

## NEAR EAST UNIVERSITY INSTITUTE OF GRADUATE STUDIES BUSINESS ADMINISTRATION PROGRAMME

## SERVICE QUALITY PERCEPTION OF MEDICAL FACULTY STUDENTS AND THE RELATIONSHIP BETWEEN STUDENT LOYALTY AND SATISFACTION: MEDITERRANEAN REGION EXAMPLE

FATMA BOLAÇ

PhD THESIS

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BUSINESS ADMINISTRATION PROGRAMME

PhD THESIS

THESIS SUPERVISOR
ASSISTANT PROFESSOR DR. BARIŞ KOYUNCU

## **ACCEPTANCE AND APROVAL**

The study titled "The Relationship Between Medical Faculty Students' Service Quality Perceptions and Student Loyalty and Satisfaction: The Mediterranean Region Example" prepared by Fatma Bolaç, was considered as successful as a result of the defense examination conducted on the date of ......./2021 and accepted as Doctoral Thesis by our jury.

JURY MEMBERS

Assist, Prof. Dr. Barıs KOYUNCU

(Supervisor)

Cyprus American University
Faculty of Business and Economics

Prof. Dr. Abdullah IŞIKLAR

(President)

Bursa Technical University
Faculty of Humanities and Social Sciences
Psychology Department

Prof. Dr. Şerife EYÜPOĞLU

(Member)

Near East University

Faculty of Economics and Administrative Sciences
Business Management Department

Assist. Prof. Dr. Ahmet ERTUGAN

(Member)

Near East University

Faculty of Economics and Administrative Sciences
Marketing Department

Assist. Prof. Dr. Ayşe Gözde KOYUNCU

(Member)

**Near East University** 

Faculty of Economics and Administrative Sciences



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## ABSTRACT

# SERVICE QUALITY PERCEPTION OF MEDICAL FACULTY STUDENTS AND THE RELATIONSHIP BETWEEN STUDENT LOYALTY AND SATISFACTION: MEDITERRANEAN REGION EXAMPLE

Success in educational services necessitates the joint action of many actors (managers, instructors, administrative staff, students) and the necessity of a system that has integrity. However, the quality of the services provided by these actors should be measured at different times and the remedial measures should be focused on within the framework of the measurement results. The aim of this study is to determine the relationship between the service quality perceived by the Faculty of Medicine students with student loyalty and student satisfaction. The population of the research consists of the students studying in term 3 at the Faculty of Medicine in the 2018 - 2019 academic year. The sample of the study is 484 students who volunteered to participate in the study. Questionnaire was used as data collection tool in the study. The questionnaire consists of personal information form, Higher Education Service Quality Scale, Student Loyalty Scale and Student Satisfaction Scale. Descriptive statistics, reliability test statistics and correlation analysis were used in data analysis. As a result of the research, when the average of the service quality perception, student loyalty and student satisfaction levels of the students were examined, it was found that the average was at medium level. In addition, a positive and moderate relationship was found between the service quality perception of the students participating in the study, student loyalty, student satisfaction and subdimensions of all variables. As a result of the research, suggestions for future studies were presented to practitioners and researchers.

**Keywords:** Quality in Higher Education, Accreditation, Service Quality, Student Loyalty, Student Satisfaction.

# TIP FAKÜLTESİ ÖĞRENCİLERİNİN HİZMET KALİTE ALGILARI VE ÖĞRENCİ SADAKATLERİ İLE MEMNUNİYET ARASINDAKİ İLİŞKİ: AKDENİZ BÖLGESİ ÖRNEĞİ

Eğitim hizmetlerinde başarı, birçok aktörün (yönetici, eğitmen, idari personel, öğrenci) ortak hareket etmesini ve bütünlük arz eden bir sistemin gerekliliğini zorunlu kılar. Bununla birlikte bu aktörlerin sunmuş oldukları hizmetlerin kalitesinin değişik zamanlarda ölçülmesi ve ölçüm sonuçları çerçevesinde iyileştirici önemlere odaklanılması gerekir. Bu araştırmanın amacı Tıp Fakültesi Öğrencilerinin algıladıkları hizmet kalitesinin, öğrenci sadakati ve öğrenci memnuniyeti ile ilişkisini tespit etmektir. Araştırmanın evrenini 2018 -2019 eğitim-öğretim yılında Tıp Fakültesinde dönem 3'de öğrenim gören öğrenciler oluşturmaktadır. Araştırmanın örneklemini de araştırmaya katılmaya gönüllü olan 484 öğrenci oluşturmaktadır. Araştırmada veri toplama aracı olarak anket kullanılmıştır. Anket kişisel bilgi formu, Yükseköğretimde Hizmet Kalitesi Ölçeği, Öğrenci Sadakati Ölçeği ve Öğrenci Memnuniyeti Ölçeğinden oluşmaktadır. Veri analizinde tanımlayıcı istatistikler, güvenirlilik test istatistikleri ve korelasyon analizi kullanılmıştır. Araştırma sonucunda öğrencilerin hizmet kalite algısı, öğrenci sadakati ve memnuniyeti düzeylerinin ortalamaları incelendiğinde, öğrenci ortalamalarının orta düzeyde olduğu bulunmuştur. Ayrıca araştırmaya katılan öğrencilerin hizmet kalite algısı, öğrenci sadakatı, öğrenci memnuniyeti ve tüm değişkenlerin alt boyutları arasında pozitif ve orta düzeyde bir ilişki bulunmuştur. Araştırmanın sonucunda uygulayıcılara ve araştırmacılara gelecekte yapılacak çalışmalara yönelik öneriler sunulmuştur.

