

Customer Service at a private hospital in the North-West Province

by

Johannes van Heerden

Minni-dissertation submitted in partial fulfilment of the requirements for the degree
Magister in Business Administration at the North-West University, Potchefstroom

Study Leader: Prof. C. A. Bisschoff

Potchefstroom

2010

ABSTRACT

The South African private healthcare industry is a very competitive market. The three key role players in this industry all market themselves as institutions that provide quality care and service. As a result of this marketing, customers attend these private institutions with the expectation that they will receive quality service.

This study centres around the research of customer service at a private hospital or private healthcare institution. The objective was to measure the expectations and perceptions of customers who made use of the services at the private healthcare institution. Thereafter, the gaps between the expectations and perceptions were also analysed in order to determine the practically significant areas for management to focus their improvements on with regards to the quality of service system.

The literature review revealed that the SERVQUAL model is the optimal instrument to be used to measure the expectations and perceptions of customers at a service institution of this nature. The model also provides a way of measuring the gaps that exist between the customers' expectations and perceptions, by adapting an instrument of 22 statements to the specific industry. The 22 statements measure the quality of services across the five SERVQUAL dimensions, namely tangibles, reliability, responsiveness, assurance and empathy. This provides valuable data for effect size analysis in all five of the SERVQUAL service quality dimensions.

The results revealed that customers' expectations of the service quality at the private healthcare institution were high. The average score for the 22 expectation statements was 6.56 out of 7.0. The customers' perceptions of the service quality at the private healthcare institution, were high, but, however, lower than the expectations average. The average score for the 22 perception statements was 6.17 out of 7.0. This indicated that there was a difference between the perception of healthcare services and that which was expected of the healthcare institution.

The reliability of the SERVQUAL instrument, was done by the calculation of a Cronbach Alpha for each of the five dimensions of the instrument and an average of 0.875 was achieved. This indicated a high reliability of the data.

CONTENTS

Abstract	ii
List of tables	v
List of figures	vi

CHAPTER 1: NATURE AND SCOPE OF THE STUDY

1.1	INTRODUCTION	2
1.2	PROBLEM STATEMENT	6
1.3	PROPOSITION	8
1.4	RESEARCH METHODOLOGY	
	1.4.1 Rerearch design	9
	1.4.2 Research method	9
1.5	PROBLEMS ENCOUNTERED	10
1.6	DEMARCATION OF STUDY	11
1.7	SUMMARY	11

CHAPTER 2: LITERATURE REVIEW

2.1	INTRODUCTION	13
2.2	SOUTH AFRICAN HEALTHCARE CONTEXT	13
2.3	QUALITY DEFINED	14
2.4	SERVQUAL	
	2.4.1 Introduction	17
	2.4.2 Dimensions of SERVQUAL	18
	2.4.3 Dimensions of service quality	19
	2.4.4 SERVQUAL model and instrument	19
	2.4.5 Customer assessment of service quality	20
	2.4.6 Difference between customer expectations and perceptions / needs	22
	2.4.7 Application of model	22
2.5	SUMMARY	26

CHAPTER 3: RESEARCH METHODOLOGY AND RESULTS

3.1	INTRODUCTION	28
3.2	RESEARCH METHODOLOGY	
	3.2.1 Questionnaire design	28
	3.2.2 Data collection	29
3.3	STATISTICAL ANALYSIS	
	3.3.1 Reliability	30
	3.3.2 Effect size	30
3.4	FINDINGS	
	3.4.1 Demographics	31
	3.4.2 SERVQUAL questionnaire analysis	31
3.5	SUMMARY	41

CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

4.1	INTRODUCTION	43
4.2	CONCLUSIONS	43
4.3	RECOMMENDATIONS	44
4.4	AREAS FOR FUTURE RESEARCH	45
4.5	SUMMARY	45

REFERENCES	47
-------------------	-----------

APPENDIX A: QUESTIONNAIRES	51
-----------------------------------	-----------

APPENDIX B: STATISTICS	56
-------------------------------	-----------

LIST OF TABLES

Table 1.1	DISTRIBUTION OF HOSPITALS, BEDS AND THEATRES BY OWNERSHIP, 2006	4
Table 1.2	PRIVATE HOSPITAL BEDS BY OWNERSHIP, 2006	4
Table 3.1	VALIDITY OF DATA	30
Table 3.2	SERVQUAL SCORES, STANDARD DEVIATION AND EFFECT SIZES	33
Table 3.3	CRONBACH's ALPHA – TANGIBLES EXPECTATION	35
Table 3.4	CRONBACH's ALPHA – TANGIBLES PERCEPTION	35
Table 3.5	CRONBACH's ALPHA – RELIABILITY EXPECTATION	36
Table 3.6	CRONBACH's ALPHA – RELIABILITY PERCEPTION	36
Table 3.7	CRONBACH's ALPHA – RESPONSIVENESS EXPECTATION	38
Table 3.8	CRONBACH's ALPHA – RESPONSIVENESS PERCEPTION	38
Table 3.9	CRONBACH's ALPHA – ASSURANCE EXPECTATION	39
Table 3.10	CRONBACH's ALPHA – ASSURANCE PERCEPTION	40
Table 3.11	CRONBACH's ALPHA – EMPATHY EXPECTATION	41
Table 3.12	CRONBACH's ALPHA – EMPATHY PERCEPTION	41

LIST OF FIGURES

Figure 1.1	THE NUMBER OF PROVATE HOSPITALS PER PROVINCE, 2006	3
Figure 1.2	THE PERCENTAGE OF MEDICAL SCHEME BENEFICIARIES PER PROVINCE, 2006	3
Figure 2.1	SERVQUAL OR GAPS MODEL	18
Figure 3.1	TANGIBLES	34
Figure 3.2	RELIABILITY	36
Figure 3.3	RESPOSIVENESS	37
Figure 3.4	ASSURANCE	39
Figure 3.5	EMPATHY	40

CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION

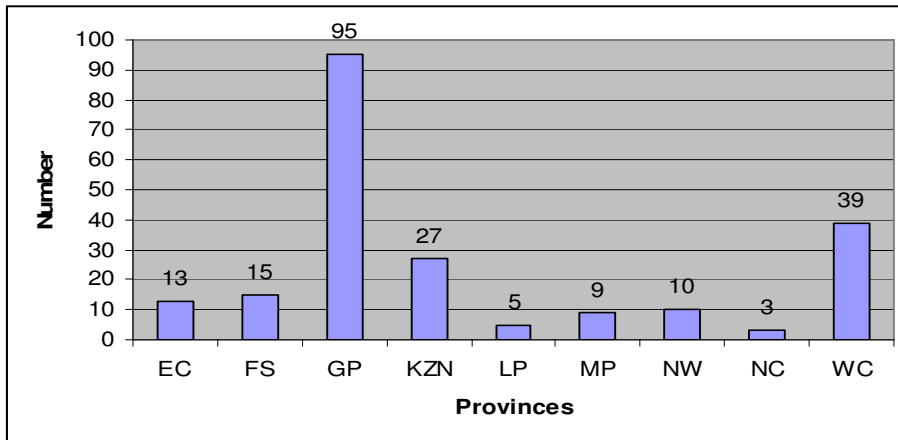
For any healthcare providing institution to be successful in the customer orientated market of today, there emphasis has to be on customer satisfaction and the care rendered. De Jager and du Plooy (2007:98), and Bear and Bowers (1998: 50) state that healthcare providers must evaluate the outcomes of their service, as well as their customer satisfaction. This is important in quality assurance and serves as an indirect marketing tool.

There is no doubt that the quality of the healthcare service, delivered especially by the private institutions in South Africa, has become increasingly important. These institutions have to focus their efforts on quality customer service as means of differentiation (Boshoff & Grey, 2004: 27). The quality of service serves as a competitive advantage and marketing tool for many firms and also leads to customer loyalty and retention.

The healthcare market in South Africa consists of the public and privately owned institutions. The public sector consists of 426 hospitals, with approximately 110 150 beds, and 4100 clinics in the nine provinces (South African Department of Health, 2006). The South African Government spends approximately \$3.1 billion on these hospitals and clinics which provide health service to closely 36 million people. The other 8 million people are provided for by more than 200 private hospitals, with approximately 27 000 beds. These private hospitals spend more than \$35 billion on healthcare annually (Basset, 2010).

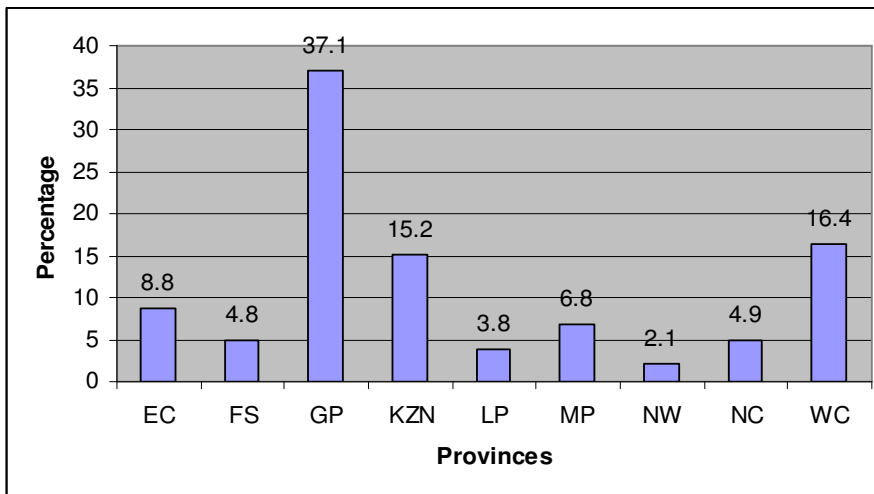
The distribution of private hospitals in South Africa is illustrated in figure 1.1. This shows the concentration of these hospitals, in predominantly Gauteng and Western Cape provinces, in relation to the growth in the number of people in these provinces. The growth in the number of people in these areas is as a result of the area's economic opportunities, as well as the fact that these economic opportunities allow more of the population to have medical aid support (figure 1.2), which, in turn, is a major contributor to the development of private hospitals (Matsebula & Willie, 2007).

FIGURE 1.1: THE NUMBER OF PRIVATE HOSPITALS PER PROVINCE, 2006.



Source: Matsabula & Willie, 2007.

FIGURE 1.2: THE PERCENTAGE OF MEDICAL SCHEME BENEFICIARIES PER PROVINCE, 2006.



Source: Matsabula & Willie, 2007.

The number of private hospitals increased from 161 hospitals in 1998 to 216 in 2006. Also, the number of hospital beds increased from 20 908 in 1998 to 27 586 in 2006, as indicated by table 1.1 on the next page.

TABLE 1.1: DISTRIBUTION OF HOSPITALS, BEDS AND THEATRES BY OWNERSHIP, 2006.

Hospital Group	Number of Hospitals	% of Hospitals	Number of Beds	% of Beds	Number of Theatres	% of theatres
Community Health Care	4	1.9	467	1.7	18	1.9
Clinix Health Group	4	1.9	511	1.9	10	1
Independent	54	25	417	12.3	125	12.9
Joint Medical Holdings	4	1.9	367	1.3	20	2
Life Healthcare	56	25.9	7300	26.4	257	26.5
Medi-Clinic	44	20.3	6401	23.2	234	24.2
Melomed	3	1.4	351	1.3	12	1.2
Mining	5	2.3	1470	5.3	16	1.7
Netcare	42	19.4	7302	26.4	276	28.5
Total:	216	100	27586	100	968	100

Source: Matsebula & Willie, 2006.

The private hospitals in South Africa consists of the three larger groups, namely Life Healthcare, Medi-Clinic and Netcare, and then smaller owned hospitals. These three hospital groups make up three quarters of the total number of privately owned hospitals in South Africa, and in total, private hospitals amount to 21% of the total number of hospital beds in South Africa (Matsebula & Willie, 2007).

