare Singapore Gleneagles Kuala Lumpur has become the well-known for local and foreign market as their preferred private healthcare capability in the country. The hospital endeavors to provide dedicated commitment to the highest level of healthcare experience, as per their tagline of “In the Arms of One Who Cares”.

Recently, Gleneagles Hospital has another branches in Penang knows as Gleneagles Penang and Kota Kinabalu known as Gleneagles KK. Main specialize in cardiac thoracic, breast and endocrine surgery care, gastroenterology, geriatrics, hematology, hand microsurgery, maxillofacial surgery, orthopedic, oncology, dermatology, endocrinology, nephrology, neurology, obstetrics gynecology, pediatrics, plastic reconstructive surgery, podiatric, psychiatry, respiratory medicine, rheumatology, surgery, urology, dental surgery and pain management.

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Patients: Act as someone who needs medical attention who seek professional advice on health body and mind condition, both physically and mentally that include medical treatment that requires at least within a certain period (Gray, 2007). Society always made assumption (positive and negative) especially how a nurse's impression. Uniforms are very important in distinguishing symbolizes the dignity of nurses and nurses with others. Also to be honored as a nurse is a noble task.

Nurse: Nursing practice can be defining as someone with trained skill have been studies science knowledge that combine with their personality such as caring, skills, and attitude(Empathy training skills that understand the patient and carry out responsibilities with dedication and dignity (Watson J. Nursing, 1988)(Meleis Al, 1997).The concept of caring is an ability in terms of emotions, attitudes and gestures exhibited to patients is essential to reflect the skills and knowledge of the latest communication and effective response to the problems and needs of their patients. This is very important for bilateral relations and for their work in the same time psychological need help taking care of patients.

Support Staffs: Including paramedic in emergency department, front office, paramedic team, front office staffs, customer service, clerical staffs, top management and operation management in the hospital that assist daily routine organization especially in Health Care. In middle-sized and large health centers management includes several managers, while in small health centers the head is typically the chief physician by Kabene (2010).

1.8 ORGANIZATION OF THE THESIS

The first chapter consists of the background of the study, problem statement formulated and the identification of the research objectives of this study. The following Chapter Two centered on the review of the related literature. The literature review chapter analyses the existing service quality literature by reviewing various service quality models e.g. Parasuraman (1985) and Grönroos (1984). Also the implication on patient perception and actual service received offered by Gleneagles Hospital Kuala Lumpur using SERVQUAL model which is Reliability, Assurance, Tangible, Empathy and Responsiveness. In Chapter Three is about research framework, hypothesis, research design, operational definition, the measurement of variable, data collection, sampling, data collection and the technique of data analysis. The analysis on the data is presented in Chapter Four. This chapter discusses the procedure taken on the data before the data are further analyzed using the descriptive and inferential analysis. Lastly in Chapter Five, the discussion is centered back on the research objective of this research. This chapter also presents some recommendation before concluding the study from the academic and practical contexts.

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CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter discusses the review of the literature on service quality model which is widely known as SERVQUAL as proposed by Parasuraman (1985). This is followed by each of the dimension, namely reliability, assurance, tangibility, empathy and responsiveness. Discussion will also cover the expectation and actual service received by patients or customers.

2.2 SERVQUAL

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The ten principles of service quality dimension or determinants was attempt by group of authors named Parasuraman (1985), Zeithaml (1990) that highlighted on main component of high quality that is applied as a quality management framework conclude that customer applied comparatively much the same principle in assessing service quality. The SERVQUAL authors originally identified ten elements of service quality, but in later work, these were collapsed into five factors - reliability, assurance, tangibles, empathy and responsiveness.

To improve the service performance, SERQUAL able to measure and manage service quality by using questionnaire as indicator to analyses both expectation and actual service received using comprehensive five dimensions. The result will depend on the

different on pre and post service received. When patient actual experience received are less than what they expected, service quality is deemed low and vice versa.

Service Quality (SQ)	=	Patient's Perception (P)	—	Patient's Actual Experience (E)

2.3 SERVQUAL DIMENSIONS

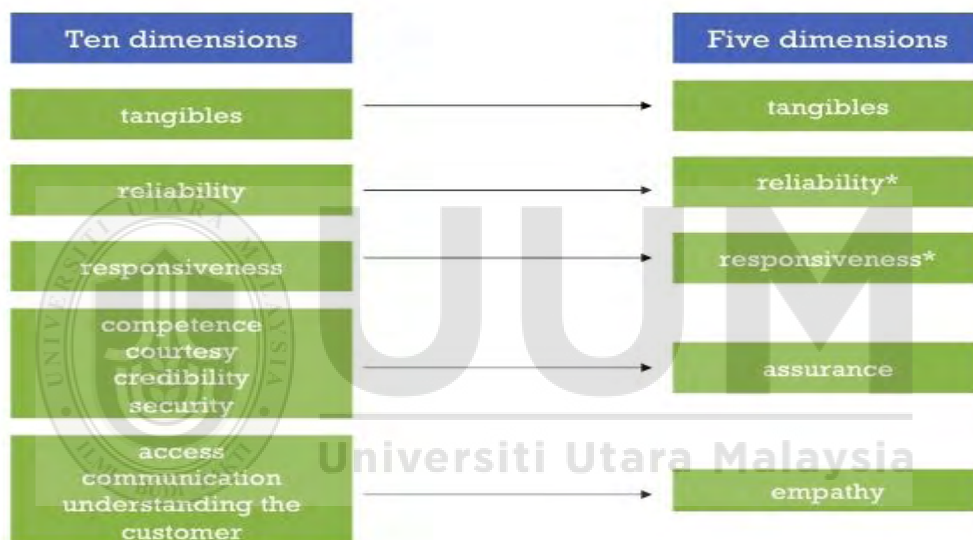

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Figure 2.1: *Service Quality Dimension*

Reliability – well-defined as the ability to perform the promised service correctly ineffective and precise way. (Peer and Mpinganjira 2011) noted that of all the five service quality components, reliability has frequently been shown to be the most significant.

Assurance – refer to patient trust and stimulating their confidence to use the service offered. Peer and Mpinganjira (2011) stated that this is primarily essential aspect for services that might be perceived to be related with high grades of danger, and also where the customer is not capable of properly assessing the service, as is frequently the case in health care services.

Tangible – refer to certain material depictions of the service (Gray 2007), that manifestation of the physical evidence of the service. Kotler, Philip, J. Bowen and J.C. Makens, (2006) said hospitality industry should aware on SERVQUAL dimension, which are intangibility which means the service that we cannot touch by hand but we can feel or experience by feeling or emotions

Empathy – is an attitude of person that shows caringness and sincerity attitude demonstrates especially in service environment and when handling customers or patient (Parasuraman 1988) defined empathy as the care and individualized attention that an organization provides to the customers. Its determine compassion, service providers that they are conscious every customer is a unique human being with different character and needs.

Responsiveness – refer to what patient should perceived for example patients receive timely and reasonable care from the hospital staff as well as being involved in decisions and in their medical management efficiently (de Jager & du Plooy, 2011). According to (Peer and Mpinganjira 2011) this component stresses reflection as well as speed in managing customer queries, complaints, feedback requirements and inconveniences.

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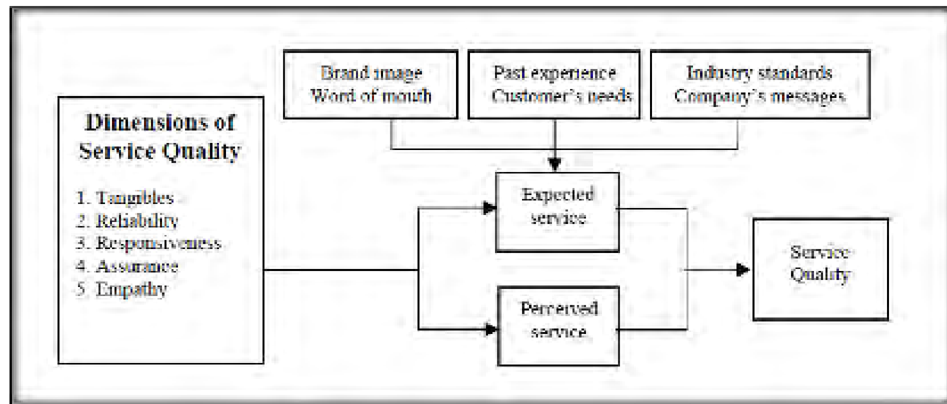

Figure 2.2: *SERVQUAL Model*

For this case of study, SERVQUAL proposal used to incorporate the five basic services into a customer satisfaction basic model. This include questionnaire that using five basic services that using 20 questions, which will explore both expectation and execution, using five point Likert scale. At this point noted by Lewis & Booms (1983), Parasuraman (1985) it will be working out the difference (gap) between patient expectation and actual serviced received. If the response is unfavorable, then dissatisfaction arises, if not, the service quality is accomplished. This comparison is generally known as gap analysis by Zahari, Yusoff (2008). In the other hand noted Parasuraman (1988) highlighted the SERVQUAL models generally can be use across a diversity of service organizations. Therefore, researcher can suggest for further investigation or revision to five dimensions in order to improve their significant theory.

2.4 SERVICE QUALITY GAPS

Below model of Parasuraman (1985) generally demonstrates relationship between activities and their relationship with main service activities that contributed to the on actual service received quality by the patients. Ghobadian, Speller & Jones (1994) noted there is connection portrayed as gaps or discrepancies in pre and post service which means explicitly, a gap demonstrates a major barrier to accomplishing a level of satisfaction in service quality. Parasuraman (1985) proposed model of the quality measurement formulated based on gap analysis which a part of the differences concerning expectation and performance from patient.

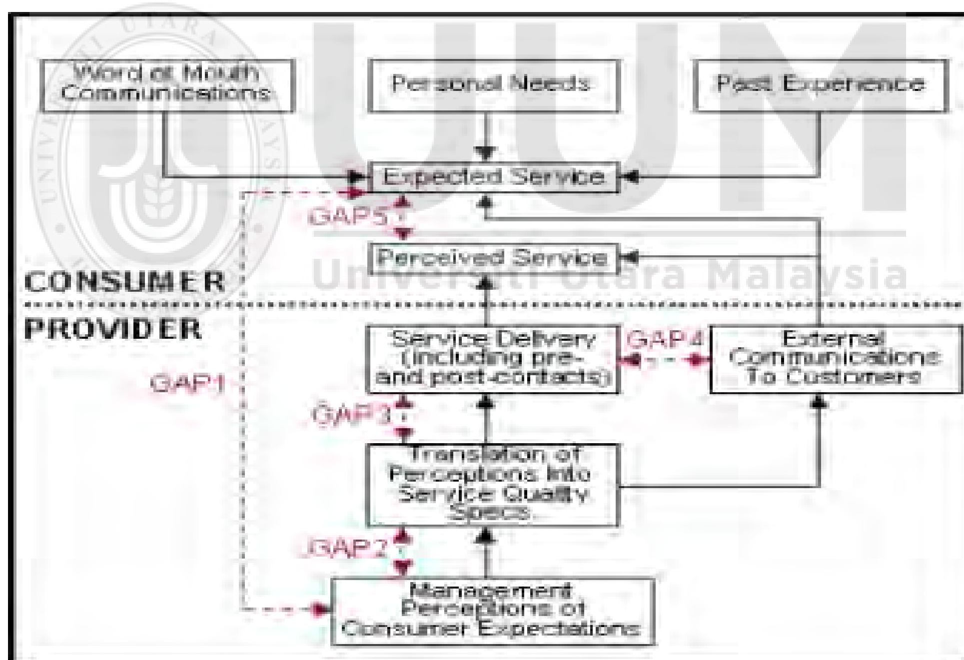

Figure 2.3: *The Service Quality Gaps Model*

Gap 1: From various understanding from customer expectation-management perception gap on the service quality. In here management might not completely understand or identify the customer which in this case is patient need and want in order what patient expects in a service. This might affect the perception of the quality.

Gap 2: Organization perception-service quality stipulations gap refers to the difference between administration's perceptions of patient' expectations and service quality necessities, in other words undesirable service-quality standards. At this stage of situation there are existing of customer perceived based on their knowledge apparently the expectations are non-existent. The factor like market constraints, management commitment and limitation of resources can attribute to this gap.

Gap 3: Service excellence specification-service distribution gap refers to the variation between service quality supplies and the actual service rendered to customer, for example, the service performance gap including in pre and post and transaction of perception. This is because there are no specific guidelines to performing and treating service well and thus the high quality might not guarantee. As the delivery process not standardized it will impact the service quality. This gap is very important in the healthcare setting where personnel work long hours and shift work requiring them to focus during the night for example nurses and medical officer on call.

Gap 4: Service delivery-external statement gap refers to the differences between service delivery and the communications to customers about service delivery, that is, whether assurances correspond with real time delivery. In this case hospital management could promise high expectations from beginning but then it will be

lowered the moment patient feel the promises are not delivered. External communication can influence the patient perception towards service quality.

Gap 5: Predictable service-perceived service gap states to the deviation between patient's expectation and perceived valuations of service in real time situation. This is depending on what patient make out of the real service performance based on their previous or past experience expectations. This gap depends on the extent and course of the four gaps related with the delivery of service quality on the provider's side. The main point is to make sure those customers are happy and satisfied with the service quality as expect from the service offered. A patient does not only expect and want to be cured of his or her illness but perhaps also to smoothen process and management of medical plan that he or she gone through. Patient prefers caring treatment pre and post treatment.

2.5 EXPECTATION

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As a profitable hospital also subject to same processes of maintain and support also focus on strategic management that comprises into revenue and market growth. Alasad and Ahmad (2003) said that the development of strategic and system need to be support by good human resource to the management in order to sustain their name in market place and to the shareholder.

