



PATIENT SATISFACTION REGARDING HOSPITAL SERVICES: A STUDY OF UMEÅ HOSPITAL.

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ABSTRACT

Patients are the key stakeholders in health care providers and it is extremely important to increase their satisfaction level. Patient satisfaction is a subject of great interest to the health care providers and researchers alike. As there are a lot of factors related to health care providers that causes patient selection and rejection. Since competition has increased in recent years, this exerts more pressure on health care providers to render more improved service quality in addition to build trust and gain high reputation. Improved quality of service has now become an important aspect of patient satisfaction, building trust is now a crucial milestone and gaining high reputation is considered the key for any health care provider. In practice and theory it has been proven that service quality dimensions, trust and reputation is related to patient satisfaction. For this, we took 5Q model of the service quality combine with trust and reputation, and how it affects patient satisfaction is the main theme of the study.

Purpose: The purpose of this study is to investigate that how 5Q model of the service quality, trust and reputation can effect patient satisfaction in health care sectors, for this study we researched Umeå hospital. This research is focused towards exploring the perceptions of patients who consume or undertook Umeå hospital services. It also provides an effective model for health care organization in practice and the study also contribute to literature from educational point of view.

Method: In this study hypothesis developed to investigate how 5Q model of the service quality, trust and reputation can effect patient satisfaction. For service quality 5Q model was used while several attributes were taken for trust and reputation to investigate the patient perception. Quantitative research strategy was adopted and convenience sampling technique was used to collect quantitative data from patients of Umeå hospital to get their satisfaction levels. Hypotheses were tested by using multiple regression analysis to the obtained data in SPSS.

Findings: The study revealed interesting results for patient satisfaction regarding the 5Q model of the service quality, trust and reputation. Meanwhile 5Q model was used for service quality, which composes quality of object, quality of process, quality of infrastructure, quality of interaction and quality of atmosphere. Out of five dimensions, two gave positive effect and three gave no effect result by the patient for their satisfaction from the Umeå hospital. Trust gave no effect result, whereas reputation gave positive effect result by the patient for their satisfaction from the Umeå hospital.

Implication/Contribution: The findings imply that 5Q model of the service quality is not the only factor that could lead to patient satisfaction in health care sectors but trust and reputation are also factors of great importance. Organizations need to improve every dimension of service quality, creating trust and achieve high reputation to gain high level of patient satisfaction. This study contributes to existing theories by confirming or adding value that have positive effect on patient satisfaction. 5Q model is a comprehensive model and it needs to be implemented in health care sector but with additional factors i.e. trust and reputation.

Key words: Patient satisfaction, Service quality, 5Q model, Trust, Reputation, Health care providers.

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CHAPTER 1: INTRODUCTION

The aim of this section is to identify the research topic and research questions. Thus the chapter begins with an introductory background, which includes the patient satisfaction regarding health care organizations and the factors, which effects, research objective and questions will follow. Delimitation and structure of the report will end the chapter.

1.1 Introductory Background

Customer satisfaction remains the most interesting subject for organizations as well as for the researchers at the same time. The basic objective of organizations is to increase the level of profits and try to decrease the cost. Profit can be enhanced by increase in sales with lesser costs. A factor to increase the sale is the satisfaction of the customer, which leads to customer loyalty (Wilson et al., 2008, p. 79). Whenever customers want to buy, their aim is to maximize their satisfaction from the product or service. Today marketplace entails organizations to build strong relationship with customers and not just producing the products, if they want to win. Building customer relationship means delivering superior value over competitors to the target customers (Kotler et al., 2002, p. 391).

Patient satisfaction has emerged as an increasingly important health outcome. Satisfaction is believed to be an attitudinal response to value judgments that patients make about their clinical encounter (Kane et al., 1997, p. 714). Satisfaction is either implicitly or explicitly defined as an evaluation based on the fulfillment of expectations (Williams, 1995, p. 559). In our point of view, satisfaction is what a consumer expectations, judging and at the end, acceptance or rejection is the outcome from the product or service.

Patient satisfaction regarding health care is a multidimensional concept that now becomes a very crucial health care outcome. A meta-analysis of satisfaction with medical care revealed the following aspects for patient satisfaction and overall performance of an organization: overall quality, trust, reputation, continuity, competence, information, organization, facilities, attention to psychosocial problems, humaneness and outcome of care (Hall & Dorman, 1988, p. 935). All of these factors have high influence on service quality of health care organizations and at the same time can influence the satisfaction level.

Due to technological advancement in the recent years, health care service provider's practices have also changed dramatically. Health care system is now a challenge for every government, state, political parties and insurance agencies due to high competition in field. The health care system that was dominated by nonprofit/public hospitals, is now provided increasingly by private sector. This competition results in satisfying patient through improvement in service quality dimensions, building trust and getting positive reputation. Some questions were raised while achieving these valuable goals in health care organizations, need to be addressed. For example, who want to improve health care service quality? Who is changing and innovating new techniques? Who is functionally and technically well sound? Whose organizational atmosphere is frankly and friendly? Is Feedback, communication, interaction and trust which is the most important factor are incorporated in organization? The organizations who

emphasizes and respond to above questions lead the organization towards positive reputation in the society (Rubin, 1990, p. 3-4).

Sweden health care system supports the idea that key dimensions of a country's health care system reflect the core social norms and values held by its citizens. No drastic changes have been occurred during the past half century in Swedish health care system and the fundamental structure of the Swedish health system has remained notably consistent, i.e., tax-based financing and publicly operated hospitals (Saltman & Bergman, 2005, p. 1).

In 1999, Sweden made reforms in order not to overload the local councils and planed that the county regions have to manage the integrated health care system. Changes in various laws and regulations created a health care model, which was founded on the following principles (Gennser, 1999).

1. The main focus of the public health laws is "that the population should be in good health." To achieve the main goal preventive care is therefore, included in the Swedish health care system.
2. Principle of justice and equal availability of health care will be provided to all citizens. No discrimination is allowed with respect to age and fee will be the same for everyone across the whole country.
3. The county regions will be responsible for health care planning. The scope and direction of health care services will be deciding by the democratically elected politicians.
4. The county councils have been given the authority to impose income taxes.
5. People who live in the country have a right to receive health care.
6. The county is responsible for both the financing of health care services and the production of health services (Gennser, 1999).

Patients have been given the choice and opportunity to choose between the different hospitals in county regions, and sometimes amongst different hospitals in neighboring counties. This kind of choice is promoting competition (Gennser, 1999). In the big cities and other areas where the public had convenient access to more than one hospital especially in suburban cities where the hospitals found themselves losing patients to the prestigious hospitals in the city centers (Michael, Harrison & Calltorp, 2000, p. 224).

Several models of health care evaluation have been proposed and designed to measure the patient satisfaction and service quality dimensions. Perhaps the most popular model is design by Donabedian (1966), who took three factors/dimensions, i.e., structure, process and outcome to evaluate quality of care and patient satisfaction. The first factor deals with the structure of the organization and the condition under which the service is provided. Second factor elaborates the process that refers to the professional activities by the health care. The third factor is outcome and refers to the result or patient rating, which means the current and future difference of patient's health and satisfaction level. Outcome is the most important factor to measure and to evaluate the patient satisfaction and service quality. The relationship among the structure, process and outcome should be very strong and clear because one can affect the other (Donabedian, 1966, p. 166-170). In order to be satisfied, everybody has a choice to choose the best health care quality and service. As price, competition is prohibited in public sector organizations that would exert pressure to focus on service, quality, reputation and trust (Vrangbaek et al., 2007, p. 126).

Measuring satisfaction with relation to service quality, most of the researchers use SERVQUAL model. For the very first time Zineldin (2006) use five quality dimensions (5Qs) model, which is a combination of technical-functional and SERVQUAL quality model. The 5Q model of the service quality covers most of the factors regarding health care. 5Q model consist of quality of object, quality of processes, quality of infrastructure, quality of interaction and quality of atmosphere. 5Q model is the strong tool to measure patient satisfaction regarding service quality.

Another factor that can lead a patient to satisfaction is trust. Trust is especially important in health care service organizations. Many definitions of trust have been proposed, however a core concept is that trust is the acceptance of a vulnerable situation in which the truster's believes that the trustee will act in the truster's best interests. Trust is the basic and fundamental aspect to measure, physician attributes identified by patients as engendering trust may be grouped into domains of technical competency, interpersonal competency, and agency (also called fidelity, loyalty, or fiduciary duty) (Thom et al., 2004, p. 125). Patient trust expresses a combination of variables, most important is the satisfaction and is more salient feature to measure the quality of ongoing relationships. Measuring trust would help to inform public policy deliberations and balance market forces, which threaten the doctor-patient relationship. Trust is a very crucial factor which builds and establishes through continuous improvement in overall service quality dimension and organizational reputation.

Apart from 5Q model of service quality and trust, we believe that reputation also plays a significant role in patient satisfaction. According to Herbig & Milewicz (1993, p. 18) nowadays, describing and explaining the concept of reputation has become a differentiating and competitive criteria. Flow of information from one user to another could be established: therefore, transactions between the entity and other party must have occurred in order to establish a good reputation. Reputation is a process or state build through continues improvement in service quality dimensions to meet the customers/patients needs and wants successfully.

Organizations with positive reputation support the argument that high quality of service firms will be larger and have more customers since fewer customers will depart from high quality firms in the long run and more will arrive because of word-of-mouth activity from other customers (Rogerson, 1983, p. 508). Organizations with high reputation maintain long life and have more customer/patients due to high satisfaction level based on credibility, quality and service. Strong relationship can be found between reputation and customer/patient satisfaction from practical as well as from theoretical point of view.

This study will investigate the effects of the 5Q model of service quality, reputation and trust on patient satisfaction in health care organizations. As discussed earlier previous research shows the relevance for patient satisfaction. This study will cover the patient satisfaction regarding service quality, for service quality, we will use 5Q model combine with trust and reputation. The combination has never been researched before. This is a gap area for health care service providers, which needs to be well research in order to be improved. In addition, this is a theoretical contribution by combining the mentioned factors together and will be useful in future for further research.

1.2 Research purpose

The main objective of the study is to investigate patient satisfaction in the context of health care organization. This will be a theoretical contribution to understand how the relationship is affected between the patient and health care service provider. This study will further investigate the satisfaction level of patients from Umea hospital, how they perceive the service dimensions. It will enable us to test if the mentioned factors affect patient's satisfaction in health care organization.

Our objective is to investigate the patient satisfaction from Umeå hospitals and to investigate the delivery of health care service quality dimensions in order to ensure the patient satisfaction. Due to high competition in health care sector, it is difficult for public health care providers to maintain its standards and achieve high performance. The results of the study will be useful and can contribute to the health care organization to improve their overall performance in the areas like service quality dimensions, trust and reputation, which are the key factors in our point of view. These factors can lead the organization in getting high level of patient satisfaction.

1.3 Research question

How do 5Q model of the service quality, trust and reputation affect patient satisfaction?

To answer the above question, we studied how health care service quality dimensions, trust and reputation can affect patient satisfaction. We will be able to investigate the effect by quantitative method. This study will lead us to understand how 5Q model of service quality, trust and reputation affect patient satisfaction.

1.4 Delimitations

Having a broad nature of this area of study, we could not access all the literature concerning patient satisfaction because it will be voluminous. Thus, we become limited within the literature around the effect of 5Q model of the service quality, trust and reputation on patient satisfaction. Generally, we are evaluating how patients perceive 5Q model of the service quality in concerned organizations. This study is limited to Umeå because our sample will be drawn from those living in Umeå and do have experience of visiting this hospital. In fact, our selected area deals with employees and patients but we will focus from patient perspective only that how they consume service quality dimensions, trust and reputation from health care organizations. Health care service quality can be best evaluated from health care service sector and at the same time, trust and reputation are important factors in health care services sector. That is the reason that 5Q model of the service quality in service sector combine with trust and reputation especially in health care services is more appealing for our selection from patient perspective in our study.

1.5 Structure of the thesis

Chapter one presents the introduction, the next chapter i.e. two will present existing literature and theoretical framework about the effect of 5Q model of service quality, reputation and trust. The following chapter will be the methodology of the research, where the research design and research methods will be explained. Then the empirical findings and analysis will come in chapter four. Thesis will end up with chapter five where we will present conclusion and future suggestion of our study.

CHAPTER 2: LITERATURE REVIEW AND THEORITICAL FRAMEWORK

The aim of this section is to present literature and conclude with conceptual framework. The chapter begins with a review of definitions and some measurements of customer/patient satisfaction. Then we will illustrate the factors of 5Q model of service quality, trust and reputation, which affect patient satisfaction. Then the study leads us to the conceptual framework, where formulation of hypothesis and conceptual model of the study will end up the chapter.

2.1 Customer and patient satisfaction

Whenever either the customer is pleased with the product or the service then it is considered as satisfaction. Satisfaction may be a person's feelings of happiness or disappointment in result for comparing a product/service perceived performance or outcome with its expectation (Kotler & Keller, 2009, p. 789). Satisfaction can be derived as happiness achieved from the consumption of goods or services offered by a person or group of people or it may be state of being happy with the situation. Sometimes it becomes very difficult to satisfy everyone or determine satisfaction among group of individuals because mostly people have different perceptions and expectations. Satisfaction is similar to the other psychological words that are easy to understand but difficult to explain. The idea of satisfaction is similar to the themes such as happiness, contentment and good quality of life. Satisfaction is not the phenomenon waiting to be measured by people but is a judgment of people from over a period of time as they reflect from their experience (Irish society for quality and safety in health care, 2003, p. 10).

“A simple and practical definition of satisfaction would be the degree to which desired goals have been achieved” (Irish society for quality and safety in health care, 2003, p.10). Satisfaction can be said as a positive response of individuals to a specific focus (consumer experience) that is determined at a particular time (Shemwell et al., 1998, p. 158-165).

For evaluating and making improvement in quality of health care, it is required to investigate the quality of care in the context of health care. Patient satisfaction is the substantial indicator in the health care. For this purpose, quality of work includes investigation that map out the patient satisfaction with several factors (Johansson et al., 2002, p. 337-338). Patient satisfaction is used as performance of measurement by different hospitals, principally on instrumental grounds such as adhering to treatment, recommendations and maintaining continuity of care (Thom et al., 2004, p. 127)

Different professionals influence patient satisfaction. Health care practices are considered as the key factor in patient assessment of their satisfaction. The patient satisfaction assessment is important not only for patient but also for the health care organization as well (Johansson et al., 2002, p. 337-338).

Patient satisfaction is fundamentally a subjective judgment that results from the appraisal of health care experience and involving the explicit and implicit comparison of the actual events with the expectation of the individuals. Patient satisfaction shows the degree to which the individual's actual experience matches with the preferences regarding their experience. Patient satisfaction is not only the judgment at the end of the

care but also essential for the initial treatment decision for future (Brenan, 1995, p. 250-252). As from the literature, we found that there is no exact definition of patient satisfaction because it depends on several factors. The main problem is that some patients are satisfied with one factor while the others are not. However Linder-Pelz (1982, p. 580) suggest the definition of patient satisfaction through content analysis of the satisfaction studies in which five psychological variables were proposed to be probable determinant of satisfaction in health care services.

- Occurrence: The outcomes of a result take place and importance of the individual perceiving what has been occurred.
- Value: Judgment of the quality perceived as good or bad or features of health care encounter is consider by the customer as “value”.
- Expectation: Patients belief that certain attributes might be attached to an object and judging importance of those attributes are the building blocks of satisfaction.
- Interpersonal comparisons: Evaluating of the individual experience of current health care encounter with what he/she has experienced previously.
- Entitlement: The individual thinking that he has a solid and sound basis for claiming of particular result.

By evaluating these attributes the patient satisfaction definition becomes “the individual positive evaluation of distinct dimensions of health care” (Linder - Pelz, 1982, p. 580).

2.2 Service quality

Customer reaches the organization and benefit at the same time through services. Service can be defined in many ways depending on which area the term is being used. Kotler & Keller (2009, p. 789) defines service as “any intangible act or performance that one party offers to another that does not result in the ownership of anything”. Service can also be defined as an intangible offer by one party to another with mutual consideration for pleasure.

Consumers mostly attracted towards a service by focusing on quality (Solomon, 2009, p. 413). Another definition of quality is the total features and characteristics of a product or services that bear on its ability to satisfy stated or implied needs (Kotler et al., 2002, p. 831). It is clear that quality is also related to the value of an offer, which could evoke satisfaction or dissatisfaction on the user’s part.

“A simple definition of quality in health care is the art of doing the right thing, at the right time, in the right way, for the right person – and having the best possible results” (Zineldin, 2006, p. 66). Recently, among health care researchers the greatest consensus has been achieved on the definition provided by Institute of Medicine (IOM): “quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” (Lohr, 1990, p. 21).

According to Parasuraman et al. (1988, p. 16-17) service quality is “the differences between customer expectations and perceptions of service”. Measuring service quality to identify the difference between perceived and expected service is a valid way and enable the management to find gaps to what they offer as services.

Organizations are now more focused on quality services and the aim is to satisfy customers. In order to know whether customer “will” is fulfilled or satisfied, organizations need to measure the service quality, a better way to understand service quality in the context of customer satisfaction. A researcher listed in his study: “three components/dimensions of service quality, called the 3 “Ps” of service quality” (Haywood, 1988, p. 19-29). The author explains in the study, service quality is comprised of three elements (Physical process, people’s behavior, professional judgment):

- The overall technical facilities, process and procedures of an organization;
- Staff behavior and responses towards their serving and;
- Staff efforts and professional judgments to improve quality of service (Haywood, 1988, p. 19-29).

Haywood (1988, p. 9-29) states, “an appropriate, carefully balanced mix of these three elements must be achieved.” What constitutes an appropriate mix is determined by the relative degrees of service process customization, labour intensity, contact and interaction between the customer and the service process. However, this idea of the author could be evaluating service quality from the employee perspective.

Researchers measure the service quality dimensions by using SERQUAL model that is the most popular and strong tool, also called gap model. SERQUAL model is created by Parasuraman et al. (1985) for the very first time and there were 97 attributes put into ten dimensions (Parasuraman et al., 1985, p. 46). Through these dimensions, one can measure the customer satisfaction level regarding the quality of service of an organization. The findings became more interesting because of further investigation and concluded that, among these 10 dimensions, some were correlated. After some refinement, ten dimensions were later reduced to five dimensions (Laroche et al., 2004, p. 363):

- **Tangibility:** This dimension consist of physical facilities, equipment, and appearance of personnel of an organization
- **Reliability:** This dimension deals with the ability to perform the promised service dependably and accurately by the organization
- **Responsiveness:** This dimension focuses on the willingness to help customers and provide prompt service
- **Assurance:** This dimension explains how knowledge and courtesy of employees and their ability to inspire trust and confidence
- **Empathy:** This dimension defines how much of an individualized attention the firm provides to its customers

From the above five dimensions perspective the aggregated sum of difference between perceptions and expectations global perceive quality construct is formed (Laroche et al., 2004, p. 363). By these dimensions, quality of service can be improved and the customer satisfaction level can be increased.

Service environment in the health-care industry is determined by not only technology and new facility support, but also the performance of employees in the organization. “Various methods and tools are used by medical administrators, researchers, and health-care policy makers in an effort to find a better way to provide high quality of the

service” (Lee et al., 2011, p. 20). Health care organizations need to emphasize on every single aspect/dimension of service quality and not only on technology, facilities and support.

Health care organizations are now competing with each other especially in the patient satisfaction area. Patients can be satisfied through various combinations of responsiveness to the patient’s views and needs, and continuous improvement of the healthcare services and in overall doctor-patients relationship. Health care providers are now more concerned with the patient satisfaction, as it is an important topic to understand and value by the patients. So in order to know how the patients perceive the quality of care and to know where, when and how service improvement can be made (Zineldin 2006, p. 61). Health care providers are now more interested to know what factors/dimensions can more affect the service quality, because of the high competition, extensive literature and pressure from the patients.

In the past, only few studies have been conducted in health care sector to investigate the link between technical and functional quality dimensions and the level of patient’s satisfaction. Mostly the studies only focus on few aspects of health care quality of service but none of the studies has empirically examined how the atmosphere, interaction and infrastructure might affect the overall patient’s quality perception and satisfaction. Patient satisfaction is a cumulative combination of different constructs, summing satisfaction with various facets of the health care organization (hospital), such as technical, functional, infrastructure, interaction and atmosphere variables or items (Zineldin, 2006, p. 61). Patient satisfaction regarding service quality is always dependent on different factors/dimensions and with the passage of time the factors/dimensions are explored by different researchers.

Zineldin (2006, p. 69) expanded technical-functional and SERVQUAL quality models into framework of five quality dimensions, consist of quality of Object, quality of Process, quality of Infrastructure, quality of Interaction and quality of Atmosphere. This model is now considered an effective model for health care providers in order to evaluate patient’s satisfaction.

5Qs model: The health care service quality is not only affected by the technical and functional activities of the organizations but some other factors the researchers have ignored, play an important role such as interaction, infrastructure and atmosphere. Zineldin (2000a) expanded technical-functional and SERVQUAL quality models into framework of five quality dimensions (5Qs): (Zineldin 2006, p. 69). Zineldin designed and developed a comprehensive model regarding patient satisfaction from health care providers, also called the 5Q model.

Q1. Quality of object – The technical quality (what customer receives), for example, relates to the clinical procedures carried out and it focuses on the technical accuracy of medical diagnosis and procedures. This dimension of service quality measures the treatment itself; the main reason of why a patient is visiting a hospital in the context of his very basic need and want.

Q2. Quality of processes – This dimension deals with the functional quality that how the health care organization provides the core service (the technical). This dimension measures how well activities of the health care are implemented practically. It includes

waiting times by the patients and speed of performing the health care activities by the staff. Sensitive issues are attached to the health care industry so process indicators should receive more attention. These indicators can be used to identify problems in service delivery and to suggest specific solutions. Front-line nurses/physicians/managers can use process indicators to supervise/monitor activity at their facilities and to improve day-to-day decision-making.

Q3. Quality of infrastructure – This dimension of service quality measures the essential and basic resources that are needed to perform the health care services. This includes many attributes such as the quality of the internal competence and skills, know-how, experience, motivation, attitudes, technology, internal relationships, internal resources and activities and most important how these activities are managed, co-operated and co-ordinated. Researchers found that technology infrastructure can play a vital role in patient satisfaction and it has become a revolutionary key factor practicing in health care organization.

Q4. Quality of interaction – communication/interaction among the people is always difficult to deal with. It is not communication/interaction among the machines, accounting systems or trading agreements, which can do it effectively with each other in order to exchange values. This dimension of service quality measures the quality of information exchange (e.g., the percentage of patients who are informed when to return for a check-up, amount of time spent by physicians or nurses to understand the patient’s needs, etc.), and social exchange, etc. Perceived quality of interaction and communication reflects a patient’s level of overall satisfaction.

Q5. Quality of atmosphere – This dimension is concerned with the relationship and interaction process between the two parties is influenced by the quality of the atmosphere in a specific environment where they cooperate and operate. The atmosphere indicators should be considered very critical and important because of the belief that lack of frankly and friendly atmosphere explains poor quality of care (Zineldin 2006, p 69-71).

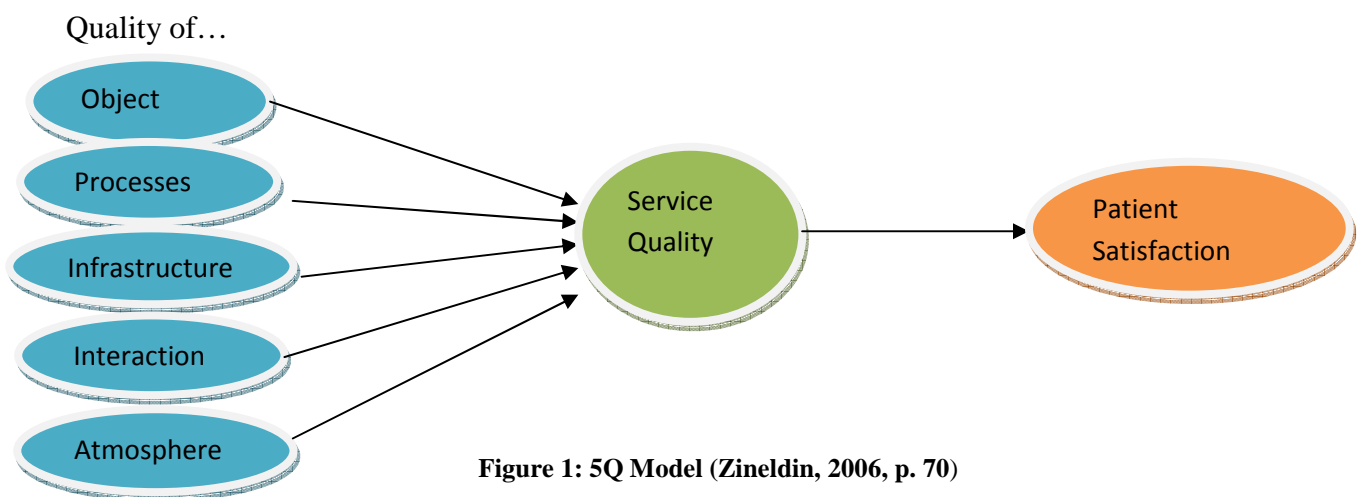


Figure 1: 5Q Model (Zineldin, 2006, p. 70)

Above figure illustrates the 5Qs model and its constructs, where the service quality of the health care is function of Q1-Q5. The model consists of 5 dimensions of the service quality, all together 5 dimensions result in health care service quality which can affect

the level of patient satisfaction (Zineldin, 2006, p. 70-72). According to Zineldin, all the dimensions are functions of service quality, which leads the patient to satisfaction.

2.3 Trust

Generally, trust in the society can be viewed as the source of minimizing the complexity and means of coping with the freedom of others, trust is the feature of all social relationship and indicates some form of expectation about the future (Jones, 2002, p. 225). while trust can be also defined as depending on the characteristics of object, or the occurrence of an event, or the behavior of a person to organize the desired but uncertain objectives in a risky situation (Giffin, 1967, p. 106).

According to Mayer et al, (1995, p. 712) trust is when one party willingly puts itself vulnerable to the other party and first one expect that the other party will do better in his favor, irrespective of the ability to monitor or control the other party.

Some researchers tried to define trust as, it is essential for effective interpersonal relations and community living (Mechanic & Meyer, 2000, p. 657). Trust is the reliable source among people living in a society, as Thom et al. (2004, p. 124-127) stated that trust is the acceptance in risky circumstances in which the trusters believe that the trustee will act in the best interest of truster. This kind of definition is supported by Hall et al. (2001, p. 615) perceiving the hope in vulnerable situation by the trusters that trustee will care for the trusters interest. Mechanic & Meyer (2000, p. 660) defines that trust allows accepting vulnerability or the belief that the other has one best interest at hearts.

Hall et al (2001, p. 616) further explored that trust cannot be separated from the vulnerability because in the absence of vulnerability there is no need of trust. The greater the situation of risk the greater will be the possibilities of trust or distrust. Trust can be also defined as to create the vulnerability as in the friendly relationship but vulnerability is prime and necessary in medicine, so it is important to think of trust in vulnerable conditions. Trust builds from the patients needs for physicians where greater the sense of vulnerability the higher will be potential for trust.

Davies & Randall (2000, p. 612) differentiates between trust and faith that the nature of trust is different from dependency and faith. Trust develops between two parties under several conditions. First there must be some interdependency between them that is the action of one must have impact on the others. Secondly, there must be some choices selected by any party and thirdly, there must be some uncertainty or risk attached to these choices. In such a situation, one or both parties can place trust on each other and choose that other party will act in the best interest of them. The word choice has important role in trust because it gives way to risk and with this trust has dependency. However, the ones trust on another must be based on experience and knowledge of the other party that it has the competences and willingness to act on behalf of him. Trust without such experience and knowledge may regard as faith or hope.

According to Hall et al. (2001, p. 620-624) trust by nature has different types and objects of multiple dimensions in which some of them focus on particular act or obligations while others stress personal attributes or characteristics. Instead of having these kinds of different conceptual schemes, it consists of some common dimensions that are fidelity, competence, honesty, confidentiality and global trust.

Fidelity: Fidelity is, pursuing in the best interest of patients and avoiding the advantage of patient's vulnerability. It can be expressed by agency or loyalty, which consists of caring, respect, advocacy and prevents the conflict of interest. Caring and respect are the important elements, which are directly related to perception of motivation. Advocacy requires actions or we can say maintaining a positive thinking. For minimizing the conflict between the patients and physicians is considering the interest of the patient instead of other competitors.

Competence: Competence means minimizing the mistakes and creating better achievable results. Mistakes may be cognitive which errors in judgments are while it may be technical which errors in executions are. Normally the patient faces difficulty in differentiating the technical competence so their views of competence are inclined by the physician interpersonal competence (communication skills and bedside manner). Conceptually and empirically it is valued to differentiate between the measure of trust and predictors of trust which is ultimately known as what trust is and what influence trust. However, communication includes eye contact, which is not effective in the caring directly because it does not make any correct sense that physician has good eye contact while it may also give way to misunderstanding. Alternative to this communication has great importance in perceiving their physicians skills, care and other personal characteristics.