TABLE 1.2: PRIVATE HOSPITAL BEDS BY OWNERSHIP, 2006

Hospital Group	Bed Type (Number)									
	Medical	Surgical	Maternity	Neonatal ICU	ICU	Specialised ICU	High Care	Pediatric	Psychiatric	Day Ward
Community Health Care	100	169	37	18	35	6	33	57	0	12
Clinix Health Group	208	106	67	9	19	0	4	72	26	0
Independent	894	837	257	45	106	43	67	254	617	297
Joint Medical Holdings	100	85	42	6	10	0	16	40	28	40
Life Healthcare	1587	2394	588	141	315	91	209	572	240	451
Medi-Clinic	1290	2509	653	180	323	113	271	602	115	464
Melomed	63	86	40	7	9	8	11	70	26	31
Mining	586	563	33	0	27	0	125	74	20	42
Netcare	1566	2943	627	201	440	127	228	635	114	367

Source: Matsabula & Willie, 2007.

The three larger private hospital groups all focus their values and visions around customer orientation, trust, respect, dignity and excellence on their home websites.

These values form a central vision of delivering quality care, so that quality of life can be improved through quality services.

The quality of services provided can be defined as the customer's overall perception of the inferiority or superiority of service delivery by the organisation (Boshoff & Grey, 2004: 27) or the comparison of the customer's expectations with actual perception of actual performance of services (de Jager & du Plooy, 2007:98).

The values of quality services are also emphasised in the White Paper on the Transformation of Public Services (South Africa, 1997). The guided philosophy that has been adopted in this legal framework is that of *Batho Pele* (People First), and it implies that the consumer of healthcare is at the centre of the service delivery, and that these services should be transformed so that the consumer can be satisfied with it. The underlying belief is that of belonging, service and caring, and the vision for healthcare is that of a representative, coherent, transparent, efficient, effective, accountable and responsive service in line with the needs of the consumer (South African Department of Health, 2007).

Therefore, healthcare institutions should create people-centered services that are characterised by the above mentioned aspects. It is also necessary that institutions also educate their employees in these characteristics, as well as equity, quality and strong code of ethics in order for them to form the basis for the delivery of service quality (Bryant & Graham, 2002:88-91). Customer and service-orientated institutions should measure their quality of service by evaluating the level of customer satisfaction for the following reasons:

- it helps to form a basis to improve and reform services (Atwal & Caldwell, 2004:10),
- it is essential in client and customer retention (Markus, 2006:16),
- it enhances customer treatment (Aldana et al, 2001:515), and
- it improves the effectiveness of treatment (Trotter, 2008:262).

1.1 PROBLEM STATEMENT

The evaluation of the quality of customer service in private hospitals in South Africa is very important in determining the effect thereof on customer satisfaction and also for identifying possible areas where improvements can be made. Therefore, it is very important that all hospitals have such evaluating tools in order for them to evaluate their quality of service.

Customers of the healthcare institutions go through a number of service stations before receiving treatment, or get admitted into a ward. This creates areas where problems could arise that are not solved to the customer's satisfaction. When a customer is eventually admitted in a ward or, alternatively, ends up in the treatment area, there could be a negative or positive attitude towards the treatment, service or institution. On arrival in the treatment area, most problems are dealt with or left unattended. It is for this reason that there is a need for frequent opportunities of problem identification and solution. This will ensure the quality of service and the satisfaction of the customer.

The identified private institution used in this study uses Ipsos-Markinor, a research institution, to evaluate the quality of care and service received by customers. This is done by phoning them after discharge and assessing the quality of service by evaluating five main areas of service in the healthcare institution, namely:

- nursing care,
- admission process,
- catering service,
- discharge process, and
- time spent waiting for medication.

These results are then sent back to the institution. This information is also sent to the group's head offices for evaluation. In this way, customers' problems can be dealt with by the client service manager and feedback given to customers in response to the complaint or positive feedback. This is relatively effective in dealing with customers' complaints and positive feedback, but only takes place after a customer is discharged, and, therefore, is not always effective in the solution of the complaint because time has

passed and the problem has evolved into a bigger issue. Therefore, the matter might become more complex and difficult to resolve.

Customers in the institution's units receive daily "POS" (Patient Opinion Survey) forms to complete. These forms evaluate the institution, overall service and attitude according to the customer's experience of service. It also asks customers to give any recommendations for future improvement, and also asks what or who impressed the most in the service to date. This gives the unit managers the opportunity to solve any problems regarding quality of care or service, but also serves as a way in which customers can identify employees who delivered quality care and service.

These tools are effective in measuring the broader level of service. However, a different type of tool is needed to measure, in depth, the different areas of service provided to the customers in the specific private healthcare institution's units, and to identify where development areas exist.

The ServQual model will be used to evaluate, in depth, the tangibles, reliability, responsiveness, assurance and empathy levels of the specific private healthcare institution.

- The SERVQUAL model is widely used by academics and practitioners around the world to measure service quality in operationalising institutions by comparing customer expectations with the service performance (De Jager & Du Plooy, 2007: 99).
- The SERVQUAL model is also used to measure and analyse the gap that exists with regard to the service quality and customer satisfaction (Kadè, 2009: 5). The measuring of service quality is sometimes as difficult as defining it, and therefore it is done on the assumption that the customer's attitude towards behaviour in the future will be of effect (Kleynhans, 2008: 5). This future behavioural effect might be the return to the healthcare institution, or word-of-mouth marketing for the company, along with the negative or positive perception of service quality delivery.

1.3 PROPOSITION

The aim of the study is based on the relationship between the nature of customer expectation and customer perception. In relation to the expected and perceived service, and the actual delivery of the service at the healthcare institution, the quality of this service can be measured in depth. If these expectations and perceptions have been met, subsequently the company providing these services would be perceived as delivering a high level of quality services.

These customers could then, by word-of-mouth, market the company according to the perceived level of quality services it provides.

If the expected and perceived level of service quality was not met, then the customers could be lost to a rival company. This will also be accompanied by negative marketing, as well as the loss of potential new customers.

The main objective of this study is the in depth measure and analysis of customers' expectations and perceptions of quality services rendered by this private healthcare institution in the North West Province, as well as its employees in the different units where patients are receiving treatment. The gaps between the customers' expectations and perceptions will also be analysed and discussed.

This will be done by measuring the perceived tangibility of customer services, the employees' interactions with customers in relation to the responsiveness, reliability, assurance, empathy and the identification of strengths or weaknesses for future development and sustained competitive advantage management.

1.4 RESEARCH METHODOLOGY

1.4.1 Research design

A non-experimental design in the form of an uncomplicated survey was conducted in the selected private healthcare institution. This design and method of research aimed to determine the level of received customer service performance in comparison with the customer expectations.

1.4.2 Research Method

a. Sample

i. Population

The population consisted of customers at the specific private institution in the North-West province. They were admitted to the various units for treatment. The units selected in the institution ranged from medical to surgical, excluding the intensive care units. These customer experience of the expected and received level of service quality was evaluated.

ii. Sampling Method

A random sampling method was used. In the five day working week used to conduct the study, all even registration numbers of customers in these units were used to identify the customers to be given the adjusted SERVQUAL questionnaire.

The SERVQUAL model questionnaire was selected and distributed throughout the private healthcare institution to the random patients and filled in according to their perception and experience of service and care the received within the agreed time period.

The questionnaire was discussed and any questions related to questionnaire was answered, so that the participating customer was in the position to fill in the questionnaire as accurately and non-biased as possible.

iii. Sample size

The sample size to be used was calculated to be a minimum of fifty customers per unit, which would in turn give a minimum of two hundred customers questioned.

iv. Data collection

After the agreed time period, the questionnaires were collected by the researcher from participating customers in their respective units of the private healthcare institution. The time spent filling in the questionnaire rarely exceeded thirty minutes.

v. Data analysis

The collected questionnaires was evaluated and analysed by using *Microsoft Excel* and *Statistica 8.0*, grouped and statistically graphed. Certain conclusions will be made with these graphs.

vi. Ethical aspects

The private healthcare institution manager, as well as the nursing manager have approved the conduct of research, provided that there will be no use of the name of the group or institution. The results must also be kept private and confidential by the North-West University.

1.5 PROBLEMS ENCOUNTERED

- I. The research sample was limited to some units in the private healthcare institution. Furthermore, the customers in these units were mostly admitted for surgical reasons, and this could have influenced the response rate negatively.
- II. The client service manager had to follow-up frequently throughout the day of questionnaire distribution, to ensure that the unit secretaries distributed the questionnaires to all willing customers.

1.6 DEMARCATION OF STUDY

Chapter 1 focuses on the background, problem statement, research objectives and research method of the research to measure the quality of service received by customers in the specific healthcare institution.

Chapter 2 focuses on the literature study with regard to the customers' perceptions and expectations. Particular attention is paid to the dimensions of the SERVQUAL model's outlined customer satisfaction description.

Chapter 3 consists of the research methodology, as well as the empirical testing of the SERVQUAL model that is used. Results found from the evaluation of the questionnaire are discussed.

Chapter 4 consists of the conclusions and recommendations according to the customer results found in chapter 3. With the findings of this research, future research can be done to evaluate if improvements have been made in the quality of service delivery in the specific healthcare institution, or the company as a whole.

1.7 SUMMARY

Chapter 1 provided the back ground to the study and problem statement, proposition and research methods were discussed. The scope of the study was also outlined, and problems encountered, were also outlined and discussed.

Chapter 2 introduces the literature used in the study, as well as the SERVQUAL model that was used to structure the questionnaire for the study.

CHAPTER 2
LITERATURE REVIEW

2.1 INTRODUCTION

In the highly competitive private healthcare market of South Africa, it is absolutely necessary for any institution to evaluate the level client satisfaction. This allows the institution to reflect on the service process, as well as the employees who work in these processes.

As described by Bryant & Graham (2002: 88), client satisfaction is related to the level of service quality, and many institutions are focusing their efforts on the delivering of quality customer service as means of differentiation, because this is an overall impression of the relative inferiority/superiority of the institution and its services (Boshoff & Grey, 2004: 27). In these terms, institutions need to conform to the customer's expectations, and implies that there should be a comparison between the customer's expectations and perceptions of actual service performance.

De Jager & Du Plooy (2007:98-99) describe the unique qualities of services relative to physical goods, namely that they are more intangible, heterogeneous, and consumption and production occurs simultaneously. Therefore the measurement of service quality should not be based on objective quality, but rather subjective quality.

Kleynhans (2008:7-27) compared the SERVQUAL and Kano models and selected the SERVQUAL model to measure quality of service in the study. Many more studies use this model in the same way, and therefore the SERVQUAL model was the chosen model of service quality measurement in this study. In this chapter, quality in the healthcare industry and the SERVQUAL model will be defined and discussed in detail.

2.2 SOUTH AFRICAN HEALTHCARE IN CONTEXT

Healthcare provision in many countries in the world face similar challenges in terms of costs to quality ratios, which has an impact on the perceived quality of services rendered to customers (de Jager & du Plooy, 2007:97). Boshoff & Grey (2004:27) also note that the relationships in the service-profit chain have not yet been considered by the public or private healthcare systems in South Africa. In their study, it was established that there was a direct relationship between the service quality dimensions of empathy and assurance, and the cumulative satisfaction of customers.

Customers' expectations, perceptions and priorities or needs with regard to healthcare through the world are highly related to cultural background, as well as the local healthcare system. In South Africa, where the population consists of more than seven cultural groups, the healthcare system has faced very particular transformational changes and challenges characterised by rapid changes to achieve the goal of equitable access to healthcare services to the majority of the population across the country (de Jager & du Plooy, 2007:97). Arries & Newman (2008:42) also note that the South Africa, as a developing and transforming country, has to deal with a decrease in resources and budgets – this directly affects the quality of service delivery.

As mentioned in Chapter 1, the healthcare sector in South Africa consisted of mainly two industries, namely the private and public industries. These have recently been increased to three, with the emergence of the public/private partnership hospitals. Public Hospitals are by far the larger industry, but in contrast, the private healthcare industry, which have the majority of HASA (Hospital Association of South Africa) members and makes up one third of South Africa's hospitals (Boshoff & Grey, 2004:29).

2.3 QUALITY DEFINED

According to Wicks & Roethlein (2009:84-85), every quality expert defines quality in their own way. Each of these experts have their own perspectives and orientations, which influence their definitions. This means that there are a large number of

definitions of quality and these definitions vary between service industries. Thus, there are no universally accepted definition of quality.