**Anahtar Kelimeler:** Yükseköğretimde Kalite, Akreditasyon, Hizmet Kalitesi, Öğrenci Sadakati, Öğrenci Memnuniyeti.

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## **ABBREVIATIONS**

**ISO:** International Standards Organization

YÖK: Council of Higher Education

YÖDEK: Higher Education Academic Evaluation and Quality Improvement

Commission

**TSEK:** Turkey Institute of Standards Agency

**SERVPERF:** Service and Performance

**HEdPERF:** Higher Education Performance

**UNESCO:** United Nations Educational, Scientific and Cultural Organization

ADEK: Higher Education Institution Academic Evaluation and Quality

Improvement Boards

**OECD:** Organisation for Economic Co-operation and Development

**ENQA:** European Association for Quality Assurance in Higher Education

**EUA:** European University Association

**EURASHE:** European Association of Institutions in Higher Education

**USDE**: The United States Department of Education

**CHEA:** Council for Higher Education Accreditation

**ESU:** European Students' Union

**ECA:** European Consortium for Accreditation in Higher Education

AYA: European Higher Education Area

## INTRODUCTION

With today's increasing competition, due to factors such as structural changes in sectors, technology, awareness of consumers, etc. It has become more and more important to produce quality and qualified products or services in all sectors. Therefore, the production of quality products or services has been among the most important and current problems of enterprises in recent years. Thus, the changes experienced affect servicebased applications as well as product-based applications. The increase in the diversity of goods arising due to the competitive conditions in the market necessitates a great diversification in services competing under the same conditions. Both the diversification of services and the increase in the number of businesses increase competition and force service businesses to be different in providing quality services and service delivery. The most valid way for an enterprise to gain competitive advantage can be expressed as producing better quality and differentiated service than its competitors, or in other words, realizing production based on quality while responding to consumer demands. Quality production is now accepted as a requirement of existence in the difficult conditions of the market economy.

All service businesses in the service sector, both public and private, have to measure the quality of their services in order to analyze their current situation, to see their place in the sector, to make future plans, investments and to ensure customer satisfaction. Measuring the quality level within a service business is essentially vital for the service providers and consumers, but the quality of the service is very important not only for those who provide the service or the consumers who receive the service, but also for those working within the service business. High service quality leads to a decrease in costs, increase in profitability, increase in corporate performance, and therefore positive results spread by word of mouth (Odunlami & Asabi, 2015).

Service quality is increasingly recognized as a critical factor influencing the success of businesses (Pakurár, Haddad, Nagy, Popp & Oláh, 2019). Studies show that service quality positively affects the success of the

institution, creates competitive advantage by affecting the trust and loyalty of customers, and there is a significant positive relationship between service quality and customer satisfaction (Kumar & Dash, 2014; Parasuraman, Zeithaml & Berry, 1985; Sumaedi, Mahatma Yuda Bakti & Metasari, 2012). A quality service ensures an increase in customer satisfaction and customer loyalty, a mutually beneficial relationship with the service provider and user, an increase in customer tolerance for service failures, and positive verbal advertising about the organization (Rehaman & Husnain, 2018).

When we associate this point of view with educational institutions, it is possible to say that there are similarities at certain points. Universities established within the higher education system have brought dynamism to the system in order to be competitive. This dynamism has been in the direction of both providing options for students entering the university and creating a competitive environment that increases the quality. For this reason, universities are developing in our country day by day, and the establishment of new universities is supported. In higher education, the importance of both quality elements and evaluators is increasing. At this point, the quality elements and the concept of service quality have gained importance.

The service sector is a multidimensional sector where abstract outputs are obtained and diversity is high, open to development and continuous development, and where competition is intense (Erdoğan & Aksoy, 2014). Universities are also one of the areas where competition is felt strongly. The service quality of universities is the reason to be preferred. Higher education institutions have become an important part of the service sector in today's education system where the importance of quality and good education is understood.