Honesty: This dimensions suggest of telling the truth and minimize the intentionally falsehood. Dishonesty concludes telling a lie, half-truth and deceiving by silence. Dishonesty can be classified according to whom take advantage from this: (1) the physician who is unable to accept the mistake, (2) the patients who are expecting false hope and (3) is the institution, which covers the process, criteria for making the important decisions. Some of dishonesty includes the misleading of patient from the risk of treatment by encouraging them for beneficial treatment or discouraging from the expensive treatment. However, honesty sometimes lowers the trust in other dimensions which directly make the overall trust uncertain.

Confidentiality: Confidentiality promotes the proper use of responsive and secret information. This information is not use as secrecy but aim is to make useful for the proper treatment of patient. The main sources of leaking this information are physicians, medical personal and those who keep the medical records. The disclosing of information can be harmful as economically and personally while inappropriate or disrespectful information exchange among medical personal are the source of leaking information.

Global trust: Global trust has ability of concerning strong connection with several other areas but does not fit exclusively in one. Global trust has important role in the component of trust, which is irreducible or we can say the "soul of trust" (Hall et al., 2001, p. 620-624).

Mechanic & Meyer (2000, p. 661) further explains "Trust means compassion: it means listening and really hearing, it is just dedications". Trust means perceiving confidence in a person that will do the right thing in best interest of patients, perceiving the physicians is well trained and having experience worked on this type of medical problem, very well know how the latest technology and latest research, and treat all the patient in the same manner. Trust means that you would trust a person with your own well-being and in your absence that person is able to control the situation and you have a trust that the person will do the best in your interests.

Trust creates the environment in which patient discloses and cooperates in treatment, making easier to adjust unhealthy behavior as well as minimize the chance of complaints, disputes and lawsuits. Trust and openness of communication not only increases the human sensibilities of both patient and doctors, however increases the quality of interactions as well. For important personal relationship trust is the investment for the continuing possibilities of human learning and growth (Mechanic, 1998, p. 286-287). However, trust in medical profession is said to be exclusively related to the patient's desires of seeking care in terms of control by physicians in making medical decisions (Balkrishnan et al., 2003, p. 1061)

Trust can be a defining characteristic of the relationship between patients with their physicians and other care providers. Trust in the physicians is one of the strongest predictors of patient decision for enrolling in their treatment of any diseases. Mostly the patient trust is linked to proposed or reported patients devotion to treatment recommendations (Thom et al., 2004, p. 124-127).

Interpersonal physicians trust is based on patient personal experience and physicians characteristics (Balkrishnan et al., 2003, p. 1061). Factors in trust through which interpersonal trust increases among patients and physicians are, greater perception of mutual interest, clear communication, history of having fulfilled trust, low perception of power difference among the person being trusted, accepting the personal disclosure and expectation of the long term relationship (Johnson & Noonan, 1972, p. 411-412).

“Trust is a lubricant that enables relationship to functions smoothly, a glue that binds people in mutually rewarding relationship and a stimulant that allows greater creativity, innovations and performance” (Davies & Rundall, 2000, p. 612). Creating and maintaining trust is very difficult task because it needs repeated interactions and reliable experience. There is contradiction between trust and distrust, trust take long time to build but it can be destroyed easily and once it has been lost it become very difficult to rebuild it.

2.4 Reputation

Herbig & Milewicz (1993, p. 18) explains corporate reputation is trust that the corporate creates by keeping its promises in a decided manner. Consumers understand the importance of reputation and credibility. Whether to believe the product claims made by a manufacturer's advertising, credit check/verification for a new account, or whether to believe delivery dates or claims made by a vendor can be the examples from daily life usually we face. The estimated consistency of an attribute of entity overtime is called reputation. This estimation is based on the willingness and ability of the entity to perform an activity repeatedly in a similar fashion. An attribute is some specific part of the entity — price, quality and marketing skills.

Aggregate composite of a historical notion of the entity, all previous transactions over the life of the entity, and requires consistency of an entity's actions over a prolonged time, cumulatively all together can be consider as a reputation. Reputation is established by the exchange of information from one user to another. Therefore, it is necessary that transactions between the entity and other parties must have occurred in order to establish a reputation and to value the transaction. Mostly reputation develops when entities are unsure or unaware about one another's options or motives and where they deal with each other repeatedly in related circumstances or past dealings observable with other firms (Herbig & Milewicz, 1993, p. 18-19). Past performance always matters

while dealing with customers; firms profile is observable in terms of services, quality, information and word of mouth continuously by the customers.

Herbig & Milewicz (1993, p. 18-20) argued that reputation is a precious and valuable commodity, it takes time to build and need continuous improvement to maintain. If a firm provides accurate information to the customers, instead of making a user duping although firms made a short term loss but it can enhance its reputation by providing accurate information, which is a long term gain. Therefore, the company takes short-term losses to build reputation and secure larger long-term gains. It is also fragile because the impact of a bad action on the customer is much stronger than that of a good action. Repeated positive transactions of a firm lead the firm to a positive reputation (for example, for quality or on-time delivery) and the same if a firm repeated negative transactions lead it to the negative reputation (poor quality or tardy deliveries).

Any organization achieves a good overall reputation and owns a valuable asset – “goodwill”: brand names, corporate logos and customer loyalty. However, it should be kept in mind that reputation is fragile and sensitive. It can be lost easily and once it is lost, it takes much time and effort to build it again. In order to restore reputation organization requires seven to ten times’ more efforts as compared to before it was lost. Organizations with vision to build and maintain a long term reputation they need to deliver the promised quality of the good/service (so as not to make worthless its prior investment or to incur the new cost of regaining it). The cost of establishing a reputation and the cost of maintaining this reputation is an investment the firm recoups through charging or receiving a premium (Herbig & Milewicz, 1993, p. 21). Reputation is a long-term process to build and once establishes, it needs more attention to maintain it.

Bromley (2002, p. 36) define reputation as the collective assessment of a firm past behavior and outcomes that deliver the firm’s ability to render valued results to customers. Reputation thus reflects the relative standing/position, internally with the employees and externally with the different stockholders. Every organization, especially health care providers should consider reputation as vital as Hibbard et al. (2005, p. 1150) argued that if a hospital reputation is affected due to some attributes then it might declines its market share via patient choice, purchase choice, or physician referral. Also declining reputation may bring other challenges to the organization such as recruiting and retaining staff and at the same time affect a hospital ability to maintain legitimacy and professional standing.

Organizations have different and various reasons to be concerned about their reputations. It is very clear that the most motivating factor is a professional pride, but change in reputation of health care organizations can influence financial and overall performance. Negative reputation could affect hospital’s ability to raise funds, charitable donations that are important sources of income for not-for-profit health care organizations and for the public health care organizations. Moreover, it is difficult to obtain budgets from the state in case of negative reputation (Hibbard et al., 2005, p. 1159).

Reputation in the health care organizations is affected by experience – stakeholders with more experience probably know the organization better and can thus evaluate it more accurately. That is why researchers suggest that health care organizations need to

enhance the quality of the care delivered to patients and effectively perform to the communities in which they operate (Bourke, 2009, p. 39-40).

Since the service is human health, how the reputation perceived is important. In parallel to this, since the patients get treatment at health care organizations towards their preferences, it is important to measure the reputation depending on customer/patients perceptions (Satir, 2006, p. 57-58). According to Herbig & Milewicz (1993), an organization's reputation is consisting of trust that the organizations establishes it by keeping its promises and fulfill it in time, Satir (2006) illustrates the following dimensions to affect customers/patients perceptions of corporate reputation, service quality and, communication. Research by Power (2005, p. 1-2) states the importance of a positive reputation to a hospital, as patients now have more choices in the health care providers they can choose. Because of this, hospitals need to continue to enhance the clinical and experimental quality of the patient care and effectively communicates their performance in the communities they serve.

2.5 Conceptual framework

This section will summarize the ideas that we got from past literature and to bring out our contribution for this study. The general idea from the past literature is that there is a relationship between customer/patient satisfaction and service quality dimensions that can affect each other. Service quality could be evaluated with the use of service quality dimensions and the most useful regarding health care services is 5Q model, because this model describes almost all factors of health care service quality which covers overall patient satisfaction.

Since customer (patient in our case), (dis)satisfaction has been considered to be based on the customer's past experience on a particular service encounter (Cronin & Taylor, 1992, p. 57). It is in line with the fact that service quality is a determinant of customer satisfaction, because service quality comes from outcome of the services from the service providers organizations. Lewis (1993, p. 4) states that "definitions of consumer satisfaction relate to a specific transaction (the difference between predicted service and perceived service) in contrast with 'attitudes', which are more enduring and less situational-oriented."

Patient satisfaction is the key factor that brings competition among the health care organizations. Patients' satisfaction is created through a combination of responsiveness to the patient's views, needs, and continuous improvement of the healthcare services, as well as continuous improvement of the overall doctor-patients relationship (Zineldin, 2006, p. 61). Patient satisfaction is concerned with the different factors of the service quality of the health care organization.

It is illustrated that service quality is the overall assessment of a service by the customers/patients, (Eshghi et al., 2008, p. 121). Also, the five dimension of the SERVQUAL model has been used by most of the researchers in the evaluation of service quality (Wilson et al., 2008, p. 79; Bennett & Barkensjo, 2005, p. 101, Negi, 2009; Wang & Hing-Po, 2002). After that, Zineldin (2006) implemented 5Q model of the service quality to evaluate and measure the satisfaction level of patient.

Most of the published academic studies in the services sector have looked only at the link between services quality and satisfaction (e.g. Kelley & Davis, 1994; Parasuraman

et al., 1994; Bettencourt, 1997; Zineldin, 2000a). Fewer studies have been conducted to “investigate the link between technical and functional quality dimensions and the level of patient’s satisfaction in the healthcare sector and at the same time no research has been done to empirically examined how the atmosphere, interaction and infrastructure might impact the overall patient’s quality perception and satisfaction” (Zineldin, 2006, p. 61). From the above discussion, we understand that previous researchers found relationship between service quality dimensions and satisfaction, to measure the phenomena they use SERQUAL model. Here, we will use 5Q model of the service quality in order to measure satisfaction level of the patients and we will investigate that does every dimension of the 5Q model of the service quality effect patient satisfaction. Therefore, this leads to state our first hypothesis.

H1a: Quality of object has a positive effect on patient satisfaction.

H1b: Quality of process has a positive effect on patient satisfaction.

H1c: Quality of infrastructure has a positive effect on patient satisfaction.

H1d: Quality of interaction has a positive effect on patient satisfaction.

H1e: Quality of atmosphere has a positive effect on patient satisfaction.

The central importance of trust in medical relationships has long been recognized (Mechanic 1996; Pellegrino, Veatch, & Langan, 1991; Parsons, 1951; Peabody, 1927), still, trust has not been systematically analyzed or measured (Pearson & Raeke, 2000). First time trust measured in 1990 (Anderson & Dedrick, 1990) and later modified by (Thom et al., 1999), and further two measures were published in the late 1990s (Safran et al., 1998; Zaslavski et al., 1998). As a result of these instruments and measures, there is growing need to study trust empirically and a burgeoning body of work measuring various aspects of trust.

Caterinicchio (1979) published a literature on measured patient trust in their physician. In addition to its intrinsic value, there is increasing evidence that patient trust is linked to intend or report patient adherence to treatment recommendations. A study by Thom et al. (1999) high ratio of patients recommended their physician and act on the physician suggested prescription. This study was regarding trust in physician and patient positive recommendation towards their physician.

Satisfaction is achieved through the delivered product and services are empirically documented as the decisions of buyers to maintain a relationship with that organization (Fornell 1992, p.12). According to confirmation/disconfirmation theory, satisfaction is achieved when the expectation becomes fulfilled (confirmed) while the disconfirmation of expectation results in the dissatisfactions, and a confirmation results in improved satisfaction (Churchill & Surprenant, 1982, p. 492-499; Oliver 1980, p. 461-465). When a customer is satisfied with supplies which means that the suppliers is able to deliver the required expectation of customer, and thus the perceived risk related to the choosing of familiar suppliers (who fulfill expectation) result in less risk as compare to choosing the unfamiliar suppliers, which affect the level of trust.

Hall et al. (2002, p. 296-314) stated that conceptually trust is related to satisfaction. In the field of medical physician, trust has strong association with satisfaction by having choice of selecting the physician by the patients, willingness to recommend the physician to others. The relationship between the patient and health care provider has great significance in the medical policy arena. Previously, measures of these relationships focused primarily on satisfaction and communication. The literature

regarding trust and satisfaction is fewer but from the above discussed literature where trust is measured with certain attributes with respect to satisfaction, we got idea that patient's satisfaction can be effected by the trust in physician and in health care organization. We took attributes of trust from Thom et al. (1999) study because that attributes are related to patient satisfaction. For this, we will conduct a quantitative survey and test the phenomenon, which would state the second hypothesis.

H 2: Trust has a positive effect on patient satisfaction

Reputation is also important because “it is a key source of distinctiveness that produces support for the company and differentiates it from rivals” (Fombrun & van Riel, 2004, p. 5). A number of studies have examined the expected benefits associated with a strong reputation, such as increased financial performance (Roberts & Dowling, 2002), increased advertising effectiveness (Goldberg & Hartwick, 1990), ability to charge a premium (Klein & Leffler, 1981; Milgrom & Roberts, 1986), improved employee recruitment (Stigler, 1962), easier product introduction (Dowling, 2001), increased access to capital markets (Betty & Ritter, 1986), and increased sales force effectiveness (Dowling, 2001).

Literature published on reputation especially during the 1990s and it has been increased in 2001–2003. It is clear that reputation is important. Fombrun et al. (2000) used a reputation quotient in their study to measure reputation. The reputation quotient assesses how a representative group of stakeholders perceives six underlying dimensions of reputation: emotional appeal, products and services, financial performance, vision and leadership, workplace environment, and social responsibility. A good reputation benefits the organizations in many ways the most important is the satisfaction through which organizations gain customer loyalty, premium prices and a cushion of goodwill when crises hits. Organizations can build its reputation through increased customer satisfaction (Bourke, 2009, p. 28-33).

If an organization fulfills and helps the customer's personal goals then satisfaction follows, this will lead to greater positive identification with the organization. Satisfaction depends on the organization “contributing suitably to the attainment of one's personal objectives” (Bullock, 1952, p. 7), individuals will identify with the institution if that institution helps them to attain their personal goals and if they are satisfied with the institution's offerings (Hong & Yang, 2009, p. 387). If a customer goals and utilities are fulfilled by the organization offerings then the customer will be satisfied and the organization will get reputation in response. This shows that satisfaction has something to do with reputation as we got idea from the above literature. This discussion leads us to state our third hypothesis.

H3: Reputation has a positive effect on patient satisfaction.

Based on above reviewed literature and hypothesis development we are now able to design a conceptual model. As 5Q model is rarely applied before in health sector area to measure patient satisfaction regarding service quality but it is still unexplored with the combination of trust and reputation and its effects on patient satisfaction. From the discussed literature, idea generates that raises an assumption that each of the five dimensions of the 5Q model could directly affect the patient satisfaction see (Figure 2). In our conceptual framework model, satisfaction is dependent variable while 5Q model

of the service quality, trust and reputation are independent variables. The three variables (5Q model of the service quality, trust and reputation) will be investigated later that how it effects patient satisfaction.

Service Quality.....

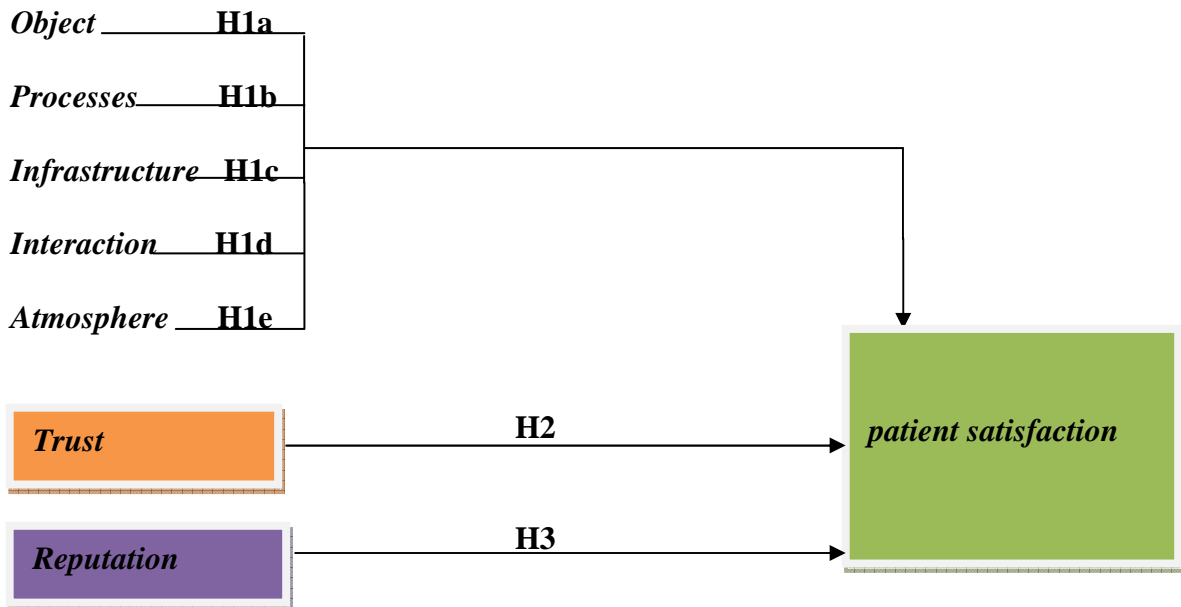


Figure 2: Conceptual framework model

(—————> Indicates positive effect and ————— means equal to)

We need to conduct survey from the patient whether they are satisfied with 5Q model of the services quality, trust and reputation. We will measure service quality dimensions (5Q model), trust and reputation then a conclusion can be drawn that the mentioned factors have a positive effect on patient satisfaction.

CHAPTER 3: METHODOLOGY

This section is about to explain methods used in carrying out this research, how the research was designed and reasons for the choices. Thus the chapter begins with the thesis preconceptions and choice of the study. The research philosophies follow, research approach, chosen research strategy and research design. The chapter also presents survey design, data collection, limitations of the survey and analysis of the data. The chapter ends with the quality criteria and ethical consideration of the data.

3.1 Authors' preconceptions

Our study has some roots from where we begin and generate the topic. We used both practical and theoretical knowledge in order to generate the research topic. To consider this area is quite obvious and appealing being students of business management as well as customers. We are interested in satisfaction and service sector due to high emergence and influence in the service sector.

We chose the topic "Patient's satisfaction regarding hospital services" because as a customer of a hospital, our selection of health care providers, decisions and repeat usage of the same service, shows our satisfaction level. Recommendation depends on high level of satisfaction we derive from the service or products we consumed from a specific organization. Usually we compare quality of a product or service with price before we decide to consume the offer. In case of health care, mostly customers focus on quality. Being a patient we consider quality, trust and reputation altogether are the main determinants of satisfaction.

Before this study, we got theoretical background knowledge from some courses which are already studied such as; principles of marketing, marketing management and economics that we studied back in our country at Peshawar University. We also studied some other courses that are supportive for this research like Project management, business strategy, product planning & development and business development as part of the program at Umeå School of Business. Moreover, we also got some literature background knowledge from past studies by other researchers on same topic and area of research.

The preconception had helped us to develop the idea of this topic and it gave us some background that how a patient could derive satisfaction from health care providers. Both the practical experience of consuming hospital services and theoretical background was important because this helped us to place our interest on testing the reality, that how a patient is satisfied and what is the basis for his selection. Hence, we carried out a quantitative study for this topic.

3.2 Choice of study

Hospitals provide the health services to the citizens in their daily life. This shows the importance of hospitals and their role in providing better health care services to the nation. Hospitals have undergone many changes in technology as well as in terms of needs and demands of patients. Patient's needs changes constantly however; hospitals identify these needs and bring changes accordingly to satisfy patients. It is important to measure health care service quality and find out how patients perceive each item that need to be improved in case they are dissatisfied with it. For this purpose our selected

model of 5Q of the service quality consists of quality of process, quality of object, quality of infrastructure, quality of interaction and quality of atmosphere combine with trust and reputation.

We reviewed the literature, the applicability of 5Q model of the service quality, trust and reputation in various sectors and identify the relevant sector i.e. health care service providers. We have developed a conceptual framework of 5Q model of the service quality by adding two other factors i.e. trust and reputation to evaluate the gap between the patient satisfaction and perception of services. Therefore, to better understand we discussed the related concept such as 5Q model of the service quality, trust and reputation and their effects on patient satisfaction. The reasons for choosing this topic is due to fact that, today mostly hospitals concentrate on providing additional services to make their patients satisfied to maintain a long term relationship. Thus, we thought it would be better to view health care service quality dimensions (5Q model) as well as trust and reputation with respect to patient satisfaction.

The choice of this subject is because that we are students of management, had studied the subject of management and marketing in our bachelor degree. We are familiar with the theories from the previous studies that are related to the service quality dimensions, trust and reputation and how it can effect satisfaction. The idea from the studied courses will help us to well treat this study and gives some backgrounds about the customer/patient satisfaction in service sector.

3.3 Research philosophy

The philosophy adopted by any researcher in his research study is composed of certain assumptions in the way he perceived the world. The assumptions in the research philosophy will help us to design research strategy and develop method for the research (Saunders et al. 2009, p. 108).

Saunders et al. (2009, p. 110-111) stated that there are two main types of research philosophies; ontology and epistemology. The former is concerned with the nature of reality and in philosophy it refers to the subject of existence. This aspect raises the questions of the assumptions that researcher has the view the way world operates and look from the view how the commitments are held. There are two aspects of ontological philosophy, objectivism and subjectivism. The researchers consider that both contribute valid knowledge. Objectivism holds that social entities exist in reality external to social actors concerning with their existence and subjectivism explains that social phenomena is created with the perception and actions of the social actors concerning their existence. Our view of the ontological aspect is objectivism.

This research holds the objectivist aspects and the reason is that the variables, which are discussed in our research i.e. patient satisfaction, 5Q model of the service quality, trust and reputation, have tangible realities. As competition pushes organization to improve the service quality dimensions, create trust in society and if the organizations want reputation and recognition so they need to satisfy the patients, but satisfaction is a utility, vary for every individual. Patient satisfaction, 5Q model of the service quality, trust and reputation are all variables with the characteristics of an object in organizations. Thus with an objective reality, we believe that the level of satisfaction will differ in different organizations and at the same time the meaning of 5Q model of the service quality, trust and reputation will also differ with the organizations. This

means that 5Q model of the service quality, trust and reputation can effect patient satisfaction in different ways in different organizations in different circumstances.

The second aspect of the research philosophy is epistemology, this aspect states that how to generate knowledge. Epistemological considerations talk about the knowledge of social groups and social world. It is about some internal problems such as realism, interpretivism and positivism (Bryman & Bell, 2007, p. 4-26). The philosophy of the realism states that our senses show us that the reality is the truth and the reality exists is independent of the human mind. Interpretivism states that it is very important for every researcher to understand the differences between humans in our role as social actors. Our view of the study from the aspect of epistemology is positivism, which states that we can only get knowledge about reality by following a scientific method of developing hypotheses and testing (Bryman & Bell, 2003, p. 19-20; Saunders et al., 2009, p. 113-116).

We have reasons to hold the positivist view because from the practical experience and literature read before, we got general view that 5Q model of the service quality, reputation and trust has something to do with patient satisfaction, and previous research proved that there is reality in what we were thinking. We can only confirm that 5Q model of the service quality, trust and reputation can strongly effect the patient satisfaction by testing hypothesis derived from existing theories. If we do not know about the factors that can affect satisfaction then it will push us to explore the possible effects and try to generate theory. It will be a subjective study and then we have to conduct interviews from the patients about their own opinion and feelings (Saunders et al., 2009, p. 110).

Going in further explanation and elaboration of the philosophies, it is better to discuss the research paradigm. Paradigm is a way to examine social phenomena through which someone can understand and gained the phenomena, and at the end explanation can be attempted. A paradigm helps us to summarize the discussion of ontology and epistemology. Paradigm is usually used in social sciences, but it can also lead to confusion because it tends to have multiple meanings (Saunders et al, 2009, p. 118). The paradigm composed of four different types: Functionalist, interpretive, radical humanist, and radical structuralist see Table 1. For functionalist, and radical structuralist paradigms their ontological positions are objectivism while interpretive and radical humanist paradigms have subjectivist as their ontological positions (Saunders et al., 2009, p. 120 -121). This can be linked to Kent (2007, p. 49) see Table 2; Functionalist and radical structuralist paradigms represents the physicist paradigms, whereas interpretive and radical humanist paradigms represents the psychiatrist paradigm.

Table 1: Four Paradigms for the analysis of social theory (Saunders et al., 2009, p. 120)

		Radical change			
		Radical humanist	Radical structuralist		
Subjectivist	Interpretive	Functionalist	Objectivist		
		Regulation			

Our research is more related to functionalist view of the paradigm because this is the paradigm where mostly business and management research operates. Our position as a functionalist in the paradigm was because this research assumed rational human actions and believed that one can understand organizational behavior through hypothesis testing (Burrell & Morgan, 1979, p. 1-35).

Table 2: Paradigms in marketing research (Kent, 2007, p. 49)

Paradigm researcher as	Ontology	Epistemology	Perspective	Theory	Method	Technique
Physicist	Objectivist	Positivist	Researcher	Deductive	Quantitative research	Quantitative analysis
Physician	Realist	Activist	Client	Mixed	Mixed	Mixed
Psychiatrist	Subjectivist	Interpretive	Participant	Inductive	Qualitative research	Qualitative analysis

If we follow an organization research like this although it is an academic work, the researcher could be placed under a physicist category see Table 2. The reason for this position was our ontological position of objectivism and epistemological position of positivism that pushed us to a deductive approach with a quantitative research method and quantitative data analysis.

3.4 Research approach

Every researcher adopts a specific approach for his research study, which is very important step in every research. There are mainly two research approaches, inductive and deductive by looking to the research onion of Saunders et al (2009, p. 108). In inductive approach, researchers use their findings for the generation of theory. Theory is a term which can be use in different ways and in qualitative research researcher use this term about the explanation of observations. Inductive approach allows the researcher in previous literature and finds the new research question, where he comes up with the new theory after the analyzing. While deductive studies, use theory deductively and places it in the very beginning of the study. With the objective of testing or verifying a theory rather than developing it, state hypothesis and collects data to test it. Reflect on the confirmation or disconfirmation of the theory by the results (Creswell, 2009, p. 10-14) and our choice for research approach is deductive approach.

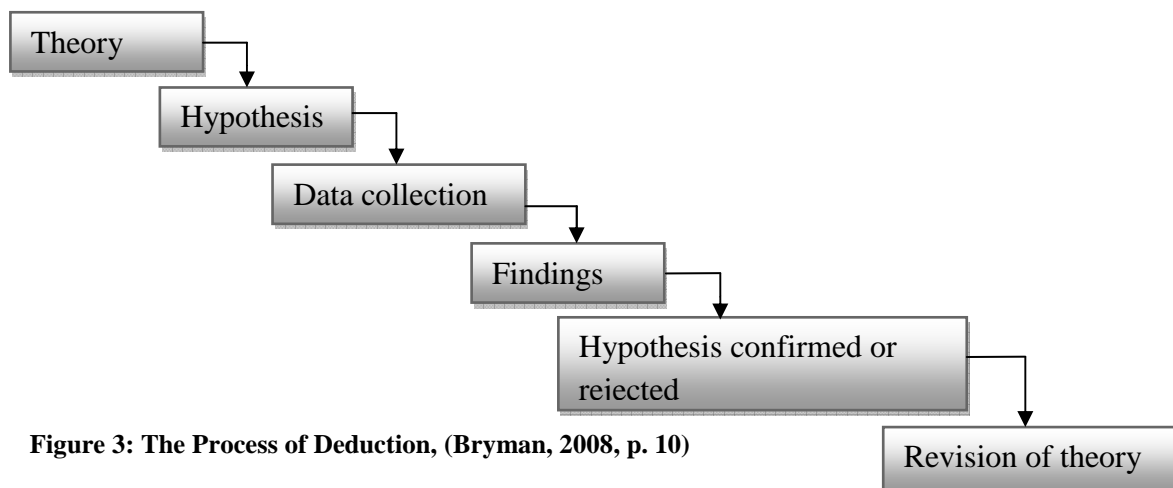


Figure 3: The Process of Deduction, (Bryman, 2008, p. 10)

Our study is related to deductive approach, because we will draw our conclusion from a thorough analysis of the theory, stated hypothesis that pushes us to collect some relevant data to our research topic. We will come up with findings, acceptance or rejection of hypothesis and in the end; we go back towards existing literature.

We formulated hypotheses based on the existed literature; we designed a method for collecting quantitative data in order to test the hypotheses. We will collect quantitative data to get findings by testing hypotheses which will be then either confirm or reject and the literature will be revise at the end.

3.5 Research strategy

Qualitative and quantitative strategies are the two main strategies used in the research for data collection. According to Saunders et al (2007, p. 145) quantitative research explores data collection techniques or data analysis procedures that results in numerical data through the medium of questionnaire, graph and statistics. On the other hand qualitative research explores a data collection technique or data analysis procedures in which researchers are able to generate and use data by conducting interviews and making observations.