The most widely accepted definition is that of the International Organisation for Standardisation or ISO, which define quality as “the degree to which a set of inherent characteristics fulfils requirements” (ISO, 2004). Wicks & Roethlein (2009:85) describe quality as derived from the Latin “qualis” and is defined as “essencial character or nature . . . an inherent or distinguishable attribute or property, a character trait” and “superiority of kind and degree or grade of excellence”. They also state that when quality is related to logic, it is “positive or negative character of a position”. Many of these definitions of quality in customer satisfaction literature can be aligned with character traits or a relationship of excellence.

Garvin (1988) is also described by Wicks & Roethlein (2009:85) as a definition that focuses on a set of characteristics or categories of quality in a multidimensional perspective. He segmented quality into five categories namely:

1. Transcendent definitions. These definitions are personal and subjective, and eternal, but go beyond the measurement and logical description. They are related to concepts such as love and beauty.
2. Product based definitions. Here quality is seen as a measurable variable, and the bases for measurement are objective attributes of the product.
3. User based definitions. Quality is a means of delivering customer satisfaction, and this makes the definitions partly subjective and individual, because it is related to a specific user.
4. Manufacturing based definitions. Here the definition has to do with the conformance to requirements and specifications.
5. Value based definitions. These definitions define quality in relation to costs that are involved, and the quality is seen as the provision of good value for related cost.

Definitions of quality are continuously changing within the industry specific differences. Wicks & Roethlein (2009:86) are also of the opinion that the definition of quality is ever changing and support this argument with the work of Tam (1999), who also state that the definitions of quality is subject to continuous change. In his study, Largrosen

(2001) states that the definition of quality should be adapted to which specific industry or situation a organisation is situated in. This definition could also depend upon the organisation's purpose, customer base and other contextual factors. The definition and important components of quality may change according to different cultures.

The major commonality between all definitions of quality is the trend towards customer satisfaction, regardless of the industry or culture (Wicks & Roethlein, 2009:87). As quality definition evolves, the common factor remains focused on the physical and technical aspects of quality. In order for organisations to become excellent, they need a user-based definition that is more important to the customer and a process based definition that is more important to the service provider. The service provider needs to keep the customer at the centre of the design and development of services. Service providers need to have processes in place to ensure that services are provided in the way that they were designed for and that employees are focused on the processes. Process perspective dimensions of quality should be developed using customer perspectives, as discussed above, so that the customer is satisfied with excellent services.

According to Wicks & Roethlein (2009:88), researchers are of the opinion that a definition of quality must contain both objective and subjective components. The objective component has to do with the measurement according to specifications, and the subjective with the customers evaluation.

Therefore, if there is a direct relationship between excellence defined by customers and the degree of customer satisfaction achieved, then the definition of quality should be: "the summation of the affective evaluations by each customer of each attitude object that creates customer satisfaction, where the term customer is defined as any of the internal or external stakeholders of the organisation and the term attitude object is defined as the particular entity of interest for either an internal or external customer" (Wicks & Roethlein, 2009:90).

Quality is measured by the customer's positive or negative emotional experience created throughout the service experience or process. Wicks & Roethlein (2009:89) state that "quality is the positive or negative character of a proposition". Thus, quality

can be measured according to the customer's experience. The quality of service in the healthcare institution, as mentioned in chapter 1, is measured by a Patient Opinion Survey (POS) questionnaire, which also relates to the customer's emotional response to service by evaluating five statements. The questionnaire asks the customer to indicate their response on one of three faces, namely a smilyface, neutral face or unhappy face. This makes it easy for the customer to understand and indicate, because there is not a scale which have to be interpreted.

2.4 THE SERVQUAL MODEL

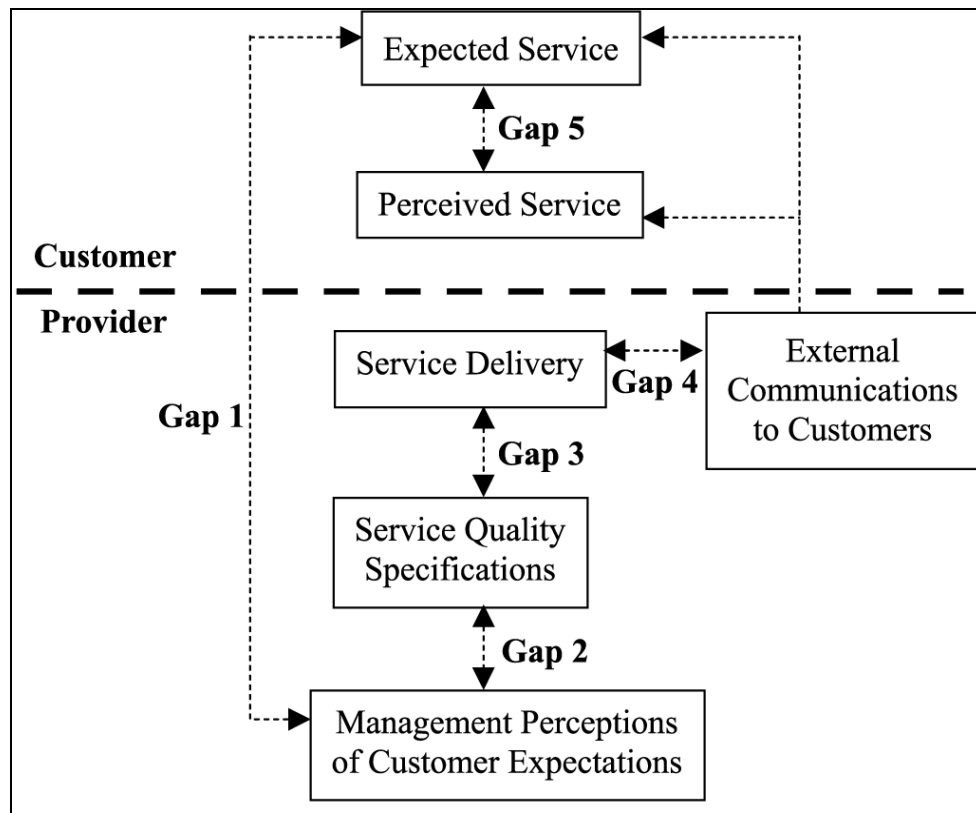
2.4.1 Introduction

The SERVQUAL model, was developed by three American academics, namely A. Parasuraman, V. A. Zeithaml and L. L. Berry during the late 1980's. The model was designed to measure customers' expectations and perceptions of service quality. Based on their twelve focus group in their study, they developed a questionnaire, comprising of 22 criteria mostly used by the twelve focus group participants, to assess service quality. Kade (2009:9) used the study by Zeithaml *et al.* (1990), who described SERVQUAL as a method that envolved the devlopment of an understanding of customers' perceived service needs. The organisation's customer measured perceptions of service quality were then compared to an organisation that is excellent in this area. The resulting gap that was then identified between the service quality of the organisation in comparison with an excellent organisation, were then analysed, and used to serve as a tool in service quality improvement for that organisation.

The SERVQUAL model also takes into account the perceptions that customers have of the importance of service attributes. This allows the organisation to use the resources at its disposal to improve the most critical attributes that it has prioritised through the analysis of customers' perceptions.

2.4.2 Dimensions of the SERVQUAL model

FIGURE 2.1: SERVQUAL OR GAPS MODEL



Source: Zeithaml, et al. (1990)

According to Parasuraman *et al.* (1988:42), the SERVQUAL model was originally based upon five key dimensions of service quality, namely:

- **Tangibles:** Appearance and measure of physical facilities, equipment, personnel and communication material;
- **Reliability:** The ability to perform the promised service accurately and independently;
- **Responsiveness:** The willingness to help customers and provide prompt service;
- **Assurance:** The employee's knowledge and courtesy, and their ability to convey trust and confidence;
- **Empathy:** The care and individualised attention to customers.

2.4.3 Dimensions of service quality

The dimensions of assurance and empathy were expanded by Zeithaml *et al.* (1990) to provide more detail to the dimensions of service quality. The two dimensions were expanded into seven dimensions namely competence, courtesy, credibility, secureness, access, communication and understanding the customer. This adaptation has led to the creation of ten dimensions of service quality that is still used today, and describe service quality in more detail in the following section:

- **Competence:** The ability to perform services with required skill and knowledge.
- **Courtesy:** Contact personnel that function with polite and friendly ways, and show respect and consideration.
- **Credibility:** To be trustworthy, and provide service in an honest manner.
- **Secureness:** Where service could be obtained in a danger, risk and doubt-free environment.
- **Access:** Where the service provides for approachable and easy contact.
- **Communication:** The service is provided by employees who listen and acknowledge comments, supervises informed choices in the customer's preferred language.
- **Understanding the customer:** Where customers are provided service according to their needs.

2.4.4 The SERVQUAL model and instrument

The SERVQUAL model (figure 2.1) describes the service delivery process. The model is divided between the customer and provider of the service. In the healthcare industry, a customer comes to the healthcare institution with previous word of mouth communication, external communication by the healthcare institution, personal needs as well as any previous experience at a healthcare institution. All of these factors influence the customer's expected level of service quality to be received by the specific healthcare institution.

The healthcare provider also has certain perceptions of what the customer may expect when entering the institution for service. These perceptions influence the institution's

service quality specifications, which has a direct effect on the service delivered, as well as the external service communication to the customer.

The SERVQUAL instrument is used to analyse the possible gaps that may form between these areas in the model, as indicated on figure 2.1. The instrument consists of 22 statements that Zeithaml *et al.* (1990) developed through empirical methods the use of any service organisation that would like to improve on service quality. The instrument method involves the development of an understanding of the customer's service needs. As described in 2.1, these measured customer expectations and perceptions are then measured against an excellent healthcare service provider. These gaps are then analysed and used to target specific dimensions in service quality improvement. The instrument also includes a few demographics that customers complete in order for specific correlations to be made with regards to service improvement.

2.4.5 Customer assessment of service quality

As discussed throughout chapter 1 and 2, various methods of service quality measurement is used by different service institutions. Healthcare institutions also measure their customers' assessment of service quality with different methods.

Customers assess the level of an institution's service quality by evaluating the difference between their expectation and perception. As indicated in the SERVQUAL model in figure 2.1, factors exist that influence the expectation of customers when they enter any service institution or organisation, and these factors could influence the way in which they assess the quality of service.

According to Zeithaml *et al.* (1990) and Kleynhans (2008: 20-21), these factors are:

- **Word of mouth communication** between the customer and other individuals who have experienced the institution's service quality, and have their own perception of the service quality. Customers could also be affected by individuals who have never been to the institution, but have developed their own perception after word of mouth communication with an individual who has been to the institution or organisation. It is therefore important to provide quality

services to all customers, because one customer with a low perception of service quality could affect any number of other customers. The opposite is also possible if a customer receives excellent quality service.

- **Personal needs** of customers are important because no two persons are the same. This creates a difficult task for service providers, especially healthcare providers, because of the magnitude of needs that could arise if customers are not receiving quality service or care. If a customer's personal needs are attended to, the level of service quality could be assessed as good or excellent. The opposite could, however, be the consequence if personal needs are not attended to.
- **Past experience** of customers that were good or excellent at a service organisation or institution, will lead to them attending the same institution or organisation with high expectations as, well as the consequent high perception of what service quality is to be expected. The opposite is also possible if a customer assessed service quality as low. These customers will often rather attend a different service institution or organisation, or if the same institution must be attended, they have a low expectation and perception of service when they arrive at this institution.
- **External communication** is very relevant in service organisations or institutions. They are often very busy with external ways of communicating the level of service quality that they provide. This creates a certain expectation that customers enter these organisations or institutions with, and could create positive or very negative assessments of service quality. It is therefore very important for any service organisation or institution who do make use of external communication, to not communicate high standards, if they can not provide them.

Customers also assess the quality of service according to the different dimensions of service quality. Customers' assessments of these dimensions may differ, but it is also taken into account with the above mentioned factors. It is therefore important for any service institution or organisation to be aware of customer assessment of these dimensions and factors, to be able to improve on their service quality assessments, and, subsequently, are able to provide excellent service quality to future customers.