As patient are very demanding and aware of their right especially it assessable through mass media. Hospitals therefore have to be equipped to provide an excellent service quality. During past time, hospital has been referred simply to seek medical treatment when patient need it for emergency or crucial situation involving life and death

decision as per noted by Cheng, Yang and Chiang (2003). Nevertheless, with the enhancement of living standard and life style have created the public awareness and general knowledge about the importance of healthy living and healthy life style. Since actability using insurance company have been easier process of getting medical services.

Amin and Nasharuddin (2013) said patient is able to pay more regards to their health and expect excellent and higher quality of service, because of this their assessment of service quality of hospital are no longer limited from hospital added value to medical technique offered. From patient point of view, they expect to be treated as required with professional care skills and good service attitude. Medical staffs should show respect, empathy and concern in addition to gain trust and depend more on the hospital more once they are satisfied with the service. This will lead to continuity from getting treatment a medical advice in the future indicate by Pai and Chary (2013). Lember (2000) said that it is very important to identify patient needs and wants in order to expand and develop a systematic approach in medical service system.

2.4 ACTUAL SERVICE RECEIVED

Patient opinion is very important to transform into meaningful situation and improve service rendered especially after getting their treatment because they experienced the service. Patient evaluated quality service on doctor and nurse's skills, feeling of assurance, respond by support staffs in answering or set their appointment and the comprehensive of the facilities. It's very valuable attribute to understand service quality offered by hospital which can improve patient loyalty. As for management level the information is great to improvise each quality dimension. Lastly the

management can focus on patient service relationship management and increase complexity of recognition in healthcare industry cited by Jenkinson (2002). Poor quality of service resulted in loss of patients' lives, morale, hospital revenue and shareholders, waste of resources skills, time, staffs, recognition, trust and loyalty patients and respect. Patient real life experience need to be identified and focus so that the hospital become effective and efficient in providing service medical noted by Haran (2000).

2.4.1 Models of Actual Service Quality Received

Service quality comprises of complexity of explicit and implicit attributes noted by Grönroos (1984), Parasuraman (1988), which is mean patient attribute are the overall evaluation of the satisfaction toward the service. Furthermore, Grönroos (1984) noted that there are two type of patient actual service received process:

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- Technical quality that refer to the result in every dimension, or what the procedure leads to for the customer as a result of the outcome and;

- Functional quality can define as a process element, or how the service process management is really functions in order to meet with patient satisfaction.

Patient who's experienced the service can influence their perception neutral, favorable or unfavorable. There are three fundamental quality perception according to Lewis and Booms (1983) and Parasuraman (1985):

- Customer will acknowledge and value goods quality than it is with service quality,

- Customer will compare their anticipated service and the actual service delivered as service perception

- Good qualities of assessments also necessitate assessments of the course of service delivery.

In model service quality numerous conceptual models has been introduce by researcher namely Parasuraman (1985) that well establish idealistic on how customer judge service, then Grönroos (1984), are more technical and functional quality by Parasuraman (1985, 1988), Frost & Kumar (2000), and Luk and Layton (2002) conceptuality also has been presented in this section. Despite that the same understanding and framework carried out the same value standard for service level, there are also study in gaps model. These are beneficial and allow quality manager to identify and improve their quality, in doing so perhaps improving the effectiveness, productivity and overall performance by Seth & Deshmukh (2005)

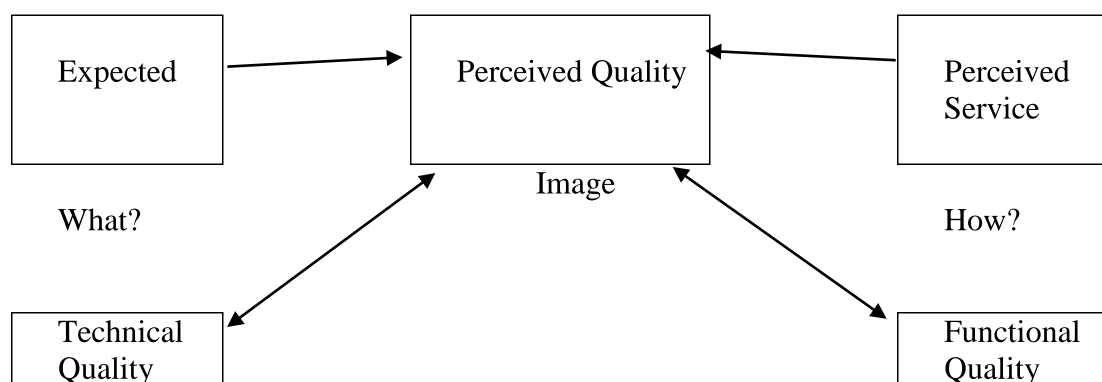

Figure 2. 1: *Technical and Functional Quality Model*

From this image the organization must focus on patient perception on how to match the expectation service so patient perceive it better than perception by Grönroos (1984) noted that in technical (product) represent power of assessment in their contact with the service provider. Especially in response time from patient enquiry for example, nurse; doctor's availability can be one of the factors. According to Grönroos (1990) functional quality in operational concurrent to production and how patient perceived on patient acquire and the service quality and it features diversified that technical quality identified issue that related to patient inquiry. In Grönroos (1990) opinion he thinks that the hospital image is very important in branding that can influence as first impression. Noted that Seth (2004) opinion that both are important as the service is expected to be brought about by technical and functional quality of service including other factors like word-of-mouth, pricing and public relations.

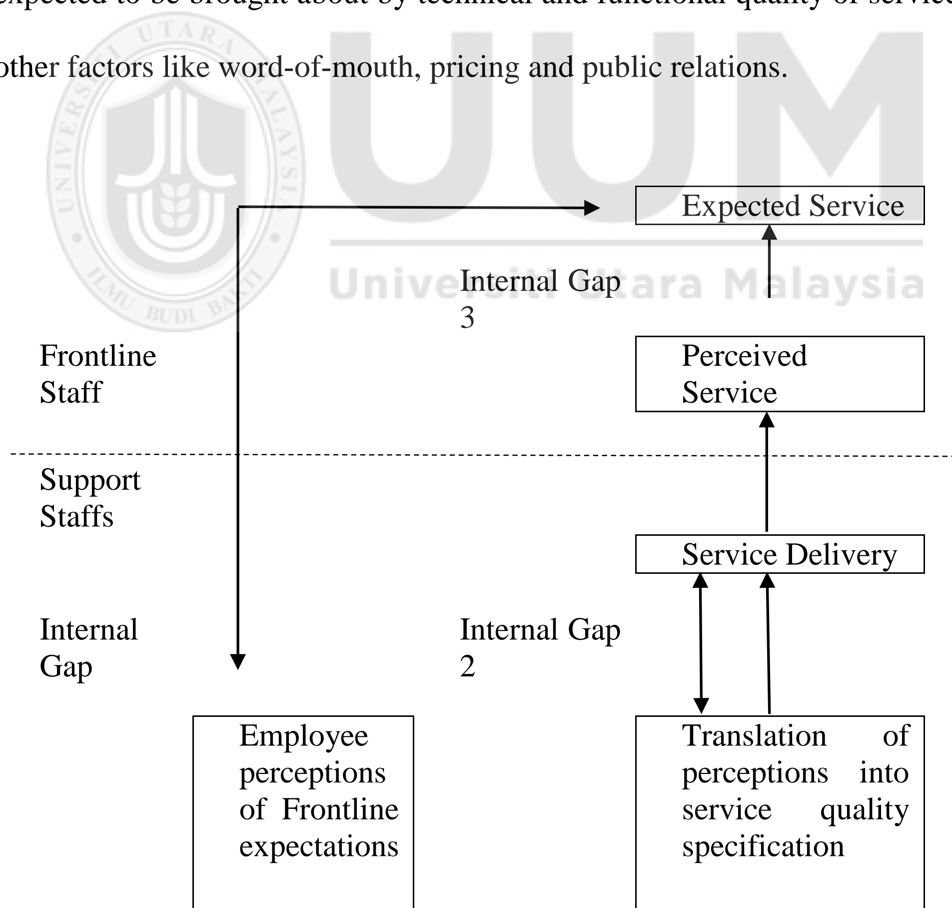

Figure 2. 2: *Model of Internal and External Quality Gap*

Model of internal service quality gaps above adapted from (Frost & Kumar, 2000). The important of the service quality is mainly from the internal service quality model as noted by Frost and Kumar (2000) that he examines and focus on the characteristics, and their relations, which determine the service quality (deficiencies) gaps between internal patients (front-line staff) and internal supplier (support staff) inside a big service hospital.

The gaps are stated below:

- First internal gap is can be found in dissimilarities in support staff's perception (internal supplier) of front-line staff's expectation (internal patient).

- Second internal gap can be differentiating between service quality specifications and the actual service rendered by the staffs, giving growth to an internal service performance gap.

- Thirdly internal gap can be differences between front-line staff's expectations and perceptions of support staff's (internal supplier) service quality. This is the gap, which focuses on the front-line staff (internal customers) as the image of hospital first impression portrayed.

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2.5 SUMMARY

In this chapter, researcher has exposed the independent variable that using SERVQUAL dimension which is Reliability, Assurance, Tangible, Empathy and Responsiveness to dependent variable which is expectation and actual service experienced in the Gleneagles Hospital Kuala Lumpur. Also literature from previous researcher or author on service quality and gap differences for pre and post service.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research methodology is a structured method of set strategies that support valid result and valid and dependable study by Mingers (2001). It required the best selection of methodology that to choice a methodology that make the most of generalizability, practicality, and accuracy by McGrath (1982). Dennis and Valacich (2001) said all research methods are basically faulty in some aspect which the boundaries addressed by one investigation perception and substitute method that reimburses for another's faults. Kaplan and Duchon (1988) said there is none of the researcher method or data can be claimed as precise and seem need further investigation and references for further progression or study.

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This chapter delivers a framework for research design and tools of data collection for further data investigation. The section provides a detail argument about sample collection, data collection, data instrument, and plan to the study, data collection, and data analysis technique.

3.2 RESEARCH FRAMEWORK

In an operational technique, SERVQUAL focus on the challenge to understand and overcome issues that make patient unsatisfied with hospital service quality. SERVQUAL is the best instrument used as tools and instrument in service satisfaction

noted by Parasuraman (1985) some academic and operational concerns and criticism were also raised up by Buttle (1996). For some researcher Nyeck, (2002) SERVQUAL instruments still the best to measure in service quality. The SERVQUAL model can be used to cater for continuous monitoring and subsequent improvement in hospitals effective and efficiently Luke (2008). The construct of quality as conceptualized in the service literature and as measured using SERVQUAL method involves real service quality. The SERVQUAL model is well-defined perceived quality as the patient's finding about an entity's total service quality by the hospital whether the patient's perception has met his/her expectation or not.

This is in strict conformance with the models in the literature on service quality, which describes it as the ability to consistently meet external and internal patients' needs, wants and expectations involving procedural and personal encounters noted by Parasuraman, Zeithaml and L.L. Berry, (1988).

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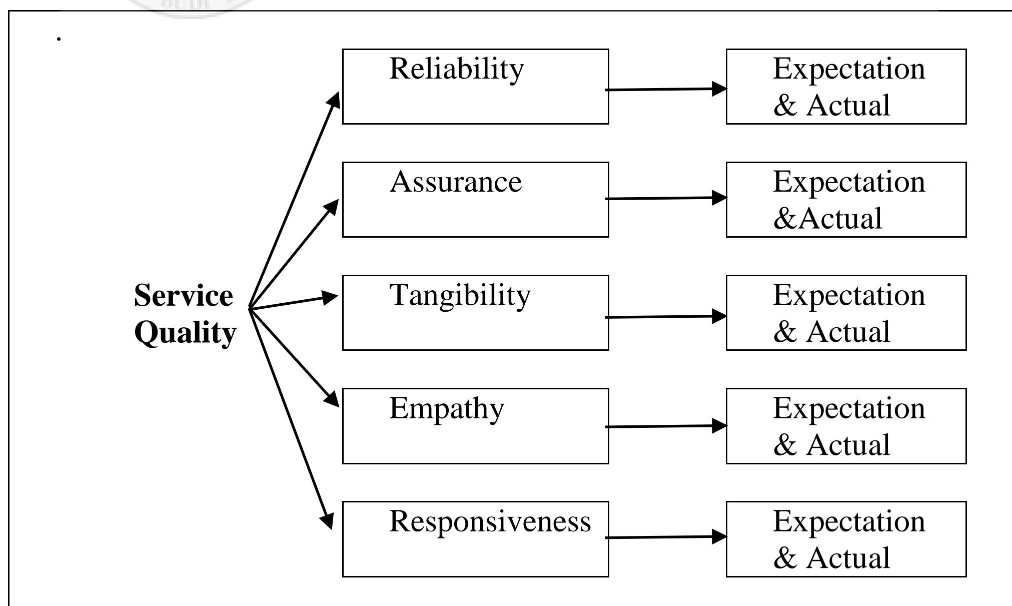

Figure 3.1: *Research Framework*

3.3 HYPOTHESES

The hypotheses developed for this research is based on the SERVQUAL model and the discussion presented the earlier chapters. The hypotheses are stated in both the null and alternative hypotheses.

Reliability

H1: There is a difference between expectation and actual service received on reliability

Assurance

H2: There is a difference between expectation and actual service received on assurance.

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Tangibility

H3: There is a difference between expectation and actual service received on tangibility. .

Empathy

H4: There is a difference between expectation and actual service received on empathy.

Responsiveness

H5: There is a difference between expectation and actual service received on responsiveness.

3.4 RESEARCH DESIGN

The research design of this research is a qualitative research whereby to determine the relationship between independent and dependent variables and to test the hypothesis developed. This study employed a cross-sectional survey research approach. The questionnaire is used to collect the primary data. The questionnaire was adopted from previous studies and later adapted to suit the purpose of this research.