This study is conducted as a quantitative research. A research that focuses primarily on the construction of the quantitative data is concerned as quantitative research (Kent, 2007, p. 10). The fact behind this method selection was our ontological position was objectivism, our epistemological position was positivism and our research approach was deductive (Bryman & Bell, 2003, p. 25). Furthermore, we collected quantitative data and our analysis method is also quantitative research. We are not developing theories but test the existing theories that enable us to use numerical data that are the characteristics of quantitative method. The research strategy can be selected on the basis of using a single data collection technique and corresponding analysis procedures, which is called mono method (Saunders et al, 2009, p. 151). While using more than one data collection technique and analysis procedures to answer the research question is called multiple methods, there are four different possibilities to use this method (Saunders et al, 2009, p. 151-152). In deductive strategy, we used mono method by using a quantitative data collection technique with using questionnaires and also quantitative data analysis procedures.

We choose this design because some research work has been done on those subjects separately that reflect our topic i.e. 5Q model of the service quality, trust, reputation and patient satisfaction. This enables us to identify and categorize the variables that make our questionnaire easy and thus we can capture all the information we need from our respondents. Our focus is Umeå hospital where we will access to the respondent and know their views and experience about service quality dimensions, trust and reputation. This type of study will make us understand to get information from the respondent in a quantitative way.

3.6 Research design

Research design is the overall arrangement of linking the theoretical research problems to relevant and realistic empirical research (Ghauri & Gronhaug, 2005, p. 56). It is also useful for researcher to make rational choices and prioritize the preferred method of collecting and analyzing research data. However Saunders et al (2007, p. 131) describe the research design as a general plan that shows how the researcher answer the research question or problem. Research time horizon is important during the research and has

influence on the process and on the stages of research work as well. There are two time horizon cross-sectional and longitudinal.

Longitudinal study is concerned with when a specific sample is repeating from more than two period of time, thus it is normally adopted in a situation where researcher is able to examine and identify proper changes occurred from the subject responses (MacNabb, 2008, p. 97).

Cross-sectional study can be defined as the study of a particular phenomenon at a particular time (Saunders et al., 2009, p. 155). Cross-sectional study is normally known as social survey and social survey is perceive in peoples image like a questionnaire that give expression of interviews, due to this cross-sectional is recommended in the survey (Bryman & Bell, 2007, p. 55). Our research is cross sectional descriptive study because we used more than one case in our research at a single point. Cross-sectional studies normally use the survey strategy, as we used in our study.

To make an appropriate research design we must know what type of research that can be conducted. According to Saunders et al (2007, p. 134) and Ghauri & Graunhaug (2005, p. 58) the research can be classified into three types i.e. exploratory, descriptive and explanatory see Figure 4.

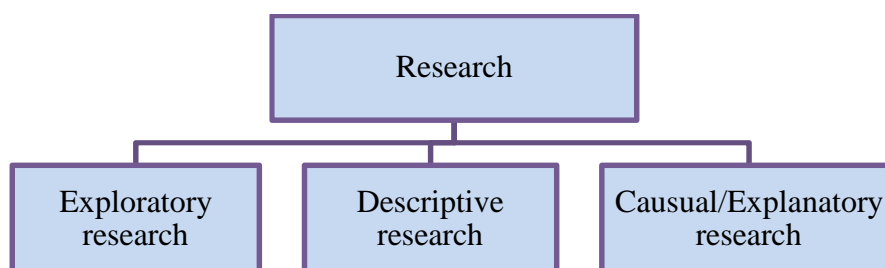


Figure 4: Types of research (Source: Ghauri & Gronhaug, 2005; Saunders et al, 2007)

According to Robson (2002 cited in Saunders et al, 2007, p. 133) exploratory study is a valuable way of finding out what new insights by asking question and assess the phenomena in a new way. This study is useful when researcher wants to clarify the problem and if he is uncertain about the nature of that problem. The way through which researcher can conduct exploratory research are by searching literature, interviewing the expert in the subjects and conducting interviews from focus group (Saunders et al, 2009, p. 140). Main advantage of this type of research is flexibility and adaptability to change but it has some limitation. Strong focus and concern are required to create observations skills, capable of getting precise and accurate data and to be competent to interpret different situation effectively.

Robson (2002, cited in Saunders et al, 2007, p. 134) defines descriptive study is aimed to develop an accurate profile of organizations, country or groups. It has importance of having clear information about the phenomena on which ones want to collect data. It may extension or the combination of a piece of exploratory or more often a piece of explanatory research. This kind of study is well defined and well structured in order to understand the accurate information about research question or problem.

Ghauri & Gronhaug (2005, p. 59) states that causal/explanatory study is to find out the research problem and explain their effects. While Saunders et al (2007, p. 134) explain that studies that establish causal relationship between variables are termed as

causal/explanatory research. Our aim is to examine the effects on patient satisfaction from 5Q model of the service quality, trust and reputation in health care sector. That is why our research question is “How do 5Q model of the service quality, trust and reputation affect patient satisfaction?” The variables in the question show some kind of link among them directly or indirectly thus we are trying to test hypothesis or relationship between variables and not just seeking new insights. We believe our study is related to this type of research.

3.7 Survey design

According to Saunders et al (2007, p. 135) there are various strategies available that can be used by the researcher in their study such as experiment, case study, survey, ethnography, grounded theory and action research. The researcher is not confine to use just one method but it depends on personal preferences and nature of the research question. For collecting primary data for this study we used one strategy i.e. survey.

Saunders et al (2009, p. 144) explain survey as a strategy which is normally linked to deductive approach. This strategy is common in business and management research and mostly used to answer the question like who, what, where, how much and how many. Survey has the benefit of collecting large amount of data from sizeable population in economical way. Survey strategy is observed to be trustworthy by people in general and comparatively easy to explain and understand.

The survey strategy is helpful in collecting quantitative data that is used to analyze quantitatively using descriptive and inferential data statistics. Survey strategy can be used for possible reason to know the particular relationship between variables and to create model for their relationship. Survey strategy gives more control over the research process in sampling; it generates the finding that is representative of the whole population at lower cost by collecting the data for the whole population. According to Bryman & Bell (2007, p. 56) survey is used for collecting quantitative data when two or more variables are involved at a particular point. To conduct a survey, we took approval from the Umeå hospital administration to distribute the questionnaire. Our survey is conducted at Umeå Hospital, this means that our sample is from patients living in Umeå.

Questionnaire: The main variables in this study are patient satisfaction, 5Q model of the service quality, trust and reputation. Previous research done on patient satisfaction related to 5Q model of the service quality, trust and reputation determines that patient satisfaction is dependent variable, while service quality dimensions, trust and reputation are independent variables. It means that 5Q model of the service quality, trust and reputation can affects the patient satisfaction.

Following the variables the questionnaire was structured to answer the question of patient satisfaction. As our intention is to test the patient satisfaction level, we prepare a questionnaire that includes questions of 5Q model of the service quality, trust and reputation. 5Q model of the service quality questions specifically in health care were taken from Zineldin (2006) “The quality of health care and patient satisfaction” and all the questions were placed the same in our questionnaire. For trust questions, we took from Hall et al (2002) “Measuring Patient trust in their primary care provider” and no changes were made to the questions.

For reputation, we took questions from Chun (1997) "Corporate reputation: meaning and measurement". In reputation section, we took selected question from the work of Chun (1997) and leave some of the questions, which are related to service quality as already taken in 5Q model of the service quality section and that would be overlapping. Again we left out questions regarding products and financial performance that are not related to our study. Furthermore, questions regarding trust were also eliminated from our questionnaire, which can overlap to trust section. Questions, which are selected in our study for reputation were modified slightly i.e. instead of "company" we wrote "Umeå hospital". For overall satisfaction from selected variables some of the related questions i.e. regarding to overall satisfaction, were taken from the De-chernatony et al (2004) "Developing a brand performance measures for financial services brands". Slight changes have been made like instead of "brand" we wrote "Umeå hospital" and for "product" we wrote "services". Some questions were self made i.e. section regarding gender, age, number of visits and nationality.

All the questions were multiple-choice and close-ended, and answers of this type of questions are easy to compare, tabulate and analyze. Closed end questions are efficient for researcher to easily analyze and quicker to administer to ask. Normally it is used in large samples and in self collection interviews. For the purpose to better understand the questionnaire due to language barrier, we translated it into Swedish with help of Swedish speaking friends before we receive feedback from patients. Academic Resource Centre in the main library (Umeå University) also helped us in proof reading of translated questionnaire to make it precise, accurate and more understandable.

Our first question was about gender and it consists two options; male and female. Then we mentioned the nationality that contains Swedish and others. Age was divided in eight categories ranging from 16 up to 85 plus and number of visits was also divided in to 4 categories ranging from first time to six time or more in the last three years. We used 5-point Likert scale 1--5 to find the response of patient. For 5Q model of the service quality the question were ranked as 1 being "very bad" and 5 being "very good". Trust and reputation were ranked from 1 being "strongly disagree" to 5 being "strongly agree". After completing these three parts, we asked the patient about their overall satisfaction regarding services quality, trust and reputation of Umeå hospital. We ranked 1 being "very dissatisfied" and 5 being "very satisfied" for service quality and trust, while for reputation 1 being "negative reputation" and 5 being "positive reputation".

3.8 Data collection

Normally the data collection contains two types primary and secondary. In this study we used both primary and secondary data collection methods.

Primary data is the source of information, which provides the original and more specific data in order to resolve the research problem. According to Saunders et al (2009, p. 256) primary data is collecting a new data specifically for a purpose. Sekaran (2003, p. 220) describe primary data as the information collected for the first time by researcher on the variables of research. Primary data can be collected through the source of doing experiment, surveys, interviews and observation.

Secondary data is collecting information from the existing source or data collected from different internal and external sources (Ghauri & Gronhog, 2005). According to Saunders et al (2009, p. 256) the data that have already been collected for some other purpose is called secondary data.

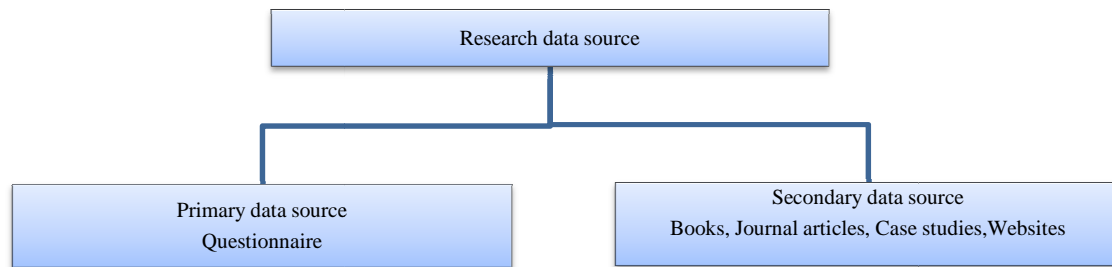


Figure 5: Primary and secondary data sources

In this study, we collected primary data by conducting surveys from the patients. The responses of patients about questions asked in survey were used as primary data to test the developed hypothesis. The reason for using primary data is due to our research based on quantitative method. The questions were made under nominal and ordinal scale, and where the respondents were hesitant to answer, we told them about the purpose of collecting the data.

The secondary data is collected through different reliable and appropriate books, journal articles, case studies and websites from database like Emerald, Business Source Premier and Umeå University database in order to effectively answer our research question. Along with this we use database PubMed from which we found out medical articles and Swedish health care system materials, which are related to our study. During collection of the secondary data our sources were books and articles, we found some complicated material as well. This is because we were studying patient satisfaction that is concern with the feelings of individuals and to relate it with service quality dimensions (5Q model), trust and reputation make it more complicated. There are large numbers of articles on patient satisfaction, so it takes time to screen out the most appropriate one for this study.

For collection of data since our respondents were from Umeå hospitals so we decided that appropriate place is the OPD (Out patient department) to administer our questionnaires. For this purpose, we contacted the hospital administration and the service manager, who helped us to select the accurate place. When conducting the survey we situated ourselves in the main entrance of hospital from where all kind of patients can be contacted. We approached patients then introduced ourselves and explained them about the survey in brief very politely. Delivering the questionnaire we were not biased, but distribute to every patient who was willing and ready to answer instantly. Least people were not willing to fill. We also distributed a very few questionnaire in the same manner to the patients of Vardcentral Äldhem and made them clear in detail that our study is regarding Umeå hospital. Before distributing questionnaire to the patients, we conducted the pivot test of about 10 questionnaires, to know how it went and allowed it for further patients. The purpose was to see how the respondent could easily answer the questions in the survey. The result shows that patients can understand it and could easily answer these questions. The survey runs for four days, we distribute 130 questionnaires and 29 found incomplete. Response rate was 77%.

3.9 Data clearing

The survey strategy has some limitations for example low response rate from respondent, some questionnaires are not completely answered and responses could be biased (Saunders et al., 2009, p. 144). As we used this method so there was risk of

getting back incomplete questionnaires. It may be due to respondent have less time or ignored to answer all the questions. One other factor is language barrier, which can affect the data; this problem is resolved by translating the questionnaire in Swedish.

Due to the problem of uncompleted questionnaires, it is always good to see how to sort out to avoid problems in analysis of uncompleted questionnaire. To handle this problem, we made it standard that 70% or above completed questionnaires will be considered. The collected responses are thoroughly checked and select only those questionnaires, which are up to the set standard and leave out the rest questionnaires.

3.10 Data analysis

It is very important for us to look at the data type that we used in our study. When using quantitative analysis, data could be classified under two types mainly numerical or categorical. Numerical data can be defined as, whose values measured or counted numerically or when the measuring scales of data are numerical values, and then they are classified under quantitative variables. Categorical data is one whose values cannot be measured but can be classified into sets or when the measurement scale of data is a set of categories then they are classified under categorical variables to investigate the certain phenomena (Agresti & Finlay, 2009, p. 12-14).

Our study is more related to categorical data, as we are dealing with 5Q model of the service quality, trust and reputation, and its impact on patient satisfaction. Therefore, that is the reason numerical data can be excluded here and we have to consider the categorical data in our study. Categorical data is further classified into nominal and ordinal data. In our study data, we collected both nominal and ordinal data. Analysis of the study can be defined as the ability to break down data in components, clarify the nature of the component and the relationship between them (Saunders et al., 2009, p. 587). To analyze data there are different methods for every research study, i.e. quantitative and qualitative data analysis procedures. A qualitative data analysis procedure allows you to develop a theory from your data (Saunders et al., 2009, p. 480), while in a quantitative data analysis, data is already collected from the surveys enables us to explore, present, describe and examine relationships and trends within the quantitative study (Saunders et al, 2009, p. 414).

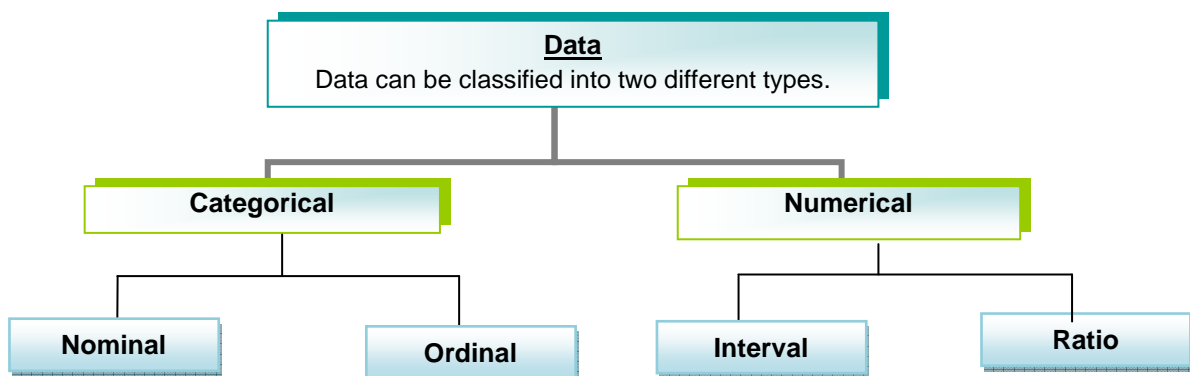


Figure 6: Data types and classification

In our study, we used quantitative data analysis methods. The reason for this choice of analysis method was firstly we did distribute questionnaire among the patients and collected quantitative data. Another reason being the fact that our objective is to

examine the impacts of 5Q model of the service quality on patient satisfaction combining trust and reputation. Carrying this type of study, we stated hypothesis and we need to test these hypotheses. In order to better understand the 5Q model of the service quality we have to test all its dimensions that whether which dimension has positive affect on patient satisfaction, for this we state hypotheses.

H1a: Quality of object has a positive effect on patient satisfaction.

H1b: Quality of process has a positive effect on patient satisfaction.

H1c: Quality of infrastructure has a positive effect on patient satisfaction.

H1d: Quality of interaction has a positive effect on patient satisfaction.

H1e: Quality of atmosphere has a positive effect on patient satisfaction.

For trust, we state hypothesis.

H2: Trust has a positive effect on patient satisfaction.

Moreover, for reputation we state hypothesis.

H3: Reputation has a positive effect on patient satisfaction.

We used both descriptive and inferential statistics in order to analyze the data of our study. By using descriptive statistics, we put data in tables and graphs to summarize the data collected for better understanding to the reader to easily examine the results (Agresti & Finlay, 2009, p. 4). For the presentation of descriptive statistics of the study, we used bar, pie charts and cross tabulation. These tools helped us as well to understand and examine the results in a better way. In order to generalize and do some prediction on the basis of the results of our collected data we used inferential statistics (Agresti & Finlay, 2009, p. 4). There are many statistical tests that can be applied for inferential statistics; we used multiple regression analysis to test the hypotheses. The reason for this choice of test is the nature of our data, i.e. categorical data.

3.11 Quality criteria

According to Saunders et al (2009, p. 156) question can arise during a study, which are the basis for the credibility of the study. It is really difficult that answers will be exactly right, so all you can do is reduce the possibility of getting the answer wrong. This is why research design is important. Research design emphasizes on quality criteria, as quality criteria consist of reliability, validity and replicability. Reducing the possibility of getting the answers wrong means that attention has to be paid to reliability, validity and replicability.

3.11.1 Reliability

This quality criterion of the research refers to the consistency of a measure of a concept. This quality criteria deals with the question whether the results of a study are repeatable (Bryman & Bell, 2007, p. 163). This quality of measure applied to value the concepts in which we are interested. We collect information through cross-sectional research design i.e. from respondents in a short time period. We believe that internal reliability is moderate as time period is continuous and no gap occurred during collecting the data so we believe that if other study is taken the results will be repeatable. One thing can affect our study that we are working independently and it is free hand research to work on from the university. So again, this can affect our results slightly.

3.11.2 Replicability

We gave immense focus on findings reliability, we followed several procedures; designing measure of concepts from practical experience, studied courses and previous literature, administration of self-completion and analysis of data. Further, we selected as our respondents patients who seemed in a good health and made sure that the processes will be followed systematically. We thoroughly analyzed and assessed the procedure that was followed by the authors of the previous research study and made sure that it was done accordingly.

3.11.3 Validity

Validity can be defined as whether or not an indicator that is devised to judge a concept, really measures that concept. It includes external validity, internal validity and ecological validity (Bryman & Bell, 2007, p. 165). External validity explains that the findings being applicable to other contexts. External validity is related to generalization (Bryman & Bell, 2003, p. 34-35). In our study the target population was the patients of Umeå hospital and our sample is enough to generalize for the whole population of Umeå hospital. So external validity is strong and can be generalized. We focus on the Umeå hospital patients to investigate how they perceive the 5Q model of the service quality, trust and reputation of the hospital regarding their satisfaction. This implies our results can be useful for health care providers but cannot directly validate for every organization.

Internal validity states the inferences concerning causal relationships or in simple words it deals with the issue of cause-effect study (Bryman & Bell, 2003, p. 34-35). Our study is an effect study, as one variable can affect other one. Moreover, our questionnaire that we used is answerable questions, so internal validity is moderate. Our study has limited ecological validity because ecological validity is concern with whether scientific findings are applicable to people's everyday life, natural science settings (Bryman & Bell, 2003, p. 34-35).

3.12 Ethical consideration

It is important to consider ethics while conducting a research for every researcher; research ethics means moral values and principles. It helps the researcher to avoid problematic issues and any potential harm to anyone during the research process. There is a growing emphasis on overcoming the ethical issues in business research because of the increased involvement of social responsibility and consumer's wellbeing (Ghauri & Gronhaug, 2005, p. 20). We need to take immense care at this stage. All the information was treated and kept secretly with high confidentiality without disclosure of the respondents' identity. No information is change or modify, hence the information is presented as collected and the same with the literatures collected for the purpose of this study. Furthermore we avoided using any equipment or technique that could have possible harm or against the interest of the participants. Moreover, we do not have any intention to use unfair means to influence the participants to obtain information. The questionnaire was anonymous and high level of confidentiality is considered when treating the information.

CHAPTER 4: EMPIRICAL FINDINGS AND ANALYSIS

The aim of this chapter is to present the survey results and analysis of our study. We decided to combine both the empirical findings and analytical part of this study together in this chapter. We decided to present the sample results of all the attributes of the variables for Umeå hospital to analyze. Thus, the chapter begins with sample presentation, frequency analysis and internal reliability analysis test. The statistical results and analysis follows the summary of the overall descriptive statistics for the all variables. The chapter ends with the detail discussion.

4.1 Sample presentation for Umeå hospital

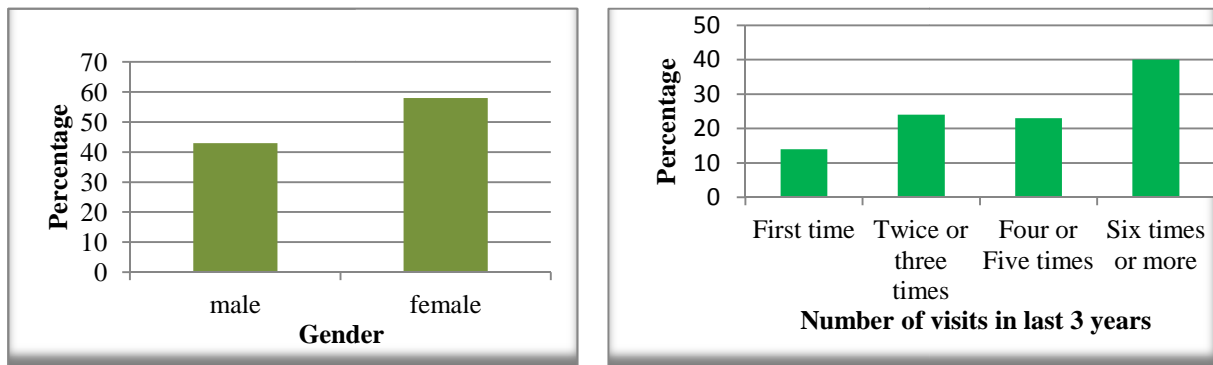


Figure 7: Gender and no. of visits

The above bar chart presents the sample of Umeå hospital patients. It could be seen from the bar chart that, with a total sample of 101 patients from Umeå hospital, male were 43% while female were 57%. Another bar chart presents the number of visits of the patients in last three years to the Umeå hospital. 14% patients of the total sample visit the hospital first time, 24% twice or thrice times, 23% four or five times and 40% six times or more.

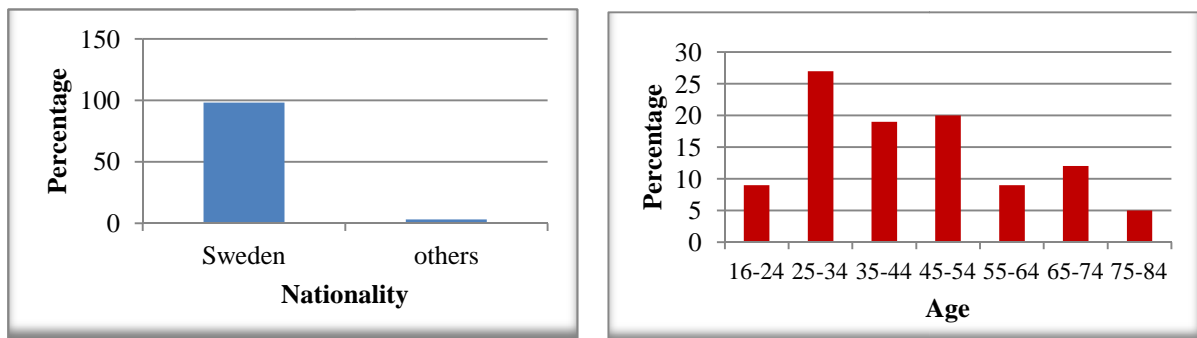


Figure 8: Nationality and age

The above bar charts present the sample of nationality of Umeå hospitals patient's. As we have divided the nationality into two "Swedish" and "others". It can be observed from the bar chart that the total number of patients were 101 of them 97% were Swedes while only 3% were others. This also represents that majority of patients were Swedes which makes our study effective. While the bar charts of age presents the number of

different ages people visits Umeå hospital. We divided the age into 8 different categories. From the chart it is clear that patients with age of 16-24 were 8.9%, 25-34 were 26.7%, 35-44 were 18.8%, 45-54 were 19.8%, 55-64 were 8.9%, 65-74 were 11.9% and 75-84 were 5% visited Umeå hospital.

4.2 Frequency analysis

We did frequency analysis of the four questions, which can present a clear picture of the patient satisfaction level for Umeå hospital. These four questions are related to the patient satisfaction level, listed below:

1. Overall satisfaction with the staff
2. Satisfaction with the overall services
3. Overall satisfaction with the Umeå hospital
4. What sort of reputation do you think that Umeå hospital has in the public?

Patients gave different answers to the above questions. Patients rate question (1) one as 36% were neutral, 58% were satisfied and 6% were very satisfied among 101 patients. There was no very dissatisfied or dissatisfied patient regarding question one (1) (Appendix 1). For question two (2) we got 44% neutral, 51% satisfied and 5% very satisfied among 101 patients from Umeå hospital for overall services. There was no very dissatisfied or dissatisfied patient regarding question two (2) as well (Appendix 2). Patient rate question three (3) as 38% were neutral, 54% were satisfied and 8% were very satisfied from Umeå hospital, as question shows the overall satisfaction from Umeå hospital and There was no very dissatisfied or dissatisfied patient regarding question three (3) (Appendix 3). For question, four (4) we got the answer as: 38% were neutral, 53% were satisfied and 9% were very satisfied. There was no very dissatisfied or dissatisfied patient regarding question four (4) (Appendix 4).

4.3 Internal reliability analysis test for 5Q model of the Service Quality, trust and reputation

For internal reliability, we did reliability analysis test for all attributes of 5Q model of the service quality. 5Q model of the Service quality has a good reliability with Cronbach's alpha coefficient of 0.804 (Appendix 5). We also calculated the reliability scale for each attributes calculated when each attribute was deleted from the 5Q model of the service quality list, to see whether the deleted item is valid or invalid for the survey. When Cronbach's alpha for an attribute increases when an item is deleted it shows that item is not valid in that organization's measurement of test. Almost all the attributes showed a lower value of reliability when deleted except for "Speed and ease of admissions" which is 0.815 means that attribute was not valid for the test measurement (Appendix 5). But we will take this attribute because the value 0.815 is very near to 0.804, as this will do not make our scale non reliable.

For trust attributes as well we made internal reliability analysis test to be confirm that how much reliability we have in these attributes. Overall trust attributes had reliability with Cronach's alpha coefficient of 0.365 (Appendix 6). We also calculated the reliability scale for each attribute calculated when each item is deleted from the trust list, to see whether the deleted item is valid or invalid for the measurement. All the attributes showed a lower value of reliability when deleted except for "The doctor will do whatever it takes to get you all the care you need", for this we got 0.678 means this attribute was not valid for the organization (Appendix 6) and we will not take this

attribute in our measurement in order to make our scale more reliable, as the difference is very large.

For reputation attributes, we conducted internal reliability analysis. Overall reputation attributes had reliability with Cronbach’s alpha coefficient of 0.878 (Appendix 7). For the reliability scale each attribute calculated when each item is deleted from the list. All the attributes showed a lower value of reliability when deleted except for two attributes i.e. “Umeå hospital recognizes and takes advantage of market opportunities” and the second one is “Umeå hospital looks like a good organization to work for”. We got 0.890 and 0.889 respectively for both, which shows that these two attributes were not valid for this organization measurement to consider (Appendix 7) but we will take both as the difference is very less and will not cause the scale non reliable.

The last variable is satisfaction, which we took as a dependent variable. In satisfaction, we have four items and we got 0.786 Cronbach’s alpha value for all overall satisfaction. All the attributes showed lower value when deleted from the list of satisfaction in reliability test one by one (Appendix 8). So the scale was valid for this variable according to reliability test analysis.

4.4 Statistical results and interpretation of the sample

Table 3: Descriptive statistics for all the variables

Descriptive Statistics

	Mean	Std. Deviation	No.
Patient Satisfaction	14.7327	1.86489	101
Quality of object	11.0495	1.50583	101
Quality of process	10.8020	1.58758	101
Quality of Infrastructure	11.1980	1.49010	101
Quality of Interaction	7.5248	1.08253	101
Quality of atmosphere	11.3069	1.33224	101
Trust	30.3267	2.89174	101
Reputation	44.0297	5.80940	101

The above table presents the mean and standard deviation of the all the attributes, computed to the main variables.