2.4.6 Difference between customer expectations and perceptions / needs

According to Parasuraman *et al* (1988:40-50) and Zethaml *et al* (1990), customer expectations is made up of the conscious, specific, surface and short term factors. These factors stand in contrast to customer needs that has to do with the unconscious, global, deep and long term factors.

The customer's expectation has to do with the service encounter, and the desired outcomes of these situations. If a customer is not satisfied with the encounter or service quality, and their expectations are not fulfilled, then there is still room for the service organisation or institution to recover.

The customer's needs entail the human experience outcome of the service situation. If the customer is not satisfied with these situations, or if their needs are not complied with, there is no room for the service organisation or institution to recover, and the customer will have probably been lost.

Service institutions need to recognise that quality starts with the needs of customers, and that violating a customer's needs, means that they are going to attend a different service institution the next time. The most important needs that service institutions and organisations should ensure is: (1) the need for security from physical and economical harm, ensuring stability and predictability in the service system; (2) the need for esteem, by making them feel competent through provision of information, and; (3) the need for justice and fair treatment in the way that they are treated during processes and procedures.

2.4.7 Application of SERVQUAL

The model is widely applied in the service industry, to evaluate and understand the perceptions and experience of customers in the service chain. This helps the institution to measure the quality of the service provided by the institution's employees. Kleynhans (2008:19) is also of the opinion that this model could also be used by the institution's management to evaluate employees' perceived level of quality service that is provided to customers.

With the SERVQUAL model, customer's perceptions of service quality are evaluated, and this helps in the identification of service quality gaps or shortcomings in all of the dimensions of the model (Kadè, 2009:11-12).

According to the SERVQUAL model, as seen in figure 2.1, there exists gaps between the perception and actual experience of service quality in the institution. These gaps are:

- Gap 1: The difference between the management's perceptions of customer expectations of services, and the customers expected quality of service.
- Gap 2: The difference between the management's perceptions of customer expectations of services, and the service quality specifications.
- Gap 3: The difference between the service quality specifications and the actual service that is being delivered.
- Gap 4: The difference between the service being delivered and the external communication from the institution.
- Gap 5: The difference between the perceived and expected service delivery. And this is the result of the above four gaps.

2.4.7.1 Gap 1: The knowledge gap

"When senior executives with the authority and responsibility for setting priorities do not fully understand customers' service expectations, they may trigger a chain of bad decisions that result in perceptions of poor service quality" (Kleynhans, 2008: 22).

That is why it is very important for management to be aware of customers' expectations of service in their institutions, and use this to set standards in the service chain to meet these expectations. Managers should be involved in the customer assessment processes so that they can be part of the problem solving team, and therefore identify and plan for process improvement.

2.4.7.2 Gap 2: The standards gap

Every service institution should have a high standard of quality services, and these standards should be evaluated frequently by management, through the evaluation of employees who are involved in the service chain (Kleynhans, 2009:23). Regular

training should be provided to enforce these standards. This is why management should be involved in these training and evaluation, to provide input and also receive feedback from employees involved in the training. Zeithaml *et al.* (1990) described their solution for gap 2 as the commitment by management to ensure service quality and setting goals throughout the institution or organisation to deliver quality service, standardisation of tasks involved in the service delivery and, perception change in connection with the feasibility of these tasks.

2.4.7.3 Gap 3: The performance gap

Because this gap has to do with the difference between the service quality specifications and the actual service being delivered, and management should be involved in the performance measure of employees' quality of service delivery. Employees' should be evaluated according to the set standards to ensure that their actual service delivery is according to management's expectations. Kleyhans (2008: 24) also emphasises the fact that management should be involved in this gap, because it is so critical in the service chain for employees to perform to set standards.

Zeithaml *et al.* (1990) names teamwork, employee job-fit, technology job-fit, perceived levels of control, supervisory control systems, role conflict and role ambiguity as important factors to concentrate on in the improvement of this gap. It is therefore important for managers to supervise and make sure that there is teamwork between employees. Employees should also be chosen correctly for their tasks and the technology that will be using in their work should also be considered carefully.

2.4.7.4 Gap 4: The communication gap

There should be no difference between the actual service delivery and externally communicated levels of service. Therefore it is important for the institution to have knowledge of the general service standards and quality and for management to be involved in the evaluation and implementation of service standards. This is to ensure that service standard quality, that are externally communicated to customers, do live up to expectations.

There should also be vertical communication between management to discuss possible factors contributing to above mentioned gaps. Different units in the service chain could contribute to the resolve of service quality gaps by effective communication. Kleynhans (2008: 24) also mentions that there should be effective communication between management in service institutions to ensure that marketed quality of service, can actually be delivered. Zeithaml *et al.* (1990) also named horizontal communication and the tendency to overpromise as areas of focus in the improvement of this gap.

2.4.7.5 Gap 5: The service delivery gap

This gap exists as a result of the difference between the perceived and expected quality of service delivery (Kleynhans, 2009:24). It is, therefore, very important for management to have the knowledge (gap 1) of the standards (gap 2), as well as performance (gap 3), and to communicate (gap 4) these gaps to ensure that service quality is perceived as the expectation created. Customers whose service delivery expectations have been met or exceeded would be expected to reflect on a quality service.

Zethaml *et al.* (1990) noted that it is important to focus on the five main dimensions of service quality in this gap. If it is found that the service quality gap is of importance after customers assessed service quality, then it will be necessary for management to focus on the tangibles, reliability, responsiveness, assurance and empathy of all employees in the service institution. One by one these dimensions should be improved through process planning and implementation.

Service quality is relative and is not absolute. Quality is determined by the customer, and not by the service provider. Therefore it is important to take note of what the customer's opinion is of service quality. At the end of the day service quality can be achieved by either meeting or exceeding the customer's expectations, or by changing the customer's expectations of service.

2.5 SUMMARY

In this chapter there was a focus on the literature study of quality and its elements. The SERVQUAL model, its dimensions, and the dimensions of service quality were also discussed. Furthermore, the SERVQUAL model, its instrument and, the customer assessment of service quality were given. The difference between customer expectations and needs was explained. The gaps that can be identified in the service industry were also described and focus areas for improvement in these gaps were stated from the literature.

Chapter 3 consists of the research methodology and results found in the study.

CHAPTER 3
RESEARCH METHODOLOGY AND RESULTS

3.1 INTRODUCTION

As described in chapter 1 of this study, the objective of this study is the in depth measure and analysis of customers' expectations and perceptions of quality services rendered by this private healthcare institution in the North-West Province. The expectations and perceptions of the employees in the different units where patients are receiving treatment will also be measured and analysed.

The measurement of quality of service delivered by any service institution is a difficult task, and in the private healthcare institution it becomes even more difficult because most customers who seek healthcare services are expecting a high level of quality care, because the service has an impact on their health. In comparison to public healthcare, there is also a premium associated with private healthcare in South Africa, and because of this customers expect to receive a higher level of quality service. These customers are also very ill at times and are not always willing to take part in quality of service surveys. This makes the task of evaluating the quality of service at any specific time, in the private healthcare institution, a difficult task.

3.2 RESEARCH METHODOLOGY

3.2.1 Questionnaire design

The literature review of Parasuraman *et al.* (1988:40-50) revealed that the collection of data, in relation to the quality of service, could be done with the SERVQUAL questionnaire. The questionnaire consisted of 22 detailed statements, which measured five dimensions in quality of service in the service industry. Additional demographics were also added that asked for gender, age, status, if the customer would visit the healthcare institution again and if the customer would refer others to the healthcare institution. This questionnaire was adapted for the healthcare environment by changing some of the wording. The questionnaire was also translated from English to Afrikaans, to accommodate customers. Additional demographic information were included into the questionnaire for statistical reasons.

The answers were to be provided in two columns, where the level of expectation and perception were indicated by using a 7 point Likert scale, next to the 22 statements provided. The Likert scale consists of scale ranged from 1 (listed as strongly disagree) to 7 (listed as strongly agree). This provided a range from which to weigh the expectation and perception of quality service.

With the questionnaire the expectation and perception of customers in the healthcare institution were evaluated. The evaluation of results provide the healthcare institution with important data to focus on when planning the improvement of service areas in the institution. These areas are where customers feel that the expectation and perception of quality service differs the most. The questionnaire, however, does not actually outline the problem, but only gives the particular dimension where the difference is the most.

The healthcare institution, as described in chapter 1, uses a POS (Patient Opinion Survey) questionnaire which evaluate the institution, overall service and attitude according to the customer's experience of service. It also asks customers to give any recommendations for future improvement, and also asks what or who impressed the most in the service to date. This questionnaire then provides more specific description that customers can provide the management with to resolve service quality problems.

3.2.2 Data collection

The questionnaires were delivered to the healthcare institution, and distributed by the client service manager to the various unit receptionists, who in turn, distributed the questionnaires to customers on one busy day of the week. The day on which the questionnaires were distributed, was selected by the client service manager. The questionnaires were collected one week after delivery.

As described in Chapter 1, the units selected in the study, were mostly of surgical nature and receptionists made an effort to distribute the questionnaires to as many customers as possible. Keeping in mind the nature of these wards, the response was acceptable given the fact that most customers had been in theatre, or waiting to go to theatre, which could have affected the response in a negative manner. A total of 47

questionnaires were received after 100 were distributed, and 47 were of usable nature, which made the usability rate 100%.

3.3 STATISTICAL ANALYSIS

The questionnaires were delivered to the North-West University's Statistical Services department, data analysis was performed by North-West University Statistical Consultation Services. Practical significance or effect sizing was done on the statistical information received, with the use of Microsoft Excel's spreadsheets.

3.3.1 Reliability

The reliability of the data was statistically determined by way of analysing the Chronbach Alpha (α) of all the dimensions of service quality found in the SERVQUAL model. The Chronbach Alpha (α) was also determined for the total data in the expectation and perception scores for these dimensions.

The minimum coefficient was set at alpha (α) \geq 0.70, as indicated in Boshoff & Hoole (1998:77) and Kade (2009:26). Because of certain behavioural and attitudinal factors, an alpha (α) \geq 0.58 can be accepted as sufficient, and such data can be used for subsequent analytical scrutiny (Kade, 2009:26).

TABLE 3.1 VALIDITY OF DATA

	Expectation	Perception	Total Data
Chronbach Alpha	0.849	0.901	0.875

As indicated by table 3.1, the data that originated from this study, resulted in a total Chronbach Alpha of 0.875, which is seen as a sufficient value if compared to the values discussed in the studies of Kade (2009:26-27) and Boshoff & Hoole (1998:77).

3.3.2 Effect size

The effect size is the calculation of practical significance between two sets of variables that have been identified in a study (Kade, 2009:27). In this study, the expectations and perceptions of customers were weighed against each other by using the practical significance or effect size (*d*) as described by Ellis and Steyn (2003:53-54).

Effect size can be measured in range from 0 and 1.0 and Ellis and Steyn (2003:54) describe effect size in the following categories: low practical significance of an effect size, with a value of less than 0.2. Medium practical significance, with effect size value of between 0.2 and 0.5, and high practical significance, with effect size value of 0.5 and 1.0.

3.4 FINDINGS

A total of 47 out of 100 questionnaires were received for analysis, and this 47% return is acceptable if various negative factors are taken into account, as described in 3.2.2.

3.4.1 Demographic analysis

In the study, more women took part than men, with 29 (61.4%) females, compared to the 18 (38.6%) men. Age groups were divided into three categories, with the under 30 years age group accounting for 33.3% of customers, the 30 to 50 years age group 44.4% of customers, and the over 50 years age group 22.2% of customers.

The percentage of new customers who completed the questionnaire were 61.4%, in comparison with the 38.6% of customers who were existing customers or have previously been admitted to the healthcare institution.

The percentage of customers who indicated that they would visit the healthcare institution in future was 97.7%, in comparison with 2.3% who said that they would not. A percentage of 93.2% customers indicated that they would refer others to the healthcare institution, whereas 6.8% of customers indicated that they would not. This is a percentage that every healthcare institution would strive towards – to, in fact, get as close to a 100% rate as possible.