The respondents were randomly identified among the patients. These patients are the international and local patients undertaking medical treatment in Gleneagles Kuala Lumpur. As a rule of thumb and suggested by Caruana (2002) that a sample size among 300 to 500 are used independently on how suitable and real the type of sampling design used and research questions applied. As the research is on service quality, a sample size of 350 from Gleneagles Kuala Lumpur been considered adequate. The service quality measurement was Implemented Sohail (2003) and 5-point Likert scales were used as a measurement for the respondents with scoring of 1 (Strongly Disagree) to 5 (Strongly Agree), while the customer satisfaction tool was borrowed Bitner (1990) with similar point Likert scale.

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3.5 OPERATIONAL DEFINITION

The operational definition of the variables in this research is presented in the following table.

Table 3.1: *Operational Definition of Variables*

Variable	Operational Definition
Reliability	the ability to perform the promised service correctly ineffective and precise way
Assurance	The trust and confidence to use the service offered
Tangibility	the physical evidence of the service and service that cannot be touched by hand but can be felt or experience by feeling or emotions
Empathy	The caring and sincere attitude in service environment and when handling customers or patient
Responsiveness	The timely, reasonable and efficient service given to patients to assist them in making decision.

3.6 MEASUREMENT OF VARIABLE

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The discussion on measurement of variables is divided into three main areas. These are the measurement item, measurement scale and the instrument employed in this study.

3.6.1 Measurement Item

The following tables represent the measurement items for reliability, assurance, tangibility, empathy and responsiveness for both the expectation and actual service received. There are seven items for reliability, six items for assurance, six items for tangibility, six items for empathy and five items for responsiveness. The items were adopted from previous research (Gray, 2007; Mpinganjira, 2011). The items were also was adapted to suit the purpose of this research.

Table 3.2: *Reliability Items*

No	Expectation	Actual
1	I should feel that I can trust my Doctor suggestion, solution and decision about my medical plan and treatment	I trusted the Doctor suggestion, solution and decision about my medical plan and treatment
2	I should can trust the Nurses to do any simple procedure, medical or treatment routine, and counseling	I trusted the Nurses when she died any simple procedure, medical or treatment routine, and counseling to me
3	The Physician Specialist should totally honest and telling the best option for my treatment that best for my conditions	The Physician Specialist was totally honest and telling me the best option for my treatment and conditions
4	Physician Specialist should pay full attention to what I am are trying to tell him/her	I received full attention from the Physician Specialist to what you are trying to tell him/her
5	The support staffs should be dependable and informative when handling my inquiries	The support was dependable and informative when handling my inquiries
6	My medical record in this hospital should free from any misdiagnose or information	The medical record in this hospital were free from any misdiagnose or information
7	This hospital should be competent in providing efficient service (inpatient/outpatient) treatment	This hospital are competent in providing efficient service (inpatient/outpatient) treatment

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Table 3.2: *Assurance Items*

No	Expectation	Actual
1	The hospital team should treat the way I expected	The hospital team are able to treat the way I expected
2	I should feel a sense of security from any physical harm	I felt a sense of security from any physical harm
3	The staffs should have knowledge and skills experience to respond to my requirement	The staffs are knowledgeable and skills experienced responded to my requirement
4	The staff should consistently courteous and polite	All the staffs was consistently courteous and polite
5	The staffs should give an adequacy of explanation /information about my treatment – clarity of information on my condition.	I received adequacy of explanation /information during my treatment – clarity of information on my condition.
6	I should feel safe receiving services and treatment from the medical and support staffs of this hospital	The services and treatment are safe to receive from the medical and support staffs of this hospital

Table 3.3: *Tangibility Items*

No	Expectation	Actual
1	The equipment in the hospital should are up to date and well functional.	The equipment in the hospital are up to standard, up to date and well functional.
2	The hospital ambience should help to calm my worries while waiting to see the doctor for counseling or treatment.	This hospital ambience helped calm my worries in waiting area while waiting to see the doctor for counseling or treatment.
3	The hospital facilities should provide sufficient parking and easy to find food or beverage and Wi-Fi	This hospital facilities has provided sufficient parking and easy to find food or beverage and Wi-Fi
4	The hospital should practice and maintain excellent hygiene standards i.e. toilet, rooms, cafeteria and waiting area	The hygiene standards i.e. toilet, café, rooms and waiting area are excellent
5	All the staffs should look professional, and always neat	All the staffs portray and practiced professional, and always neat
6	The system of numbering, receptionist, pharmacy, admission and discharge area should be maintained, monitored and improving.	The system of numbering, receptionist, pharmacy, admission and discharge area are well maintained, monitored and has improvement.

Table 3.4: *Empathy Items*

No	Expectation	Actual
1	The doctor should treat me with warm and caring attitude	I received warm and caring treatment under my Doctor care
2	The medical staffs should treat me with warm and caring attitude	I received warm and caring attitude under the medical staffs care.
3	The doctor should give fully attention while listen to my discomfort of health complaint with patient and support	The doctor has given fully attention while listen to my discomfort of health complaint with patient and supportive
4	The nurses should be willing to comfort me while I feel down and uncomfortable	The nurses has comforted me while I felt down and uncomfortable
5	The support staffs should be helpful and show their caring in a way they speak nicely and smile and try to smooth the medical plan or treatment plan process management.	The support staffs was helpful and show their caring in a way they speak nicely and smile and try to smooth the medical plan or treatment plan process management.
6	The medical team should give me a sufficient time for me to make decision about my health condition plan and advise me according prior to my needs	I be given a sufficient time for me to make decision about my health condition plan and advised me according prior to my needs by the medical staffs.

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Table 3.5: *Responsiveness Items*

No	Expectation	Actual
1	The support staffs should always keep me update about my appointment, procedure, bill and what not	The medical and support staffs was helpful in updated about my appointment, procedure, bill and what not.
2	The medical staffs should always keep me inform or update regards to risk of the procedure	The medical staffs kept me informed or update regards to my follow up
3	The medical staffs should provide treatment or procedure without delay	There was no delay by medical staffs in provided treatment or procedure
4	The medical or support staffs should always willing to help and give extra miles services.	The medical or support staffs given their extra miles services.
5	The medical staffs and support staffs should be never too busy to respond to any inquires or keep me waiting for long time.	The medical staffs and support staffs were never too busy to respond to any inquires or kept me waited for long time.

3.6.2 Measurement Scale

Table 3.6: *Measurement Scale*

Dimension	Situation	No Item	Scale
Reliability	Expected	7	(Strongly disagree) 1 — 5 (Strongly agree)
	Actual	7	(Strongly disagree) 1 — 5 (Strongly agree)
Assurance	Expected	6	(Strongly disagree) 1 — 5 (Strongly agree)
	Actual	6	(Strongly disagree) 1 — 5 (Strongly agree)
Tangibility	Expected	6	(Strongly disagree) 1 — 5 (Strongly agree)
	Actual	6	(Strongly disagree) 1 — 5 (Strongly agree)
Empathy	Expected	6	(Strongly disagree) 1 — 5 (Strongly agree)
	Actual	6	(Strongly disagree) 1 — 5 (Strongly agree)
Responsiveness	Expected	5	(Strongly disagree) 1 — 5 (Strongly agree)
	Actual	5	(Strongly disagree) 1 — 5 (Strongly agree)

In measuring the variable, it is based on association adapted from Parasuraman, (1985) on constructive of SERVQUAL and behavioral intensions studied in literature as well as exploratory research. As shown in the above table, expected and actual service received on ***reliability*** is measured with 7-item scale. Each item rated on a 5-point Likert scale "1= strongly disagree to 5 = strongly agree". Expected and actual service received on ***assurance*** is measured with 6-item scale. Each item rated on a 5-point

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Likert scale “1= strongly disagree to 5 = strongly agree”. Expected and actual service received on ***tangible*** is measured with 6-item scale. Each item rated on a 5-point Likert scale “1= strongly disagree to 5 = strongly agree”. Expected and actual service received on ***empathy*** is measured with 6-item scale. Each item rated on a 5-point Likert scale “1= strongly disagree to 5 = strongly agree”. Expected and actual service received on ***responsiveness*** is measured with 5-item scale. Each item rated on a 5-point Likert scale “1= strongly disagree to 5 = strongly agree”.

3.6.3 Instrumentation

Table 3.7: *Questionnaire Format*

Section	Description
Section A	Background
Section B	Reasons to choose Gleneagles Kuala Lumpur
Section C	Expectation on the service
Section D	Actual service received

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The instrument employed in this study is the closed ended questionnaire based on the measurement items and measurement scale discussed above. The format of the questionnaire is shown in the table below. The actual questionnaire distributed is shown in Appendix A.

3.6.4 Pilot Test

30 sample as a pilot testing was used to finding out if the survey, key information and observation form will work in the real world situation by Hundley (2001). The purpose is to ensure that patient understand the questions. Thus, in this way too, questions can be improvising if any questions make respondents feel uncomfortable. Also researcher be able to estimate time takes to complete the survey in real time.

Table 3.8: *Reliability Analysis for Pilot Test*

Dimension	Cronbach's Alpha		No of Items
	Expected	Perceived	
Tangible	.925	.891	6
Responsiveness	.878	.815	5
Reliability	.919	.863	7
Assurance	.902	.891	6
Empathy	.964	.903	6

Statistically, the typical method to check out reliability is depending on the concept that each item (or set of items) must generate final results consistent within the questionnaire of the study. Reliability is just the capability of questionnaire to produce exactly results underneath the exact same conditions. It can be anticipated by various methods. One of the most known techniques in order to measure the reliability scale is the Cronbach's alpha. Table 9 above shows the reliability of the measurement scales. Cronbach's alpha reliability scores should be greater than 0.7 (minimum) by Cortina (1993). An alpha of more than 0.7 would indicate that the items are homogeneous and measuring the same constant.

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Cronbach's Alpha can be defining as a measurement tool to regulate how closely a set of items are connected. It is most normally used when one has a scale of numerous Likert questions in a questionnaire and the target is to control if this scale is reliable. The theoretical value of alpha differs from zero to 1 and higher standards of alpha are more wanted. Nunnally and Bernstein (1994) suggested the value of 0.70 or higher.

3.7 SAMPLING

In this section, the discussion is on the population, sampling size and the sampling method employed in this study.

3.7.1 Population

Table 3.9: *Population of Study*

Type of population member	Number
In-patient	350
Out-patient	380
Total	**630**

The set of questionnaire has been distributed in outpatient department and inpatient department. Although there are difficulties in getting cooperation but with assistant and adequate explanation from customer service care department to the patient, researcher managed to get total of 630 populations.

3.7.2 Sample Size

Based on the population of 630 as shown in the above table and Krecjie and Morgan (1970) sampling size table, the appropriate sample size is 230.

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3.7.3 Sampling Method

The stratified sampling approach is used in determining the distribution of the questions. As shown in table below, a total of 92 questionnaires were distributed to the in-patient group, 138 questionnaires to the out-patient group.

Table 3.10: *Sample Size to Each Group*

Type of population member	Number	No of Sample
In-patient	150	92
Out-patient	280	138
Total	**630**	**230**

3.8 DATA COLLECTION

The information from this survey is gather through questionnaires. The instrument used for this study is designed to measure SERVQUAL model. About 400 questionnaires were distributed to all the outpatients and inpatient in the hospital. Nevertheless, only 370 received and 350 are qualified to use as shown in bar chart below.

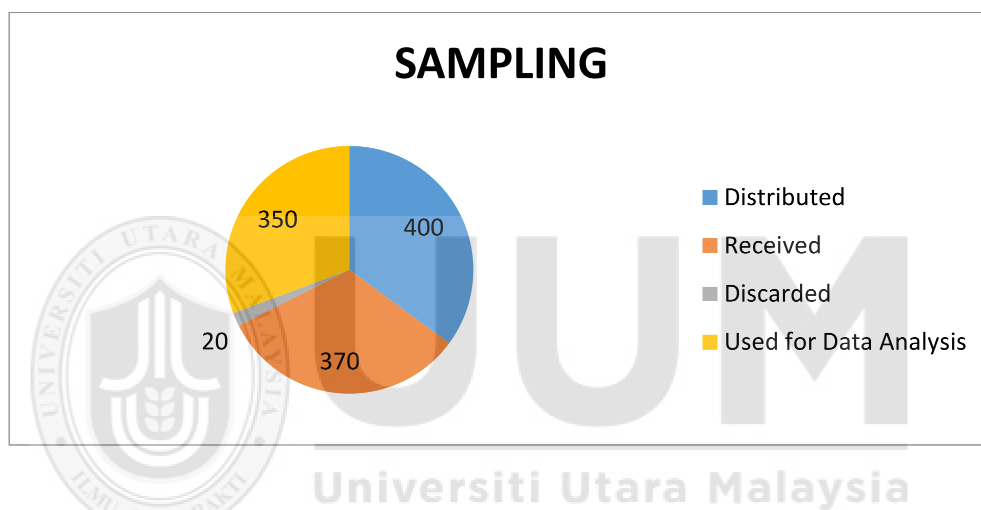

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Figure 3.1: *Bar Chart for Sampling*

The survey will be designed in two fragments. Section A comprised of the demographic profile of respondents such as gender, age, education, positioning within the organization, and working experience. Section 2 consists of variables. Entirely the respondents will be obligatory to rate the questions in Section B using five-point Likert-type scale ranging from 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. The survey of this study will be designed in English. Population of patients in Gleneagles Kuala Lumpur has been associated in this case study as homogenous respondents, hospital patients in this case as adapted from Calder (1981) said to the objective of patient's satisfaction in real world setting interest.

3.9 DATA COLLECTION PROCEDURES

With help and permission to do the research from the management of Gleneagles Kuala Lumpur, the set of questionnaire has been distributed to the admission department for inpatient and selected ward which is not executive wards and the questionnaire administrated by the Nurse Manager. For outpatient department the set of questioned has been distributed to the outpatient clinics in every floor and specialist in Gleneagles Kuala Lumpur.