Table 4: Correlation among the all variables

Correlations

		P.S	Object	Proces s	Infrastr ucture	Interact ion	Atmosp here	Trust	Reput ation
Pearson Correla tion	Patient Satisfacti on	1.000	0.243	0.229	0.214	0.293	0.251	0.324	0.603
	Object	0.243	1.000	0.289	0.357	0.242	0.296	0.217	0.052

	Process	0.229	0.289	1.000	0.423	0.143	0.119	0.289	0.203
	Infrastru cture	0.214	0.357	0.423	1.000	0.356	0.307	0.426	0.237
	Interactio n	0.293	0.242	0.143	0.356	1.000	0.449	0.258	0.147
	Atmosph ere	0,251	0.296	0.119	0.307	0.449	1.000	0.270	0.187
	Trust	0.324	0.217	0.289	0.426	0.258	0.270	1.000	0.395
	Reputatio n	0.603	0.052	0.203	0.237	0.147	0.187	0.395	1.000
Sig. (1- tailed)	Patient Satisfacti on	.	0.007	0.011	0.016	0.001	0.006	0.000	0.000
	Object	0.007	.	0.002	0.000	0.007	0.001	0.015	0.301
	Process	0.011	0.002	.	0.000	0.078	0.118	0.002	0.021
	Infrastru cture	0.016	0.000	0.000	.	0.000	0.001	0.000	0.008
	Interactio n	0.001	0.007	0.078	0.000	.	0.000	0.005	0.071
	Atmosph ere	0.006	0.001	0.118	0.001	0.000	.	0.003	0.030
	Trust	0.000	0.015	0.002	0.000	0.005	0.003	.	0.000
	Reputatio n	0.000	0.301	0.021	0.008	0.071	0.030	0.000	.

The above correlation table shows the positive multicollinearity of all the independent variables with the dependent variable i.e. patient satisfaction and also among them. The multicollinearity will be strong if the values range from 0.3 to 0.8. In our case the strength of collinearity of all the independent variable with the dependent is moderate as the values range from 0.216 to 0.603. While the multicollinearity among all the independent variable is also moderate ranges from 0.052 to 0.449. The lowest collinearity can be seen between the two independent variables is quality of object and reputation which is 0.052, in other words we can say weak collinearity. On the other hand the highest collinearity can also be seen between the two independent variables that is quality of interaction and quality of atmosphere that is 0.449, almost 0.5. Which is considering being a strong collinearity between these two variables? So overall the model can be said with a moderate strength of multicollinearity.

Table 5: Multiple regression analysis test for all variables

Multiple Regression test

	Beta	Significance	R square	Adj. R square	F value
Constant	2.515	0.182			
Quality of object	0.214	0.000	0.434	0.417	56.434
Quality of Interaction	0.289	0.030			33.776
Reputation	0.183	0.037			24.794

(Quality of process, Quality of infrastructure, quality of atmosphere and trust is excluded as in stepwise regression analysis the variables are automatically excluded from the list if their significance value is lower than 0.05)

The table above presents the multiple regression analysis tests for the variables i.e. quality of object, quality of interaction and reputation. All the three variables have positive beta value. Contribute in a positive way to the dependent variable. For quality of object, if we increase 1 percent in independent variable that will results increase in 0.214 percent in dependent variable. Same with the quality of interaction and for reputation, as both have positively contributes to the dependent variables with values of 0.289 and 0.183.

All the three independent variables have very good significance values. In order to be significant the value should be <0.05 . In our case all the three variables have values <0.05 . Quality of object is more significant than other two variables. So these variables have strong positive effect on patient satisfaction. Some of the variables are excluded from the test, because in stepwise regression the SPSS directly exclude the variables having significance values >0.05 .

The R square value is also considerable in our model although it is not high but considered to be moderate. In our model the R square value is 43.40. This value indicates that 43% of the criterion i.e. dependent variable has success on the statistical test and we can predict 43% future variability on the basis of our results. We believe that R square value is moderate. Adjusted R square is a bit lower than R square, it shows the shrinkage loss while treating the data, or might be when entering in to the software or may be a problem with the software.

The table also shows the F value, which represents the overall significance of the regression model. The F value is the ratio of the mean regression sum of squares divided by the mean error sum of squares. The regression table shows F values is decreasing when going top to bottom that should be because as by adding more and more independent variable to the model the F value lowers. Because by adding more independent variable it share the dependent variable among them. In our case it starts from 56.434 going down to 24.794, so the model is strong.

Hypothesis:

H1a: Quality of object has a positive effect on patient satisfaction.

H1b: Quality of process has a positive effect on patient satisfaction.

- H1c:** Quality of infrastructure has a positive effect on patient satisfaction.
- H1d:** Quality of interaction has a positive effect on patient satisfaction.
- H1e:** Quality of atmosphere has a positive effect on patient satisfaction.

We have three attributes in all five service quality dimensions (5Q model) except in quality of interaction i.e. in that dimension we have two attributes in our survey. As from the above multiple regression analysis test we accept hypothesis (**H1a**) for Quality of object and (**H1d**) for quality of interaction for 5Q of the service quality. While we reject hypothesis (**H1b**, **H1c** and **H1e**) for the quality of process, quality of infrastructure and quality of atmosphere of the 5Q model of the service quality.

H2: Trust has a positive effect on patient satisfaction.

In trust we had ten attributes but we exclude one attribute because Cronbach’s alpha was not valid and was not a reliable attribute for the scale. Thus we have nine attributes in trust, and on the basis of SPSS test result we will reject hypothesis (H2) for trust. Means trust has no effect on patient satisfaction for Umeå hospital in our case.

H3: Reputation has positive effect on patient satisfaction.

We have twelve attributes in reputation; we computed all the attributes in SPSS and got positive results for this variable. So we accept hypothesis (H3) for reputation. Means reputation has positive effect on patient satisfaction for Umea hospital in our case.

4.5 Summary of the results from the study

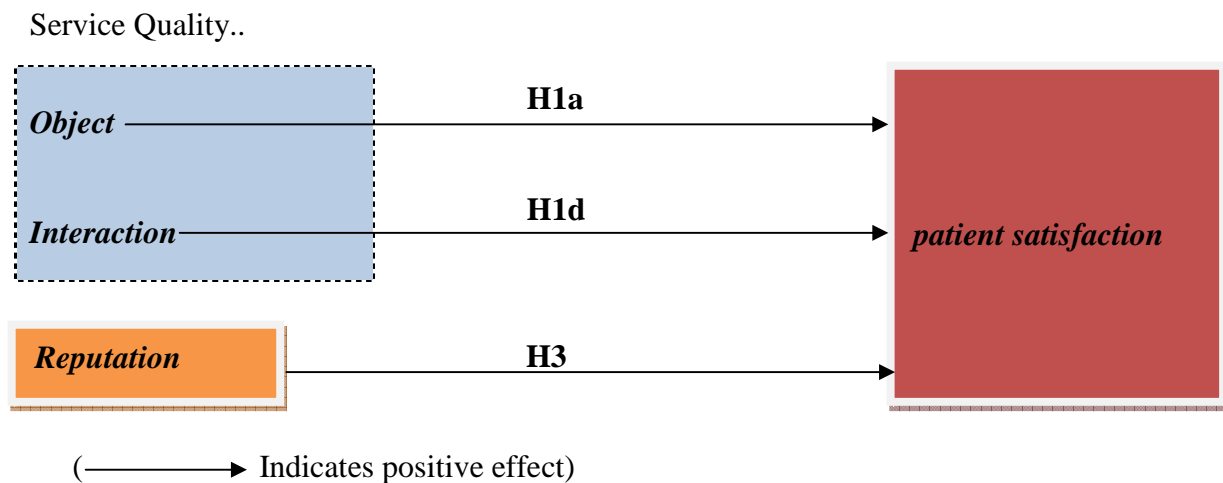


Figure 9: Summary result variables effects

From the above figure we can understand that out of five, two quality dimensions of the 5Q model of service quality has positively testify and gave positive results. In the 5Qmodel of the service quality, two dimensions have positively affected patient satisfaction of Umeå hospital in our case. Three dimensions of the 5Q model i.e. quality of process, quality of infrastructure and quality of atmosphere gave “no effect” results on patient satisfaction. Among five dimension of the 5Q model of the service quality patients gave positive response to two (2) dimensions. As we know from literature service quality has many facets that can affect patient satisfaction in many different

ways. So we accept hypothesis (H1a) and (H1d) for the two hypotheses and we include these in our updated model while reject hypothesis for rest of the three.

Second independent variable was trust in our model. Which consist of different attributes, trust gave “no effect” in our case for Umeå hospital. So on the basis of statistical results from SPSS, we reject hypothesis (H2) for patient satisfaction i.e. trust has no effect on patient satisfaction for Umeå hospital patients in our study. That’s the reason we exclude trust from our model.

Third variable was reputation, which gave very positive result as compare to other variables because most of the reputation attributes have strong Cronbach’s alpha values, at the same time gave also good correlation and significance values. Hence reputation has positive effect on patient satisfaction for Umeå hospital in our study. Thus we accept hypothesis (H3) for patient satisfaction and we include it in our new model.

Three dimensions of 5Q model of the service quality and trust were excluded from our model. Now our updated model is consist of two dimensions of 5Q model of the service quality and reputation, which can positively affect patient satisfaction.

4.6 Discussion

This study is concerned with the effects of different variables on customer and specifically on patient satisfaction. We took three factors that are mostly considered by every patient when they choose the health care organization i.e. service quality dimensions (5Q model), trust and reputation. From the summary of the results see Figure 9, we believe that present study has a lot to be discussed. In our study patients were satisfied with the some of dimensions of the service quality form Umeå hospital, which is link to the theory “consumers mostly attracted towards a service by focusing on quality” (Solomon, 2009, p. 413).

Some patients differentiate among the different qualities of the service i.e. 5Q model of the service quality. From the statistical results, we can say that patients believe that service is combination of different facets because they rank differently the 5Q model means five different quality dimensions. This supports the theory of Zineldin (2006, p. 61) patient satisfaction is a cumulative combination of different constructs, summing satisfaction with various facets of the health care organization (hospital), such as technical, functional, infrastructure, interaction and atmosphere variables or items. At the same time the theory strongly supports our updated model that different service quality dimensions are equal to overall service quality, which directly affects patient satisfaction.

From the Inferential statistics in our study, the patients of the Umeå hospital gave positive effect for the quality of object and interaction. These two dimension are consist of different attributes, emphasis on that two dimension of the service quality like sense of security, ability of the hospital to treat patients, interaction, right information and feedback. These attributes gave positive result by the patients of Umeå hospital and that can be link to work of “A simple definition of quality in health care is the art of doing the right thing, at the right time, in the right way, for the right person and having the best possible results” (Zineldin, 2006, p. 66). In more elaborated form, we can say that these two dimensions provide best health care outcomes to every single person. The two dimensions that patients rated as positive effect could also be linked to: "quality of care is the degree to which health services for individuals and populations increase the

likelihood of desired health outcomes and are consistent with current professional knowledge" (Lohr, 1990, p. 21).

We took reputation as our third variable in our study, which can affect patient satisfaction. From the statistical results of reputation, patients gave positive response to many attributes that were asked in the survey. Some of the attributes were very encouraging for our study like good feeling about the Umeå hospital, respect and admire, environmental responsibility and reputable services came positive in our study. These can be link to the theory of Herbig & Milewicz (1993, p. 18-19) "it is necessary that transactions between the entity and other parties must have occurred in order for to establish a reputation and to value the transaction" and at the same time repeated positive transactions of a firm lead the firm to a positive reputation (Herbig & Milewicz, 1993, p. 18-20).

We have some attributes of reputation in our survey like Umeå hospital develop innovative services, leadership and high standards which can be linked to Hibbard et al. (2005, p. 1150) "if a hospital reputation is affected due to some attributes then it might declines its market share via patient choice, purchase choice, or physician referral. Also declining reputation may bring other challenges to the organization such as recruiting and retaining staff and at the same time affect a hospital ability to maintain legitimacy and professional standing". So in simple words reputation regarding the operative or functional activities brings long term life to the organization.

Overall reputation of the Umeå hospital came positive and that can be link to the work of Bromley (2002, p. 36) "reputation as the collective assessment of a firm past behavior and outcomes that deliver the firm's ability to render valued results to customers. Reputation thus reflects the relative standing/position, internally with the employees and externally with the different stockholders". From the data we concluded that patients ranked Umeå hospital reputation in a very positive way, which shows their satisfaction level that can be linked to the work of Bourke (2009, p. 28-33) a good reputation benefits the organization in many ways the most important is the satisfaction through which the organization gain customer loyalty, premium prices and a cushion of goodwill when crises hits.

CHAPTER 5: CONCLUSIONS

The basic aim of this chapter is to know whether the research question was answered; the objective for this study is achieved and if the study has contributions. The chapter begins with a conclusion, then to the implication, followed by theoretical contribution and limitations. The chapter ends with the suggestion for future research.

5.1 Conclusion

Our focus of the study was to investigate the effect of three different variables i.e. 5Q model of the service quality, trust and reputation on patient satisfaction. The research question was “How do 5Q model of the service quality, trust and reputation affect patient satisfaction?”. This kind of combination never done before and the study gave very interesting results. The study covers lot of attributes belonging to all variables taken for our study, which made it more interesting and complex at the same time. Although the statistical results we got for quality of process, quality of infrastructure, quality of atmosphere and for trust have no effect on patient satisfaction but the focus should be whether the research questions was answered or not. From the summary of the results section, it could be easily analyze that the research question is answered through inferential statistics.

For 5Q model of the service quality that is combination of five dimensions called 5Q model is used which presents different results of the patients regarding their satisfaction level for Umeå hospital. Two dimensions of 5Q model of the service quality gave positive effect results on patient satisfaction. The entire two dimensions have positive correlation values and were significant.

We also did internal reliability analysis test for 5Q model of the service quality where Cronbach’s alpha came lower when attribute was deleted one by one from the list for all attributes of the 5Q model. This shows that all the attributes taken was valid measurement for the organization. All the quality dimensions of the 5Q model were considered important and patient’s showed positive effect for some attributes of the service quality inside the single dimension but for some attributes showed no effect. The patients gave “no effect” response for their satisfaction for the quality of process, quality of infrastructure and quality of atmosphere dimension of 5Q model because these dimensions gave lower correlation and non-significant values. The reason for “no effect” that they are not satisfied or might be there is no effect of the attributes like “Waiting time, clarity of information and responsiveness” on them, as we understand from the inferential statistics results. Another reason for not satisfied or no effect might be that the selected patient’s number of visits in last three years is very less, so they do not know much about the Umeå hospital in our study.

Second variable we choose for our study was trust to investigate how patients take this variable when choosing the physician or health care organization especially in Umeå hospital. Our result for trust regarding patient satisfaction shows “no effect” in our case for Umeå hospital. Although the reliability analysis test validates the attributes taken because the Cronbach’s alpha came lower for all the attributes when deleting one by one from the list. Only one attribute value came higher when deleted from the list that shows the invalid measurement for the organization. Therefore, we excluded that attribute in our measurement, to make the scale reliable. For trust attributes, we got low

correlation and non-significant values. Overall for trust variable we got “no effect” results on patient satisfaction in our case for Umeå hospital. As discussed earlier the reason might be low risk taking approach of the Swedish people. Most probable trust is very much developed in Swedish society that is very visible, and makes sense in our case. Other reason can be the low visiting rate to the hospital as trust took time to develop overtime, means a long term variable.

On the other hand, the reputation gave very positive results as we were expecting because reputation can play a vital role while choosing health care provider in general or physician specifically. We came up with positive effect results for reputation attributes. This shows that reputation has important role on patient satisfaction. This may be due to past actions and probably of its plans for the future. In this case the hospital administration and leadership will be very effective and Umeå hospital maintains the standard of treating the patients in better way that is the reason that the respondents gave positive reputation of hospital. Our statistical results show that correlation value was strong that means this variable has strongly affect patient’s satisfaction and it has significant value. The reliability analysis test for reputation attributes the Cronbach’s alpha came lower when one by one attribute is deleted from the list, it means that the attributes were taken valid for this kind of organization. Thus, reputation shows positive effect on patient satisfaction in Umeå hospital.

In all, this study is able to get exposure of 5Q model of the service quality, trust and reputation that how it can effect patient satisfaction. This could mean that patient satisfaction is depending on different factors and attributes. Patients react differently to the different variables in different situation, thus one can come up with different results. Still we believe that patient satisfaction can be achieved through combination of different improved variables.

5.2 Practical implication

More focus is now diverted to the health care sector because of high competition in the health care sector and privatization, hence we believe that this study is useful to health care providers and at the same time can be fruitful for business organization as it also cover customer. The result of the study can be used to improve the health care service quality and building trust by gaining high level of patient satisfaction. This study can be a small contribution or a deep insight towards improved health care facilities in developed or underdeveloped countries. As dissatisfaction leads to disloyalty, in case of health it might be more worse so this study exert some pressure on health care organizations as well, if they are not trust worthy and lack of some service qualities. Umeå hospital should focus on significant dimension of 5Q model of the service quality and reputation attributes because the patients gave positive effect response regarding their satisfaction.

The practical contribution of this study is that it specifically provides answers relating to what were the perceptions of patients who consumed the health service of Umeå hospital. It also provides the perceptions held by patients regarding what is the value of using health care facilities. From organizational perspective the study can be very useful for health care organization to incorporate this literature in order to be more effective keeping in mind the patient’s perception. Providing improved dimensions of the service quality and gaining reputation by maintaining high standards can increase patient satisfaction level.

5.3 Theoretical contribution

This study has a theoretical contribution in the form of developed a model for health care organization to be more effective in providing health facilities. The developed model is design from the previous studies and empirical findings collected through the surveys from our study. In addition, the study contributes to the literature in the sense that it provides knowledge about the health care service and the variables, which can affect service quality, how it has evolved, tested and measured over time. In addition, the study highlights that it will be very effective that health care organization emphasis on every factor which can lead to satisfaction. The study combines three different variables i.e. 5Q model of the service quality, trust and reputation. At the end, we developed a new model on the basis of existing theories and of our empirical results. Theoretically the study contributes a lot for future research and somebody can come up with new more factors combination for overall health care organizations.

5.4 Limitations

In this study, we used a convenience sampling method, though a benefit of this kind sampling technique is that the study could provide spur for future research. There is a limitation that this study cannot be validated by all health care organization. Time and money have always been the main constraint in research studies. Since this study is an academic research with limited time. We targeted only Umeå hospital due to time shortage for this study. If we had sufficient time we would have preferred to target other hospitals as possible, actually we will be able to see how this holds with them and to draw a better conclusion. We would even be able to test and compared the situation in other countries, as well as to investigate how this kind of study works in other organizations. Another important constraint that we face, which is not so common was the language. This is because in Sweden, English is the second language. The majority of the patients could communicate very well in Swedish but not in English, thus collecting data was a problem for us because the hospital administration also informs us that we have to distribute questionnaire by ourselves. Although we managed it by gathering some data after translating our questionnaire into Swedish, this wasted a lot of time because we had to send the questionnaires to a translator and wait for her to do her job and send the questionnaires back to us. Another limitation of the study is that in survey we have closed end question, so very less option for the patients to express their own view.

5.5 Suggestions for future research

The topic we selected was a good one but because of its limitations and outcome, there is a need for further research. This study did not consider employees who provide the services to patients. Further study can be held to investigate the effect of 5Q model of the service quality, trust and reputation on employee's job satisfaction in health care sector. Further study could be design to test these attributes of service quality, trust and reputation by using other method of data collection i.e. interviews, archival research and experimental research to see which of them will be more effective. Also future study could be needed to test the same variables in other service sector. Applying the model to other hospitals in other countries might give different or more useful results. While qualitative study will give more in depth knowledge regarding the study topic for health care providers.

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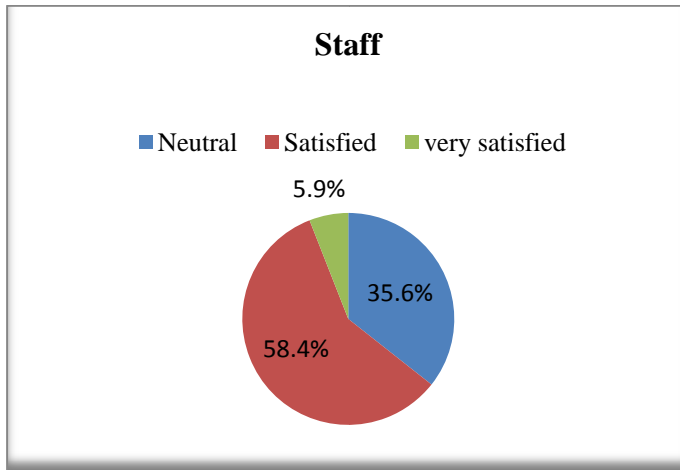
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Appendices

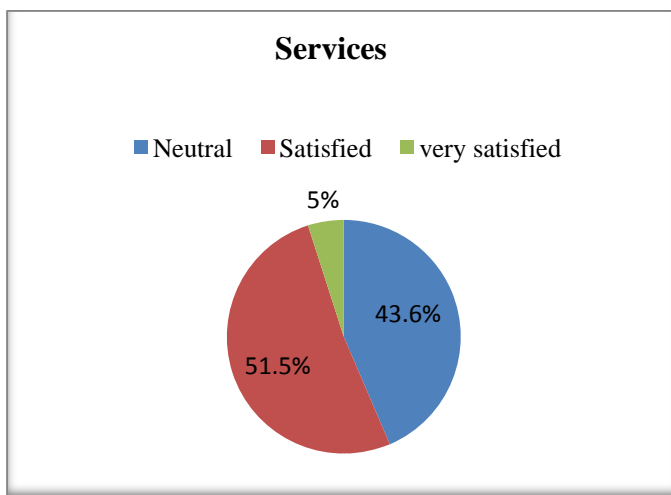
Appendix 1

Overall satisfaction with the staff



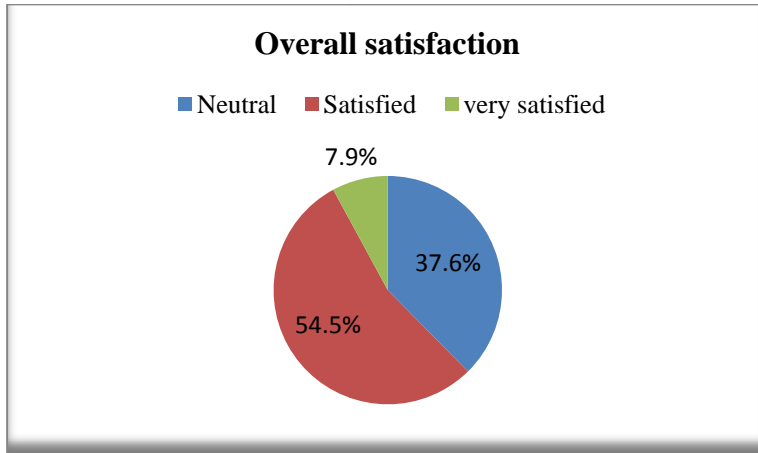
Appendix 2

Satisfaction with the overall services



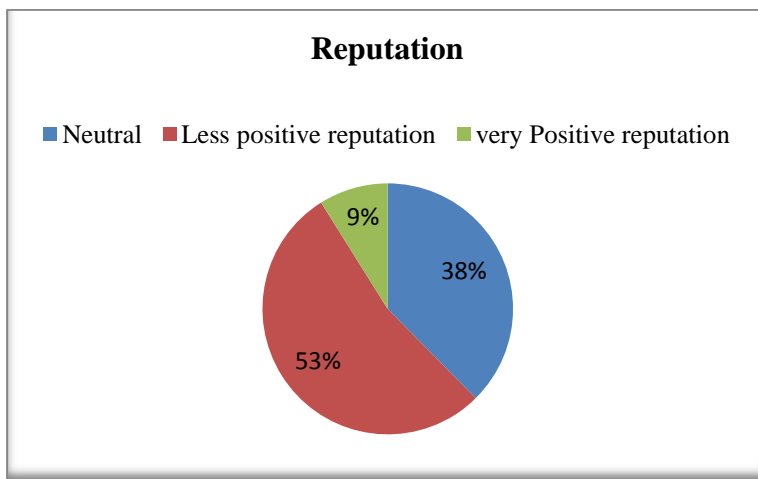
Appendix 3

Overall satisfaction for Umeå hospital



Appendix 4

What sort of reputation for Umeå hospital



Appendix 5

Internal Reliability analysis test for service quality

	Number of items	Cronbach's alpha	Variables	Cronbach's alpha if items deleted
Service quality	14	0.804	Sense of wellbeing that you felt in the hospital	0.791
			Ability of the hospital to treat you the way you expected	0.784
			Sense of security from physical harm you felt in the hospital	0.799
			Waiting time for medication	0.793
			Waiting time for tests	0.796
			Speed and ease of admissions	0.815
			Skills of the nurses attending you	0.782
			Skill of those performing your tests	0.788
			Skill of the physicians attending you	0.798
			Adequacy of explanation about your treatment	0.794
			Adequacy of instruction on release from the hospital	0.792
			Responsiveness of nurses to your needs	0.771
			Clarity of information about your condition	0.785
			Politeness of the physicians	0.802

Appendix 6

Internal reliability analysis test for trust

	Number of items	Cronbach's alpha	Variables	Cronbach's alpha if items deleted
Trust	10	0.365	The doctor will do whatever it takes to get you all the care you need	0.678
			Sometimes doctors care more about what is convenient for his/her than about your medical needs	0.361
			Doctors medical skills are not as good as they should be	0.350
			The doctors are extremely thorough and careful	0.348
			You completely trust the doctors decision about which medical treatment are best for you	0.301
			The doctor is totally honest and telling you about all of the different treatment options available for your condition	0.318
			The doctor only thinks about what is best for you	0.278
			Sometimes the doctor does not pay full attention to what you are trying to tell him/her	0.319
			You have no worries about putting your life in doctors hand	0.276
			All in all you have complete trust in doctor	0.287

Appendix 7

Internal reliability test for Reputation

	Number of items	Cronbach's alpha	Variables	Cronbach's alpha if items deleted
Reputation	12	0.878	I have a good feeling about the Umeå hospital	0.867
			I admire and respect the Umeå hospital	0.869
			Umeå hospital stands behind its services	0.864
			Umeå hospital develops innovative services	0.868
			Umeå hospital has excellent leadership	0.869
			Umeå hospital has a clear vision for its future	0.864
			Umeå hospital recognizes and takes advantage of market opportunities	0.890
			Umeå hospital is well managed	0.865
			Umeå hospital looks like a good organization to work for	0.889
			Umeå hospital looks like a organization that would have good employees	0.872
			Umeå hospital Is an environmentally responsible organization	0.868
			Umeå hospital maintains a high standard in the way it treats people	0.869

Appendix 8

Internal reliability test Satisfaction

	Number of items	Cronbach's alpha	Variables	Cronbach's alpha if items deleted
Satisfaction	4	0.786	Satisfaction with the staff	0.755
			Satisfaction with services	0.702
			Overall satisfaction with the Umeå hospital	0.734
			What sort of reputation do you think that Umeå hospital has in the public?	0.742

Responsiveness of nurses to your needs					
Clarity of information about your condition					
Politeness of the physicians					

➤ Please rate each statement below regarding Trust.

	1 Strongly Disagree	2 Disagree	3 Neither	4 Agree	5 Strongly Agree
The doctor will do whatever it takes to get you all the care you need					
Sometimes doctors care more about what is convenient for his/her than about your medical needs					
Doctors medical skills are not as good as they should be					
The doctors are extremely thorough and careful					
You completely trust the doctors decision about which medical treatment are best for you					
The doctor is totally honest and telling you about all of the different treatment options available for your condition					
The doctor only thinks about what is best for you					
Sometimes the doctor does not pay full attention to what you are trying to tell him/her					
You have no worries about putting your life in doctors hand					
All in all you have complete trust in doctor					

➤ Please rate each statement below regarding reputation

	1 Strongly Disagree	2 Disagree	3 Neither	4 Agree	5 Strongly Agree
I have a good feeling about the Umeå hospital					
I admire and respect the Umeå hospital					
Umeå hospital stands behind its services					
Umeå hospital develops innovative services					
Umeå hospital has excellent leadership					
Umeå hospital has a clear vision for its future					
Umeå hospital recognizes and takes advantage of market opportunities					

Umeå hospital is well managed					
Umeå hospital looks like a good organization to work for					
Umeå hospital looks like a organization that would have good employees					
Umeå hospital Is an environmentally responsible organization					
Umeå hospital maintains a high standard in the way it treats people					

Satisfaction with the staff	Very Dissatisfied			Very satisfied	
	1	2	3	4	5
Satisfaction with the services	Very Dissatisfied			Very satisfied	
	1	2	3	4	5
Overall satisfaction with the Umeå hospital	Very Dissatisfied			Very satisfied	
	1	2	3	4	5
What sort of reputation do you think that Umeå hospital has in the public?	Negative reputation			Positive reputation	
	1	2	3	4	5

Thank you very much for your cooperation!



PATIENT SATISFACTION REGARDING HOSPITAL SERVICES: A STUDY OF UMEÅ HOSPITAL.

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ABSTRACT

Patients are the key stakeholders in health care providers and it is extremely important to increase their satisfaction level. Patient satisfaction is a subject of great interest to the health care providers and researchers alike. As there are a lot of factors related to health care providers that causes patient selection and rejection. Since competition has increased in recent years, this exerts more pressure on health care providers to render more improved service quality in addition to build trust and gain high reputation. Improved quality of service has now become an important aspect of patient satisfaction, building trust is now a crucial milestone and gaining high reputation is considered the key for any health care provider. In practice and theory it has been proven that service quality dimensions, trust and reputation is related to patient satisfaction. For this, we took 5Q model of the service quality combine with trust and reputation, and how it affects patient satisfaction is the main theme of the study.