3.4.2 SERVQUAL questionnaire analysis

As illustrated in table 3.2, the 22 questions are aligned to the five SERVQUAL dimensions that they represent. The average scores and standard deviation of the expectance and perception of each statement are also aligned next to the statements and dimensions. Next, the effect size is given which represent the practical significance between the expectations and perceptions of customers in terms of the service quality they received (Ellis and Steyn, 2003:54).

With the analysis of the questionnaire, it became apparent that customers' perceived quality of service were lower than what they expected of the healthcare institution. The perception of the quality of service delivered by the healthcare institution were lower than the expected level of quality service in all of the 22 statements. Throughout the 22 statements, the perception of service quality had an average of 6.17, while the expectation of service quality had an average of 6.56. This indicates that customers who came to the healthcare institution, either had high expectations of service quality associated with the specific institution, or that the perception of service quality was that it was not excellent. Given that there little difference between the expectation and perception of quality service (6%) at the healthcare institution, it can be concluded that service quality is acceptable, but that there is room for improvement.

The biggest differences in the 22 statements, when comparing the average scores of the expectance and perception of quality service, were in statements that described reliability, responsiveness, assurance, empathy and then tangibles.

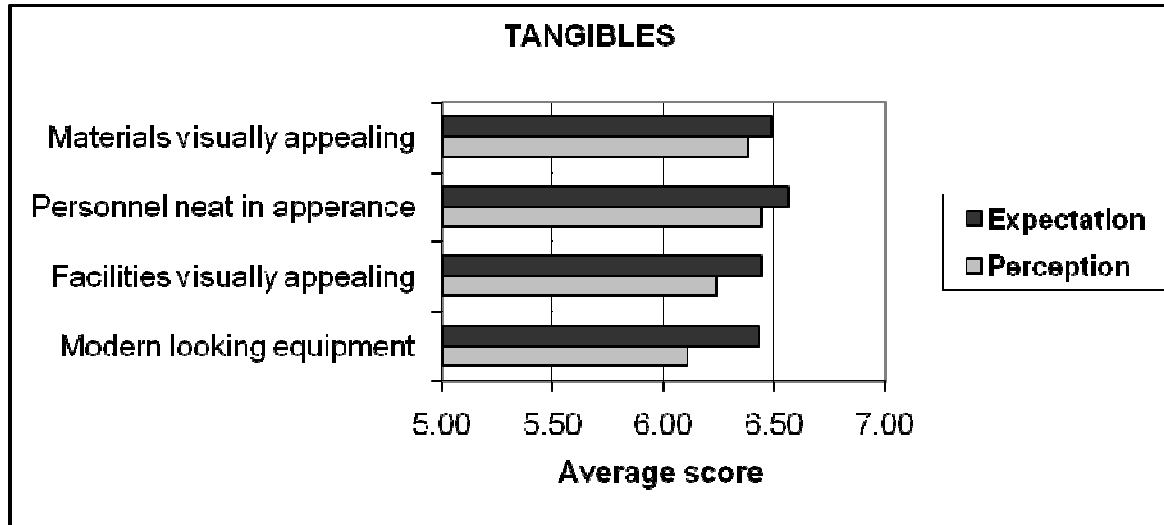
TABLE 3.2: SERVQUAL SCORES, STANDARD DEVIATION AND EFFECT SIZES

DIMENSIONS	STATEMENT	AVERAGE SCORES		STANDARD DEVIATION		EFFECT SIZE
		EXPECTATION	PERCEPTION	EXPECTATION	PERCEPTION	
TANGIBLES	1. Modern looking equipment	6.43	6.11	0.765	0.936	0.35
	2. Facilities visually appealing	6.44	6.24	0.695	0.883	0.24
	3. Personnel neat in appearance	6.57	6.44	0.655	0.680	0.20
	4. Materials visually appealing	6.49	6.38	0.702	0.747	0.15
RELIABILITY	5. Admin delivered on time	6.70	5.75	0.467	1.532	0.62
	6. Sincere interest in problems	6.64	6.05	0.549	1.374	0.42
	7. Performed right the first time	6.57	6.22	0.698	0.866	0.40
	8. Performed on time	6.68	5.92	0.535	1.201	0.63
	9. Accurate records	6.61	6.27	0.599	0.838	0.41
RESPONSIVENESS	10. Informed about services	6.66	5.79	0.591	1.580	0.55
	11. Prompt services	6.40	5.89	0.812	1.311	0.39
	12. Personnel willing to help	6.56	6.26	0.705	1.044	0.29
	13. Personnel response to request	6.58	6.17	0.649	1.298	0.32
ASSURANCE	14. Instil confidence	6.70	6.18	0.467	1.097	0.47
	15. Feel safe	6.54	6.49	0.741	0.901	0.06
	16. Consistently courteous	6.57	6.16	0.655	1.118	0.37
	17. Knowledge in answering questions	6.42	6.19	0.770	1.009	0.22
EMPATHY	18. Individual attention	6.68	6.21	0.475	1.143	0.41
	19. Operating hours	6.67	6.37	0.540	0.913	0.33
	20. Personal attention	6.53	6.34	0.788	0.878	0.21
	21. Patient's interest priority	6.47	6.18	0.825	1.111	0.26
	22. Understand needs	6.47	6.14	0.845	1.099	0.30

The difference in average scores for the expectation and perception of quality service as seen in table 3.2, are discussed according to the dimensions of the SERVQUAL model. These dimensions are discussed in terms of the effect size.

3.4.2.1 Tangibles

FIGURE 3.1 TANGIBLES



From figure 3.1, it is notable that customers' expectation and perception of tangibles at the healthcare institution are acceptable. The perception average for modern looking equipment, was the lowest for the dimension, and also had the biggest effect size difference of 0.35 of all statements in the dimension, which makes it a moderately practical significant for employees to focus on.

None of the statements had high expectation or perception averages of close to 7.0 and with this it seems that customers do not have the same type of expectation as with the other dimensions of service quality. Nevertheless, all statements received high scores in the expectation and perception averages.

In practise, it is very important that a healthcare institution is equipped with technology that is adequate for service delivery, regularly inspected and repaired, and complies with international safety requirements. The level of technology also differs in the various healthcare institutions, and this could create higher

expectations when customers move between institutions for service. Some healthcare groups have standardised levels of technology for all their institutions because this could create a lower effect size difference between expected and perceived level of the tangibles dimension.

From figure 3.1, it is also notable that customers expect that employees of the healthcare institution be neat in appearance. This is very important because the appearance of the employees serves as an extended advertisement for the healthcare institution and may impact negatively on the institution's image if the perception is that employees are not neat.

TABLE 3.3 CRONBACH'S ALPHA – TANGIBLES EXPECTATION

Cronbach's Alpha	Number of Items
0.922	4

As indicated by table 3.3, the reliability of data results from the four statements that measured the expectations around tangibles, were of high reliability.

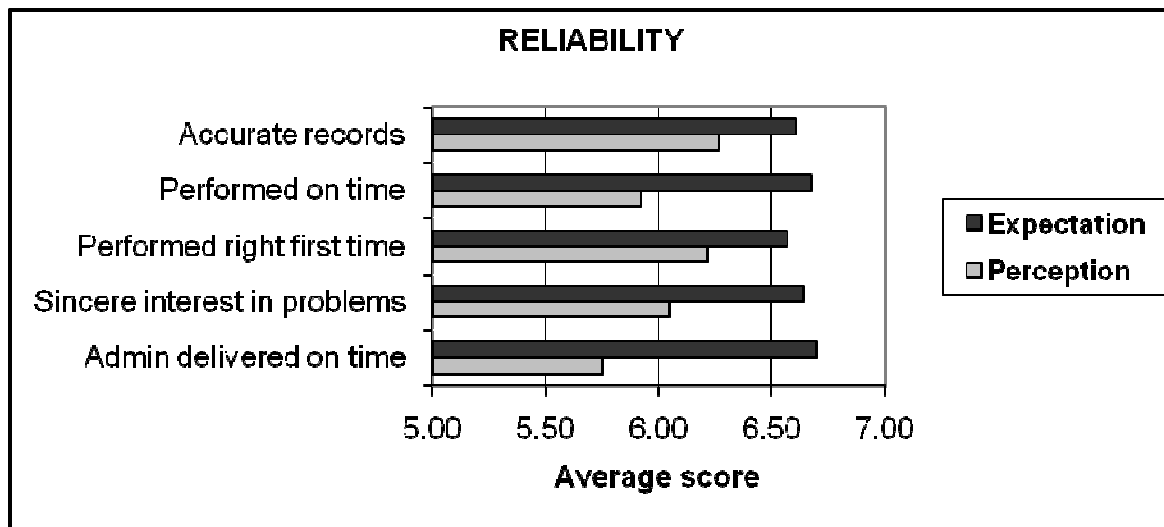
TABLE 3.4 CHRONBACH'S ALPHA – TANGIBLES PERCEPTION

Cronbach's Alpha	Number of Items
0.889	4

As indicated by table 3.4, the reliability of data results from the four statements that measured the perceptions around tangibles, were of high reliability.

3.4.2.2 Reliability

FIGURE 3.2 RELIABILITY



As seen in figure 3.2, there is a clear difference between the expectation and perception of quality service at the healthcare institution, in relation to the reliability of the service. According to the data, there is a large gap between the customers' expectance and perceived time that it takes to deliver services. This dimension also had the largest effect size differences of all five dimensions in the questionnaire.

In table 3.2, the most important area for future service quality improvement, is in the dimension of reliability. The biggest effect size difference was in statement 8, where a value of 0.63 was calculated, which indicates a high practical significance. The statement also received a 6.68 expectation average, which indicates that it is an important part of service quality for customers. Customers perceived the practise of this statement, only to be an average of 5.75. There is, thus, a clear indication that this dimension in service quality is of a lower standard and that improvements should be made to improve on these lower standards of service quality.

TABLE 3.5 CHRONBACH'S ALPHA – RELIABILITY EXPECTATION

Cronbach's Alpha	Number of Items
0.794	5

As indicated in table 3.5, the reliability of data results from the five statements that measured the expectations around reliability, were of high reliability.

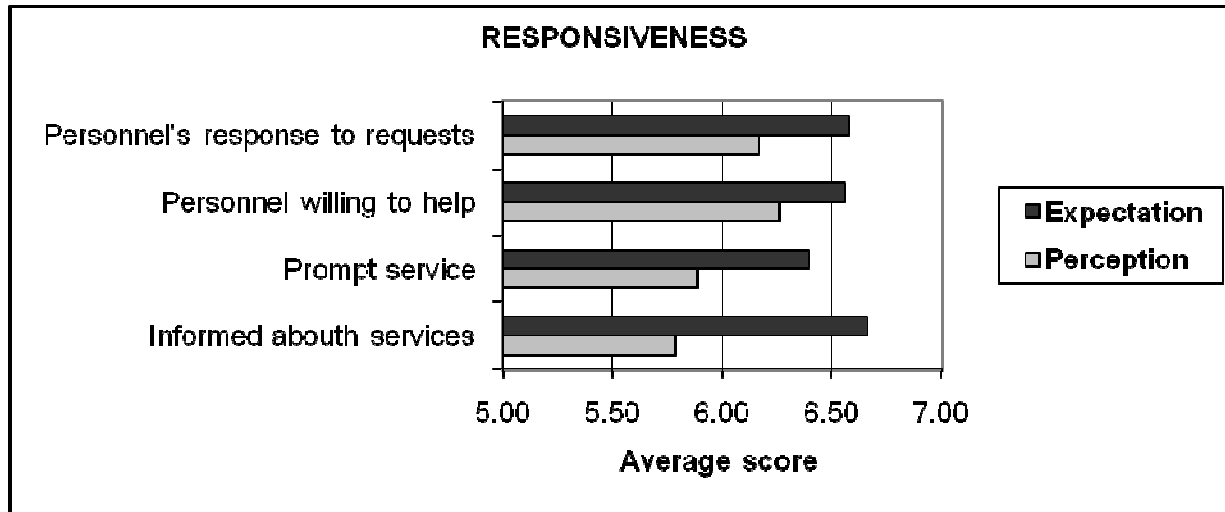
TABLE 3.6 CHRONBACH’S ALPHA –RELIABILITY PERCEPTION

Cronbach's Alpha	Number of Items
0.876	5

As indicated in table 3.6, the reliability of data results from the five statements that measured the perceptions around reliability, were of high reliability.