The private data personal act has been explained to the patient and researcher mentioned only for study purposed. Data collected using questionnaire using structured self-administered which took about 10 to 15 minutes per person by Nurses, Clerical, clinic assistant and customer service representative while waiting for the treatment or while waiting for medication in outpatient. For inpatient the clerical staffs help to assist by distributed it while waiting to go to the ward for admission or procedure. As appreciation there was an exchange of pen and note pad as a token of appreciation from the researcher to respondent.

The self-administrated questionnaire was attended by a covering letter with information and directions about the survey. A formal logo of University Utara Malaysia under Othman Yeop Abdullah logo also used. The questionnaire was printed double sided as an A4. Refer Annexure for copies of covering and questionnaire letters.

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3.10 TECHNIQUES OF DATA ANALYSIS

Table 3.11: Technique of Data Analysis

	Technique of Analysis
Background of Respondents	Frequency Percentages
Descriptive	Mean Standard Deviation
Hypotheses	Paired T-Test

As shown above, the technique of analysis employed in order to analyzed the data using the SPSS. SPSS is a window built platform that generates statistics that associate through analysis data and produce graph. This is software is a good tool that are capable to conduct large volume of data by Field (2009). Through this study a lot of techniques can be generate for example Demographic Analysis, Descriptive Analysis, Reliability Analysis, and T-Test through SPSS. The SPSS version 22 has been used in order to do the analysis of the data. As the aim of it adapted from Pallant (2010) that is used to describe the characteristic of the sample case in the hospital patients. The SERVQUAL dimension that has utilized in this study comprised a set of items within each dimension.

3.10.1 Demographic Participant Profile Analysis

The tools profile analyses are using frequency distribution, cumulative frequency distribution, relative frequency distribution and table for figure. Charts are graphical representation of data such as pie chart, bar chart stacked bar chart, histogram, frequency polygon and curves. The classification tools serve as data presentation techniques for clear interpretation Panneerselvam (2004) and have been used to analyze gender, education and age group and so on.

3.10.2 Descriptive Analysis

In descriptive analysis can be distinguished through few statistical measures for the approximation or differences or deduction regarding sample population by Panneerselvam (2004). The analysis of the data is generally entails decreasing gathered data to a size that is easy to manage, developing summaries, searching for designs as well as using statistical techniques. The questionnaires as well as the experimental instruments scaled responses are frequently need an analyst in order to obtain numerous functions, and in order to discover relationships within the variables by Cooper & Schindler (2003).

3.11 SUMMARY

Chapter three presents the study and the way the information is gathered to develop the proposed migration model. The chapter focuses on method done to measure five dimension of SERVQUAL methods in patient perception and actual service received in the Gleneagles Kuala Lumpur. For data technique analysis used demographic participant profile analysis interpreted by Panneerselvam (2004), descriptive analysis to discover the relationship in pre and post service by Cooper and Schindler (2003), Reliability test use as scale in Cronbach's alpha by Cortina (1993) and lastly the pilot test to test a run test in real time situation by Hundley (2001).

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CHAPTER 4

FINDINGS

4.1 INTRODUCTION

This chapter delivers arrangements of analysis and the findings of the study where the information was collected from the respondent in Gleneagles Hospital Kuala Lumpur, using the survey questionnaire which was later analyzed using the statistical software package SPSS. The analysis of the results is presented in two sections, section A and section B. Section A is about the profile of the respondents, and section B is about the independent and dependent variables, which relates to the factors. The pragmatic data composed throughout this study were subjected to statistical investigation as it was essential to measure the reliability and validity of the measuring instrument and also to assess the empirical results of five hypothesized relations (refer to Chapter 3) in order to convert data to knowledge. Leedy (1993) in his said that cautions if it is no discovery of the meaning of the data, there is no research. Consequently, no new knowledge or insights can be gained from the research.

However, before the data analysis could begin, the completed feedback form had to go through a process of data groundwork. The two procedures commonly undertaken to progression and prepare data are coding and editing, followed by the actual data entry and capturing.

4.2 EXPLORATORY DATA ANALYSIS

Table 4.1: *Questionnaire Distributed and Collected*

	Distributed	Collected	Usable
No of questionnaires	400	370	350

The researcher distributed 400 sample of questionnaires to selected patients, which were randomly selected as inpatient and outpatient patient from patient admission and discharge room also at health screening center but only 370 received back despite of that 20 questions are not fill properly and have missing value then only left 350 sample are used for data analysis. Gleneagles wards can accommodate 300 beds respectively and have average monthly bed occupancy of 95 percent. There are also selected patients or customers that are doing basic screening at health screening center and rehabilitation.

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4.2.1 Skewness, Histogram and P-P Plot

Three types of data exploration technique are used which are the skewness, histogram and P-P plot. Skewness is a measure of the asymmetry of the probability distribution of a real-valued random variable about its mean. The skewness value can be positive or negative, or even undefined. Skewness characterizes the degree of asymmetry of a distribution around its mean. Positive skewness indicates a distribution with an asymmetric tail extending toward more positive values. Negative skewness indicates a distribution with an asymmetric tail extending toward more negative values (von Hippel, 2005). Values for acceptability for psychometric purposes (+/-1 to +/-2) (Holmes & Rinaman, 2014). Histogram is a graph of a frequency distribution in which

rectangles with bases on the horizontal axis are given widths equal to the class intervals and heights equal to the corresponding frequencies (Pearson, 1894). P–P plot is a probability plot for assessing how closely two data sets agree, which plots the two cumulative distribution functions against each other (Gibbons & Chakraborti, 2011).

Table 4.2: *Skewness, Histogram and P-P Plot*

Dimension	Skewness		Histogram	P-P Plot
	Expected	Actual		
Reliability	-.242 / .130	-.248 / .130	Normal	Normal
Assurance	-.248 / .130	-.249 / .130	Normal	Normal
Tangibility	-.248 / .130	-.248 / .130	Normal	Normal
Empathy	-.249 / .130	-.240 / .130	Normal	Normal
Responsiveness	-.248 / .130	-.246 / .130	Normal	Normal

The detail output of Table 4.2 on skewness, histogram and P-P plot of reliability, assurance, tangibility, empathy and responsiveness dimensions of the SERVQUAL is presented in Appendix B.

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4.3 BACKGROUND OF RESPONDENTS

4.3.1 Gender

Table 4.3: *Respondent by Gender*

Gender	Frequency	Percent
Male	114	32.6
Female	236	67.4
Total	350	100.0

Table 4.3 shows number of respondents by gender category. It can be seen majority respondents were female with frequency of 236 and 67.4 percent. While 114 were male and represent 32.6 percentages. Figure 29 provides chart of respondent gender.

4.3.2 Age

Table 4.4:: *Respondents by Age Group*

Age	Frequency	Percent
16-24	63	18.0
25-34	132	37.7
35-44	58	16.6
45-54	44	12.6
55-64	32	9.1
65-74	14	4.0
75-84	7	2.0
Total	350	100.0

Table 4.4 showed the number of respondents related to their age group. It can be seen that 37.7% of the respondent's age were between 25 to 34 years, which is highest percentage. On the other hand, only 2% respondent's age were between 75 to 84 years, which is lowest percentage. The figure 27 shows the number of respondents related to their age group.

4.3.3 Qualification

Table 4.5: *Qualification of Respondents*

Qualification	Frequency	Percent
SPM/Cert	31	8.9
Diploma	130	37.1
Degree	148	42.3
Master	34	9.7
PHD& above	7	2.0
Total	350	100.0

Table 4.5 showed that education background of respondents. It can be seen that 42.3% of the respondents had degree followed by 37.1% respondents done diploma and only 2% respondents were holding PhD degree. This indicates that most of the respondents have the proper background to answer the questions of the survey. The figure 28 shows Education background of respondents.

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4.3.4 Salary

Table 4.6: *Income Level of Respondents*

Income level	Frequency	Percent
RM 1800 or below	21	6.0
RM 1900 -RM 2900	119	34.0
RM 3800- RM 4500	103	29.4
RM 4600 - RM 5500	40	11.4
RM 5600 – RM 6600	29	8.3
RM 6700 – RM 7600	7	2.0
RM 8000 and above	31	8.9
Total	350	100.0

Table 4.6 showed that salary of respondents that shows, 34% respondents have salary between RM 1900 – RM 2900, followed by 29.4% respondents have salary between RM 3800 – RM 4500. On the other side only 2% respondents have salary between RM 6700 – RM 7600. Figure 29 shows salary of respondents.

4.3.5 Method of Payment

Table 4.5: *Method of Payment*

Payment	Frequency	Percent
Cash	27	7.7
Insurance	180	51.4
Corporate Company	133	38.0
Guarantee Letter	10	2.9
Total	350	100.0

Table 4.5 showed that respondents method of payment. It can be seen that 51.4% of the respondent's payment method were insurance followed by 38% respondent's payment method through corporate company. The figure 30 shows payment method of the respondents

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4.3.6 Other Demographic of Respondents

Below table showed the respondents visit, reason, and type. It can be seen that 40.9% of the respondents were visit 1 – 2 years which the highest, followed by 2 – 5 years shows 24.9%, Number three is goes for first timer in this hospital which shows 23.1 percent. It goes by 6 – 10 years which is 2.0 % and lastly 11 years and above shows 2%.

Table 4.6: *Duration of Patronage*

Duration	Frequency	Percent
First Time	81	23.1
1-2 years	143	40.9
2-5 years	87	24.9
6-10 years	32	9.1
11 and above	7	2.0
Total	350	100.0

Table 4.7: *Reason to Patronage*

Reason	Frequency	Percent
Near	69	19.7
Experience Doc	196	56.0
Modern	31	8.9
Friendly staffs	12	3.4
Cost	11	3.1
No choice	31	8.9
Total	350	100.0

Table 4.7 shows the reason of patient choosing this hospital. The highest percentage is 56.0 percent that said the experience doctor are the main factor there are getting treatment in this hospital, 19.7 percent said it nearby to their amenities. Other reason like no choice share same percentage which is 8.9 percent because the hospital offered modern environment. Whereby 3.4 percent because they are comfortable with the friendly staffs and lastly is because of the price.

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Table 4.8 shows a percentage for the type of admission. The highest is 49.4 percent shows that patient admitted through appointment. Second highest is 20.9 percentage which referral from clinic. Followed by emergency department indicate 16.9 percent. Where walk-in patient shows 7.4 percent and lastly referred by insurance company is 5.4 percent.

Table 4.8: *Type of Admission*

Type of Admission	Frequency	Percent
Emergency	59	16.9
Appointment	173	49.4
Walk-in	26	7.4
Referral from clinic	73	20.9
Referral from insurance company	19	5.4
Total	350	100.0

4.4 RELIABILITY ANAYSIS

Table 4.9: *Results of Reliability Analysis*

Scale	No of Items	Pilot Test		Actual Data	
		Expectation	Actual	Expectation	Actual
Tangible	6	.925	.891	.949	.900
Responsiveness	5	.878	.815	.870	.805
Reliability	7	.919	.863	.937	.907
Assurance	6	.902	.891	.958	.899
Empathy	6	.964	.903	.943	.874

As shown in the table above, the Cronbach's Alpha results during the pilot test and from the data collected from the field work. During the pilot test stage, the score is between 0.815 and 0.964 which indicate that each item in a variable which is Tangible, Responsiveness, Reliability, Assurance and Empathy measured appropriately. For an actual data similar results obtained from data collected with the range of 0.805 to 0.958 respectively. Hence from the reliability analyses showed that questioned apply are reliable to the case study.

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4.5 DESCRIPTIVE ANALYSIS

Descriptive analysis was used to describe overall study. There are six (6) variable in this study and it was separated into two research element are expectation and perception. All variable was analyzed for mean and standard deviation. An analysis of mean for measure of central tendency, while standard deviation for measure of dispersion.

4.5.1 Reliability

Based on an analysis the highest mean for expectation is item no 7 which the respondent expects this hospital should be competent in providing efficient service (inpatient/outpatient) treatment with mean score of 3.8514, while for actual service received also the same as what they expected on reliability with the mean score of 4.1514. It can be concluded that in-patient and out-patient service at the hospital competence and efficient.

Table 4.10: *Mean and Standard Deviation for Reliability*

		Expectation		Actual Service Received	
Item	Item Statement	Mean	SD	Mean	SD
1	The Doctor's advice, suggestion, solution and decision on medical / treatment / procedure plan can be trusted	3.8000	.86644	3.8371	.89526
2	Nurse, Medical staffs advise, suggestion, solution and decision on medical / treatment / procedure plan can be trusted	3.7229	.83635	3.7600	.86948
3	Doctors should be honest and willing to do their best as what patient need	3.6971	.84619	3.7343	.88004
4	Doctors should give full attention to patient requirement and need	3.7800	.83282	3.8171	.86362

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5	Can depend on support staffs information as per related inquiry	3.7343	.77624	3.7714	.81130
6	Patient medical record or any personal data are safe and free from misdiagnose	3.7857	.78110	3.8229	.81360
7	Hospital are competence, efficient in inpatient / outpatient service	**3.8514**	.79805	**4.1514**	.74360

4.5.2 Assurance

Table 4.11: *Mean and Standard Deviation for Assurance*

		Expectation		Actual Service Received	
Item	Item Statement	Mean	SD	Mean	SD
1	Hospital should treat the patient as wl patient expected	3.6914	.87085	3.7114	.88905
2	Patient feel the sense of security	3.7143	.88513	3.7343	.90254
3	All staffs have knowledge and skills experience	3.7743	.88795	3.7943	.90397
4	Consistency in politeness and courtesy to patients / customer	3.6914	.86755	3.7114	.88582
5	Adequate information / explanation about the disease and proactive action to treat / cure.	3.7771	.89988	3.7971	.91563
6	Patient safeness in treatment / procedure or used of facilities	**3.8086**	.89918	**4.0686**	.85034

Based on an analysis the highest mean for expectation is item no 6 which respondent expect to feel safe receiving services and treatment from the medical and support staffs of this hospital with mean 3.8086, while for perception also item 6 also feel safe receiving services and treatment from the medical and support staffs of this hospital with mean 4.0686. It means for expectation and perception most of respondent respond that they are strongly agree with item 6.