Purpose: The purpose of this study is to investigate that how 5Q model of the service quality, trust and reputation can effect patient satisfaction in health care sectors, for this study we researched Umeå hospital. This research is focused towards exploring the perceptions of patients who consume or undertook Umeå hospital services. It also provides an effective model for health care organization in practice and the study also contribute to literature from educational point of view.

Method: In this study hypothesis developed to investigate how 5Q model of the service quality, trust and reputation can effect patient satisfaction. For service quality 5Q model was used while several attributes were taken for trust and reputation to investigate the patient perception. Quantitative research strategy was adopted and convenience sampling technique was used to collect quantitative data from patients of Umeå hospital to get their satisfaction levels. Hypotheses were tested by using multiple regression analysis to the obtained data in SPSS.

Findings: The study revealed interesting results for patient satisfaction regarding the 5Q model of the service quality, trust and reputation. Meanwhile 5Q model was used for service quality, which composes quality of object, quality of process, quality of infrastructure, quality of interaction and quality of atmosphere. Out of five dimensions, two gave positive effect and three gave no effect result by the patient for their satisfaction from the Umeå hospital. Trust gave no effect result, whereas reputation gave positive effect result by the patient for their satisfaction from the Umeå hospital.

Implication/Contribution: The findings imply that 5Q model of the service quality is not the only factor that could lead to patient satisfaction in health care sectors but trust and reputation are also factors of great importance. Organizations need to improve every dimension of service quality, creating trust and achieve high reputation to gain high level of patient satisfaction. This study contributes to existing theories by confirming or adding value that have positive effect on patient satisfaction. 5Q model is a comprehensive model and it needs to be implemented in health care sector but with additional factors i.e. trust and reputation.

Key words: Patient satisfaction, Service quality, 5Q model, Trust, Reputation, Health care providers.

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CHAPTER 1: INTRODUCTION

The aim of this section is to identify the research topic and research questions. Thus the chapter begins with an introductory background, which includes the patient satisfaction regarding health care organizations and the factors, which effects, research objective and questions will follow. Delimitation and structure of the report will end the chapter.

1.1 Introductory Background

Customer satisfaction remains the most interesting subject for organizations as well as for the researchers at the same time. The basic objective of organizations is to increase the level of profits and try to decrease the cost. Profit can be enhanced by increase in sales with lesser costs. A factor to increase the sale is the satisfaction of the customer, which leads to customer loyalty (Wilson et al., 2008, p. 79). Whenever customers want to buy, their aim is to maximize their satisfaction from the product or service. Today marketplace entails organizations to build strong relationship with customers and not just producing the products, if they want to win. Building customer relationship means delivering superior value over competitors to the target customers (Kotler et al., 2002, p. 391).

Patient satisfaction has emerged as an increasingly important health outcome. Satisfaction is believed to be an attitudinal response to value judgments that patients make about their clinical encounter (Kane et al., 1997, p. 714). Satisfaction is either implicitly or explicitly defined as an evaluation based on the fulfillment of expectations (Williams, 1995, p. 559). In our point of view, satisfaction is what a consumer expectations, judging and at the end, acceptance or rejection is the outcome from the product or service.

Patient satisfaction regarding health care is a multidimensional concept that now becomes a very crucial health care outcome. A meta-analysis of satisfaction with medical care revealed the following aspects for patient satisfaction and overall performance of an organization: overall quality, trust, reputation, continuity, competence, information, organization, facilities, attention to psychosocial problems, humaneness and outcome of care (Hall & Dorman, 1988, p. 935). All of these factors have high influence on service quality of health care organizations and at the same time can influence the satisfaction level.

Due to technological advancement in the recent years, health care service provider's practices have also changed dramatically. Health care system is now a challenge for every government, state, political parties and insurance agencies due to high competition in field. The health care system that was dominated by nonprofit/public hospitals, is now provided increasingly by private sector. This competition results in satisfying patient through improvement in service quality dimensions, building trust and getting positive reputation. Some questions were raised while achieving these valuable goals in health care organizations, need to be addressed. For example, who want to improve health care service quality? Who is changing and innovating new techniques? Who is functionally and technically well sound? Whose organizational atmosphere is frankly and friendly? Is Feedback, communication, interaction and trust which is the most important factor are incorporated in organization? The organizations who

emphasizes and respond to above questions lead the organization towards positive reputation in the society (Rubin, 1990, p. 3-4).

Sweden health care system supports the idea that key dimensions of a country's health care system reflect the core social norms and values held by its citizens. No drastic changes have been occurred during the past half century in Swedish health care system and the fundamental structure of the Swedish health system has remained notably consistent, i.e., tax-based financing and publicly operated hospitals (Saltman & Bergman, 2005, p. 1).

In 1999, Sweden made reforms in order not to overload the local councils and planed that the county regions have to manage the integrated health care system. Changes in various laws and regulations created a health care model, which was founded on the following principles (Gennser, 1999).

1. The main focus of the public health laws is "that the population should be in good health." To achieve the main goal preventive care is therefore, included in the Swedish health care system.
2. Principle of justice and equal availability of health care will be provided to all citizens. No discrimination is allowed with respect to age and fee will be the same for everyone across the whole country.
3. The county regions will be responsible for health care planning. The scope and direction of health care services will be deciding by the democratically elected politicians.
4. The county councils have been given the authority to impose income taxes.
5. People who live in the country have a right to receive health care.
6. The county is responsible for both the financing of health care services and the production of health services (Gennser, 1999).

Patients have been given the choice and opportunity to choose between the different hospitals in county regions, and sometimes amongst different hospitals in neighboring counties. This kind of choice is promoting competition (Gennser, 1999). In the big cities and other areas where the public had convenient access to more than one hospital especially in suburban cities where the hospitals found themselves losing patients to the prestigious hospitals in the city centers (Michael, Harrison & Calltorp, 2000, p. 224).

Several models of health care evaluation have been proposed and designed to measure the patient satisfaction and service quality dimensions. Perhaps the most popular model is design by Donabedian (1966), who took three factors/dimensions, i.e., structure, process and outcome to evaluate quality of care and patient satisfaction. The first factor deals with the structure of the organization and the condition under which the service is provided. Second factor elaborates the process that refers to the professional activities by the health care. The third factor is outcome and refers to the result or patient rating, which means the current and future difference of patient's health and satisfaction level. Outcome is the most important factor to measure and to evaluate the patient satisfaction and service quality. The relationship among the structure, process and outcome should be very strong and clear because one can affect the other (Donabedian, 1966, p. 166-170). In order to be satisfied, everybody has a choice to choose the best health care quality and service. As price, competition is prohibited in public sector organizations that would exert pressure to focus on service, quality, reputation and trust (Vrangbaek et al., 2007, p. 126).

Measuring satisfaction with relation to service quality, most of the researchers use SERVQUAL model. For the very first time Zineldin (2006) use five quality dimensions (5Qs) model, which is a combination of technical-functional and SERVQUAL quality model. The 5Q model of the service quality covers most of the factors regarding health care. 5Q model consist of quality of object, quality of processes, quality of infrastructure, quality of interaction and quality of atmosphere. 5Q model is the strong tool to measure patient satisfaction regarding service quality.

Another factor that can lead a patient to satisfaction is trust. Trust is especially important in health care service organizations. Many definitions of trust have been proposed, however a core concept is that trust is the acceptance of a vulnerable situation in which the truster's believes that the trustee will act in the truster's best interests. Trust is the basic and fundamental aspect to measure, physician attributes identified by patients as engendering trust may be grouped into domains of technical competency, interpersonal competency, and agency (also called fidelity, loyalty, or fiduciary duty) (Thom et al., 2004, p. 125). Patient trust expresses a combination of variables, most important is the satisfaction and is more salient feature to measure the quality of ongoing relationships. Measuring trust would help to inform public policy deliberations and balance market forces, which threaten the doctor-patient relationship. Trust is a very crucial factor which builds and establishes through continuous improvement in overall service quality dimension and organizational reputation.

Apart from 5Q model of service quality and trust, we believe that reputation also plays a significant role in patient satisfaction. According to Herbig & Milewicz (1993, p. 18) nowadays, describing and explaining the concept of reputation has become a differentiating and competitive criteria. Flow of information from one user to another could be established: therefore, transactions between the entity and other party must have occurred in order to establish a good reputation. Reputation is a process or state build through continues improvement in service quality dimensions to meet the customers/patients needs and wants successfully.

Organizations with positive reputation support the argument that high quality of service firms will be larger and have more customers since fewer customers will depart from high quality firms in the long run and more will arrive because of word-of-mouth activity from other customers (Rogerson, 1983, p. 508). Organizations with high reputation maintain long life and have more customer/patients due to high satisfaction level based on credibility, quality and service. Strong relationship can be found between reputation and customer/patient satisfaction from practical as well as from theoretical point of view.

This study will investigate the effects of the 5Q model of service quality, reputation and trust on patient satisfaction in health care organizations. As discussed earlier previous research shows the relevance for patient satisfaction. This study will cover the patient satisfaction regarding service quality, for service quality, we will use 5Q model combine with trust and reputation. The combination has never been researched before. This is a gap area for health care service providers, which needs to be well research in order to be improved. In addition, this is a theoretical contribution by combining the mentioned factors together and will be useful in future for further research.

1.2 Research purpose

The main objective of the study is to investigate patient satisfaction in the context of health care organization. This will be a theoretical contribution to understand how the relationship is affected between the patient and health care service provider. This study will further investigate the satisfaction level of patients from Umeå hospital, how they perceive the service dimensions. It will enable us to test if the mentioned factors affect patient's satisfaction in health care organization.

Our objective is to investigate the patient satisfaction from Umeå hospitals and to investigate the delivery of health care service quality dimensions in order to ensure the patient satisfaction. Due to high competition in health care sector, it is difficult for public health care providers to maintain its standards and achieve high performance. The results of the study will be useful and can contribute to the health care organization to improve their overall performance in the areas like service quality dimensions, trust and reputation, which are the key factors in our point of view. These factors can lead the organization in getting high level of patient satisfaction.

1.3 Research question

How do 5Q model of the service quality, trust and reputation affect patient satisfaction?

To answer the above question, we studied how health care service quality dimensions, trust and reputation can affect patient satisfaction. We will be able to investigate the effect by quantitative method. This study will lead us to understand how 5Q model of service quality, trust and reputation affect patient satisfaction.

1.4 Delimitations

Having a broad nature of this area of study, we could not access all the literature concerning patient satisfaction because it will be voluminous. Thus, we become limited within the literature around the effect of 5Q model of the service quality, trust and reputation on patient satisfaction. Generally, we are evaluating how patients perceive 5Q model of the service quality in concerned organizations. This study is limited to Umeå because our sample will be drawn from those living in Umeå and do have experience of visiting this hospital. In fact, our selected area deals with employees and patients but we will focus from patient perspective only that how they consume service quality dimensions, trust and reputation from health care organizations. Health care service quality can be best evaluated from health care service sector and at the same time, trust and reputation are important factors in health care services sector. That is the reason that 5Q model of the service quality in service sector combine with trust and reputation especially in health care services is more appealing for our selection from patient perspective in our study.

1.5 Structure of the thesis

Chapter one presents the introduction, the next chapter i.e. two will present existing literature and theoretical framework about the effect of 5Q model of service quality, reputation and trust. The following chapter will be the methodology of the research, where the research design and research methods will be explained. Then the empirical findings and analysis will come in chapter four. Thesis will end up with chapter five where we will present conclusion and future suggestion of our study.

CHAPTER 2: LITERATURE REVIEW AND THEORITICAL FRAMEWORK

The aim of this section is to present literature and conclude with conceptual framework. The chapter begins with a review of definitions and some measurements of customer/patient satisfaction. Then we will illustrate the factors of 5Q model of service quality, trust and reputation, which affect patient satisfaction. Then the study leads us to the conceptual framework, where formulation of hypothesis and conceptual model of the study will end up the chapter.

2.1 Customer and patient satisfaction

Whenever either the customer is pleased with the product or the service then it is considered as satisfaction. Satisfaction may be a person's feelings of happiness or disappointment in result for comparing a product/service perceived performance or outcome with its expectation (Kotler & Keller, 2009, p. 789). Satisfaction can be derived as happiness achieved from the consumption of goods or services offered by a person or group of people or it may be state of being happy with the situation. Sometimes it becomes very difficult to satisfy everyone or determine satisfaction among group of individuals because mostly people have different perceptions and expectations. Satisfaction is similar to the other psychological words that are easy to understand but difficult to explain. The idea of satisfaction is similar to the themes such as happiness, contentment and good quality of life. Satisfaction is not the phenomenon waiting to be measured by people but is a judgment of people from over a period of time as they reflect from their experience (Irish society for quality and safety in health care, 2003, p. 10).

“A simple and practical definition of satisfaction would be the degree to which desired goals have been achieved” (Irish society for quality and safety in health care, 2003, p.10). Satisfaction can be said as a positive response of individuals to a specific focus (consumer experience) that is determined at a particular time (Shemwell et al., 1998, p. 158-165).

For evaluating and making improvement in quality of health care, it is required to investigate the quality of care in the context of health care. Patient satisfaction is the substantial indicator in the health care. For this purpose, quality of work includes investigation that map out the patient satisfaction with several factors (Johansson et al., 2002, p. 337-338). Patient satisfaction is used as performance of measurement by different hospitals, principally on instrumental grounds such as adhering to treatment, recommendations and maintaining continuity of care (Thom et al., 2004, p. 127)

Different professionals influence patient satisfaction. Health care practices are considered as the key factor in patient assessment of their satisfaction. The patient satisfaction assessment is important not only for patient but also for the health care organization as well (Johansson et al., 2002, p. 337-338).

Patient satisfaction is fundamentally a subjective judgment that results from the appraisal of health care experience and involving the explicit and implicit comparison of the actual events with the expectation of the individuals. Patient satisfaction shows the degree to which the individual's actual experience matches with the preferences regarding their experience. Patient satisfaction is not only the judgment at the end of the

care but also essential for the initial treatment decision for future (Brenan, 1995, p. 250-252). As from the literature, we found that there is no exact definition of patient satisfaction because it depends on several factors. The main problem is that some patients are satisfied with one factor while the others are not. However Linder-Pelz (1982, p. 580) suggest the definition of patient satisfaction through content analysis of the satisfaction studies in which five psychological variables were proposed to be probable determinant of satisfaction in health care services.

- Occurrence: The outcomes of a result take place and importance of the individual perceiving what has been occurred.
- Value: Judgment of the quality perceived as good or bad or features of health care encounter is consider by the customer as “value”.
- Expectation: Patients belief that certain attributes might be attached to an object and judging importance of those attributes are the building blocks of satisfaction.
- Interpersonal comparisons: Evaluating of the individual experience of current health care encounter with what he/she has experienced previously.
- Entitlement: The individual thinking that he has a solid and sound basis for claiming of particular result.

By evaluating these attributes the patient satisfaction definition becomes “the individual positive evaluation of distinct dimensions of health care” (Linder - Pelz, 1982, p. 580).

2.2 Service quality

Customer reaches the organization and benefit at the same time through services. Service can be defined in many ways depending on which area the term is being used. Kotler & Keller (2009, p. 789) defines service as “any intangible act or performance that one party offers to another that does not result in the ownership of anything”. Service can also be defined as an intangible offer by one party to another with mutual consideration for pleasure.

Consumers mostly attracted towards a service by focusing on quality (Solomon, 2009, p. 413). Another definition of quality is the total features and characteristics of a product or services that bear on its ability to satisfy stated or implied needs (Kotler et al., 2002, p. 831). It is clear that quality is also related to the value of an offer, which could evoke satisfaction or dissatisfaction on the user’s part.

“A simple definition of quality in health care is the art of doing the right thing, at the right time, in the right way, for the right person – and having the best possible results” (Zineldin, 2006, p. 66). Recently, among health care researchers the greatest consensus has been achieved on the definition provided by Institute of Medicine (IOM): “quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” (Lohr, 1990, p. 21).

According to Parasuraman et al. (1988, p. 16-17) service quality is “the differences between customer expectations and perceptions of service”. Measuring service quality to identify the difference between perceived and expected service is a valid way and enable the management to find gaps to what they offer as services.

Organizations are now more focused on quality services and the aim is to satisfy customers. In order to know whether customer “will” is fulfilled or satisfied, organizations need to measure the service quality, a better way to understand service quality in the context of customer satisfaction. A researcher listed in his study: “three components/dimensions of service quality, called the 3 “Ps” of service quality” (Haywood, 1988, p. 19-29). The author explains in the study, service quality is comprised of three elements (Physical process, people’s behavior, professional judgment):

- The overall technical facilities, process and procedures of an organization;
- Staff behavior and responses towards their serving and;
- Staff efforts and professional judgments to improve quality of service (Haywood, 1988, p. 19-29).

Haywood (1988, p. 9-29) states, “an appropriate, carefully balanced mix of these three elements must be achieved.” What constitutes an appropriate mix is determined by the relative degrees of service process customization, labour intensity, contact and interaction between the customer and the service process. However, this idea of the author could be evaluating service quality from the employee perspective.

Researchers measure the service quality dimensions by using SERQUAL model that is the most popular and strong tool, also called gap model. SERQUAL model is created by Parasuraman et al. (1985) for the very first time and there were 97 attributes put into ten dimensions (Parasuraman et al., 1985, p. 46). Through these dimensions, one can measure the customer satisfaction level regarding the quality of service of an organization. The findings became more interesting because of further investigation and concluded that, among these 10 dimensions, some were correlated. After some refinement, ten dimensions were later reduced to five dimensions (Laroche et al., 2004, p. 363):

- **Tangibility:** This dimension consist of physical facilities, equipment, and appearance of personnel of an organization
- **Reliability:** This dimension deals with the ability to perform the promised service dependably and accurately by the organization
- **Responsiveness:** This dimension focuses on the willingness to help customers and provide prompt service
- **Assurance:** This dimension explains how knowledge and courtesy of employees and their ability to inspire trust and confidence
- **Empathy:** This dimension defines how much of an individualized attention the firm provides to its customers

From the above five dimensions perspective the aggregated sum of difference between perceptions and expectations global perceive quality construct is formed (Laroche et al., 2004, p. 363). By these dimensions, quality of service can be improved and the customer satisfaction level can be increased.

Service environment in the health-care industry is determined by not only technology and new facility support, but also the performance of employees in the organization. “Various methods and tools are used by medical administrators, researchers, and health-care policy makers in an effort to find a better way to provide high quality of the

service” (Lee et al., 2011, p. 20). Health care organizations need to emphasize on every single aspect/dimension of service quality and not only on technology, facilities and support.

Health care organizations are now competing with each other especially in the patient satisfaction area. Patients can be satisfied through various combinations of responsiveness to the patient’s views and needs, and continuous improvement of the healthcare services and in overall doctor-patients relationship. Health care providers are now more concerned with the patient satisfaction, as it is an important topic to understand and value by the patients. So in order to know how the patients perceive the quality of care and to know where, when and how service improvement can be made (Zineldin 2006, p. 61). Health care providers are now more interested to know what factors/dimensions can more affect the service quality, because of the high competition, extensive literature and pressure from the patients.

In the past, only few studies have been conducted in health care sector to investigate the link between technical and functional quality dimensions and the level of patient’s satisfaction. Mostly the studies only focus on few aspects of health care quality of service but none of the studies has empirically examined how the atmosphere, interaction and infrastructure might affect the overall patient’s quality perception and satisfaction. Patient satisfaction is a cumulative combination of different constructs, summing satisfaction with various facets of the health care organization (hospital), such as technical, functional, infrastructure, interaction and atmosphere variables or items (Zineldin, 2006, p. 61). Patient satisfaction regarding service quality is always dependent on different factors/dimensions and with the passage of time the factors/dimensions are explored by different researchers.

Zineldin (2006, p. 69) expanded technical-functional and SERVQUAL quality models into framework of five quality dimensions, consist of quality of Object, quality of Process, quality of Infrastructure, quality of Interaction and quality of Atmosphere. This model is now considered an effective model for health care providers in order to evaluate patient’s satisfaction.

5Qs model: The health care service quality is not only affected by the technical and functional activities of the organizations but some other factors the researchers have ignored, play an important role such as interaction, infrastructure and atmosphere. Zineldin (2000a) expanded technical-functional and SERVQUAL quality models into framework of five quality dimensions (5Qs): (Zineldin 2006, p. 69). Zineldin designed and developed a comprehensive model regarding patient satisfaction from health care providers, also called the 5Q model.

Q1. Quality of object – The technical quality (what customer receives), for example, relates to the clinical procedures carried out and it focuses on the technical accuracy of medical diagnosis and procedures. This dimension of service quality measures the treatment itself; the main reason of why a patient is visiting a hospital in the context of his very basic need and want.

Q2. Quality of processes – This dimension deals with the functional quality that how the health care organization provides the core service (the technical). This dimension measures how well activities of the health care are implemented practically. It includes

waiting times by the patients and speed of performing the health care activities by the staff. Sensitive issues are attached to the health care industry so process indicators should receive more attention. These indicators can be used to identify problems in service delivery and to suggest specific solutions. Front-line nurses/physicians/managers can use process indicators to supervise/monitor activity at their facilities and to improve day-to-day decision-making.

Q3. Quality of infrastructure – This dimension of service quality measures the essential and basic resources that are needed to perform the health care services. This includes many attributes such as the quality of the internal competence and skills, know-how, experience, motivation, attitudes, technology, internal relationships, internal resources and activities and most important how these activities are managed, co-operated and co-ordinated. Researchers found that technology infrastructure can play a vital role in patient satisfaction and it has become a revolutionary key factor practicing in health care organization.

Q4. Quality of interaction – communication/interaction among the people is always difficult to deal with. It is not communication/interaction among the machines, accounting systems or trading agreements, which can do it effectively with each other in order to exchange values. This dimension of service quality measures the quality of information exchange (e.g., the percentage of patients who are informed when to return for a check-up, amount of time spent by physicians or nurses to understand the patient’s needs, etc.), and social exchange, etc. Perceived quality of interaction and communication reflects a patient’s level of overall satisfaction.

Q5. Quality of atmosphere – This dimension is concerned with the relationship and interaction process between the two parties is influenced by the quality of the atmosphere in a specific environment where they cooperate and operate. The atmosphere indicators should be considered very critical and important because of the belief that lack of frankly and friendly atmosphere explains poor quality of care (Zineldin 2006, p 69-71).

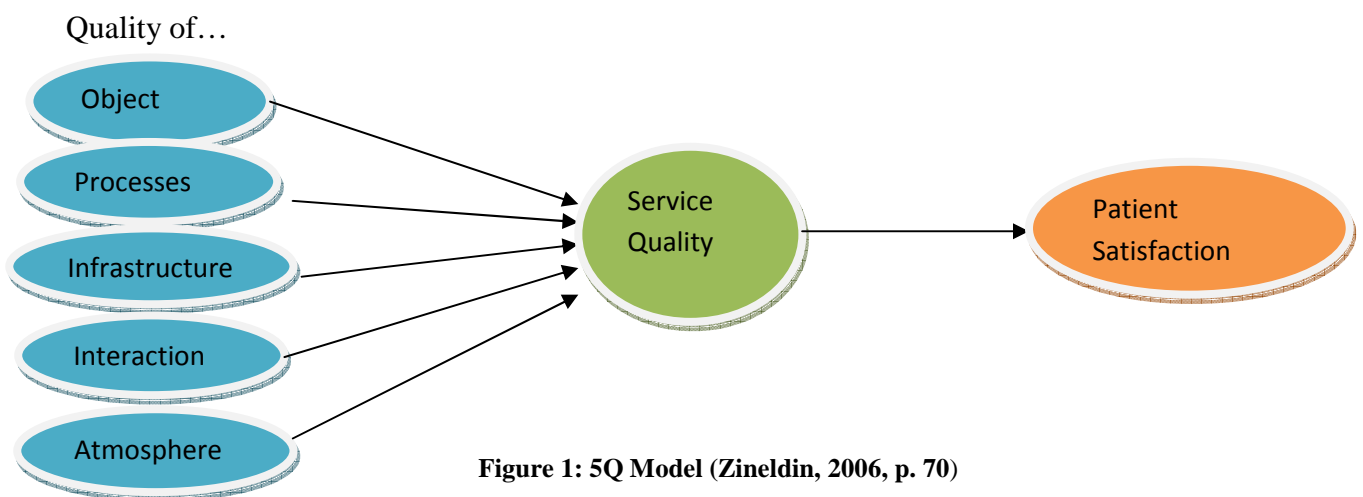


Figure 1: 5Q Model (Zineldin, 2006, p. 70)

Above figure illustrates the 5Qs model and its constructs, where the service quality of the health care is function of Q1-Q5. The model consists of 5 dimensions of the service quality, all together 5 dimensions result in health care service quality which can affect

the level of patient satisfaction (Zineldin, 2006, p. 70-72). According to Zineldin, all the dimensions are functions of service quality, which leads the patient to satisfaction.

2.3 Trust

Generally, trust in the society can be viewed as the source of minimizing the complexity and means of coping with the freedom of others, trust is the feature of all social relationship and indicates some form of expectation about the future (Jones, 2002, p. 225). while trust can be also defined as depending on the characteristics of object, or the occurrence of an event, or the behavior of a person to organize the desired but uncertain objectives in a risky situation (Giffin, 1967, p. 106).

According to Mayer et al, (1995, p. 712) trust is when one party willingly puts itself vulnerable to the other party and first one expect that the other party will do better in his favor, irrespective of the ability to monitor or control the other party.

Some researchers tried to define trust as, it is essential for effective interpersonal relations and community living (Mechanic & Meyer, 2000, p. 657). Trust is the reliable source among people living in a society, as Thom et al. (2004, p. 124-127) stated that trust is the acceptance in risky circumstances in which the trusters believe that the trustee will act in the best interest of truster. This kind of definition is supported by Hall et al. (2001, p. 615) perceiving the hope in vulnerable situation by the trusters that trustee will care for the trusters interest. Mechanic & Meyer (2000, p. 660) defines that trust allows accepting vulnerability or the belief that the other has one best interest at hearts.

Hall et al (2001, p. 616) further explored that trust cannot be separated from the vulnerability because in the absence of vulnerability there is no need of trust. The greater the situation of risk the greater will be the possibilities of trust or distrust. Trust can be also defined as to create the vulnerability as in the friendly relationship but vulnerability is prime and necessary in medicine, so it is important to think of trust in vulnerable conditions. Trust builds from the patients needs for physicians where greater the sense of vulnerability the higher will be potential for trust.

Davies & Randall (2000, p. 612) differentiates between trust and faith that the nature of trust is different from dependency and faith. Trust develops between two parties under several conditions. First there must be some interdependency between them that is the action of one must have impact on the others. Secondly, there must be some choices selected by any party and thirdly, there must be some uncertainty or risk attached to these choices. In such a situation, one or both parties can place trust on each other and choose that other party will act in the best interest of them. The word choice has important role in trust because it gives way to risk and with this trust has dependency. However, the ones trust on another must be based on experience and knowledge of the other party that it has the competences and willingness to act on behalf of him. Trust without such experience and knowledge may regard as faith or hope.

According to Hall et al. (2001, p. 620-624) trust by nature has different types and objects of multiple dimensions in which some of them focus on particular act or obligations while others stress personal attributes or characteristics. Instead of having these kinds of different conceptual schemes, it consists of some common dimensions that are fidelity, competence, honesty, confidentiality and global trust.

Fidelity: Fidelity is, pursuing in the best interest of patients and avoiding the advantage of patient's vulnerability. It can be expressed by agency or loyalty, which consists of caring, respect, advocacy and prevents the conflict of interest. Caring and respect are the important elements, which are directly related to perception of motivation. Advocacy requires actions or we can say maintaining a positive thinking. For minimizing the conflict between the patients and physicians is considering the interest of the patient instead of other competitors.

Competence: Competence means minimizing the mistakes and creating better achievable results. Mistakes may be cognitive which errors in judgments are while it may be technical which errors in executions are. Normally the patient faces difficulty in differentiating the technical competence so their views of competence are inclined by the physician interpersonal competence (communication skills and bedside manner). Conceptually and empirically it is valued to differentiate between the measure of trust and predictors of trust which is ultimately known as what trust is and what influence trust. However, communication includes eye contact, which is not effective in the caring directly because it does not make any correct sense that physician has good eye contact while it may also give way to misunderstanding. Alternative to this communication has great importance in perceiving their physicians skills, care and other personal characteristics.

Honesty: This dimensions suggest of telling the truth and minimize the intentionally falsehood. Dishonesty concludes telling a lie, half-truth and deceiving by silence. Dishonesty can be classified according to whom take advantage from this: (1) the physician who is unable to accept the mistake, (2) the patients who are expecting false hope and (3) is the institution, which covers the process, criteria for making the important decisions. Some of dishonesty includes the misleading of patient from the risk of treatment by encouraging them for beneficial treatment or discouraging from the expensive treatment. However, honesty sometimes lowers the trust in other dimensions which directly make the overall trust uncertain.