3.4.2.3 Responsiveness

FIGURE 3.3 RESPONSIVENESS



In figure 3.3, it is visible that the dimension of responsiveness was also not perceived to be of quality. The expected level of quality in this dimension had a high average in the questionnaire and customers felt that the perceived level of responsiveness from the employees at the healthcare institution was average.

As indicated by the statement averages, there was an effect size difference of 0.55 at statement 10, which indicates a high level of practical significance. This indicates that employees should focus on informing customers when services could be expected. Statement 11 had an effect size difference of 0.39, which indicates a

medium practical significance. Employees should therefore also focus on delivering prompt service, and not delay certain services.

Statement 12, which is a very important part of any healthcare institution's service delivery, received an effect size difference of 0.29, which is also of medium practical significance. Employees should, therefore, focus on being willing to help customers when they need assistance and not draw back from tasks and dependant customers.

TABLE 3.7 CHRONBACH's ALPHA – RESPONSIVENESS EXPECTATION

Cronbach's Alpha	Number of Items
0.917	4

As indicated in table 3.7, the reliability of data results from the four statements that measured the expectations around responsiveness, were of high reliability.

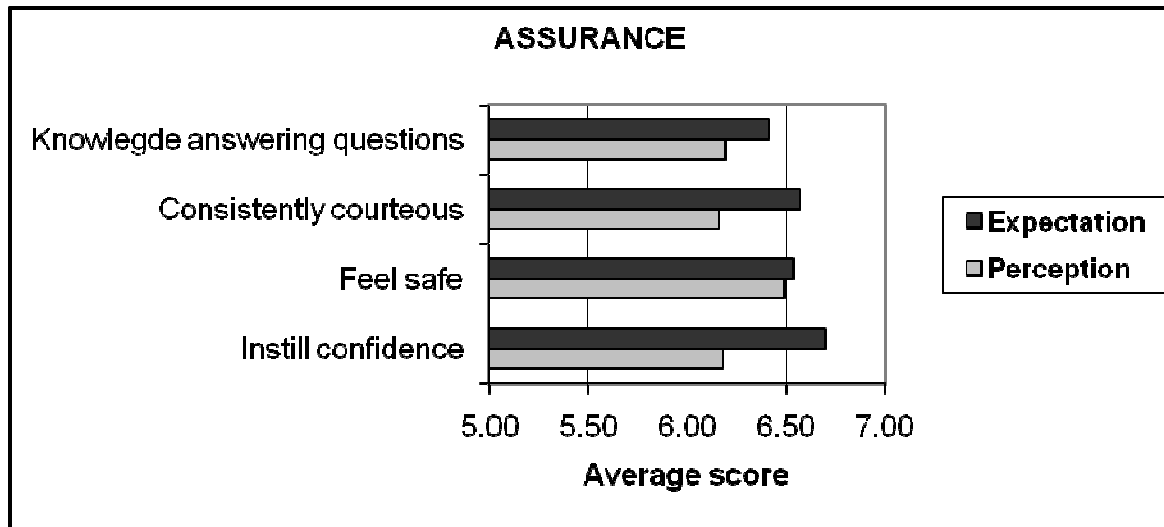
TABLE 3.8 CHRONBACH's ALPHA – RESPONIVENESS PERCEPTION

Cronbach's Alpha	Number of Items
0.908	4

As indicated in table 3.8, the reliability of data results from the four statements that measured the perceptions around responsiveness, were of high reliability.

3.4.2.4 Assurance

FIGURE 3.4 ASSURANCE



From figure 3.4, customers' perceptions of the assurance dimension were lower than expected. The biggest effect size difference was in statement 14, where customers did not perceive employees' efforts to instill trust and confidence in their service. There was also a medium practical significance in statement 16, where the effect size difference was 0.37. Therefore, it indicates that employees should be more courteous in their service delivery.

Employees should have enough knowledge and training, so that they can provide assurance when customers are undergoing procedures and need to be reassured. This will instill confidence in customers. Customers will also feel more safe during procedures, if employees are perceived to have adequate knowledge and skill. Employees who can answer questions from an anxious customer will be perceived as reassuring and will, furthermore, be able to instill confidence in the customer.

TABLE 3.9 CHRONBACH'S ALPHA – ASSURANCE EXPECTATION

Cronbach's Alpha	Number of Items
0.743	4

As indicated in table 3.10, the reliability of data results from the four statements that measured the expectations around assurance, were of high reliability.

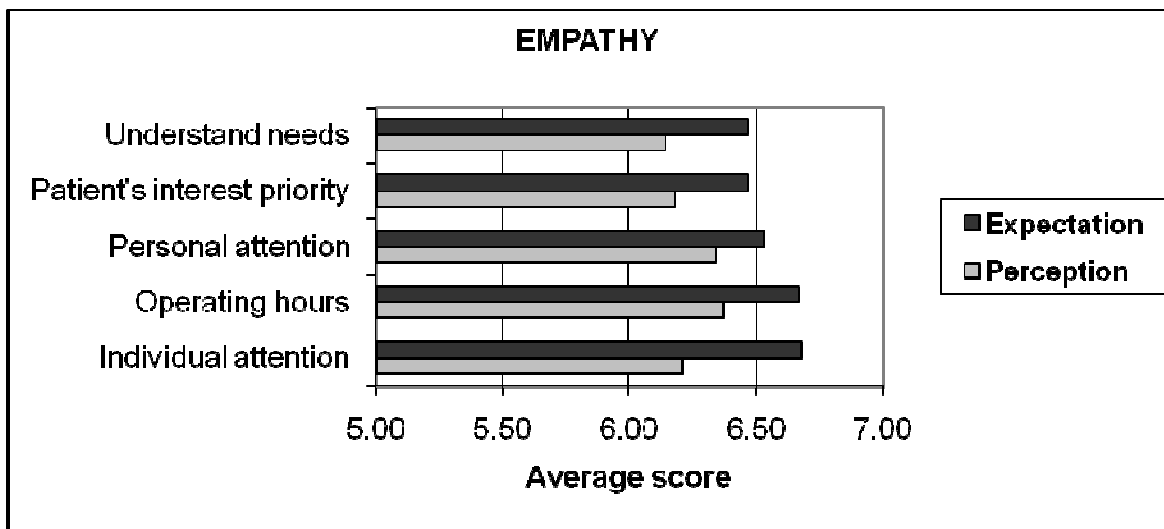
TABLE 3.10 CHRONBACH'S ALPHA – ASSURANCE PERCEPTION

Cronbach's Alpha	Number of Items
0.918	4

As indicated in table 3.11, the reliability of data results from the four statements that measured the perceptions around assurance, were of high reliability.

3.4.2.5 Empathy

FIGURE 3.5 EMPATHY



According to figure 3.5, the dimension of empathy received the second highest average expectation score from customers. All perceived averages were of medium practical significance, when looking at the effect size differences in table 3.2. This indicates that there is a high level of expected service quality in this dimension but that customers perceived service quality as lacking substance.

In any healthcare institution, it is absolutely vital that employees show empathy during their service delivery. This demand good communication and listening skills, and employees who are better qualified in these skills will be able to deliver quality service in this dimension.

TABLE 3.11 CHRONBACH's ALPHA – EMPATHY EXPECTATION

Cronbach's Alpha	Number of Items
0.869	5

As indicated in table 3.12, the reliability of data results from the five statements that measured the expectations around empathy, were of high reliability.

TABLE 3.12 CHRONBACH's ALPHA – EMPATHY PERCEPTION

Cronbach's Alpha	Number of Items
0.914	5

As indicated in table 3.13, the reliability of data results from the five statements that measured the perceptions around empathy, were of high reliability.

3.5 SUMMARY

In this chapter the results from analysed data were discussed. The data was presented by descriptive statistics to create a table and figures that showed the different dimensions and their statements, and the scores that were given to these by customers who participated in the study.

CHAPTER 4
CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

In this chapter the conclusions and recommendations are discussed according to the results described in chapter 3. The conclusions will be made based on the values and also the gaps that were discussed. The recommendations that are offered, are a result of the conclusions drawn in the research. These recommendations should provide management of the healthcare institution where the research was done, with a framework for service quality improvement.

4.2 CONCLUSIONS

- i. The use of the SERVQUAL model in the measurement of quality of service in the healthcare institution chosen for this study, resulted in satisfactory results. With the model customers' expectations and perceptions clearly notable in the figures given in chapter 3. This is after the questionnaire's statements were adapted for the healthcare institution.
- ii. The use of the SERVQUAL dimensional questionnaire clearly indicated that employees at the healthcare institution had a definite influence on the customers' perception of quality of service. Employees need to be made aware that their responsiveness, reliability, attitudes, skills and knowledge is very important to customers. These factors have a definite influence on the outcome of their service quality to customers.
- iii. Through the use of the SERVQUAL model to measure quality of service, it is clear that excellent service becomes the foundation for a healthcare institution. When the healthcare institution's customers indicate that the service is excellent, then only will customers actually perceive value in the service delivered. Only then will there also be real positive word-of-mouth communication about the healthcare institution.
- iv. The research done by the use of the SERVQUAL model, was found to be of high reliability, through the calculation of a Chronbach Alpha test for all five

dimensions of the model, as well as for all results as a whole. The Chronbach Alpha for the total result was 0.875, which was higher than the minimum of 0.58 – 0.70.

- v. With the analysis of results from the questionnaires, it was clear that customers' expectations of quality of service at the private healthcare institution was high. Perceptions of quality of service was lower, and there existed some effect size differences that were practically significant.
- vi. The interpretation of the effect size differences revealed that the dimensions of reliability and responsiveness were those with the largest differences. This is followed by the dimensions of assurance, empathy and tangibles. It indicated the dimensions that management should focus on in order for them to improve their quality of service.

4.3 RECOMMENDATIONS

- i. The use of the SERVQUAL model in future research at the private healthcare institution, will result in comparable results, that can be used by management to evaluate the progress of improvements to quality service.
- ii. As stated in point ii of 4.2, management should focus on the awareness of employees in terms of the effect that their reliability, responsiveness, attitudes, skills and knowledge have on customers' assessment have on quality of service. Therefore, internal training should be focused on in providing employees with skills and knowledge in these factors.
- iii. As indicated in the conclusion, excellent service forms the foundation for quality service. Therefore, managers and healthcare institutions should include detailed training on the company, its vision, mission and excellent service. This will allow employees to understand their core function in delivering excellent service and increase productivity.

- iv. Future researchers are recommended to make use of the SERVQUAL instrument in their research. The SERVQUAL instrument was proven to have high reliability in its results.
- v. Future research should focus on customers' expectations and perceptions and the differences of effect sizes of this study, and that of future studies. With these future results, new conclusions that are time related could be made.
- vi. Management at the private healthcare institution should focus their improvements on service quality in the dimensions of reliability and responsiveness. These were the dimensions where the highest practical significance.

4.4 AREAS FOR FUTURE RESEARCH

- i. A comparative study at the same private healthcare institution, to evaluate the effects of management's improvements to the service quality. This study would also have to make use of the SERVQUAL model and instrument, to ensure comparable results, as well as for results to be reliable.
- ii. A study into the service quality dimensions of reliability and responsiveness at the private healthcare institution. These dimensions were found to have the largest effect sizes in this study. The future study would propose to identify factors that have an influence on these dimensions, as well as ways to improve on these dimensions.

4.5 SUMMARY

This study focused on the customers' expectations and perceptions of quality service at a private healthcare institution. With the use of the SERVQUAL model and instrument, the most important dimensions for customers, at the healthcare institution, were identified. These dimensions were found to have the highest effect

size differences, and therefore the most important areas for management to focus on in their improvement of service quality.

BIBLIOGRAPHY

ARRIES, E.J. & NEWMAN, O. 2008. Outpatients' experience of quality service delivery at a teaching hospital in Gauteng : research. *Health SA* , March, 13(1):41-54.

ATWAL, A. & CALDWELL, K. 2005. Older people: The enigma of satisfaction surveys. *Australian Occupational Therapy Journal*, March, 52(1): 10-16.

BASSET, H. 2010. Healthcare in South Africa. Medhunters.com.