4.5.3 Tangibility

Table 4.12: *Mean and Standard Deviation for Tangibility*

		Expectation		Actual Service Received	
Item	Item Statement	Mean	SD	Mean	SD
1	Equipment should be update and well function	3.8857	.85885	3.8057	.88085
2	Hospital ambience help to calm patient worried while waiting for Dr/appointment	**3.8914**	.82558	3.8143	.85131
3	Sufficient parking, easy to access food or Wi-Fi	3.8629	.83171	3.7857	.85467
4	Excellent hygiene standard	3.8657	.86758	3.7886	.88986
5	All staffs should look professional and neat	3.8000	.83615	3.7314	.85772
6	The system numbering at every counter should be well functioned and monitored	3.8143	.88756	**4.0200**	.76988

Based on an analysis the highest mean for expectation is item no 2 expect the hospital ambience should help to calm their worries while waiting to see the doctor for counseling or treatment. 2 with mean 3.8914, while for perception is item 4 where the hospital should practice and maintain excellent hygiene standards i.e. toilet, rooms, cafeteria and waiting area with mean 4.0200. It means for expectation most of respondent respond that they are agree with item 2. While for perception, most of respondent was respond agree with item 4.

4.5.4 Empathy

Based on an analysis the highest mean for expectation is item no 5 which the support staffs should be helpful and show their caring in a way they speak nicely and smile and try to smooth the medical plan or treatment plan process management. With mean

3.8257, while for perception is item 6 which the medical team should give respondent a sufficient time for them to make decision about their health condition plan and advise them according prior to their needs with mean 4.0914. It means for expectation most of respondent respond that they are agree with item 5. While for perception, most of respondent was respond agree with item 6.

Table 4.13: *Mean and Standard Deviation for Empathy*

		Expectation		Actual Service Received	
Item	Item Statement	Mean	SD	Mean	SD
1	Warm & caring attitude from Doc	3.6829	.78998	3.7257	.83214
2	Warm & caring attitude from medical staffs	3.6486	.74514	3.6914	.79156
3	Full attention from Dr and medical staffs	3.8086	.85340	3.8457	.88228
4	Nurse willing to comfort while patient down or uncomfortable	3.7143	.75593	3.7571	.79820
5	Support staffs should helpful, courtesy, nice, smile	**3.8257**	.87363	3.8686	.90518
6	Sufficient time to patient to make decision about their help plan	3.7371	.79363	**4.0914**	.86159

4.5.5 Responsiveness

Based on an analysis the highest mean for expectation is item no 4 which the medical or support staffs should always will to help and give extra miles' services and item no 5is the medical staffs and support staffs – well-defined as the ability to perform the promised service correctly in effective and precise way. (Peer and Mpinganjira 2011) noted that of all the five service quality components, reliability has frequently been shown to be the most significant. Respondent have to waiting for long time. With mean 3.8457, while for perception is item no 5 only is the medical staffs and support staffs should be never too busy to respond to any inquires or keep respondent waiting for

long time. With mean 4.2029 that's means for expectation most of respondent respond that they are agree with item no 4 and no 5. While for perception, most of respondent was respond agree with item no 5.

Table 4.14: *Mean and Standard Deviation for Responsiveness*

Item	Item Statement	Expectation		Actual Service Received	
		Mean	SD	Mean	SD
Item 1	Patient should be keep update about their appointment, procedure, bill and what not by support staffs	3.7914	.99824	3.8800	1.05570
Item 2	Patient should be keep update about their appointment, procedure, bill and what not by medical staffs	3.7143	.77094	3.8029	.85210
Item 3	Any serious or high risk cases/ issue should be treated without delay	3.7200	.75807	3.8086	.83986
Item 4	Medical and support staffs always do extra miles service	**3.8457**	.81122	3.9343	.87547
Item 5	Medical and support staffs always respond for any inquires and no long waiting time	**3.8457**	.79336	**4.2029**	.76566

4.5.6 SERVQUAL Dimensions

There are five (5) dimensions in service quality, namely reliability, assurance, tangibility, empathy and responsiveness. Based on result, most of respondent was respond agree with perception and expectation of responsiveness with mean 3.8243 and 3.8533. There is negative different mean for both variables because most of respondent answer almost same respond. It was proving by different mean is -0.029. When customer perception almost similar with customer expectation, it means customers satisfied with service provided.

Table 4.15: *Mean and Standard Deviation for SERVQUAL Dimensions*

	Perception		Actual Service Received		Difference
	Mean	SD	Mean	SD	Mean
Reliability	3.8420	.67333	3.7673	.69809	0.0747
Assurance	3.8029	.72677	3.7443	.80645	0.0847
Tangibility	3.9257	.66218	3.7834	.67443	**0.1423**
Empathy	3.8300	.66289	3.7362	.70885	0.0938
Responsiveness	**3.8243**	.69519	**3.8533**	.75979	-0.029

While, the highest different mean is tangibility with mean 0.1423. It means most of respondent have different perception and expectation with service provided.

4.6 PAIRED T TEST ANALYSIS

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Table 4.16: *Statistics for Paired T-Test*

Dimension		Mean	SD	t	Sig. (2 tailed)
Reliability	Expectation	3.8420	.67333		
	Actual Service Received	3.7673	.69809		
	Paired T-Test	-.07469	.23387	-5.975	.000
Assurance	Expectation	3.8029	.72677		
	Actual Service Received	3.7443	.80645		
	Paired T-Test	-.05857	.23835	-4.597	.000
Tangibility	Expectation	3.9257	.66218		
	Actual Service Received	3.7834	.67443		
	Paired T-Test	.02905	.40200	1.352	.177
Empathy	Expectation	3.8300	.66289		
	Actual Service Received	3.7362	.70885		
	Paired T-Test	-.09381	.26165	-6.708	.000
Responsiveness	Expectation	3.8243	.69519		
	Actual Service Received	3.8533	.75979		
	Paired T-Test	-.14229	.34155	-7.794	.000

Total gap score for SERVQUAL's dimension is as follows:

(i) **Reliability** (mean= -.07469, t = -5.975, p < 00.05). Where the mean for reliability for perception (3.7673) is less than expected (3.8420) even though it shows significant result in this dimension. The medical or support staffs should be more professional and build a trust that they can be trusted in order to do any treatment according to the needs of patients. It does means that the doctor should be very honest and gives best opinion according to patient condition but may need more solution to decision making. Whilst the support staffs should and must be very efficient and ownership in handling patient information and their medical record. Patient or customer expect to the hospital to be competent and efficient in service especially for inpatient and outpatient services. This shows that satisfaction of the patients towards the service quality based from responsiveness value is high.

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(ii) **Assurance** (mean = -.05857, t =-4.597, p < 00.05) shows patient perception is less (3.7443) are than their expectation (3.8029). Even though there are significant results in this area but patient need to feel that they can trust this hospital and make this hospital as their preferred one to them and extended family. Where patient feel safe, been treated the way they want. The Doctor and nurse also support staffs show knowledgeable and skillful in their field.

(iii) **Tangibility** (mean = .02905, t = 1.352, p > 00.05) the tangibility is lower, and not significant at all that make this tangibility factor in service quality not really affected their decision making for example hospital ambience while waiting to see the doctor for counseling or treatment. The equipment

in the hospital should are up to date and well functional. The hospital facilities should provide sufficient parking and easy to find food or beverage and Wi-Fi. The hospital should practice and maintain excellent hygiene standards i.e. toilet, rooms, cafeteria and waiting area. All the staffs should look professional, and always neat. The system of numbering, receptionist, pharmacy, admission and discharge area should be maintained, monitored and improving.

(iv) **Empathy** (mean = - 0. 09381, t = -6.708, p < 00.05) where the mean for perception (3.7362) is less than expectation (3.8300) even though its show significant result in empathy dimension. Its shows that the overall respondent think that the nurse and the doctor need to be more empathy to them than what the expected in real situation. The patient expects the doctor or medical staffs to comfort them while their down. Whilst the nurses and support staffs have to be warm and carry a caring attitude.

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(v) **Responsiveness** (mean = -0.14229, t = -.7.794, p< 00.05) where the mean for perception is higher (3.8533) than expectation (3.8243) and it shows significant dimension of responsiveness in service quality. From the descriptive analysis on responsiveness variable, patients responded that the overall responsiveness service quality received is satisfied that what is expected before starting the treatment. Also responsiveness shows highest result mean in the service quality for five dimensions of SERVQUAL in the test. The responsiveness in this case is the support staffs always keep patient and client update about their appointment, procedure, bill and other related matters and prompt to keep their patient and customer informs or update

regards to risk of the procedure. The medical staffs should provide treatment or procedure without delay.

4.7 HYPOTHESES RESULTS

Table 4.17: *Summary of Hypotheses Results*

	Statement	Results
H1	There is a difference between expectation mean and perception mean on **reliability**.	Accepted T=-5.975, p<00.05
H2	There is a difference between expectation mean and perception mean on **assurance**.	Accepted t=-4.597, p<00.05
H3	There is no difference between expectation mean and perception mean on **tangibility.**	Rejected t = 1.352, p > 0.05
H4	There is a difference between expectation mean and perception mean on **empathy**.	Accepted t=-6.708, p< 00.05
H5	There is a difference between expectation mean and perception mean on **responsiveness**.	Accepted t= -7.794, p<0.05

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4.8 SUMMARY

This chapter investigated tangible, responsiveness, reliability, assurance, and empathy towards patient satisfaction. Data were collected from patient, clients, staffs in Gleneagles Hospital Kuala Lumpur. Based on the result four hypothesis result using five dimension shows that there are four dimension for this case study are significant. Nevertheless, only one are not significant in the result.

CHAPTER 5

DISCUSSION, RECOMMENDATION AND CONCLUSION

5.1 INTRODUCTION

This is the final chapter for this research, provides conclusions of this research with future work. This study was organized in five chapters. Hence, in Chapter 1, the researcher has discussed on the objective of the research that are related to the Hypotheses. From the result of the Hypotheses shows that four dimension of the SERVQUAL model resulted as significant factors in pre and post service for patient expectation and their actual experience after the service. There is one factor that is not significant which is tangibility in the result.

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5. 2 DISCUSSION

5.2.1 Expectation and Actual Service Received on Reliability

Based on the T-test statistic results, there is a significant difference ($t = -.07469$, $p < 0.05$) between expectation and actual service received on reliability. The mean for perception (mean = 3.7673, SD = .69809) is higher than the mean for actual service received (mean = 3.8420, SD = .67333). It could be concluded that patients do trust the doctor and nurses' advice on medical plan and treatment.

Even there a slightly lower in patient feeling after actual service received hence it is very minor issue and proactive action will take into consideration to improve. In this

context patient's experience towards the Doctor, Nurse, Medical and support staffs are very important and will influenced the SERVQUAL dimensions by Grönroos, (1984), Brady (2006), Orava and Tuominen (2002). Also, Trumble (2006) said that Doctors and Nurses and medical staffs' skills and knowledge can be evaluating by patient whilst doing the treatment, procedure or consultation.

5.2.2 Expectation and Actual Service Received on Assurance

Based on the T-test statistics results, there is a significant different ($t = -.05857b$, $p < 0.05$) between expectation and actual service received on assurance. The mean for perception (mean = 3.7443, SD = .80645) is lower than the mean for actual service received (mean = 3.8029, SD = .72677). It could be concluded that knowledgeable staff, treatment, being courtesy and polite or security is not as expected. Even though the difference in the mean for expectation and perception is small but it is implying a slight decline in the assurance dimension of the service quality.

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Management should plan and encourage and provide effective and efficient course or training to all staff including doctor, nurse, medical and support and general staff in enhancing their interpersonal and communication skills. Moreover, Chahal and Kumari (2010) expressed the effective of this skills on patient relationship management as one of the driver formation on how to enhancing patient satisfaction by Herrmann (2007). This is good as mechanism for maintaining customer loyalty and strategy to be benchmark compare to other hospital.

5.2.3 Expectation and Actual Service Received on Tangibility

Based on the T-test statistics results, there are no difference ($t = 1.352$, $p > 0.05$) between expectation and actual service received on tangible. The mean for perception (mean = 3.7834, SD = .67443) is lower than the mean for actual service received (mean = 3.9257, SD = .66218). It could be concluded that the tangibility aspects are the same as before and after receiving the service.

Hence, since there is no relationship between tangibility and patient perception and actual service received management should take this matter in to consideration to improve and form a plan to implementation on facilities and what not said Li (2011). Patient can be educating in term of ward facilities and tools especially that can make them satisfied.

The research outcomes from this study contribute to better understanding of the service quality dimensions and their influence on patient satisfaction in the context of the private hospitals in developing economy of Malaysia. This research is expressive since the capability to deliver quality services and deliver patient satisfaction, especially in the private units in rising nations like Malaysia.

The goal of this study was to comprehend the patient's views of service quality and the impact this has on patient satisfaction. The study has confirmed that patient's expectation and actual service received are an important measure in influencing their satisfaction in a private hospital. The research established that all the five independent variables (tangible, responsiveness, reliability, assurance, and empathy) are utilized by the patients to evaluate the patient satisfaction by the private hospital. Satisfaction with

the quality of care rendered throughout the hospital stay is ultimately a decision that only the patient can make. The value to private hospitals of patient satisfaction over the long term is improved viability as a result of return visits by patients and recommendations of the facility to others. It is hence a pre-requisite for private hospitals to carry on competing aggressively to attract patients. Determined for superior quality of service to achieve the aim of optimal patient satisfaction in a progressively competitive healthcare setting remains as effective and modest advantage today as it will be in future.