Confidentiality: Confidentiality promotes the proper use of responsive and secret information. This information is not use as secrecy but aim is to make useful for the proper treatment of patient. The main sources of leaking this information are physicians, medical personal and those who keep the medical records. The disclosing of information can be harmful as economically and personally while inappropriate or disrespectful information exchange among medical personal are the source of leaking information.

Global trust: Global trust has ability of concerning strong connection with several other areas but does not fit exclusively in one. Global trust has important role in the component of trust, which is irreducible or we can say the "soul of trust" (Hall et al., 2001, p. 620-624).

Mechanic & Meyer (2000, p. 661) further explains "Trust means compassion: it means listening and really hearing, it is just dedications". Trust means perceiving confidence in a person that will do the right thing in best interest of patients, perceiving the physicians is well trained and having experience worked on this type of medical problem, very well know how the latest technology and latest research, and treat all the patient in the same manner. Trust means that you would trust a person with your own well-being and in your absence that person is able to control the situation and you have a trust that the person will do the best in your interests.

Trust creates the environment in which patient discloses and cooperates in treatment, making easier to adjust unhealthy behavior as well as minimize the chance of complaints, disputes and lawsuits. Trust and openness of communication not only increases the human sensibilities of both patient and doctors, however increases the quality of interactions as well. For important personal relationship trust is the investment for the continuing possibilities of human learning and growth (Mechanic, 1998, p. 286-287). However, trust in medical profession is said to be exclusively related to the patient's desires of seeking care in terms of control by physicians in making medical decisions (Balkrishnan et al., 2003, p. 1061)

Trust can be a defining characteristic of the relationship between patients with their physicians and other care providers. Trust in the physicians is one of the strongest predictors of patient decision for enrolling in their treatment of any diseases. Mostly the patient trust is linked to proposed or reported patients devotion to treatment recommendations (Thom et al., 2004, p. 124-127).

Interpersonal physicians trust is based on patient personal experience and physicians characteristics (Balkrishnan et al., 2003, p. 1061). Factors in trust through which interpersonal trust increases among patients and physicians are, greater perception of mutual interest, clear communication, history of having fulfilled trust, low perception of power difference among the person being trusted, accepting the personal disclosure and expectation of the long term relationship (Johnson & Noonan, 1972, p. 411-412).

“Trust is a lubricant that enables relationship to functions smoothly, a glue that binds people in mutually rewarding relationship and a stimulant that allows greater creativity, innovations and performance” (Davies & Rundall, 2000, p. 612). Creating and maintaining trust is very difficult task because it needs repeated interactions and reliable experience. There is contradiction between trust and distrust, trust take long time to build but it can be destroyed easily and once it has been lost it become very difficult to rebuild it.

2.4 Reputation

Herbig & Milewicz (1993, p. 18) explains corporate reputation is trust that the corporate creates by keeping its promises in a decided manner. Consumers understand the importance of reputation and credibility. Whether to believe the product claims made by a manufacturer's advertising, credit check/verification for a new account, or whether to believe delivery dates or claims made by a vendor can be the examples from daily life usually we face. The estimated consistency of an attribute of entity overtime is called reputation. This estimation is based on the willingness and ability of the entity to perform an activity repeatedly in a similar fashion. An attribute is some specific part of the entity — price, quality and marketing skills.

Aggregate composite of a historical notion of the entity, all previous transactions over the life of the entity, and requires consistency of an entity's actions over a prolonged time, cumulatively all together can be consider as a reputation. Reputation is established by the exchange of information from one user to another. Therefore, it is necessary that transactions between the entity and other parties must have occurred in order to establish a reputation and to value the transaction. Mostly reputation develops when entities are unsure or unaware about one another's options or motives and where they deal with each other repeatedly in related circumstances or past dealings observable with other firms (Herbig & Milewicz, 1993, p. 18-19). Past performance always matters

while dealing with customers; firms profile is observable in terms of services, quality, information and word of mouth continuously by the customers.

Herbig & Milewicz (1993, p. 18-20) argued that reputation is a precious and valuable commodity, it takes time to build and need continuous improvement to maintain. If a firm provides accurate information to the customers, instead of making a user duping although firms made a short term loss but it can enhance its reputation by providing accurate information, which is a long term gain. Therefore, the company takes short-term losses to build reputation and secure larger long-term gains. It is also fragile because the impact of a bad action on the customer is much stronger than that of a good action. Repeated positive transactions of a firm lead the firm to a positive reputation (for example, for quality or on-time delivery) and the same if a firm repeated negative transactions lead it to the negative reputation (poor quality or tardy deliveries).

Any organization achieves a good overall reputation and owns a valuable asset – “goodwill”: brand names, corporate logos and customer loyalty. However, it should be kept in mind that reputation is fragile and sensitive. It can be lost easily and once it is lost, it takes much time and effort to build it again. In order to restore reputation organization requires seven to ten times’ more efforts as compared to before it was lost. Organizations with vision to build and maintain a long term reputation they need to deliver the promised quality of the good/service (so as not to make worthless its prior investment or to incur the new cost of regaining it). The cost of establishing a reputation and the cost of maintaining this reputation is an investment the firm recoups through charging or receiving a premium (Herbig & Milewicz, 1993, p. 21). Reputation is a long-term process to build and once establishes, it needs more attention to maintain it.

Bromley (2002, p. 36) define reputation as the collective assessment of a firm past behavior and outcomes that deliver the firm’s ability to render valued results to customers. Reputation thus reflects the relative standing/position, internally with the employees and externally with the different stockholders. Every organization, especially health care providers should consider reputation as vital as Hibbard et al. (2005, p. 1150) argued that if a hospital reputation is affected due to some attributes then it might declines its market share via patient choice, purchase choice, or physician referral. Also declining reputation may bring other challenges to the organization such as recruiting and retaining staff and at the same time affect a hospital ability to maintain legitimacy and professional standing.

Organizations have different and various reasons to be concerned about their reputations. It is very clear that the most motivating factor is a professional pride, but change in reputation of health care organizations can influence financial and overall performance. Negative reputation could affect hospital’s ability to raise funds, charitable donations that are important sources of income for not-for-profit health care organizations and for the public health care organizations. Moreover, it is difficult to obtain budgets from the state in case of negative reputation (Hibbard et al., 2005, p. 1159).

Reputation in the health care organizations is affected by experience – stakeholders with more experience probably know the organization better and can thus evaluate it more accurately. That is why researchers suggest that health care organizations need to

enhance the quality of the care delivered to patients and effectively perform to the communities in which they operate (Bourke, 2009, p. 39-40).

Since the service is human health, how the reputation perceived is important. In parallel to this, since the patients get treatment at health care organizations towards their preferences, it is important to measure the reputation depending on customer/patients perceptions (Satir, 2006, p. 57-58). According to Herbig & Milewicz (1993), an organization's reputation is consisting of trust that the organizations establishes it by keeping its promises and fulfill it in time, Satir (2006) illustrates the following dimensions to affect customers/patients perceptions of corporate reputation, service quality and, communication. Research by Power (2005, p. 1-2) states the importance of a positive reputation to a hospital, as patients now have more choices in the health care providers they can choose. Because of this, hospitals need to continue to enhance the clinical and experimental quality of the patient care and effectively communicates their performance in the communities they serve.

2.5 Conceptual framework

This section will summarize the ideas that we got from past literature and to bring out our contribution for this study. The general idea from the past literature is that there is a relationship between customer/patient satisfaction and service quality dimensions that can affect each other. Service quality could be evaluated with the use of service quality dimensions and the most useful regarding health care services is 5Q model, because this model describes almost all factors of health care service quality which covers overall patient satisfaction.

Since customer (patient in our case), (dis)satisfaction has been considered to be based on the customer's past experience on a particular service encounter (Cronin & Taylor, 1992, p. 57). It is in line with the fact that service quality is a determinant of customer satisfaction, because service quality comes from outcome of the services from the service providers organizations. Lewis (1993, p. 4) states that "definitions of consumer satisfaction relate to a specific transaction (the difference between predicted service and perceived service) in contrast with 'attitudes', which are more enduring and less situational-oriented."

Patient satisfaction is the key factor that brings competition among the health care organizations. Patients' satisfaction is created through a combination of responsiveness to the patient's views, needs, and continuous improvement of the healthcare services, as well as continuous improvement of the overall doctor-patients relationship (Zineldin, 2006, p. 61). Patient satisfaction is concerned with the different factors of the service quality of the health care organization.

It is illustrated that service quality is the overall assessment of a service by the customers/patients, (Eshghi et al., 2008, p. 121). Also, the five dimension of the SERVQUAL model has been used by most of the researchers in the evaluation of service quality (Wilson et al., 2008, p. 79; Bennett & Barkensjo, 2005, p. 101, Negi, 2009; Wang & Hing-Po, 2002). After that, Zineldin (2006) implemented 5Q model of the service quality to evaluate and measure the satisfaction level of patient.

Most of the published academic studies in the services sector have looked only at the link between services quality and satisfaction (e.g. Kelley & Davis, 1994; Parasuraman

et al., 1994; Bettencourt, 1997; Zineldin, 2000a). Fewer studies have been conducted to “investigate the link between technical and functional quality dimensions and the level of patient’s satisfaction in the healthcare sector and at the same time no research has been done to empirically examined how the atmosphere, interaction and infrastructure might impact the overall patient’s quality perception and satisfaction” (Zineldin, 2006, p. 61). From the above discussion, we understand that previous researchers found relationship between service quality dimensions and satisfaction, to measure the phenomena they use SERQUAL model. Here, we will use 5Q model of the service quality in order to measure satisfaction level of the patients and we will investigate that does every dimension of the 5Q model of the service quality effect patient satisfaction. Therefore, this leads to state our first hypothesis.

H1a: Quality of object has a positive effect on patient satisfaction.

H1b: Quality of process has a positive effect on patient satisfaction.

H1c: Quality of infrastructure has a positive effect on patient satisfaction.

H1d: Quality of interaction has a positive effect on patient satisfaction.

H1e: Quality of atmosphere has a positive effect on patient satisfaction.

The central importance of trust in medical relationships has long been recognized (Mechanic 1996; Pellegrino, Veatch, & Langan, 1991; Parsons, 1951; Peabody, 1927), still, trust has not been systematically analyzed or measured (Pearson & Raeke, 2000). First time trust measured in 1990 (Anderson & Dedrick, 1990) and later modified by (Thom et al., 1999), and further two measures were published in the late 1990s (Safran et al., 1998; Zaslavski et al., 1998). As a result of these instruments and measures, there is growing need to study trust empirically and a burgeoning body of work measuring various aspects of trust.

Caterinicchio (1979) published a literature on measured patient trust in their physician. In addition to its intrinsic value, there is increasing evidence that patient trust is linked to intend or report patient adherence to treatment recommendations. A study by Thom et al. (1999) high ratio of patients recommended their physician and act on the physician suggested prescription. This study was regarding trust in physician and patient positive recommendation towards their physician.

Satisfaction is achieved through the delivered product and services are empirically documented as the decisions of buyers to maintain a relationship with that organization (Fornell 1992, p.12). According to confirmation/disconfirmation theory, satisfaction is achieved when the expectation becomes fulfilled (confirmed) while the disconfirmation of expectation results in the dissatisfactions, and a confirmation results in improved satisfaction (Churchill & Surprenant, 1982, p. 492-499; Oliver 1980, p. 461-465). When a customer is satisfied with supplies which means that the suppliers is able to deliver the required expectation of customer, and thus the perceived risk related to the choosing of familiar suppliers (who fulfill expectation) result in less risk as compare to choosing the unfamiliar suppliers, which affect the level of trust.

Hall et al. (2002, p. 296-314) stated that conceptually trust is related to satisfaction. In the field of medical physician, trust has strong association with satisfaction by having choice of selecting the physician by the patients, willingness to recommend the physician to others. The relationship between the patient and health care provider has great significance in the medical policy arena. Previously, measures of these relationships focused primarily on satisfaction and communication. The literature

regarding trust and satisfaction is fewer but from the above discussed literature where trust is measured with certain attributes with respect to satisfaction, we got idea that patient's satisfaction can be effected by the trust in physician and in health care organization. We took attributes of trust from Thom et al. (1999) study because that attributes are related to patient satisfaction. For this, we will conduct a quantitative survey and test the phenomenon, which would state the second hypothesis.

H 2: Trust has a positive effect on patient satisfaction

Reputation is also important because “it is a key source of distinctiveness that produces support for the company and differentiates it from rivals” (Fombrun & van Riel, 2004, p. 5). A number of studies have examined the expected benefits associated with a strong reputation, such as increased financial performance (Roberts & Dowling, 2002), increased advertising effectiveness (Goldberg & Hartwick, 1990), ability to charge a premium (Klein & Leffler, 1981; Milgrom & Roberts, 1986), improved employee recruitment (Stigler, 1962), easier product introduction (Dowling, 2001), increased access to capital markets (Betty & Ritter, 1986), and increased sales force effectiveness (Dowling, 2001).

Literature published on reputation especially during the 1990s and it has been increased in 2001–2003. It is clear that reputation is important. Fombrun et al. (2000) used a reputation quotient in their study to measure reputation. The reputation quotient assesses how a representative group of stakeholders perceives six underlying dimensions of reputation: emotional appeal, products and services, financial performance, vision and leadership, workplace environment, and social responsibility. A good reputation benefits the organizations in many ways the most important is the satisfaction through which organizations gain customer loyalty, premium prices and a cushion of goodwill when crises hits. Organizations can build its reputation through increased customer satisfaction (Bourke, 2009, p. 28-33).

If an organization fulfills and helps the customer's personal goals then satisfaction follows, this will lead to greater positive identification with the organization. Satisfaction depends on the organization “contributing suitably to the attainment of one's personal objectives” (Bullock, 1952, p. 7), individuals will identify with the institution if that institution helps them to attain their personal goals and if they are satisfied with the institution's offerings (Hong & Yang, 2009, p. 387). If a customer goals and utilities are fulfilled by the organization offerings then the customer will be satisfied and the organization will get reputation in response. This shows that satisfaction has something to do with reputation as we got idea from the above literature. This discussion leads us to state our third hypothesis.

H3: Reputation has a positive effect on patient satisfaction.

Based on above reviewed literature and hypothesis development we are now able to design a conceptual model. As 5Q model is rarely applied before in health sector area to measure patient satisfaction regarding service quality but it is still unexplored with the combination of trust and reputation and its effects on patient satisfaction. From the discussed literature, idea generates that raises an assumption that each of the five dimensions of the 5Q model could directly affect the patient satisfaction see (Figure 2). In our conceptual framework model, satisfaction is dependent variable while 5Q model

of the service quality, trust and reputation are independent variables. The three variables (5Q model of the service quality, trust and reputation) will be investigated later that how it effects patient satisfaction.

Service Quality.....

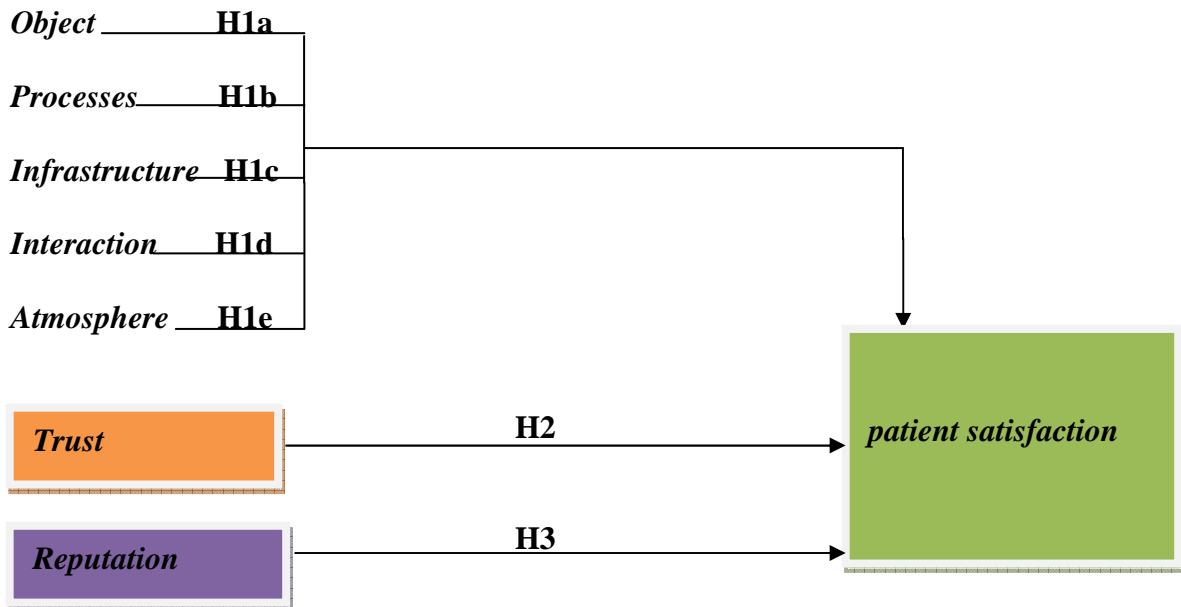


Figure 2: Conceptual framework model

(—————> Indicates positive effect and ————— means equal to)

We need to conduct survey from the patient whether they are satisfied with 5Q model of the services quality, trust and reputation. We will measure service quality dimensions (5Q model), trust and reputation then a conclusion can be drawn that the mentioned factors have a positive effect on patient satisfaction.

CHAPTER 3: METHODOLOGY

This section is about to explain methods used in carrying out this research, how the research was designed and reasons for the choices. Thus the chapter begins with the thesis preconceptions and choice of the study. The research philosophies follow, research approach, chosen research strategy and research design. The chapter also presents survey design, data collection, limitations of the survey and analysis of the data. The chapter ends with the quality criteria and ethical consideration of the data.

3.1 Authors' preconceptions

Our study has some roots from where we begin and generate the topic. We used both practical and theoretical knowledge in order to generate the research topic. To consider this area is quite obvious and appealing being students of business management as well as customers. We are interested in satisfaction and service sector due to high emergence and influence in the service sector.

We chose the topic "Patient's satisfaction regarding hospital services" because as a customer of a hospital, our selection of health care providers, decisions and repeat usage of the same service, shows our satisfaction level. Recommendation depends on high level of satisfaction we derive from the service or products we consumed from a specific organization. Usually we compare quality of a product or service with price before we decide to consume the offer. In case of health care, mostly customers focus on quality. Being a patient we consider quality, trust and reputation altogether are the main determinants of satisfaction.

Before this study, we got theoretical background knowledge from some courses which are already studied such as; principles of marketing, marketing management and economics that we studied back in our country at Peshawar University. We also studied some other courses that are supportive for this research like Project management, business strategy, product planning & development and business development as part of the program at Umeå School of Business. Moreover, we also got some literature background knowledge from past studies by other researchers on same topic and area of research.

The preconception had helped us to develop the idea of this topic and it gave us some background that how a patient could derive satisfaction from health care providers. Both the practical experience of consuming hospital services and theoretical background was important because this helped us to place our interest on testing the reality, that how a patient is satisfied and what is the basis for his selection. Hence, we carried out a quantitative study for this topic.

3.2 Choice of study

Hospitals provide the health services to the citizens in their daily life. This shows the importance of hospitals and their role in providing better health care services to the nation. Hospitals have undergone many changes in technology as well as in terms of needs and demands of patients. Patient's needs changes constantly however; hospitals identify these needs and bring changes accordingly to satisfy patients. It is important to measure health care service quality and find out how patients perceive each item that need to be improved in case they are dissatisfied with it. For this purpose our selected

model of 5Q of the service quality consists of quality of process, quality of object, quality of infrastructure, quality of interaction and quality of atmosphere combine with trust and reputation.

We reviewed the literature, the applicability of 5Q model of the service quality, trust and reputation in various sectors and identify the relevant sector i.e. health care service providers. We have developed a conceptual framework of 5Q model of the service quality by adding two other factors i.e. trust and reputation to evaluate the gap between the patient satisfaction and perception of services. Therefore, to better understand we discussed the related concept such as 5Q model of the service quality, trust and reputation and their effects on patient satisfaction. The reasons for choosing this topic is due to fact that, today mostly hospitals concentrate on providing additional services to make their patients satisfied to maintain a long term relationship. Thus, we thought it would be better to view health care service quality dimensions (5Q model) as well as trust and reputation with respect to patient satisfaction.

The choice of this subject is because that we are students of management, had studied the subject of management and marketing in our bachelor degree. We are familiar with the theories from the previous studies that are related to the service quality dimensions, trust and reputation and how it can effect satisfaction. The idea from the studied courses will help us to well treat this study and gives some backgrounds about the customer/patient satisfaction in service sector.

3.3 Research philosophy

The philosophy adopted by any researcher in his research study is composed of certain assumptions in the way he perceived the world. The assumptions in the research philosophy will help us to design research strategy and develop method for the research (Saunders et al. 2009, p. 108).

Saunders et al. (2009, p. 110-111) stated that there are two main types of research philosophies; ontology and epistemology. The former is concerned with the nature of reality and in philosophy it refers to the subject of existence. This aspect raises the questions of the assumptions that researcher has the view the way world operates and look from the view how the commitments are held. There are two aspects of ontological philosophy, objectivism and subjectivism. The researchers consider that both contribute valid knowledge. Objectivism holds that social entities exist in reality external to social actors concerning with their existence and subjectivism explains that social phenomena is created with the perception and actions of the social actors concerning their existence. Our view of the ontological aspect is objectivism.

This research holds the objectivist aspects and the reason is that the variables, which are discussed in our research i.e. patient satisfaction, 5Q model of the service quality, trust and reputation, have tangible realities. As competition pushes organization to improve the service quality dimensions, create trust in society and if the organizations want reputation and recognition so they need to satisfy the patients, but satisfaction is a utility, vary for every individual. Patient satisfaction, 5Q model of the service quality, trust and reputation are all variables with the characteristics of an object in organizations. Thus with an objective reality, we believe that the level of satisfaction will differ in different organizations and at the same time the meaning of 5Q model of the service quality, trust and reputation will also differ with the organizations. This

means that 5Q model of the service quality, trust and reputation can effect patient satisfaction in different ways in different organizations in different circumstances.

The second aspect of the research philosophy is epistemology, this aspect states that how to generate knowledge. Epistemological considerations talk about the knowledge of social groups and social world. It is about some internal problems such as realism, interpretivism and positivism (Bryman & Bell, 2007, p. 4-26). The philosophy of the realism states that our senses show us that the reality is the truth and the reality exists is independent of the human mind. Interpretivism states that it is very important for every researcher to understand the differences between humans in our role as social actors. Our view of the study from the aspect of epistemology is positivism, which states that we can only get knowledge about reality by following a scientific method of developing hypotheses and testing (Bryman & Bell, 2003, p. 19-20; Saunders et al., 2009, p. 113-116).

We have reasons to hold the positivist view because from the practical experience and literature read before, we got general view that 5Q model of the service quality, reputation and trust has something to do with patient satisfaction, and previous research proved that there is reality in what we were thinking. We can only confirm that 5Q model of the service quality, trust and reputation can strongly effect the patient satisfaction by testing hypothesis derived from existing theories. If we do not know about the factors that can affect satisfaction then it will push us to explore the possible effects and try to generate theory. It will be a subjective study and then we have to conduct interviews from the patients about their own opinion and feelings (Saunders et al., 2009, p. 110).

Going in further explanation and elaboration of the philosophies, it is better to discuss the research paradigm. Paradigm is a way to examine social phenomena through which someone can understand and gained the phenomena, and at the end explanation can be attempted. A paradigm helps us to summarize the discussion of ontology and epistemology. Paradigm is usually used in social sciences, but it can also lead to confusion because it tends to have multiple meanings (Saunders et al, 2009, p. 118). The paradigm composed of four different types: Functionalist, interpretive, radical humanist, and radical structuralist see Table 1. For functionalist, and radical structuralist paradigms their ontological positions are objectivism while interpretive and radical humanist paradigms have subjectivist as their ontological positions (Saunders et al., 2009, p. 120 -121). This can be linked to Kent (2007, p. 49) see Table 2; Functionalist and radical structuralist paradigms represents the physicist paradigms, whereas interpretive and radical humanist paradigms represents the psychiatrist paradigm.

Table 1: Four Paradigms for the analysis of social theory (Saunders et al., 2009, p. 120)

		Radical change			
		Radical humanist	Radical structuralist		
Subjectivist	Interpretive	Functionalist	Objectivist		
		Regulation			

Our research is more related to functionalist view of the paradigm because this is the paradigm where mostly business and management research operates. Our position as a functionalist in the paradigm was because this research assumed rational human actions and believed that one can understand organizational behavior through hypothesis testing (Burrell & Morgan, 1979, p. 1-35).

Table 2: Paradigms in marketing research (Kent, 2007, p. 49)

Paradigm researcher as	Ontology	Epistemology	Perspective	Theory	Method	Technique
Physicist	Objectivist	Positivist	Researcher	Deductive	Quantitative research	Quantitative analysis
Physician	Realist	Activist	Client	Mixed	Mixed	Mixed
Psychiatrist	Subjectivist	Interpretive	Participant	Inductive	Qualitative research	Qualitative analysis

If we follow an organization research like this although it is an academic work, the researcher could be placed under a physicist category see Table 2. The reason for this position was our ontological position of objectivism and epistemological position of positivism that pushed us to a deductive approach with a quantitative research method and quantitative data analysis.

3.4 Research approach

Every researcher adopts a specific approach for his research study, which is very important step in every research. There are mainly two research approaches, inductive and deductive by looking to the research onion of Saunders et al (2009, p. 108). In inductive approach, researchers use their findings for the generation of theory. Theory is a term which can be use in different ways and in qualitative research researcher use this term about the explanation of observations. Inductive approach allows the researcher in previous literature and finds the new research question, where he comes up with the new theory after the analyzing. While deductive studies, use theory deductively and places it in the very beginning of the study. With the objective of testing or verifying a theory rather than developing it, state hypothesis and collects data to test it. Reflect on the confirmation or disconfirmation of the theory by the results (Creswell, 2009, p. 10-14) and our choice for research approach is deductive approach.

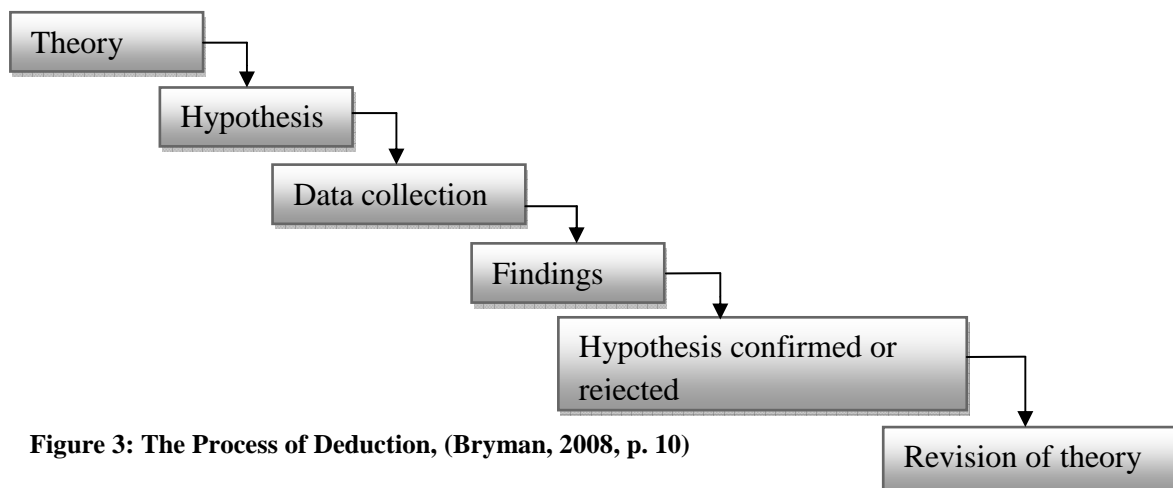


Figure 3: The Process of Deduction, (Bryman, 2008, p. 10)

Our study is related to deductive approach, because we will draw our conclusion from a thorough analysis of the theory, stated hypothesis that pushes us to collect some relevant data to our research topic. We will come up with findings, acceptance or rejection of hypothesis and in the end; we go back towards existing literature.

We formulated hypotheses based on the existed literature; we designed a method for collecting quantitative data in order to test the hypotheses. We will collect quantitative data to get findings by testing hypotheses which will be then either confirm or reject and the literature will be revise at the end.

3.5 Research strategy

Qualitative and quantitative strategies are the two main strategies used in the research for data collection. According to Saunders et al (2007, p. 145) quantitative research explores data collection techniques or data analysis procedures that results in numerical data through the medium of questionnaire, graph and statistics. On the other hand qualitative research explores a data collection technique or data analysis procedures in which researchers are able to generate and use data by conducting interviews and making observations.

This study is conducted as a quantitative research. A research that focuses primarily on the construction of the quantitative data is concerned as quantitative research (Kent, 2007, p. 10). The fact behind this method selection was our ontological position was objectivism, our epistemological position was positivism and our research approach was deductive (Bryman & Bell, 2003, p. 25). Furthermore, we collected quantitative data and our analysis method is also quantitative research. We are not developing theories but test the existing theories that enable us to use numerical data that are the characteristics of quantitative method. The research strategy can be selected on the basis of using a single data collection technique and corresponding analysis procedures, which is called mono method (Saunders et al, 2009, p. 151). While using more than one data collection technique and analysis procedures to answer the research question is called multiple methods, there are four different possibilities to use this method (Saunders et al, 2009, p. 151-152). In deductive strategy, we used mono method by using a quantitative data collection technique with using questionnaires and also quantitative data analysis procedures.