BEAR, M. & BOWERS, C. 1998. Using a Nursing Framework to Measure Client Satisfaction at a Nurse-Managed Clinic. *Public Health Nursing*, February, 15(1):50.

BERRY, L.L., PARASURAMAN, A. 1997. Listening to the Customer – The Concept of a Service Quality Information System. *Sloan Management Review*, Spring, 38(3):65-76.

BOSHOFF, C. & GRAY, B. 2004. The relationships between service quality, customer satisfaction and buying intentions in the private hospital industry . *South African Journal of Business Management*, December, 35(4):27-37.

BOSHOFF, A.B. & HOOLE, C. 1998. Portability of job involvement and job satisfaction constructs between the USA and RSA. *South African Journal for economic management sciences*, 1(1):73-84.

BRINK, H.I. 2003. Fundamentals of research methodology for health care professionals. Cape Town : Juta & Company Ltd. 220 p.

BRYANT, R. & GRAHAM, M.C. 2002. Advanced practice nurses: a study of client satisfaction. *Journal Of The American Academy Of Nurse Practitioners*, February, 14(2):88-92.

DARBY, D. 1999. Factors that influence nurses' customer orientation. *Journal of Nursing Management*, September, 7(5):271-280.

DE JAGER, J. & DU PLOOY, Y. 2007. Measuring tangibility and assurance as determinants of service quality for public health care in South Africa. *Acta Commercii*, 7:96-111.

DE STRICKER, U. 2007. My Pleasure to Serve You. *Client Service Marketing*. 53(3):130-133.

ELLIS, S.M. & STEYN, H.S. 2003. Practical significance (effect sizes) versus or in combination with statistical significance (p-values), *Management Dynamics*, 12(4):51-53.

HEALTHCARE REVIEW. 2009. TWIG Reasearch Specialists (Pty) Ltd. t/a Willbury & Claymore. Greenside

INTERNATIONAL ORGANISATION FOR STANDARDIZATION. 2004. "ISO 9000/ISO 1400 in Brief," [Web:] <http://www.iso.ch/iso/en/sio9000-14000/index.html>

KADE, A. 2009. Customer Service of an Ophthalmology Practise. North West University Business School.

KATSIN, D. 2009. Give Your Marketing a Competitive Edge. *Marketing Health Services*, Summer, 29(2):32-32.

KLEYNHANS, K. 2008. Customer Service of Convenience Stores. North West University Business School.

MARKUS, B.W. 2006. The Client Service Team as a Growing Phenomenon. *Of Counsel*, April, 25(4):14-17.

MATSEBULA, T. & WILLIE, M. 2007. Private Hospitals. *Health Systems Trust*. [Web:] www.hst.org.za/uploads/files/chap11_07.pdf

MENDOZA, A.J., PIECHULEK, H. & AL-SHABIR, A. 2001. Client satisfaction and quality of health care in rural Bangladesh. *Bulletin Of The World Health Organization*, 79(6):512-517.

MCKENNA, P.J. & ANDERSON, M.J. 2006. Client Service Minus the Platitudes. *Of Counsel*, May, 25(5):5-10.

ORLIKOFF, J.E. & TOTTEN, M.K. 2008. The Far-Reaching Power of the Brand. *Healthcare Executive*, September/October, 23(5):64-67.

PARASURAMAN, A., ZEITHAML, V.A. & BERRY, L.L. 1988b. A conceptual model of service quality and its implications for future research. *Journal of Marketing*, Fall, pp. 40-50.

PARASURAMAN, A., ZEITHAML, V.A. & BERRY, L.L. 1988. SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, Spring, 64(1):5-6.

SOUTH AFRICA. 1997. White Paper on the Transformation of Public Service delivery (Batho Pele). Notice 1459 of 1997. Pretoria: Government Press. [Web:] www.doh.gov.za

SOUTH AFRICAN DEPARTMENT OF HEALTH. 2007. A policy on quality in healthcare for South Africa. April. Pretoria: Government Press. [Web:] www.doh.gov.za

TROTTER, C. 2008. What does client satisfaction tell us about effectiveness? *Child Abuse Review*, July/August, 17(4):262-274.

ZEITHAML, V.A., PARASURAMAN, A. & BERRY, L.L. 1990. Delivering quality service: balancing customer perceptions and expectations. [Web:] www.feequality.org/beta%20freequal/fg%20%20site/training/GapAnalysis%5B2%5D.ppt. Date of access:21/03/2010.

APPENDIX A – QUESTIONNAIRES

SERVICE QUALITY SURVEY

Each statement in the questionnaire has two answers. There are no right or wrong answers.

We are merely interested in the the number that describes your **expectation** and **perception** about a excellent private healthcare intitutions. Only fill in the number next to each statement.

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

The first judgement is for the **expectation** you have for the quality of services at excellent private healthcare institutions, and to what extent you think excellent private healthcare institutions should possess these features described in the statements.

What is your **expectation** of service at a private healthcare institution?

The second judgement is for the **perception** according to service at this private healthcare institution, and to what level this private healthcare institution attains these statements.

What is your **perception** of service at this private healthcare institution?

Item	Statement	Expectation	Perception
1	Excellent private healthcare insitutions will have equipment that looks modern.		
2	The physical facilities at excellent private healthcare institutions will be visually appealing.		
3	Employees at excellent private healthcare institutions will look neat.		
4	Materials associated with the service, like pamphlets, statements etc will be of the highest quality.		
5	When excellent private healthcare institutions promise to do something, they do so. For example reports or authorisations.		
6	If a patient has healthcare related problems, excellent private healthcare institutions will show sincere interest in solving it.		
7	Excellent private healthcare institutions will perform services correctly.		
8	Excellent private healthcare institutions will complete services on time, as promised.		
9	Excellent private healthcare institutions will insist on documentation and data without errors.		
10	Excellent private healthcare institutions will inform patients on exactly when a service will be delivered.		

11	Excellent private healthcare institutions will deliver prompt service to its patients.		
12	Excellent private healthcare institutions will always be willing to help patients.		
Item	Statement	Expectation	Perception
13	Employees at excellent private healthcare institutions will never be too busy to listen and respond to patients' requests.		
14	The behaviour of employees at excellent private healthcare institutions will instil trust in patients.		
15	Patients at excellent private healthcare institutions will feel safe during their visit.		
16	Employees at excellent private healthcare institutions will continually be courteous with patients.		
17	Employees at excellent private healthcare institutions will possess the needed knowledge to answer patients' questions.		
18	Excellent private healthcare institutions will deliver individual care and attention to its patients.		
19	Excellent private healthcare institutions will have convenient operating hours for patients.		
20	Employees at excellent private healthcare institutions will give personal attention to its patients.		
21	Excellent private healthcare institutions will have their patients' best interest at heart.		
22	Employees at excellent private healthcare institutions will understand their patients' specific needs.		

Mark the applicable statement with an X:

Gender Male Female

Age 1 – 30 years 30 – 50 years 50 + years

Status New patient Existing patient

Will you visit this private healthcare institution in future? Yes No

Will you refer others to this private healthcare institution? Yes No

Thank you for your time !

DIENSKWALITEIT OPNAME

Elke opmerking in die vraelys het twee antwoorde. Daar is geen reg of verkeerde antwoorde nie.

Ons stel slegs belang in die nommer wat u aandui by die **verwagting** en **waarneming** ten opsigte van wat 'n uitstekende gesondheidsorg instansie die beste sal beskryf. Vul slegs die nommer van die waarde teenoor elke opmerking in.

Verskil sterk					Stem sterk saam	
1	2	3	4	5	6	7

Die eerste waarde is vir die **verwagting** wat u het rakende die kwaliteit van die diens by 'n privaat gesondheidsorg instansie, en in watter mate u dink sulke privaat gesondheidsorg instansies aan sulke kwaliteite, soos in die opmerkings genoem, moet voldoen.

Wat is u **verwagting** van diens by 'n privaat gesondheidsorg instansie?

Die tweede waarde is u **waarneming** ten opsigte van diens by hierdie spesifieke privaat gesondheidsorg instansie, en in watter mate hierdie spesifieke privaat gesondheidsorg instansie aan hierdie opmerkings voldoen.

Wat is u **waarneming** van diens by hierdie privaat gesondheidsorg instansie?

Item	Opmerking	Verwagting	Waarneming
1	Uitstekende privaat gesondheidsorg instansies sal toerusting hê wat modern vertoon.		
2	Die fisiese fasiliteite by uitstekende privaat gesondheidsorg instansies sal visueel goed vertoon.		
3	Personeel by uitstekende privaat gesondheidsorg instansies se voorkoms sal netjies vertoon.		
4	Materiaal rakende die diens, soos pamflette, state ensomeer, sal netjies en visueel goed vertoon.		
5	Wanneer uitstekende privaat gesondheidsorg instansies belowe om iets te doen teen 'n sekere tyd, sal dit so uitgevoer word, bv. magtigings en verslae.		
6	As 'n pasiënt gesondeids verwante probleem het, sal uitstekende privaat gesondheidsorg instansies opregte belang toon om dit op te los.		
7	Uitstekende privaat gesondheidsorg instansies sal diens korrek uitvoer.		
8	Uitstekende privaat gesondheidsorg instansies sal diens betyds lewer soos belowe is.		
9	Uitstekende privaat gesondheidsorg instansies dring aan op foutlose dokumente en data.		
10	Uitstekende privaat gesondheidsorg instansies sal pasiënte inlig oor wanneer presies 'n diens gelewer sal word.		

Item	Opmerking	Verwagting	Waarneming
11	Uitstekende privaat gesondheidsorg instansies sal stiptelike diens lewer aan pasiënte.		
12	Uitstekende privaat gesondheidsorg instansies sal altyd bereid wees om pasiënte te help.		
13	Werknemers by uitstekende privaat gesondheidsorg instansies sal nooit te besig wees om aan pasiënte se versoeke gehoor te gee nie.		
14	Die optrede by van werknemers by uitstekende privaat gesondheidsorg instansies sal vertrouwe inboesem by pasiënte.		
15	Pasiënte by uitstekende privaat gesondheidsorg instansies sal veilig voel hul besoek.		
16	Werknemers by uitstekende privaat gesondheidsorg instansies sal voortdurend beleefd wees met pasiënte.		
17	Werknemers by uitstekende privaat gesondheidsorg instansies sal oor die nodige kennis beskik om pasiënte se vrae beantwoord.		
18	Uitstekende privaat gesondheidsorg instansies sal individuele aandag gee aan pasiënte.		
19	Uitstekende privaat gesondheidsorg instansies sal besigheidsure hê wat gerieflik is vir alle pasiënte.		
20	Werknemers by uitstekende privaat gesondheidsorg instansies, sal persoonlike aandag aan pasiënte gee.		
21	Uitstekende privaat gesondheidsorg instansies, sal hul pasiënte se belange op hul harte dra.		
22	Werknemers by uitstekende privaat gesondheidsorg instansies, sal die spesifieke behoeftes van hul pasiënte verstaan.		

Merk die toepaslike opmerking met 'n X:

Geslag Manlik Vroulik

Ouderdom 1 – 30 jaar 30 – 50 jaar 50 + jaar

Status Nuwe pasiënt Bestaande pasiënt

Sal u hierdie privaat gesondheidsorg instansie weer besoek? Ja Nee

Sal u ander verwys na hierdie privaat Gesondheidsorg instansie? Ja Nee

Baie dankie vir u tyd !