The study demonstrated that patients' perceptions of satisfaction are more than actual service received satisfaction. This study found the relationship between service quality perceptions, customer or patients' satisfaction using SERVQUAL parameter towards a service provider. More over this study contribute a recommendation on measures that can be taken by those in private hospitals to ensure patient satisfaction.

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Private hospitals should adapt the questionnaire to align more with the relative importance of the service quality dimensions. Tangible and Assurance were rated as the most important dimension in determining overall patient satisfaction, followed by Responsiveness, but these are not getting the required emphasis in the patient opinion surveys. More focus, management of the hospital improves service with respect to the prioritized service quality dimensions and their affections on increasing service quality.

5.2.4 Expectation and Actual Service Received on Empathy

Based on the T-test statistics results, there are significant difference (t = .6.708, $p < 0.05$) between expectation and actual service received on empathy. The mean for perception (mean = 3.7362, SD = .07088) is higher compared to the mean for actual service received (mean = 3.8300, SD = .66289). It could be concluded that patient's do received higher warm and caring attention from both the medical and supporting staff while receiving treatment and the level is more than what the patients initially expected.

For on now trending, especially in Private Hospital culture perception is based on patient or customer judgement. From the result it's obviously that this Hospital staffs for example, Doctor, nurse, medical and support staff should give patient attention and show empathy not only sympathy towards the patients. Arasli (2008) said that empathy, giving priority to patient needs can lead to patient satisfaction and morale support gain that can boost patient recovery and motivation level. Furthermore, Brady and Cronin (2001) mentioned that this can lead to good service quality perceptions and greater impact to Hospital image.

5.2.5 Expectation and Actual Service Received on Responsiveness

Based on the T-Test statistic results, there is a significant difference (t = -.7.794; $p < 0.05$) between expectation and actual service received on responsiveness. The mean for perception (mean = 3.8533, SD = .75979) is higher than the mean for actual service received (mean = 3.8243, SD =. 69519). Therefore, it could be concluded that patients

felt that medical and support staff was helpful in updating appointment, procedure time, bills, treatment process and flow also ensuring the waiting time was kept short.

From the result the relationship between expectations which is lower than their actual service received is higher on responsiveness. Its shows that patient are satisfied and happy for always been updated and keep inform on certain matters that related to their procedure or not wait for long time to see the Doctor.

Some of the unhappiness or dissatisfaction are because when the customer or client not be informed for the changes of their appointment because the Doctor are not around or had emergency case. This cause last minute arrangement or simply they had prepared themselves to see the doctor. To ensure the satisfaction of patient or customer they need to be inform or update about any reschedule appointment or last minute cancelation so that they can plan or arrange for new appointment or been given solution to see another Doctor if the patient condition need serious attention.

This is where the support staffs should play a role as a communicator and give extra miles' service to avoid complaint. This can build good relationship between hospital provider and client by Owusu-Frimpong (2010), Kessler and Mylod (2011). For example, Padma (2010) mentioned in his research that good customer service can lead of personal touch and quality that effected customer satisfaction.

5. 3 RECOMMENDATION

This service quality scope using SERVQUAL tool based relatively effected by five service quality dimension can be more wide-ranging in other related research can be conducted by adding more opportunities like Andaleeb (2001) in his study he suggests that the used of communication and discipline of other than five service quality dimensions is good measurement in research area.

In circumstance of health care services still word of mouth i.e. information concerning hospitals and services from household play an important role. Health care service providers should distribute correct information from time to time as more value information leads to patient consciousness and satisfaction.

The hospitals should have appropriate operating hours and nurses should give specific personalize attention to patients. Especially this problem is found in private and trust run hospitals. The outcomes are limited to the number of respondents as to protect PDPA issue. Also the data studied was less than one months, as this could be strained the period in recognizing the trends in evolving in health care service delivery. This perhaps would be effective and useful for academician or hospital management to compare and contrast the research and finding for future development among diverse patient groups across demographic variables in Kuala Lumpur Valley. This study could be extended to some other developing countries in the region, and to other healthcare sector (i.e., public hospitals). Finally, in improving hospital benchmark, customer relation management system or patient service information technology for example in Japan and developing country should be considering for service quality.

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5.4 CONCLUSION

A good service quality in private hospital will change patient and customer perception about the negative idea about getting service or treatment in private hospital environment. Thus the quality will lead the benchmark as preferred hospital.

The administrators must expand tremendous quality in healthcare amenities. This can ensure the patient satisfaction and focus on customer positioning that this hospital is vital in modern managerial practices.

Some of the essential plans are to improve through several action programs concerning hospital for example, it is necessary for the hospital managers to pay attention to the need of hospital tangibles and invest to upgrade the hospital amenities, equipment and hospital environment.

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It is also very important to encourage good teamwork and courtesy, medical ethics and attitude of medical staff and doctors concerning patients, as well as to improve better and customer service culture, and provide training medical staff and physicians on ethics, communication, and skills in their specialization.

This study is can be used as a tools for management to improve on their policy, tactics and strategy to upgrade and update their level of service quality management and increase patient satisfaction in this hospital.

For certain non-medical policy can be improved especially on waiting time. These innovative investment policies for private hospitals should accept great consideration

in upgrading facilities, medical equipment and develop better hospital environment. Policy makers should spend substantial effort to develop effective policies to attract investors to build high-quality hospitals so that comfortable patients may want to use healthcare services in local hospitals instead of going and spending for medical services abroad.

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APPENDIX A

To Whom It May Concern,

I am seeking your co-operation to fill in this questionnaire survey about “Service Quality and Patient Satisfaction in Private Hospital: Case Study of Gleneagles Kuala Lumpur” prepared to my final dissertation for Master Science (MSc, Management) from University Utara Malaysia.

Your feedback will provide important data to my study. The data gathered is strictly confidential and will be used for academic purpose only. Please spare a few minutes to complete this questionnaire form.

Your cooperation and support is highly appreciated

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Thank you

PART A
Please tick (√) for the relevant answer.

1. Gender

Male	
Female	

2 Please choose your age group

16-24	
25-34	
35-44	
45-54	
55-64	
65-74	
75-84	
and above	

2. Highest Qualification

SPM/ Cert	
Diploma	
Degree	
Master	
PHD and above	

4 Monthly Salary

RM 1800 or below	
RM 1900- RM 2900	
RM 3800- RM 4500	
RM 4600- RM 5500	
RM 5600 – RM 6600	
RM 6700 – RM 7600	
RM 8000 and above	

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5. Payer

Cash	
Insurance/TPA	
Corporate Company	
Guarantee Letter	

PART B
Please tick (√) for the relevant answer.

1. For how long you have been on follow up / receiving treatment in this Hospital

First Time	
1- 2 years	
2- 5 years	
6- 10 years	
11- and above	

2. Please choose the main reasons that prompt you to seek treatment to this Hospital?

The only Hospital you know/ near to your amenities	
Experienced Doctor, Consultant	
Modern and up to date equipment	
Friendly staff's	
Reasonable and cheaper cost of treatment compared to other specialist center.	
No choice	

3. What type of admission did you appoint for in this Hospital?

Emergency	
Appointment	
Walk –in	
Referral from Clinic	
Referral from Insurance Company	

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PART C (adapted from the SERVQUAL dimensions (Parasuraman, 1988)

Expectation

RELIABILITY

Please rate each statement below regarding reliability in this hospital

No		Strongly Disagree (1)	(2)	(3)	(4)	(5) Strongly Agree
1.	I should feel that I can trust my Doctor suggestion, solution and decision about my medical plan and treatment					
2.	I should can trust the Nurses to do any simple procedure, medical or treatment routine, and counseling					
3	The Physician Specialist should totally honest and telling the best option for my treatment that best for my conditions					
4	Physician Specialist should pay full attention to what I am are trying to tell him/her					
5	The support staffs should be dependable and informative when handling my inquiries					
6	My medical record in this hospital should free from any misdiagnose or information					
7	This hospital should be competent in providing efficient service (inpatient/outpatient) treatment					

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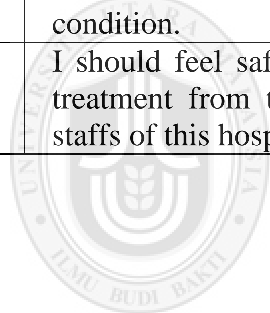
ASSURANCE

Please rate each statement below regarding assurance in this hospital

No		Strongly Disagree (1)	(2)	(3)	(4)	Strongly Agree (5)
1.	The hospital team should treat the way I expected					
2.	I should feel a sense of security from any physical harm					
3	The staffs should have knowledge and skills experience to respond to my requirement					
4	The staff should consistently courteous and polite					
5	The staffs should give an adequacy of explanation /information about my treatment – clarity of information on my condition.					
6	I should feel safe receiving services and treatment from the medical and support staffs of this hospital					



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TANGIBLES

Please rate each statement below regarding tangible

No		Strongly Disagree (1)	(2)	(3)	(4)	Strongly Agree (5)
1.	The equipment in the hospital should are up to date and well functional.					
2.	The hospital ambience should help to calm my worries while waiting to see the doctor for counseling or treatment.					
3	The hospital facilities should provide sufficient parking and easy to find food or beverage and Wi-Fi					
4	The hospital should practice and maintain excellent hygiene standards i.e. toilet, rooms, cafeteria and waiting area					
5	All the staffs should look professional, and always neat					
6	The system of numbering, receptionist, pharmacy, admission and discharge area should be maintained, monitored and improving.					

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EMPATHY

Please rate each statement below regarding empathy

No		Strongly Disagree (1)	(2)	(3)	(4)	Strongly Agree (5)
1.	The doctor should treat me with warm and caring attitude					
2.	The medical staffs should treat me with warm and caring attitude					
3	The doctor should give fully attention while listen to my discomfort of health complaint with patient and support					
4	The nurses should willing to comfort me while I feel down and uncomfortable					
5	The support staffs should be helpful and show their caringness in a way they speak nicely and smile and try to smoothen the medical plan or treatment plan process management.					
6	The medical team should give me a sufficient time for me to make decision about my health condition plan and advise me according prior to my needs					

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RESPONSIVENESS

Please rate each statement below regarding responsiveness

No		Strongly Disagree (1)	(2)	(3)	(4)	Strongly Agree (5)
1.	The support staffs should always keep me update about my appointment, procedure, bill and what not					
2.	The medical staffs should always keep me inform or update regards to risk of the procedure					
3	The medical staffs should provide treatment or procedure without delay					
4	The medical or support staffs should always willing to help and give extra miles services.					
5	The medical staffs and support staffs should be never too busy to respond to any inquires or keep me waiting for long time.					

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PART D (adapted from the SERVQUAL dimensions (Parasuraman, 1988)

Actual service received

RELIABILITY

Please rate each statement below regarding reliability in this hospital

No		Strongly Disagree (1)	(2)	(3)	(4)	Strongly Agree (5)
1.	I trusted the Doctor suggestion, solution and decision about my medical plan and treatment					
2.	I trusted the Nurses when she died any simple procedure, medical or treatment routine, and counseling to me					
3	The Physician Specialist was totally honest and telling me the best option for my treatment and conditions					
4	I received full attention from the Physician Specialist to what you are trying to tell him/her					
5	The support was dependable and informative when handling my inquiries					
6	The medical record in this hospital were free from any misdiagnose or information					
7	This hospital are competent in providing efficient service (inpatient/outpatient) treatment					

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ASSURANCE

Please rate each statement below regarding assurance in this hospital

No		Strongly Disagree (1)	(2)	(3)	(4)	Strongly Agree (5)
1.	The hospital team are able to treat the way I expected					
2.	I felt a sense of security from any physical harm					
3	The staffs are knowledgeable and skills experienced responded to my requirement					
4	All the staffs was consistently courteous and polite					
5	I received adequacy of explanation /information during my treatment – clarity of information on my condition.					
6	The services and treatment are safe to receive from the medical and support staffs of this hospital					

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TANGIBLES

Please rate each statement below regarding tangible

No		Strongly Disagree (1)	(2)	(3)	(4)	Strongly Agree (5)
1.	The equipment in the hospital are up to standard, up to date and well functional.					
2.	This hospital ambience helped calm my worries in waiting area while waiting to see the doctor for counseling or treatment.					
3	This hospital facilities has provided sufficient parking and easy to find food or beverage and Wi-Fi					
4	The hygiene standards i.e. toilet, café, rooms and waiting area are excellent					
5	All the staffs portray and practiced professional, and always neat					
6	The system of numbering, receptionist, pharmacy, admission and discharge area are well maintained, monitored and has improvement.					

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EMPATHY

Please rate each statement below regarding empathy

No		Strongly Disagree (1)	(2)	(3)	(4)	Strongly Agree (5)
1.	I received warm and caring treatment under my Doctor care					
2.	I received warm and caring attitude under the medical staffs care.					
3	The doctor has given fully attention while listen to my discomfort of health complaint with patient and supportive					
4	The nurses has comforted me while I felt down and uncomfortable					
5	The support staffs was helpful and show their caringness in a way they speak nicely and smile and try to smoothen the medical plan or treatment plan process management.					
6	I be given a sufficient time for me to make decision about my health condition plan and advised me according prior to my needs by the medical staffs.					

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RESPONSIVENESS

Please rate each statement below regarding responsiveness

No		Strongly Disagree (1)	(2)	(3)	(4)	Strongly Agree (5)
1.	The medical and support staffs was helpful in updated about my appointment, procedure, bill and what not.					
2.	The medical staffs kept me informed or update regards to my follow up					
3	There was no delay by medical staffs in provided treatment or procedure					
4	The medical or support staffs given their extra miles services.					
5	The medical staffs and support staffs were never too busy to respond to any inquires or kept me waited for long time.					