We choose this design because some research work has been done on those subjects separately that reflect our topic i.e. 5Q model of the service quality, trust, reputation and patient satisfaction. This enables us to identify and categorize the variables that make our questionnaire easy and thus we can capture all the information we need from our respondents. Our focus is Umeå hospital where we will access to the respondent and know their views and experience about service quality dimensions, trust and reputation. This type of study will make us understand to get information from the respondent in a quantitative way.

3.6 Research design

Research design is the overall arrangement of linking the theoretical research problems to relevant and realistic empirical research (Ghauri & Gronhaug, 2005, p. 56). It is also useful for researcher to make rational choices and prioritize the preferred method of collecting and analyzing research data. However Saunders et al (2007, p. 131) describe the research design as a general plan that shows how the researcher answer the research question or problem. Research time horizon is important during the research and has

influence on the process and on the stages of research work as well. There are two time horizon cross-sectional and longitudinal.

Longitudinal study is concerned with when a specific sample is repeating from more than two period of time, thus it is normally adopted in a situation where researcher is able to examine and identify proper changes occurred from the subject responses (MacNabb, 2008, p. 97).

Cross-sectional study can be defined as the study of a particular phenomenon at a particular time (Saunders et al., 2009, p. 155). Cross-sectional study is normally known as social survey and social survey is perceive in peoples image like a questionnaire that give expression of interviews, due to this cross-sectional is recommended in the survey (Bryman & Bell, 2007, p. 55). Our research is cross sectional descriptive study because we used more than one case in our research at a single point. Cross-sectional studies normally use the survey strategy, as we used in our study.

To make an appropriate research design we must know what type of research that can be conducted. According to Saunders et al (2007, p. 134) and Ghauri & Graunhaug (2005, p. 58) the research can be classified into three types i.e. exploratory, descriptive and explanatory see Figure 4.

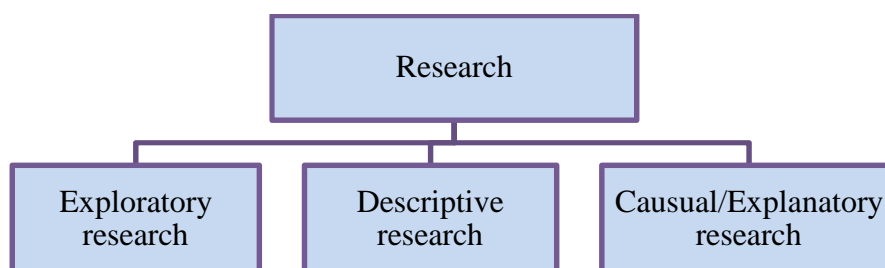


Figure 4: Types of research (Source: Ghauri & Gronhaug, 2005; Saunders et al, 2007)

According to Robson (2002 cited in Saunders et al, 2007, p. 133) exploratory study is a valuable way of finding out what new insights by asking question and assess the phenomena in a new way. This study is useful when researcher wants to clarify the problem and if he is uncertain about the nature of that problem. The way through which researcher can conduct exploratory research are by searching literature, interviewing the expert in the subjects and conducting interviews from focus group (Saunders et al, 2009, p. 140). Main advantage of this type of research is flexibility and adaptability to change but it has some limitation. Strong focus and concern are required to create observations skills, capable of getting precise and accurate data and to be competent to interpret different situation effectively.

Robson (2002, cited in Saunders et al, 2007, p. 134) defines descriptive study is aimed to develop an accurate profile of organizations, country or groups. It has importance of having clear information about the phenomena on which ones want to collect data. It may extension or the combination of a piece of exploratory or more often a piece of explanatory research. This kind of study is well defined and well structured in order to understand the accurate information about research question or problem.

Ghauri & Gronhaug (2005, p. 59) states that causal/explanatory study is to find out the research problem and explain their effects. While Saunders et al (2007, p. 134) explain that studies that establish causal relationship between variables are termed as

causal/explanatory research. Our aim is to examine the effects on patient satisfaction from 5Q model of the service quality, trust and reputation in health care sector. That is why our research question is “How do 5Q model of the service quality, trust and reputation affect patient satisfaction?” The variables in the question show some kind of link among them directly or indirectly thus we are trying to test hypothesis or relationship between variables and not just seeking new insights. We believe our study is related to this type of research.

3.7 Survey design

According to Saunders et al (2007, p. 135) there are various strategies available that can be used by the researcher in their study such as experiment, case study, survey, ethnography, grounded theory and action research. The researcher is not confine to use just one method but it depends on personal preferences and nature of the research question. For collecting primary data for this study we used one strategy i.e. survey.

Saunders et al (2009, p. 144) explain survey as a strategy which is normally linked to deductive approach. This strategy is common in business and management research and mostly used to answer the question like who, what, where, how much and how many. Survey has the benefit of collecting large amount of data from sizeable population in economical way. Survey strategy is observed to be trustworthy by people in general and comparatively easy to explain and understand.

The survey strategy is helpful in collecting quantitative data that is used to analyze quantitatively using descriptive and inferential data statistics. Survey strategy can be used for possible reason to know the particular relationship between variables and to create model for their relationship. Survey strategy gives more control over the research process in sampling; it generates the finding that is representative of the whole population at lower cost by collecting the data for the whole population. According to Bryman & Bell (2007, p. 56) survey is used for collecting quantitative data when two or more variables are involved at a particular point. To conduct a survey, we took approval from the Umeå hospital administration to distribute the questionnaire. Our survey is conducted at Umeå Hospital, this means that our sample is from patients living in Umeå.

Questionnaire: The main variables in this study are patient satisfaction, 5Q model of the service quality, trust and reputation. Previous research done on patient satisfaction related to 5Q model of the service quality, trust and reputation determines that patient satisfaction is dependent variable, while service quality dimensions, trust and reputation are independent variables. It means that 5Q model of the service quality, trust and reputation can affects the patient satisfaction.

Following the variables the questionnaire was structured to answer the question of patient satisfaction. As our intention is to test the patient satisfaction level, we prepare a questionnaire that includes questions of 5Q model of the service quality, trust and reputation. 5Q model of the service quality questions specifically in health care were taken from Zineldin (2006) “The quality of health care and patient satisfaction” and all the questions were placed the same in our questionnaire. For trust questions, we took from Hall et al (2002) “Measuring Patient trust in their primary care provider” and no changes were made to the questions.

For reputation, we took questions from Chun (1997) "Corporate reputation: meaning and measurement". In reputation section, we took selected question from the work of Chun (1997) and leave some of the questions, which are related to service quality as already taken in 5Q model of the service quality section and that would be overlapping. Again we left out questions regarding products and financial performance that are not related to our study. Furthermore, questions regarding trust were also eliminated from our questionnaire, which can overlap to trust section. Questions, which are selected in our study for reputation were modified slightly i.e. instead of "company" we wrote "Umeå hospital". For overall satisfaction from selected variables some of the related questions i.e. regarding to overall satisfaction, were taken from the De-chernatony et al (2004) "Developing a brand performance measures for financial services brands". Slight changes have been made like instead of "brand" we wrote "Umeå hospital" and for "product" we wrote "services". Some questions were self made i.e. section regarding gender, age, number of visits and nationality.

All the questions were multiple-choice and close-ended, and answers of this type of questions are easy to compare, tabulate and analyze. Closed end questions are efficient for researcher to easily analyze and quicker to administer to ask. Normally it is used in large samples and in self collection interviews. For the purpose to better understand the questionnaire due to language barrier, we translated it into Swedish with help of Swedish speaking friends before we receive feedback from patients. Academic Resource Centre in the main library (Umeå University) also helped us in proof reading of translated questionnaire to make it precise, accurate and more understandable.

Our first question was about gender and it consists two options; male and female. Then we mentioned the nationality that contains Swedish and others. Age was divided in eight categories ranging from 16 up to 85 plus and number of visits was also divided in to 4 categories ranging from first time to six time or more in the last three years. We used 5-point Likert scale 1--5 to find the response of patient. For 5Q model of the service quality the question were ranked as 1 being "very bad" and 5 being "very good". Trust and reputation were ranked from 1 being "strongly disagree" to 5 being "strongly agree". After completing these three parts, we asked the patient about their overall satisfaction regarding services quality, trust and reputation of Umeå hospital. We ranked 1 being "very dissatisfied" and 5 being "very satisfied" for service quality and trust, while for reputation 1 being "negative reputation" and 5 being "positive reputation".

3.8 Data collection

Normally the data collection contains two types primary and secondary. In this study we used both primary and secondary data collection methods.

Primary data is the source of information, which provides the original and more specific data in order to resolve the research problem. According to Saunders et al (2009, p. 256) primary data is collecting a new data specifically for a purpose. Sekaran (2003, p. 220) describe primary data as the information collected for the first time by researcher on the variables of research. Primary data can be collected through the source of doing experiment, surveys, interviews and observation.

Secondary data is collecting information from the existing source or data collected from different internal and external sources (Ghauri & Gronhog, 2005). According to Saunders et al (2009, p. 256) the data that have already been collected for some other purpose is called secondary data.

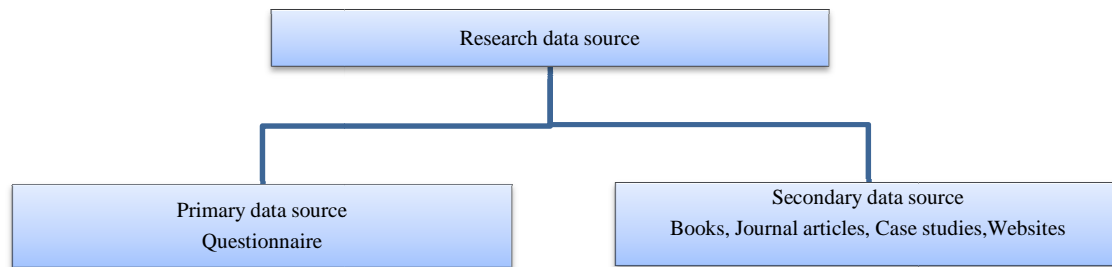


Figure 5: Primary and secondary data sources

In this study, we collected primary data by conducting surveys from the patients. The responses of patients about questions asked in survey were used as primary data to test the developed hypothesis. The reason for using primary data is due to our research based on quantitative method. The questions were made under nominal and ordinal scale, and where the respondents were hesitant to answer, we told them about the purpose of collecting the data.

The secondary data is collected through different reliable and appropriate books, journal articles, case studies and websites from database like Emerald, Business Source Premier and Umeå University database in order to effectively answer our research question. Along with this we use database PubMed from which we found out medical articles and Swedish health care system materials, which are related to our study. During collection of the secondary data our sources were books and articles, we found some complicated material as well. This is because we were studying patient satisfaction that is concern with the feelings of individuals and to relate it with service quality dimensions (5Q model), trust and reputation make it more complicated. There are large numbers of articles on patient satisfaction, so it takes time to screen out the most appropriate one for this study.

For collection of data since our respondents were from Umeå hospitals so we decided that appropriate place is the OPD (Out patient department) to administer our questionnaires. For this purpose, we contacted the hospital administration and the service manager, who helped us to select the accurate place. When conducting the survey we situated ourselves in the main entrance of hospital from where all kind of patients can be contacted. We approached patients then introduced ourselves and explained them about the survey in brief very politely. Delivering the questionnaire we were not biased, but distribute to every patient who was willing and ready to answer instantly. Least people were not willing to fill. We also distributed a very few questionnaire in the same manner to the patients of Vardcentral Åldhem and made them clear in detail that our study is regarding Umeå hospital. Before distributing questionnaire to the patients, we conducted the pivot test of about 10 questionnaires, to know how it went and allowed it for further patients. The purpose was to see how the respondent could easily answer the questions in the survey. The result shows that patients can understand it and could easily answer these questions. The survey runs for four days, we distribute 130 questionnaires and 29 found incomplete. Response rate was 77%.

3.9 Data clearing

The survey strategy has some limitations for example low response rate from respondent, some questionnaires are not completely answered and responses could be biased (Saunders et al., 2009, p. 144). As we used this method so there was risk of

getting back incomplete questionnaires. It may be due to respondent have less time or ignored to answer all the questions. One other factor is language barrier, which can affect the data; this problem is resolved by translating the questionnaire in Swedish.

Due to the problem of uncompleted questionnaires, it is always good to see how to sort out to avoid problems in analysis of uncompleted questionnaire. To handle this problem, we made it standard that 70% or above completed questionnaires will be considered. The collected responses are thoroughly checked and select only those questionnaires, which are up to the set standard and leave out the rest questionnaires.

3.10 Data analysis

It is very important for us to look at the data type that we used in our study. When using quantitative analysis, data could be classified under two types mainly numerical or categorical. Numerical data can be defined as, whose values measured or counted numerically or when the measuring scales of data are numerical values, and then they are classified under quantitative variables. Categorical data is one whose values cannot be measured but can be classified into sets or when the measurement scale of data is a set of categories then they are classified under categorical variables to investigate the certain phenomena (Agresti & Finlay, 2009, p. 12-14).

Our study is more related to categorical data, as we are dealing with 5Q model of the service quality, trust and reputation, and its impact on patient satisfaction. Therefore, that is the reason numerical data can be excluded here and we have to consider the categorical data in our study. Categorical data is further classified into nominal and ordinal data. In our study data, we collected both nominal and ordinal data. Analysis of the study can be defined as the ability to break down data in components, clarify the nature of the component and the relationship between them (Saunders et al., 2009, p. 587). To analyze data there are different methods for every research study, i.e. quantitative and qualitative data analysis procedures. A qualitative data analysis procedure allows you to develop a theory from your data (Saunders et al., 2009, p. 480), while in a quantitative data analysis, data is already collected from the surveys enables us to explore, present, describe and examine relationships and trends within the quantitative study (Saunders et al, 2009, p. 414).

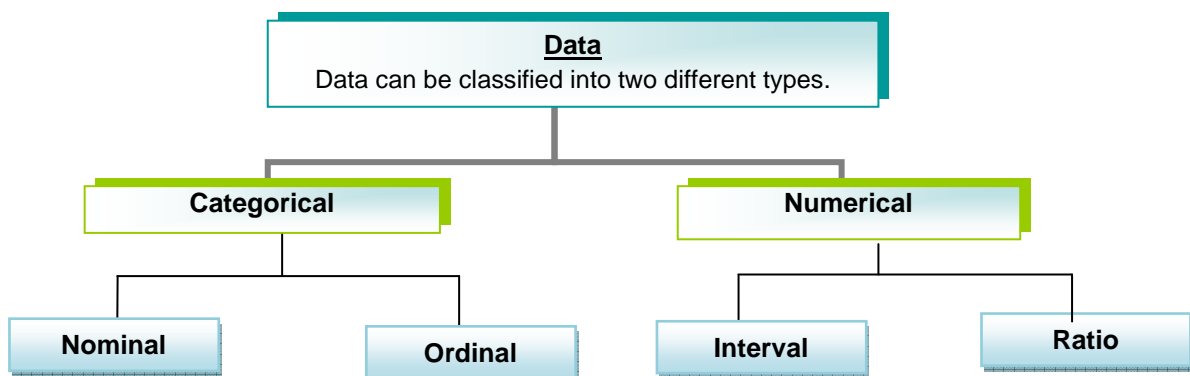


Figure 6: Data types and classification

In our study, we used quantitative data analysis methods. The reason for this choice of analysis method was firstly we did distribute questionnaire among the patients and collected quantitative data. Another reason being the fact that our objective is to

examine the impacts of 5Q model of the service quality on patient satisfaction combining trust and reputation. Carrying this type of study, we stated hypothesis and we need to test these hypotheses. In order to better understand the 5Q model of the service quality we have to test all its dimensions that whether which dimension has positive affect on patient satisfaction, for this we state hypotheses.

H1a: Quality of object has a positive effect on patient satisfaction.

H1b: Quality of process has a positive effect on patient satisfaction.

H1c: Quality of infrastructure has a positive effect on patient satisfaction.

H1d: Quality of interaction has a positive effect on patient satisfaction.

H1e: Quality of atmosphere has a positive effect on patient satisfaction.

For trust, we state hypothesis.

H2: Trust has a positive effect on patient satisfaction.

Moreover, for reputation we state hypothesis.

H3: Reputation has a positive effect on patient satisfaction.

We used both descriptive and inferential statistics in order to analyze the data of our study. By using descriptive statistics, we put data in tables and graphs to summarize the data collected for better understanding to the reader to easily examine the results (Agresti & Finlay, 2009, p. 4). For the presentation of descriptive statistics of the study, we used bar, pie charts and cross tabulation. These tools helped us as well to understand and examine the results in a better way. In order to generalize and do some prediction on the basis of the results of our collected data we used inferential statistics (Agresti & Finlay, 2009, p. 4). There are many statistical tests that can be applied for inferential statistics; we used multiple regression analysis to test the hypotheses. The reason for this choice of test is the nature of our data, i.e. categorical data.

3.11 Quality criteria

According to Saunders et al (2009, p. 156) question can arise during a study, which are the basis for the credibility of the study. It is really difficult that answers will be exactly right, so all you can do is reduce the possibility of getting the answer wrong. This is why research design is important. Research design emphasizes on quality criteria, as quality criteria consist of reliability, validity and replicability. Reducing the possibility of getting the answers wrong means that attention has to be paid to reliability, validity and replicability.

3.11.1 Reliability

This quality criterion of the research refers to the consistency of a measure of a concept. This quality criteria deals with the question whether the results of a study are repeatable (Bryman & Bell, 2007, p. 163). This quality of measure applied to value the concepts in which we are interested. We collect information through cross-sectional research design i.e. from respondents in a short time period. We believe that internal reliability is moderate as time period is continuous and no gap occurred during collecting the data so we believe that if other study is taken the results will be repeatable. One thing can affect our study that we are working independently and it is free hand research to work on from the university. So again, this can affect our results slightly.

3.11.2 Replicability

We gave immense focus on findings reliability, we followed several procedures; designing measure of concepts from practical experience, studied courses and previous literature, administration of self-completion and analysis of data. Further, we selected as our respondents patients who seemed in a good health and made sure that the processes will be followed systematically. We thoroughly analyzed and assessed the procedure that was followed by the authors of the previous research study and made sure that it was done accordingly.

3.11.3 Validity

Validity can be defined as whether or not an indicator that is devised to judge a concept, really measures that concept. It includes external validity, internal validity and ecological validity (Bryman & Bell, 2007, p. 165). External validity explains that the findings being applicable to other contexts. External validity is related to generalization (Bryman & Bell, 2003, p. 34-35). In our study the target population was the patients of Umeå hospital and our sample is enough to generalize for the whole population of Umeå hospital. So external validity is strong and can be generalized. We focus on the Umeå hospital patients to investigate how they perceive the 5Q model of the service quality, trust and reputation of the hospital regarding their satisfaction. This implies our results can be useful for health care providers but cannot directly validate for every organization.

Internal validity states the inferences concerning causal relationships or in simple words it deals with the issue of cause-effect study (Bryman & Bell, 2003, p. 34-35). Our study is an effect study, as one variable can affect other one. Moreover, our questionnaire that we used is answerable questions, so internal validity is moderate. Our study has limited ecological validity because ecological validity is concern with whether scientific findings are applicable to people's everyday life, natural science settings (Bryman & Bell, 2003, p. 34-35).

3.12 Ethical consideration

It is important to consider ethics while conducting a research for every researcher; research ethics means moral values and principles. It helps the researcher to avoid problematic issues and any potential harm to anyone during the research process. There is a growing emphasis on overcoming the ethical issues in business research because of the increased involvement of social responsibility and consumer's wellbeing (Ghauri & Gronhaug, 2005, p. 20). We need to take immense care at this stage. All the information was treated and kept secretly with high confidentiality without disclosure of the respondents' identity. No information is change or modify, hence the information is presented as collected and the same with the literatures collected for the purpose of this study. Furthermore we avoided using any equipment or technique that could have possible harm or against the interest of the participants. Moreover, we do not have any intention to use unfair means to influence the participants to obtain information. The questionnaire was anonymous and high level of confidentiality is considered when treating the information.

CHAPTER 4: EMPIRICAL FINDINGS AND ANALYSIS

The aim of this chapter is to present the survey results and analysis of our study. We decided to combine both the empirical findings and analytical part of this study together in this chapter. We decided to present the sample results of all the attributes of the variables for Umeå hospital to analyze. Thus, the chapter begins with sample presentation, frequency analysis and internal reliability analysis test. The statistical results and analysis follows the summary of the overall descriptive statistics for the all variables. The chapter ends with the detail discussion.

4.1 Sample presentation for Umeå hospital

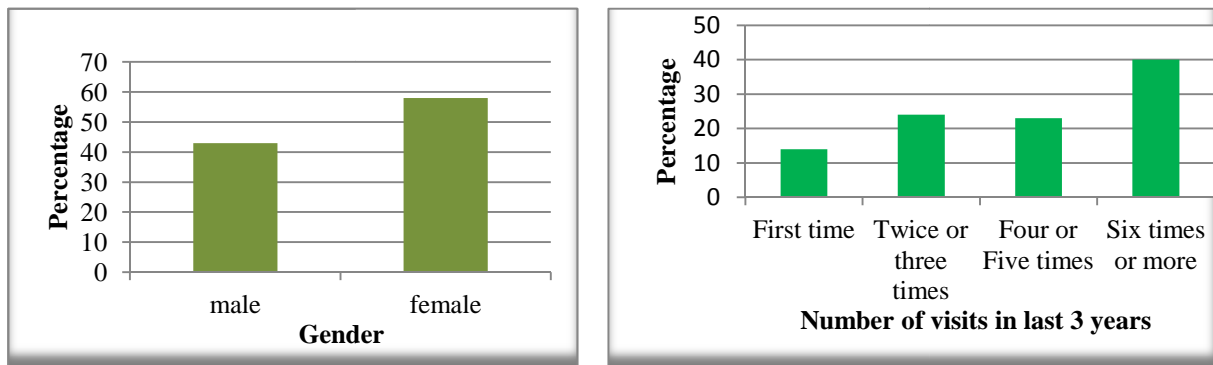


Figure 7: Gender and no. of visits

The above bar chart presents the sample of Umeå hospital patients. It could be seen from the bar chart that, with a total sample of 101 patients from Umeå hospital, male were 43% while female were 57%. Another bar chart presents the number of visits of the patients in last three years to the Umeå hospital. 14% patients of the total sample visit the hospital first time, 24% twice or thrice times, 23% four or five times and 40% six times or more.

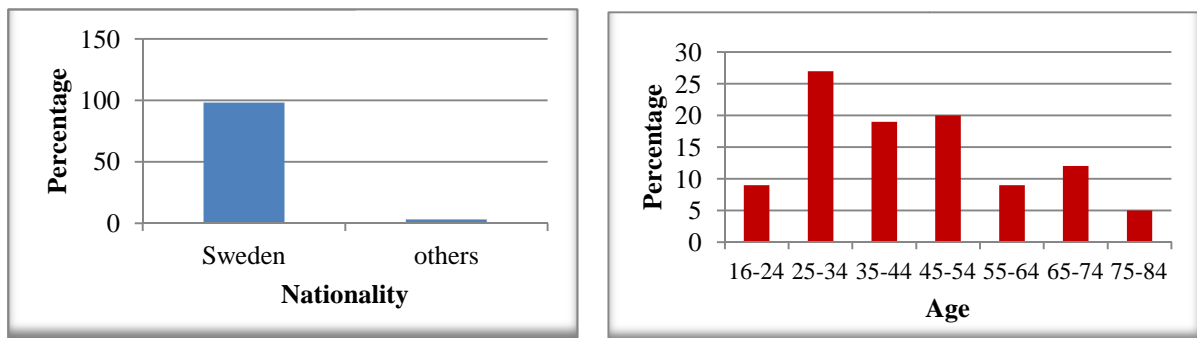


Figure 8: Nationality and age

The above bar charts present the sample of nationality of Umeå hospitals patient's. As we have divided the nationality into two "Swedish" and "others". It can be observed from the bar chart that the total number of patients were 101 of them 97% were Swedes while only 3% were others. This also represents that majority of patients were Swedes which makes our study effective. While the bar charts of age presents the number of

different ages people visits Umeå hospital. We divided the age into 8 different categories. From the chart it is clear that patients with age of 16-24 were 8.9%, 25-34 were 26.7%, 35-44 were 18.8%, 45-54 were 19.8%, 55-64 were 8.9%, 65-74 were 11.9% and 75-84 were 5% visited Umeå hospital.

4.2 Frequency analysis

We did frequency analysis of the four questions, which can present a clear picture of the patient satisfaction level for Umeå hospital. These four questions are related to the patient satisfaction level, listed below:

1. Overall satisfaction with the staff
2. Satisfaction with the overall services
3. Overall satisfaction with the Umeå hospital
4. What sort of reputation do you think that Umeå hospital has in the public?

Patients gave different answers to the above questions. Patients rate question (1) one as 36% were neutral, 58% were satisfied and 6% were very satisfied among 101 patients. There was no very dissatisfied or dissatisfied patient regarding question one (1) (Appendix 1). For question two (2) we got 44% neutral, 51% satisfied and 5% very satisfied among 101 patients from Umeå hospital for overall services. There was no very dissatisfied or dissatisfied patient regarding question two (2) as well (Appendix 2). Patient rate question three (3) as 38% were neutral, 54% were satisfied and 8% were very satisfied from Umeå hospital, as question shows the overall satisfaction from Umeå hospital and There was no very dissatisfied or dissatisfied patient regarding question three (3) (Appendix 3). For question, four (4) we got the answer as: 38% were neutral, 53% were satisfied and 9% were very satisfied. There was no very dissatisfied or dissatisfied patient regarding question four (4) (Appendix 4).

4.3 Internal reliability analysis test for 5Q model of the Service Quality, trust and reputation

For internal reliability, we did reliability analysis test for all attributes of 5Q model of the service quality. 5Q model of the Service quality has a good reliability with Cronbach's alpha coefficient of 0.804 (Appendix 5). We also calculated the reliability scale for each attributes calculated when each attribute was deleted from the 5Q model of the service quality list, to see whether the deleted item is valid or invalid for the survey. When Cronbach's alpha for an attribute increases when an item is deleted it shows that item is not valid in that organization's measurement of test. Almost all the attributes showed a lower value of reliability when deleted except for "Speed and ease of admissions" which is 0.815 means that attribute was not valid for the test measurement (Appendix 5). But we will take this attribute because the value 0.815 is very near to 0.804, as this will do not make our scale non reliable.

For trust attributes as well we made internal reliability analysis test to be confirm that how much reliability we have in these attributes. Overall trust attributes had reliability with Cronach's alpha coefficient of 0.365 (Appendix 6). We also calculated the reliability scale for each attribute calculated when each item is deleted from the trust list, to see whether the deleted item is valid or invalid for the measurement. All the attributes showed a lower value of reliability when deleted except for "The doctor will do whatever it takes to get you all the care you need", for this we got 0.678 means this attribute was not valid for the organization (Appendix 6) and we will not take this

attribute in our measurement in order to make our scale more reliable, as the difference is very large.

For reputation attributes, we conducted internal reliability analysis. Overall reputation attributes had reliability with Cronbach’s alpha coefficient of 0.878 (Appendix 7). For the reliability scale each attribute calculated when each item is deleted from the list. All the attributes showed a lower value of reliability when deleted except for two attributes i.e. “Umeå hospital recognizes and takes advantage of market opportunities” and the second one is “Umeå hospital looks like a good organization to work for”. We got 0.890 and 0.889 respectively for both, which shows that these two attributes were not valid for this organization measurement to consider (Appendix 7) but we will take both as the difference is very less and will not cause the scale non reliable.

The last variable is satisfaction, which we took as a dependent variable. In satisfaction, we have four items and we got 0.786 Cronbach’s alpha value for all overall satisfaction. All the attributes showed lower value when deleted from the list of satisfaction in reliability test one by one (Appendix 8). So the scale was valid for this variable according to reliability test analysis.

4.4 Statistical results and interpretation of the sample

Table 3: Descriptive statistics for all the variables

Descriptive Statistics

	Mean	Std. Deviation	No.
Patient Satisfaction	14.7327	1.86489	101
Quality of object	11.0495	1.50583	101
Quality of process	10.8020	1.58758	101
Quality of Infrastructure	11.1980	1.49010	101
Quality of Interaction	7.5248	1.08253	101
Quality of atmosphere	11.3069	1.33224	101
Trust	30.3267	2.89174	101
Reputation	44.0297	5.80940	101

The above table presents the mean and standard deviation of the all the attributes, computed to the main variables.