APPENDIX B – STATISTICAL RESULTS

Frequency Tables

Q1V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	2.1	2.7	2.7
	5	3	6.4	8.1	10.8
	6	12	25.5	32.4	43.2
	7	21	44.7	56.8	100.0
	Total	37	78.7	100.0	
Missing	System	10	21.3		
Total		47	100.0		

Q1W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	2.1	2.7	2.7
	5	8	17.0	21.6	24.3
	6	13	27.7	35.1	59.5
	7	15	31.9	40.5	100.0
	Total	37	78.7	100.0	
Missing	System	10	21.3		
Total		47	100.0		

Q2V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	4	8.5	11.1	11.1
	6	12	25.5	33.3	44.4
	7	20	42.6	55.6	100.0
	Total	36	76.6	100.0	
Missing	System	11	23.4		
Total		47	100.0		

Q2W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	2	4.3	5.3	5.3
	5	5	10.6	13.2	18.4
	6	13	27.7	34.2	52.6
	7	18	38.3	47.4	100.0
	Total	38	80.9	100.0	
Missing	System	9	19.1		
Total		47	100.0		

Q3V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	2.1	2.9	2.9
	6	12	25.5	34.3	37.1
	7	22	46.8	62.9	100.0
	Total	35	74.5	100.0	
Missing	System	12	25.5		
Total		47	100.0		

Q3W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	4	8.5	10.3	10.3
	6	14	29.8	35.9	46.2
	7	21	44.7	53.8	100.0
	Total	39	83.0	100.0	
Missing	System	8	17.0		
Total		47	100.0		

Q4V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	2.1	2.9	2.9
	5	1	2.1	2.9	5.7
	6	13	27.7	37.1	42.9
	7	20	42.6	57.1	100.0
	Total	35	74.5	100.0	
Missing	System	12	25.5		
Total		47	100.0		

Q4W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	2.1	2.6	2.6
	5	3	6.4	7.7	10.3
	6	15	31.9	38.5	48.7
	7	20	42.6	51.3	100.0
	Total	39	83.0	100.0	
Missing	System	8	17.0		
Total		47	100.0		

Q5V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6	10	21.3	30.3	30.3
	7	23	48.9	69.7	100.0
	Total	33	70.2	100.0	
Missing	System	14	29.8		
Total		47	100.0		

Q5W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	3	6.4	7.5	7.5
	3	1	2.1	2.5	10.0
	4	4	8.5	10.0	20.0
	5	4	8.5	10.0	30.0
	6	11	23.4	27.5	57.5
	7	17	36.2	42.5	100.0
	Total	40	85.1	100.0	
Missing	System	7	14.9		
Total		47	100.0		

Q6V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	1	2.1	3.0	3.0
	6	10	21.3	30.3	33.3
	7	22	46.8	66.7	100.0
	Total	33	70.2	100.0	
Missing	System	14	29.8		
Total		47	100.0		

Q6W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	2	4.3	5.3	5.3
	3	1	2.1	2.6	7.9
	4	1	2.1	2.6	10.5
	5	5	10.6	13.2	23.7
	6	9	19.1	23.7	47.4
	7	20	42.6	52.6	100.0
	Total	38	80.9	100.0	
Missing	System	9	19.1		
Total		47	100.0		

Q7V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	2.1	2.9	2.9
	5	1	2.1	2.9	5.7
	6	10	21.3	28.6	34.3
	7	23	48.9	65.7	100.0
	Total	35	74.5	100.0	
Missing	System	12	25.5		
Total		47	100.0		

Q8V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	1	2.1	2.9	2.9
	6	9	19.1	26.5	29.4
	7	24	51.1	70.6	100.0
	Total	34	72.3	100.0	
Missing	System	13	27.7		
Total		47	100.0		

Q8W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	2.1	2.6	2.6
	3	1	2.1	2.6	5.1
	4	2	4.3	5.1	10.3
	5	7	14.9	17.9	28.2
	6	13	27.7	33.3	61.5
	7	15	31.9	38.5	100.0
	Total	39	83.0	100.0	
Missing	System	8	17.0		
Total		47	100.0		

Q9V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	2	4.3	5.6	5.6
	6	10	21.3	27.8	33.3
	7	24	51.1	66.7	100.0
	Total	36	76.6	100.0	
Missing	System	11	23.4		
Total		47	100.0		

Q9W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	2.1	2.7	2.7
	5	3	6.4	8.1	10.8
	6	17	36.2	45.9	56.8
	7	16	34.0	43.2	100.0
	Total	37	78.7	100.0	
Missing	System	10	21.3		
Total		47	100.0		

Q10V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	2	4.3	5.7	5.7
	6	8	17.0	22.9	28.6
	7	25	53.2	71.4	100.0
	Total	35	74.5	100.0	
Missing	System	12	25.5		
Total		47	100.0		

Q10W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	3	6.4	7.9	7.9
	3	1	2.1	2.6	10.5
	4	4	8.5	10.5	21.1
	5	3	6.4	7.9	28.9
	6	9	19.1	23.7	52.6
	7	18	38.3	47.4	100.0
	Total	38	80.9	100.0	
Missing	System	9	19.1		
Total		47	100.0		

Q11V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	2.1	2.9	2.9
	5	4	8.5	11.4	14.3
	6	10	21.3	28.6	42.9
	7	20	42.6	57.1	100.0
	Total	35	74.5	100.0	
Missing	System	12	25.5		
Total		47	100.0		

Q11W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	2.1	2.6	2.6
	3	1	2.1	2.6	5.3
	4	1	2.1	2.6	7.9
	5	10	21.3	26.3	34.2
	6	9	19.1	23.7	57.9
	7	16	34.0	42.1	100.0
	Total	38	80.9	100.0	
Missing	System	9	19.1		
Total		47	100.0		

Q12V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	2.1	2.9	2.9
	5	1	2.1	2.9	5.9
	6	10	21.3	29.4	35.3
	7	22	46.8	64.7	100.0
	Total	34	72.3	100.0	
Missing	System	13	27.7		
Total		47	100.0		

Q12W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	2.1	2.6	2.6
	4	2	4.3	5.1	7.7
	5	5	10.6	12.8	20.5
	6	9	19.1	23.1	43.6
	7	22	46.8	56.4	100.0
	Total	39	83.0	100.0	
Missing	System	8	17.0		
Total		47	100.0		

Q13V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	3	6.4	8.3	8.3
	6	9	19.1	25.0	33.3
	7	24	51.1	66.7	100.0
	Total	36	76.6	100.0	
Missing	System	11	23.4		
Total		47	100.0		

Q13W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	2	4.3	5.6	5.6
	4	1	2.1	2.8	8.3
	5	4	8.5	11.1	19.4
	6	9	19.1	25.0	44.4
	7	20	42.6	55.6	100.0
	Total	36	76.6	100.0	
Missing	System	11	23.4		
Total		47	100.0		

Q14V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6	10	21.3	30.3	30.3
	7	23	48.9	69.7	100.0
	Total	33	70.2	100.0	
Missing	System	14	29.8		
Total		47	100.0		

Q14W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	2	4.3	5.1	5.1
	4	1	2.1	2.6	7.7
	5	5	10.6	12.8	20.5
	6	11	23.4	28.2	48.7
	7	20	42.6	51.3	100.0
	Total	39	83.0	100.0	
Missing	System	8	17.0		
Total		47	100.0		

Q15V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	2.1	2.9	2.9
	5	2	4.3	5.7	8.6
	6	9	19.1	25.7	34.3
	7	23	48.9	65.7	100.0
	Total	35	74.5	100.0	
Missing	System	12	25.5		
Total		47	100.0		

Q15W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	2.1	2.7	2.7
	5	4	8.5	10.8	13.5
	6	7	14.9	18.9	32.4
	7	25	53.2	67.6	100.0
	Total	37	78.7	100.0	
Missing	System	10	21.3		
Total		47	100.0		

Q16V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	3	6.4	8.6	8.6
	6	9	19.1	25.7	34.3
	7	23	48.9	65.7	100.0
	Total	35	74.5	100.0	
Missing	System	12	25.5		
Total		47	100.0		

Q16W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	2.1	2.7	2.7
	3	1	2.1	2.7	5.4
	5	4	8.5	10.8	16.2
	6	14	29.8	37.8	54.1
	7	17	36.2	45.9	100.0
	Total	37	78.7	100.0	
Missing	System	10	21.3		
Total		47	100.0		

Q17V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	2.1	2.8	2.8
	5	3	6.4	8.3	11.1
	6	12	25.5	33.3	44.4
	7	20	42.6	55.6	100.0
	Total	36	76.6	100.0	
Missing	System	11	23.4		
Total		47	100.0		

Q17W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	2.1	2.8	2.8
	4	1	2.1	2.8	5.6
	5	6	12.8	16.7	22.2
	6	10	21.3	27.8	50.0
	7	18	38.3	50.0	100.0
	Total	36	76.6	100.0	
Missing	System	11	23.4		
Total		47	100.0		

Q18V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6	11	23.4	32.4	32.4
	7	23	48.9	67.6	100.0
	Total	34	72.3	100.0	
Missing	System	13	27.7		
Total		47	100.0		

Q18W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	2	4.3	5.3	5.3
	4	2	4.3	5.3	10.5
	5	3	6.4	7.9	18.4
	6	10	21.3	26.3	44.7
	7	21	44.7	55.3	100.0
	Total	38	80.9	100.0	
Missing	System	9	19.1		
Total		47	100.0		

Q19V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	1	2.1	3.0	3.0
	6	9	19.1	27.3	30.3
	7	23	48.9	69.7	100.0
	Total	33	70.2	100.0	
Missing	System	14	29.8		
Total		47	100.0		

Q19W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	2.1	2.6	2.6
	4	1	2.1	2.6	5.3
	5	2	4.3	5.3	10.5
	6	13	27.7	34.2	44.7
	7	21	44.7	55.3	100.0
	Total	38	80.9	100.0	
Missing	System	9	19.1		
Total		47	100.0		

Q20V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	2.1	2.9	2.9
	5	3	6.4	8.8	11.8
	6	7	14.9	20.6	32.4
	7	23	48.9	67.6	100.0
	Total	34	72.3	100.0	
Missing	System	13	27.7		
Total		47	100.0		

Q20W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	2	4.3	5.3	5.3
	5	4	8.5	10.5	15.8
	6	11	23.4	28.9	44.7
	7	21	44.7	55.3	100.0
	Total	38	80.9	100.0	
Missing	System	9	19.1		
Total		47	100.0		

Q21V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	2.1	2.9	2.9
	5	4	8.5	11.8	14.7
	6	7	14.9	20.6	35.3
	7	22	46.8	64.7	100.0
	Total	34	72.3	100.0	
Missing	System	13	27.7		
Total		47	100.0		

Q21W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	2	4.3	5.3	5.3
	4	1	2.1	2.6	7.9
	5	5	10.6	13.2	21.1
	6	10	21.3	26.3	47.4
	7	20	42.6	52.6	100.0
	Total	38	80.9	100.0	
Missing	System	9	19.1		
Total		47	100.0		

Q22V

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	2.1	2.8	2.8
	5	2	4.3	5.6	8.3
	6	11	23.4	30.6	38.9
	7	22	46.8	61.1	100.0
	Total	36	76.6	100.0	
Missing	System	11	23.4		
Total		47	100.0		

Q22W

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	2	4.3	5.6	5.6
	5	7	14.9	19.4	25.0
	6	9	19.1	25.0	50.0
	7	18	38.3	50.0	100.0
	Total	36	76.6	100.0	
Missing	System	11	23.4		
Total		47	100.0		

GESLAG

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	17	36.2	38.6	38.6
	2	27	57.4	61.4	100.0
	Total	44	93.6	100.0	
Missing	System	3	6.4		
Total		47	100.0		

OUDERDOM

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	15	31.9	33.3	33.3
	2	20	42.6	44.4	77.8
	3	10	21.3	22.2	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

STATUS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	27	57.4	61.4	61.4
	2	17	36.2	38.6	100.0
	Total	44	93.6	100.0	
Missing	System	3	6.4		
Total		47	100.0		

BESOEK

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	43	91.5	97.7	97.7
	2	1	2.1	2.3	100.0
	Total	44	93.6	100.0	
Missing	System	3	6.4		
Total		47	100.0		

VERWYS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	41	87.2	93.2	93.2
	2	3	6.4	6.8	100.0
	Total	44	93.6	100.0	
Missing	System	3	6.4		
Total		47	100.0		

22 November 2010

TO WHOM IT MAY CONCERN

I, Tarien Jacobs, hereby confirm that I am responsible for the text editing and text formatting of the mini-dissertation (CUSTOMER SERVICE AT A PRIVATE HOSPITAL IN THE NORTH-WEST PROVINCE), compiled by Mr J van Heerden.

Yours Faithfully,

Tarien Jacobs
BA Language and Literary Studies
082 060 5922
tarienj@gmail.com