End of question.

Thank you for your cooperation!

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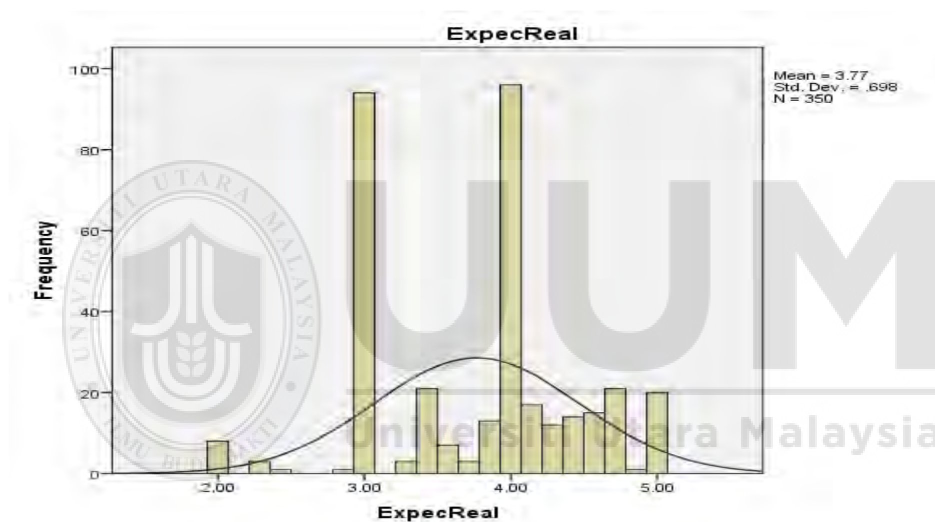
APPENDIX B

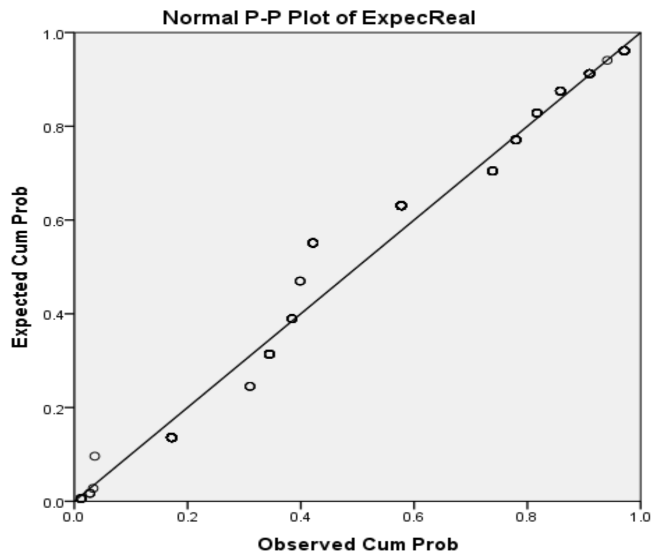
HISTOGRAM AND P-P PLOT

Reliability

The skewness for expected reliability (Skew = -.242 / .130). As shown below, the histogram curve and P-P plot has a normal curve.



Expected Reliability Histogram



Expected Reliability P-P plot

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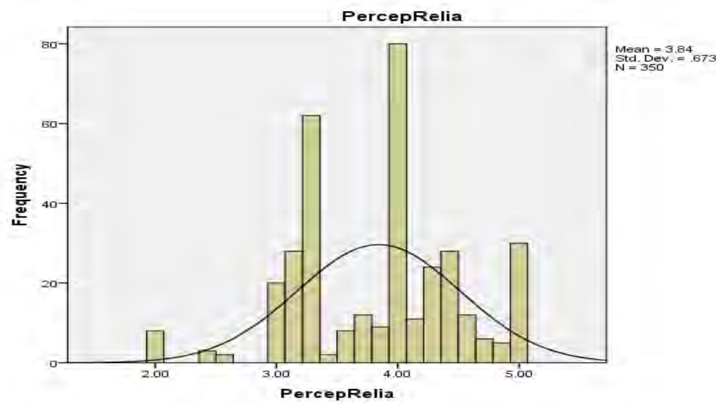
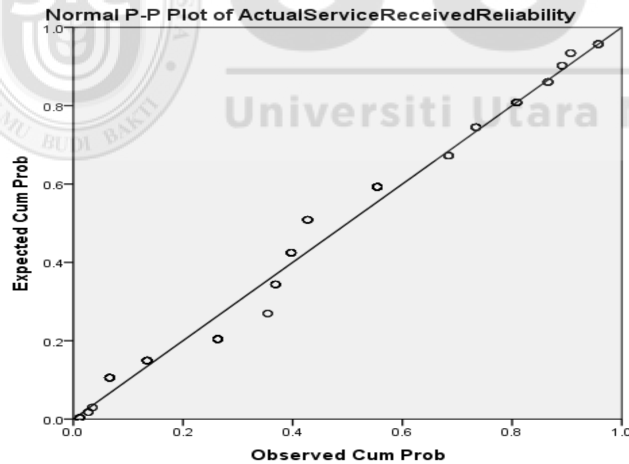
Actual Service Received on Reliability

The skewness is -.248 / .130 and the curve for histogram and P-P Plot is normal.



Actual Reliability Services Received Histogram



Actual Reliability Services Received P-P Plot

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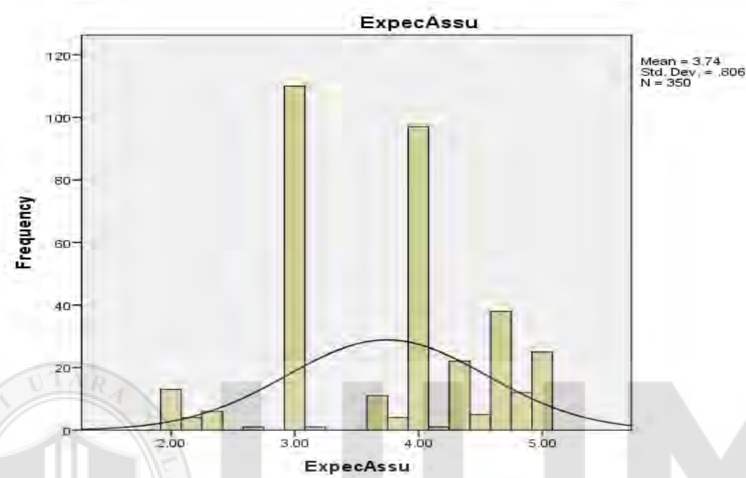
Assurance

The skewness for expected assurance is -.248 / .130. As shown in Figure 13 and 14, the curve for histogram and P-P plot is normal.



Expected Assurance Histogram

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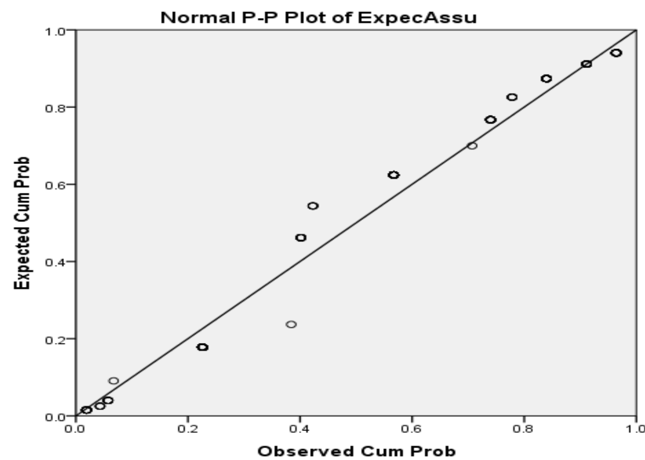
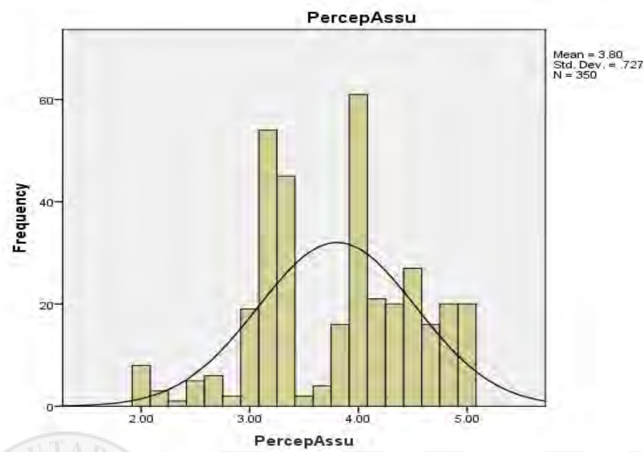
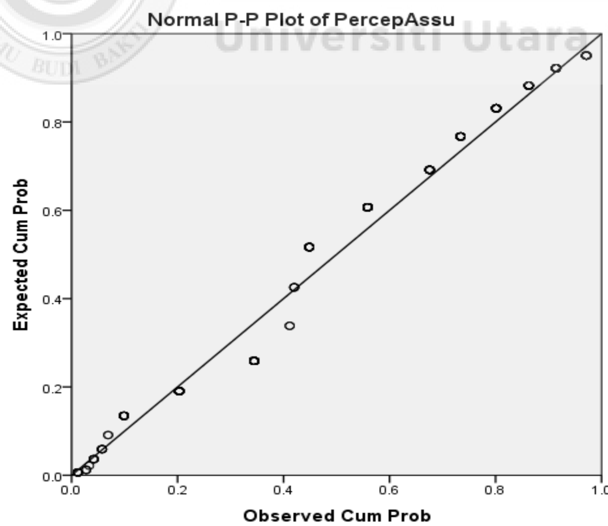


Expected Assurance P-P plot

The skewness for actual assurance service received is -.249 / .130 and the histogram and P-P Plot has a normal curve.



Actual Assurance Services Received Histogram



Actual Assurance Services Received P-P plot

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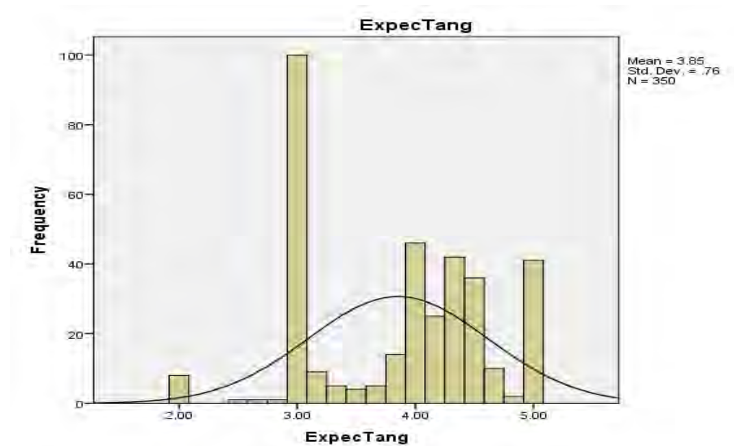
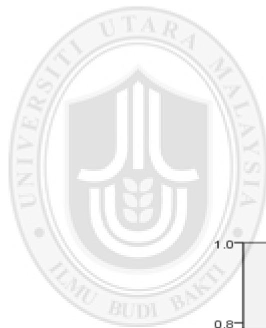
Tangible

The skewness for expected tangible is -.248 / .130 and the histogram and P-P Plot shows a normal curve.



Expected Tangible Histogram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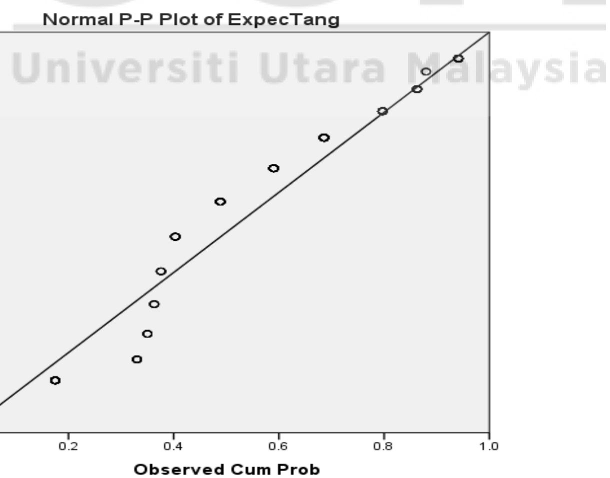
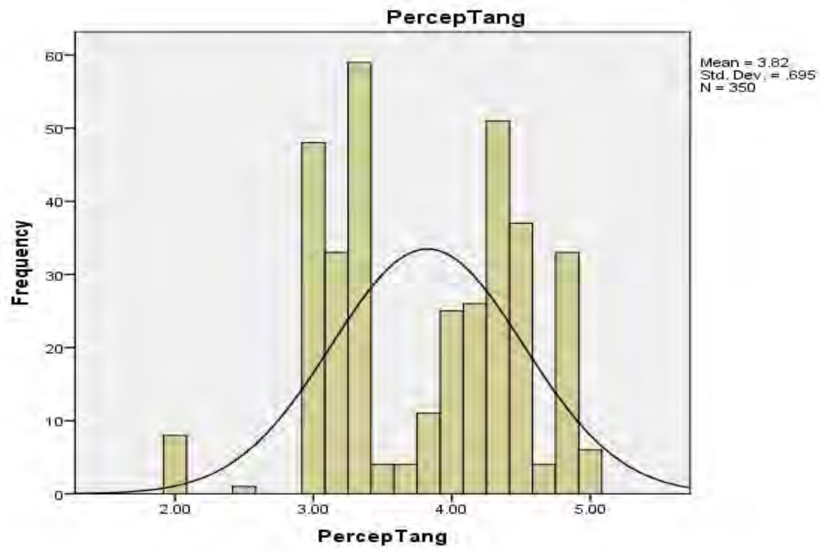
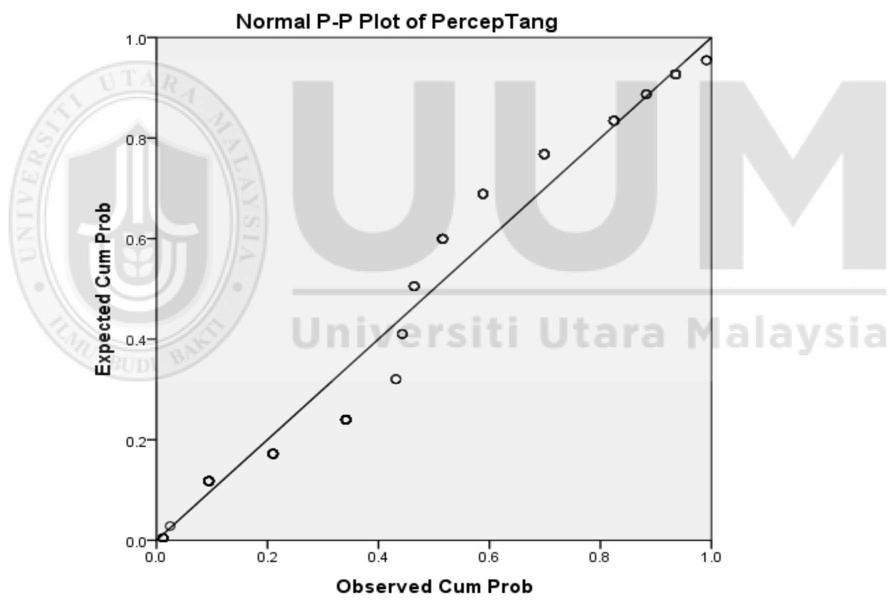


The actual tangibility services received skewness is -.248 / .130 and the histogram and P-P plot has a normal curve.