Table 4: Correlation among the all variables

Correlations

		P.S	Object	Proces s	Infrastr ucture	Interact ion	Atmosp here	Trust	Reput ation
Pearson Correla tion	Patient Satisfacti on	1.000	0.243	0.229	0.214	0.293	0.251	0.324	0.603
	Object	0.243	1.000	0.289	0.357	0.242	0.296	0.217	0.052

	Process	0.229	0.289	1.000	0.423	0.143	0.119	0.289	0.203
	Infrastru cture	0.214	0.357	0.423	1.000	0.356	0.307	0.426	0.237
	Interactio n	0.293	0.242	0.143	0.356	1.000	0.449	0.258	0.147
	Atmosph ere	0,251	0.296	0.119	0.307	0.449	1.000	0.270	0.187
	Trust	0.324	0.217	0.289	0.426	0.258	0.270	1.000	0.395
	Reputatio n	0.603	0.052	0.203	0.237	0.147	0.187	0.395	1.000
Sig. (1- tailed)	Patient Satisfacti on	.	0.007	0.011	0.016	0.001	0.006	0.000	0.000
	Object	0.007	.	0.002	0.000	0.007	0.001	0.015	0.301
	Process	0.011	0.002	.	0.000	0.078	0.118	0.002	0.021
	Infrastru cture	0.016	0.000	0.000	.	0.000	0.001	0.000	0.008
	Interactio n	0.001	0.007	0.078	0.000	.	0.000	0.005	0.071
	Atmosph ere	0.006	0.001	0.118	0.001	0.000	.	0.003	0.030
	Trust	0.000	0.015	0.002	0.000	0.005	0.003	.	0.000
	Reputatio n	0.000	0.301	0.021	0.008	0.071	0.030	0.000	.

The above correlation table shows the positive multicollinearity of all the independent variables with the dependent variable i.e. patient satisfaction and also among them. The multicollinearity will be strong if the values range from 0.3 to 0.8. In our case the strength of collinearity of all the independent variable with the dependent is moderate as the values range from 0.216 to 0.603. While the multicollinearity among all the independent variable is also moderate ranges from 0.052 to 0.449. The lowest collinearity can be seen between the two independent variables is quality of object and reputation which is 0.052, in other words we can say weak collinearity. On the other hand the highest collinearity can also be seen between the two independent variables that is quality of interaction and quality of atmosphere that is 0.449, almost 0.5. Which is considering being a strong collinearity between these two variables? So overall the model can be said with a moderate strength of multicollinearity.

Table 5: Multiple regression analysis test for all variables

Multiple Regression test

	Beta	Significance	R square	Adj. R square	F value
Constant	2.515	0.182			
Quality of object	0.214	0.000	0.434	0.417	56.434
Quality of Interaction	0.289	0.030			33.776
Reputation	0.183	0.037			24.794

(Quality of process, Quality of infrastructure, quality of atmosphere and trust is excluded as in stepwise regression analysis the variables are automatically excluded from the list if their significance value is lower than 0.05)

The table above presents the multiple regression analysis tests for the variables i.e. quality of object, quality of interaction and reputation. All the three variables have positive beta value. Contribute in a positive way to the dependent variable. For quality of object, if we increase 1 percent in independent variable that will results increase in 0.214 percent in dependent variable. Same with the quality of interaction and for reputation, as both have positively contributes to the dependent variables with values of 0.289 and 0.183.

All the three independent variables have very good significance values. In order to be significant the value should be <0.05 . In our case all the three variables have values <0.05 . Quality of object is more significant than other two variables. So these variables have strong positive effect on patient satisfaction. Some of the variables are excluded from the test, because in stepwise regression the SPSS directly exclude the variables having significance values >0.05 .

The R square value is also considerable in our model although it is not high but considered to be moderate. In our model the R square value is 43.40. This value indicates that 43% of the criterion i.e. dependent variable has success on the statistical test and we can predict 43% future variability on the basis of our results. We believe that R square value is moderate. Adjusted R square is a bit lower than R square, it shows the shrinkage loss while treating the data, or might be when entering in to the software or may be a problem with the software.

The table also shows the F value, which represents the overall significance of the regression model. The F value is the ratio of the mean regression sum of squares divided by the mean error sum of squares. The regression table shows F values is decreasing when going top to bottom that should be because as by adding more and more independent variable to the model the F value lowers. Because by adding more independent variable it share the dependent variable among them. In our case it starts from 56.434 going down to 24.794, so the model is strong.

Hypothesis:

H1a: Quality of object has a positive effect on patient satisfaction.

H1b: Quality of process has a positive effect on patient satisfaction.

- H1c:** Quality of infrastructure has a positive effect on patient satisfaction.
- H1d:** Quality of interaction has a positive effect on patient satisfaction.
- H1e:** Quality of atmosphere has a positive effect on patient satisfaction.

We have three attributes in all five service quality dimensions (5Q model) except in quality of interaction i.e. in that dimension we have two attributes in our survey. As from the above multiple regression analysis test we accept hypothesis (**H1a**) for Quality of object and (**H1d**) for quality of interaction for 5Q of the service quality. While we reject hypothesis (**H1b**, **H1c** and **H1e**) for the quality of process, quality of infrastructure and quality of atmosphere of the 5Q model of the service quality.

H2: Trust has a positive effect on patient satisfaction.

In trust we had ten attributes but we exclude one attribute because Cronbach’s alpha was not valid and was not a reliable attribute for the scale. Thus we have nine attributes in trust, and on the basis of SPSS test result we will reject hypothesis (H2) for trust. Means trust has no effect on patient satisfaction for Umeå hospital in our case.

H3: Reputation has positive effect on patient satisfaction.

We have twelve attributes in reputation; we computed all the attributes in SPSS and got positive results for this variable. So we accept hypothesis (H3) for reputation. Means reputation has positive effect on patient satisfaction for Umea hospital in our case.

4.5 Summary of the results from the study

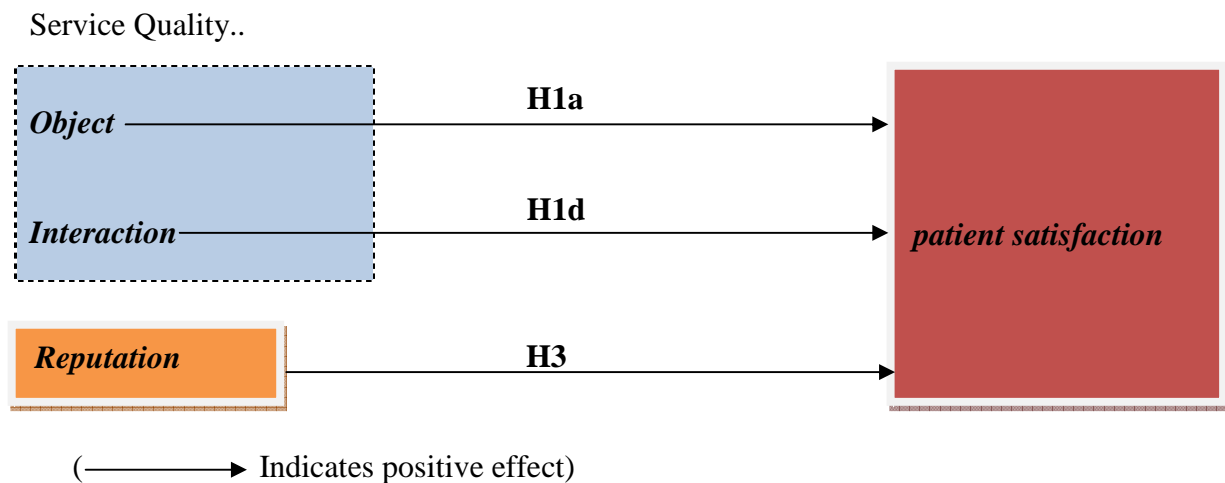


Figure 9: Summary result variables effects

From the above figure we can understand that out of five, two quality dimensions of the 5Q model of service quality has positively testify and gave positive results. In the 5Qmodel of the service quality, two dimensions have positively affected patient satisfaction of Umeå hospital in our case. Three dimensions of the 5Q model i.e. quality of process, quality of infrastructure and quality of atmosphere gave “no effect” results on patient satisfaction. Among five dimension of the 5Q model of the service quality patients gave positive response to two (2) dimensions. As we know from literature service quality has many facets that can affect patient satisfaction in many different

ways. So we accept hypothesis (H1a) and (H1d) for the two hypotheses and we include these in our updated model while reject hypothesis for rest of the three.

Second independent variable was trust in our model. Which consist of different attributes, trust gave “no effect” in our case for Umeå hospital. So on the basis of statistical results from SPSS, we reject hypothesis (H2) for patient satisfaction i.e. trust has no effect on patient satisfaction for Umeå hospital patients in our study. That’s the reason we exclude trust from our model.

Third variable was reputation, which gave very positive result as compare to other variables because most of the reputation attributes have strong Cronbach’s alpha values, at the same time gave also good correlation and significance values. Hence reputation has positive effect on patient satisfaction for Umeå hospital in our study. Thus we accept hypothesis (H3) for patient satisfaction and we include it in our new model.

Three dimensions of 5Q model of the service quality and trust were excluded from our model. Now our updated model is consist of two dimensions of 5Q model of the service quality and reputation, which can positively affect patient satisfaction.

4.6 Discussion

This study is concerned with the effects of different variables on customer and specifically on patient satisfaction. We took three factors that are mostly considered by every patient when they choose the health care organization i.e. service quality dimensions (5Q model), trust and reputation. From the summary of the results see Figure 9, we believe that present study has a lot to be discussed. In our study patients were satisfied with the some of dimensions of the service quality form Umeå hospital, which is link to the theory “consumers mostly attracted towards a service by focusing on quality” (Solomon, 2009, p. 413).

Some patients differentiate among the different qualities of the service i.e. 5Q model of the service quality. From the statistical results, we can say that patients believe that service is combination of different facets because they rank differently the 5Q model means five different quality dimensions. This supports the theory of Zineldin (2006, p. 61) patient satisfaction is a cumulative combination of different constructs, summing satisfaction with various facets of the health care organization (hospital), such as technical, functional, infrastructure, interaction and atmosphere variables or items. At the same time the theory strongly supports our updated model that different service quality dimensions are equal to overall service quality, which directly affects patient satisfaction.

From the Inferential statistics in our study, the patients of the Umeå hospital gave positive effect for the quality of object and interaction. These two dimension are consist of different attributes, emphasis on that two dimension of the service quality like sense of security, ability of the hospital to treat patients, interaction, right information and feedback. These attributes gave positive result by the patients of Umeå hospital and that can be link to work of “A simple definition of quality in health care is the art of doing the right thing, at the right time, in the right way, for the right person and having the best possible results” (Zineldin, 2006, p. 66). In more elaborated form, we can say that these two dimensions provide best health care outcomes to every single person. The two dimensions that patients rated as positive effect could also be linked to: "quality of care is the degree to which health services for individuals and populations increase the

likelihood of desired health outcomes and are consistent with current professional knowledge" (Lohr, 1990, p. 21).

We took reputation as our third variable in our study, which can affect patient satisfaction. From the statistical results of reputation, patients gave positive response to many attributes that were asked in the survey. Some of the attributes were very encouraging for our study like good feeling about the Umeå hospital, respect and admire, environmental responsibility and reputable services came positive in our study. These can be link to the theory of Herbig & Milewicz (1993, p. 18-19) "it is necessary that transactions between the entity and other parties must have occurred in order for to establish a reputation and to value the transaction" and at the same time repeated positive transactions of a firm lead the firm to a positive reputation (Herbig & Milewicz, 1993, p. 18-20).

We have some attributes of reputation in our survey like Umeå hospital develop innovative services, leadership and high standards which can be linked to Hibbard et al. (2005, p. 1150) "if a hospital reputation is affected due to some attributes then it might declines its market share via patient choice, purchase choice, or physician referral. Also declining reputation may bring other challenges to the organization such as recruiting and retaining staff and at the same time affect a hospital ability to maintain legitimacy and professional standing". So in simple words reputation regarding the operative or functional activities brings long term life to the organization.

Overall reputation of the Umeå hospital came positive and that can be link to the work of Bromley (2002, p. 36) "reputation as the collective assessment of a firm past behavior and outcomes that deliver the firm's ability to render valued results to customers. Reputation thus reflects the relative standing/position, internally with the employees and externally with the different stockholders". From the data we concluded that patients ranked Umeå hospital reputation in a very positive way, which shows their satisfaction level that can be linked to the work of Bourke (2009, p. 28-33) a good reputation benefits the organization in many ways the most important is the satisfaction through which the organization gain customer loyalty, premium prices and a cushion of goodwill when crises hits.

CHAPTER 5: CONCLUSIONS

The basic aim of this chapter is to know whether the research question was answered; the objective for this study is achieved and if the study has contributions. The chapter begins with a conclusion, then to the implication, followed by theoretical contribution and limitations. The chapter ends with the suggestion for future research.

5.1 Conclusion

Our focus of the study was to investigate the effect of three different variables i.e. 5Q model of the service quality, trust and reputation on patient satisfaction. The research question was “How do 5Q model of the service quality, trust and reputation affect patient satisfaction?”. This kind of combination never done before and the study gave very interesting results. The study covers lot of attributes belonging to all variables taken for our study, which made it more interesting and complex at the same time. Although the statistical results we got for quality of process, quality of infrastructure, quality of atmosphere and for trust have no effect on patient satisfaction but the focus should be whether the research questions was answered or not. From the summary of the results section, it could be easily analyze that the research question is answered through inferential statistics.

For 5Q model of the service quality that is combination of five dimensions called 5Q model is used which presents different results of the patients regarding their satisfaction level for Umeå hospital. Two dimensions of 5Q model of the service quality gave positive effect results on patient satisfaction. The entire two dimensions have positive correlation values and were significant.

We also did internal reliability analysis test for 5Q model of the service quality where Cronbach’s alpha came lower when attribute was deleted one by one from the list for all attributes of the 5Q model. This shows that all the attributes taken was valid measurement for the organization. All the quality dimensions of the 5Q model were considered important and patient’s showed positive effect for some attributes of the service quality inside the single dimension but for some attributes showed no effect. The patients gave “no effect” response for their satisfaction for the quality of process, quality of infrastructure and quality of atmosphere dimension of 5Q model because these dimensions gave lower correlation and non-significant values. The reason for “no effect” that they are not satisfied or might be there is no effect of the attributes like “Waiting time, clarity of information and responsiveness” on them, as we understand from the inferential statistics results. Another reason for not satisfied or no effect might be that the selected patient’s number of visits in last three years is very less, so they do not know much about the Umeå hospital in our study.

Second variable we choose for our study was trust to investigate how patients take this variable when choosing the physician or health care organization especially in Umeå hospital. Our result for trust regarding patient satisfaction shows “no effect” in our case for Umeå hospital. Although the reliability analysis test validates the attributes taken because the Cronbach’s alpha came lower for all the attributes when deleting one by one from the list. Only one attribute value came higher when deleted from the list that shows the invalid measurement for the organization. Therefore, we excluded that attribute in our measurement, to make the scale reliable. For trust attributes, we got low

correlation and non-significant values. Overall for trust variable we got “no effect” results on patient satisfaction in our case for Umeå hospital. As discussed earlier the reason might be low risk taking approach of the Swedish people. Most probable trust is very much developed in Swedish society that is very visible, and makes sense in our case. Other reason can be the low visiting rate to the hospital as trust took time to develop overtime, means a long term variable.

On the other hand, the reputation gave very positive results as we were expecting because reputation can play a vital role while choosing health care provider in general or physician specifically. We came up with positive effect results for reputation attributes. This shows that reputation has important role on patient satisfaction. This may be due to past actions and probably of its plans for the future. In this case the hospital administration and leadership will be very effective and Umeå hospital maintains the standard of treating the patients in better way that is the reason that the respondents gave positive reputation of hospital. Our statistical results show that correlation value was strong that means this variable has strongly affect patient’s satisfaction and it has significant value. The reliability analysis test for reputation attributes the Cronbach’s alpha came lower when one by one attribute is deleted from the list, it means that the attributes were taken valid for this kind of organization. Thus, reputation shows positive effect on patient satisfaction in Umeå hospital.

In all, this study is able to get exposure of 5Q model of the service quality, trust and reputation that how it can effect patient satisfaction. This could mean that patient satisfaction is depending on different factors and attributes. Patients react differently to the different variables in different situation, thus one can come up with different results. Still we believe that patient satisfaction can be achieved through combination of different improved variables.

5.2 Practical implication

More focus is now diverted to the health care sector because of high competition in the health care sector and privatization, hence we believe that this study is useful to health care providers and at the same time can be fruitful for business organization as it also cover customer. The result of the study can be used to improve the health care service quality and building trust by gaining high level of patient satisfaction. This study can be a small contribution or a deep insight towards improved health care facilities in developed or underdeveloped countries. As dissatisfaction leads to disloyalty, in case of health it might be more worse so this study exert some pressure on health care organizations as well, if they are not trust worthy and lack of some service qualities. Umeå hospital should focus on significant dimension of 5Q model of the service quality and reputation attributes because the patients gave positive effect response regarding their satisfaction.

The practical contribution of this study is that it specifically provides answers relating to what were the perceptions of patients who consumed the health service of Umeå hospital. It also provides the perceptions held by patients regarding what is the value of using health care facilities. From organizational perspective the study can be very useful for health care organization to incorporate this literature in order to be more effective keeping in mind the patient’s perception. Providing improved dimensions of the service quality and gaining reputation by maintaining high standards can increase patient satisfaction level.

5.3 Theoretical contribution

This study has a theoretical contribution in the form of developed a model for health care organization to be more effective in providing health facilities. The developed model is design from the previous studies and empirical findings collected through the surveys from our study. In addition, the study contributes to the literature in the sense that it provides knowledge about the health care service and the variables, which can affect service quality, how it has evolved, tested and measured over time. In addition, the study highlights that it will be very effective that health care organization emphasis on every factor which can lead to satisfaction. The study combines three different variables i.e. 5Q model of the service quality, trust and reputation. At the end, we developed a new model on the basis of existing theories and of our empirical results. Theoretically the study contributes a lot for future research and somebody can come up with new more factors combination for overall health care organizations.

5.4 Limitations

In this study, we used a convenience sampling method, though a benefit of this kind sampling technique is that the study could provide spur for future research. There is a limitation that this study cannot be validated by all health care organization. Time and money have always been the main constraint in research studies. Since this study is an academic research with limited time. We targeted only Umeå hospital due to time shortage for this study. If we had sufficient time we would have preferred to target other hospitals as possible, actually we will be able to see how this holds with them and to draw a better conclusion. We would even be able to test and compared the situation in other countries, as well as to investigate how this kind of study works in other organizations. Another important constraint that we face, which is not so common was the language. This is because in Sweden, English is the second language. The majority of the patients could communicate very well in Swedish but not in English, thus collecting data was a problem for us because the hospital administration also informs us that we have to distribute questionnaire by ourselves. Although we managed it by gathering some data after translating our questionnaire into Swedish, this wasted a lot of time because we had to send the questionnaires to a translator and wait for her to do her job and send the questionnaires back to us. Another limitation of the study is that in survey we have closed end question, so very less option for the patients to express their own view.

5.5 Suggestions for future research

The topic we selected was a good one but because of its limitations and outcome, there is a need for further research. This study did not consider employees who provide the services to patients. Further study can be held to investigate the effect of 5Q model of the service quality, trust and reputation on employee's job satisfaction in health care sector. Further study could be design to test these attributes of service quality, trust and reputation by using other method of data collection i.e. interviews, archival research and experimental research to see which of them will be more effective. Also future study could be needed to test the same variables in other service sector. Applying the model to other hospitals in other countries might give different or more useful results. While qualitative study will give more in depth knowledge regarding the study topic for health care providers.

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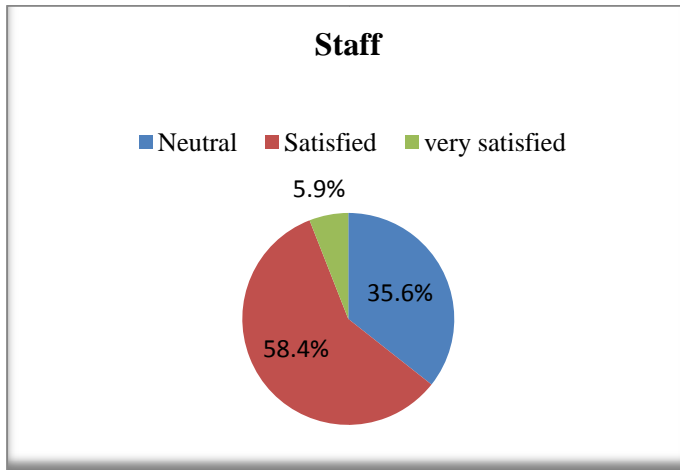
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Appendices

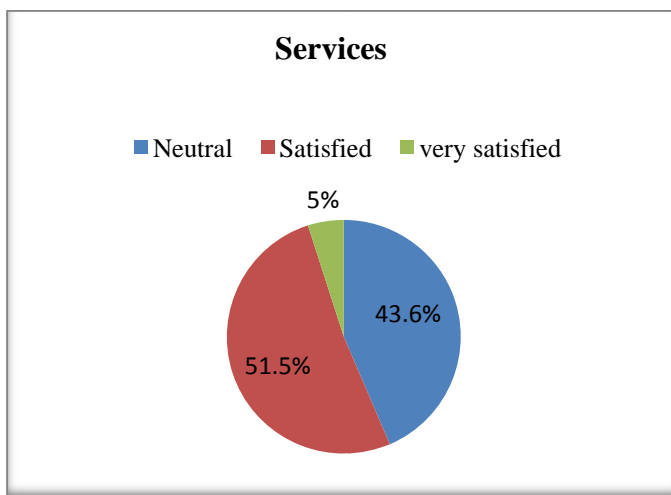
Appendix 1

Overall satisfaction with the staff



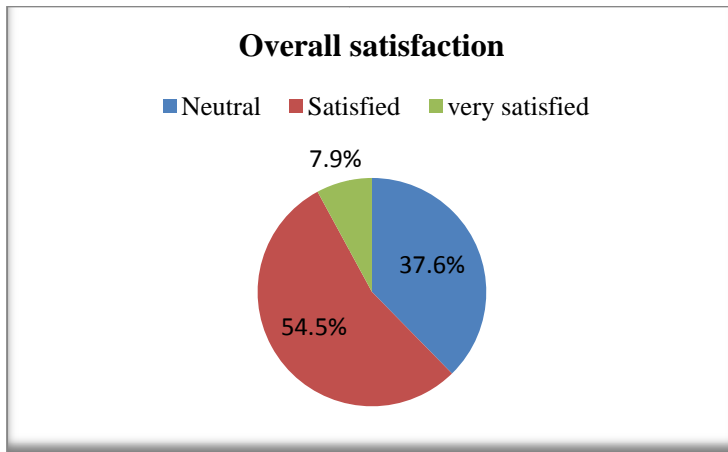
Appendix 2

Satisfaction with the overall services



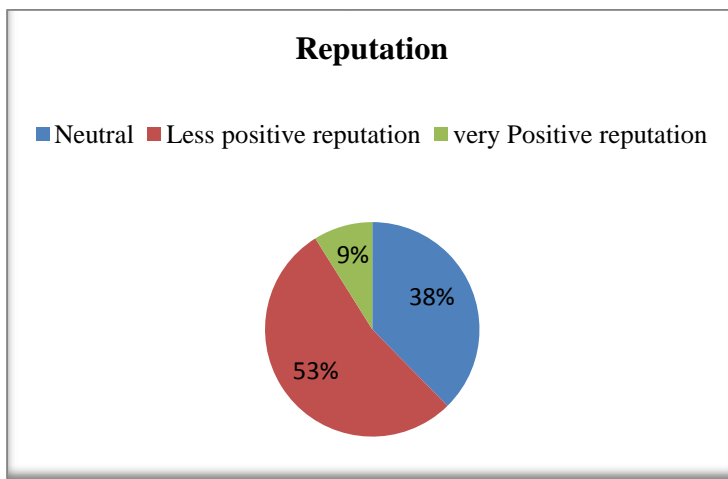
Appendix 3

Overall satisfaction for Umeå hospital



Appendix 4

What sort of reputation for Umeå hospital



Appendix 5

Internal Reliability analysis test for service quality

	Number of items	Cronbach's alpha	Variables	Cronbach's alpha if items deleted
Service quality	14	0.804	Sense of wellbeing that you felt in the hospital	0.791
			Ability of the hospital to treat you the way you expected	0.784
			Sense of security from physical harm you felt in the hospital	0.799
			Waiting time for medication	0.793
			Waiting time for tests	0.796
			Speed and ease of admissions	0.815
			Skills of the nurses attending you	0.782
			Skill of those performing your tests	0.788
			Skill of the physicians attending you	0.798
			Adequacy of explanation about your treatment	0.794
			Adequacy of instruction on release from the hospital	0.792
			Responsiveness of nurses to your needs	0.771
			Clarity of information about your condition	0.785
			Politeness of the physicians	0.802

Appendix 6

Internal reliability analysis test for trust

	Number of items	Cronbach's alpha	Variables	Cronbach's alpha if items deleted
Trust	10	0.365	The doctor will do whatever it takes to get you all the care you need	0.678
			Sometimes doctors care more about what is convenient for his/her than about your medical needs	0.361
			Doctors medical skills are not as good as they should be	0.350
			The doctors are extremely thorough and careful	0.348
			You completely trust the doctors decision about which medical treatment are best for you	0.301
			The doctor is totally honest and telling you about all of the different treatment options available for your condition	0.318
			The doctor only thinks about what is best for you	0.278
			Sometimes the doctor does not pay full attention to what you are trying to tell him/her	0.319
			You have no worries about putting your life in doctors hand	0.276
			All in all you have complete trust in doctor	0.287

Appendix 7

Internal reliability test for Reputation

	Number of items	Cronbach's alpha	Variables	Cronbach's alpha if items deleted
Reputation	12	0.878	I have a good feeling about the Umeå hospital	0.867
			I admire and respect the Umeå hospital	0.869
			Umeå hospital stands behind its services	0.864
			Umeå hospital develops innovative services	0.868
			Umeå hospital has excellent leadership	0.869
			Umeå hospital has a clear vision for its future	0.864
			Umeå hospital recognizes and takes advantage of market opportunities	0.890
			Umeå hospital is well managed	0.865
			Umeå hospital looks like a good organization to work for	0.889
			Umeå hospital looks like a organization that would have good employees	0.872
			Umeå hospital Is an environmentally responsible organization	0.868
			Umeå hospital maintains a high standard in the way it treats people	0.869

Appendix 8

Internal reliability test Satisfaction

	Number of items	Cronbach's alpha	Variables	Cronbach's alpha if items deleted
Satisfaction	4	0.786	Satisfaction with the staff	0.755
			Satisfaction with services	0.702
			Overall satisfaction with the Umeå hospital	0.734
			What sort of reputation do you think that Umeå hospital has in the public?	0.742

Appendix 9

Questionnaire

Hello, we are students of Umeå School of Business & Economics (USBE). We would be very grateful if you could answer some questions about your experience with the Umeå hospital for our master's thesis project. It will take approximately 5 - 10 minutes to complete the questionnaire.

All answers will be treated anonymous and confidentially
Thank you very much for your participation!

Demographics

Please circle the appropriate answer

Are you male or female? Male / Female	What is your nationality? -----
Which age group are you in? 16-24 25-34 35-44 45-54 55-64 65-74 75-84 85+	How many times have you attended Umeå hospital in the last Three (3) years? First time Twice or three time Four or five times Sex times or more

➤ Please rate each statement below regarding service quality in the Umeå hospital.

	1 Very bad	2 Bad	3 Average	4 Good	5 Very good
Sense of wellbeing that you felt in the hospital					
Ability of the hospital to treat you the way you expected					
Sense of security from physical harm you felt in the hospital					
Waiting time for medication					
Waiting time for tests					
Speed and ease of admissions					
Skills of the nurses attending you					
Skill of those performing your tests					
Skill of the physicians attending you					
Adequacy of explanation about your treatment					
Adequacy of instruction on release from the hospital					

Responsiveness of nurses to your needs					
Clarity of information about your condition					
Politeness of the physicians					

➤ Please rate each statement below regarding Trust.

	1 Strongly Disagree	2 Disagree	3 Neither	4 Agree	5 Strongly Agree
The doctor will do whatever it takes to get you all the care you need					
Sometimes doctors care more about what is convenient for his/her than about your medical needs					
Doctors medical skills are not as good as they should be					
The doctors are extremely thorough and careful					
You completely trust the doctors decision about which medical treatment are best for you					
The doctor is totally honest and telling you about all of the different treatment options available for your condition					
The doctor only thinks about what is best for you					
Sometimes the doctor does not pay full attention to what you are trying to tell him/her					
You have no worries about putting your life in doctors hand					
All in all you have complete trust in doctor					

➤ Please rate each statement below regarding reputation

	1 Strongly Disagree	2 Disagree	3 Neither	4 Agree	5 Strongly Agree
I have a good feeling about the Umeå hospital					
I admire and respect the Umeå hospital					
Umeå hospital stands behind its services					
Umeå hospital develops innovative services					
Umeå hospital has excellent leadership					
Umeå hospital has a clear vision for its future					
Umeå hospital recognizes and takes advantage of market opportunities					

Umeå hospital is well managed					
Umeå hospital looks like a good organization to work for					
Umeå hospital looks like a organization that would have good employees					
Umeå hospital Is an environmentally responsible organization					
Umeå hospital maintains a high standard in the way it treats people					

Satisfaction with the staff	Very Dissatisfied			Very satisfied	
	1	2	3	4	5
Satisfaction with the services	Very Dissatisfied			Very satisfied	
	1	2	3	4	5
Overall satisfaction with the Umeå hospital	Very Dissatisfied			Very satisfied	
	1	2	3	4	5
What sort of reputation do you think that Umeå hospital has in the public?	Negative reputation			Positive reputation	
	1	2	3	4	5

Thank you very much for your cooperation!