Actual Tangible Services Received Histogram



Actual Tangible Services Received P-Plot

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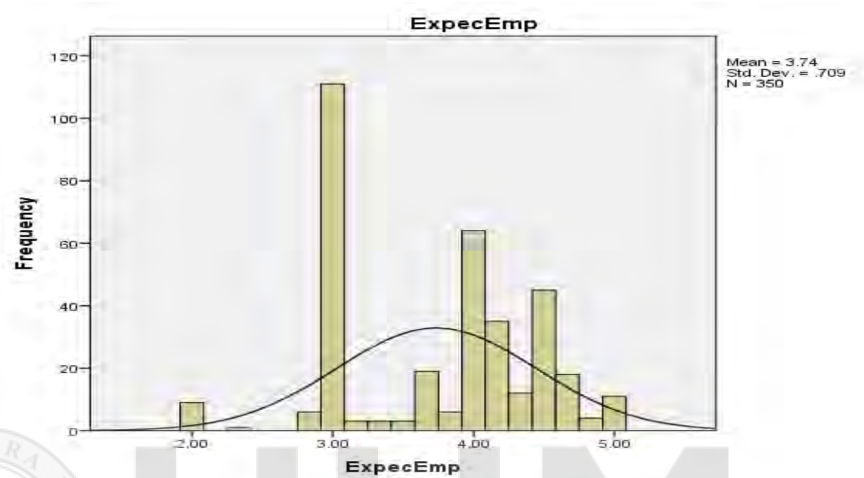
Empathy

The skewness for expected empathy is -.249 / .130 and the histogram and P-P plot has a normal curve.



Expected Empathy Histogram

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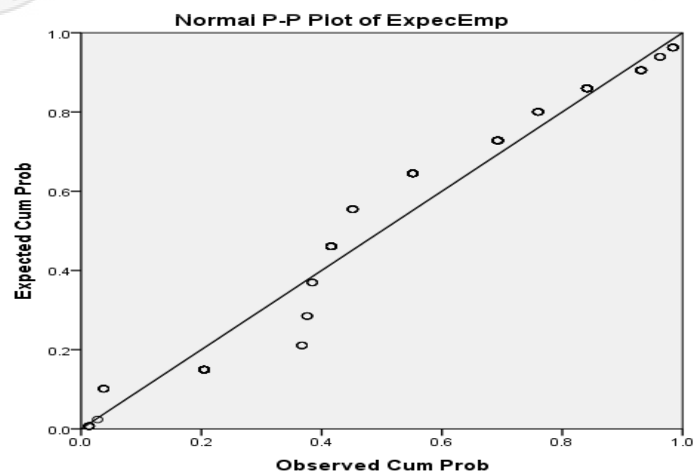
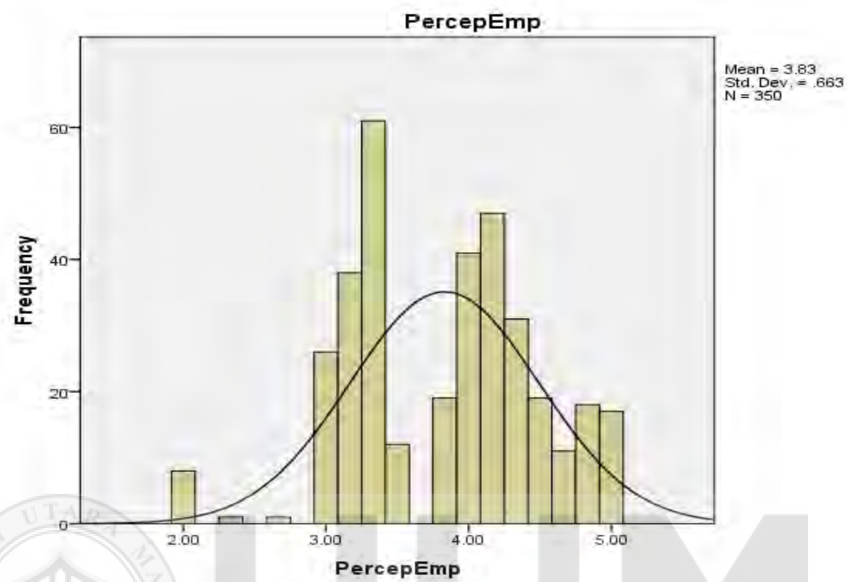
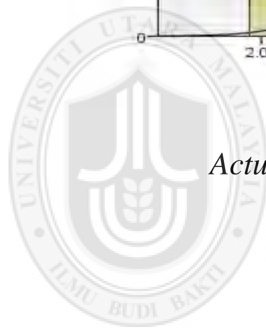


Expected Empathy P-P plot

The skewness for actual empathy services received is -.240 / .130 and the histogram and P-P plot has a normal curve.

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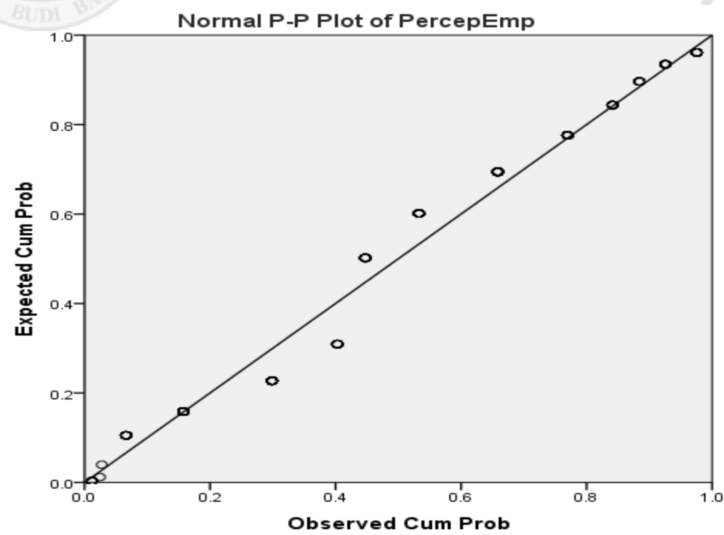
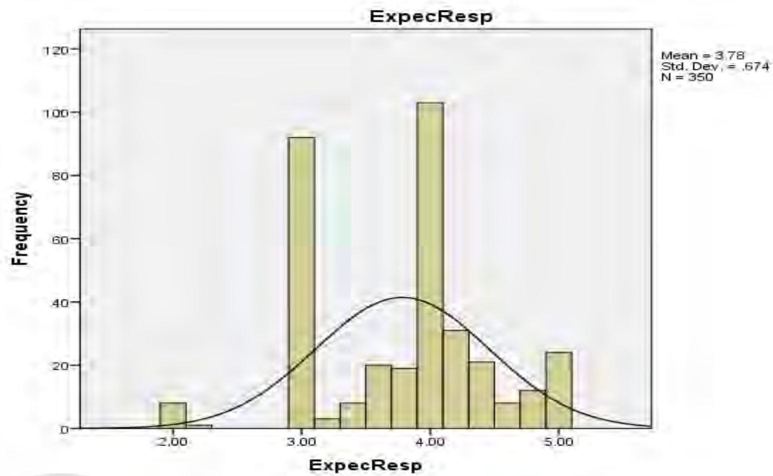
Actual Empathy Services Received Histogram



Actual Empathy Services Received P-P plot

Responsiveness

The skewness for expected responsiveness is -.248 / .130. and the histogram and P-P plot has a normal curve.



Expected Responsiveness Histogram

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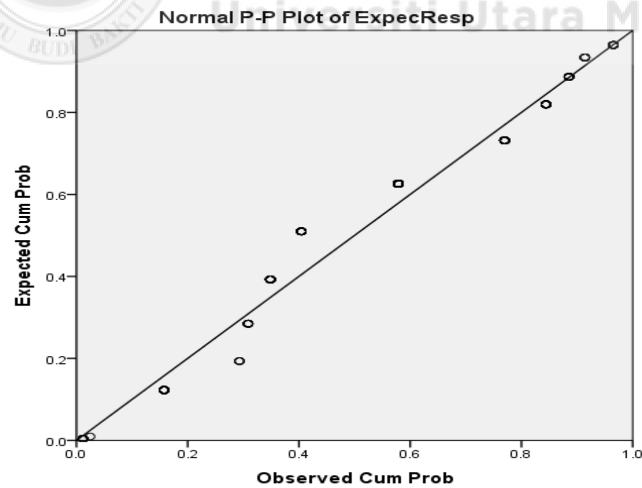
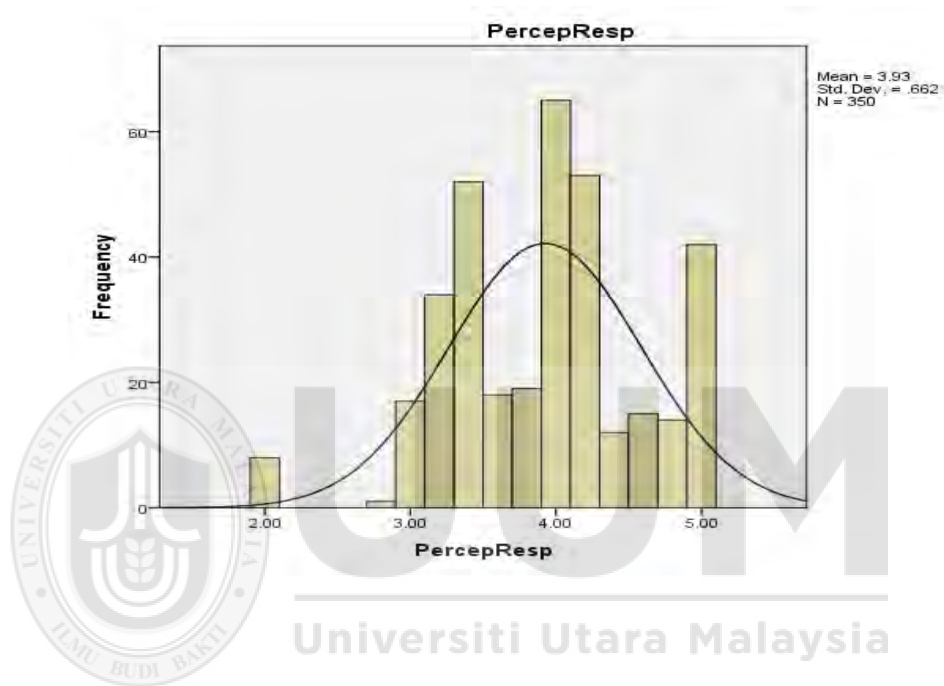


Expected Responsiveness P-P plot

The actual service received on responsiveness is -.246 / .130 and both histogram and P-P plot has a normal curve.



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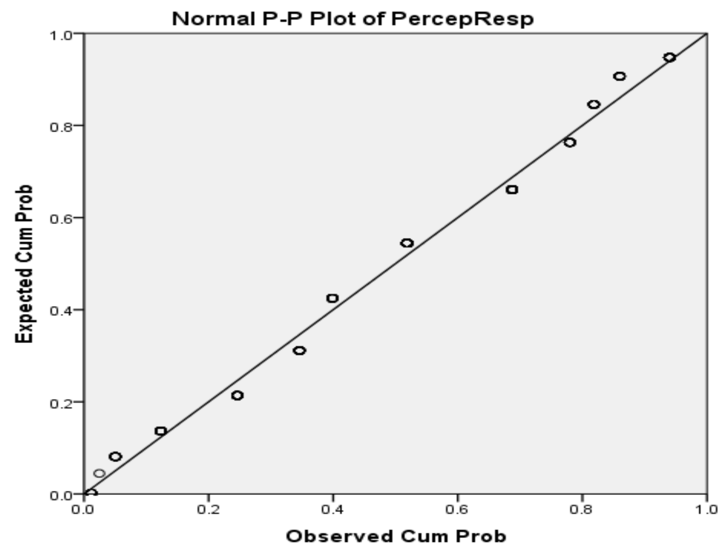
Actual Responsiveness Services Received Histogram



Actual Responsiveness Services Received P-P plot

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