Educational institutions, especially higher education institutions, which have an important place in the service sector, emphasize the quality of the service provided recently, follow and apply international developments in the field of quality management. Higher education institutions adopt and apply the standards set by national and international institutions in the face of intense competition. Adopting the Quality Assurance System Standards recommended by the International Standards Organization (ISO) is considered as an important indicator. In addition, it is seen that studies aimed at determining the expectations of internal and external customers from the higher education institution are given priority. Especially, researches on the loyalty and satisfaction of students who are internal customers of higher education institutions in different countries and different institutions explain this situation.

In parallel with customer loyalty, student loyalty is defined as the commitment to the university and to the service it provides (Köse, 2012). When viewed from a marketing perspective, student loyalty is a top priority of numerous higher education institutions for three reasons. First, tuition fees are the main source of income for most foundation universities. Second, a loyal student can positively affect the quality of teaching through active participation and connected behavior. The last reason is that after graduation, a loyal student can continue to financially support their academic institution, verbally or through some form of collaboration. It is clear that the advantages of students being connected to universities are not limited to the time spent by the student at the university. For these reasons, student loyalty is essential for an educational institution to keep students connected and survive in a competitive market (Oritonang, 2014).

Customer satisfaction is a concept expressed as meeting the needs, wishes and expectations of customers. Customer satisfaction in service occurs as a result of meeting the expectations of the customer from the service during the service (Özgüven, 2007). Businesses have to make an intense effort to satisfy their customers, to maintain satisfaction, and to meet their demands, needs and expectations.

The practice of measuring student satisfaction in higher education institutions and making use of these data have become possible thanks to the legal

regulations introduced by the Council of Higher Education (CHE/YÖK). As it is known, the Higher Education Academic Evaluation and Quality Improvement Commission was established in 2006 and the aim was to switch to a quality assurance system in higher education institutions. Together with the Higher Education Academic Evaluation and Quality Improvement Commission, operations such as determining program qualifications, determining learning gains and workloads on a course basis, measuring the effectiveness of curricula and student satisfaction have started to be carried out within the scope of strategic planning activities. (Higher Education Academic Evaluation and Quality Improvement Commission, 2006). This regulation has formed the basis for the establishment of a common academic evaluation and quality improvement system in Turkish higher education institutions, determination of areas open to improvement in institutions, and continuous improvement of education quality and management functions (Higher Education Academic Evaluation and Quality Improvement Commission, 2007). About ten years later, another important development took place. In order to carry out quality studies in universities more effectively, Higher Education Quality Assurance Regulation was published in July 2015; With this regulation, an accreditation target has been introduced for universities (Council of Higher Education, 2015).

## **Research Problem**

Minimizing the negativities affecting student achievement in institutions and organizations providing educational services is one of the important indicators that increase educational success. Success in educational services necessitates the entailment of a system that can act together and has integrity. Measuring the quality of the services provided by these organizations and focusing on remedial measures within the framework of measurement results can directly affect the level of student achievement in education.

In this study, it is aimed to determine the Service Quality Perceptions of Medical Faculty Students. Accordingly, the problem of the study is determined as "Is there a relationship between Medical Faculty Students' Perception of Service Quality and Student Loyalty and Student Satisfaction?".

### Sub Problems

In line with this main purpose, the following questions were tried to be answered:

- 1. What are the Medical Faculty Students' Perceptions of Service Quality?
- 2. What is the Student Loyalty of the Medical Faculty Students?
- 3. What is the Student Satisfaction of the Medical Faculty Students?
- 4. What are the perception of service quality, student loyalty and student satisfaction of accredited and non-accredited students?
- 5. What is the relationship between Medical School Students' Service Quality Perceptions and Student Loyalty and Satisfaction?

## Purpose of the research

The main purpose of the research is to determine the relationship between perceived service quality and student loyalty student satisfaction. In addition, it is among the aims of the research to shed light on the subject to researchers who will work in the same field in the future.

## Importance of the Research

Studies on services considered within the scope of abstract products can not be found in the literature. Nonetheless, studies on service quality in the university environment are quite limited. Such studies are very important, especially in terms of supporting the development and institutionalization process of newly established and developing universities. The increasing number of universities in Turkey in parallel with the development of understanding of the expectations of university students will be able to accelerate the development of the university.

With this study, which aims to evaluate university performance by testing student loyalty and satisfaction, it is foreseen to develop some solutions to increase the performance of universities.

When the Turkish literature is examined, the number of studies using service quality perception, student loyalty and satisfaction is quite low. In the light of this information, this study is important in terms of providing preliminary information to newly opened universities and revising the strategies of universities that already have a certain reputation.

## **Limitations of the Study**

The first limitation of the study is that it only reflects the opinions and thoughts of the 3rd grade students of the Medical Faculties in the Mediterranean Region.

The research is limited to the questionnaire scale prepared for students studying at four universities in the Mediterranean Region.

## **Definitions**

**Service Quality:** It is the difference between customers' expectations and perceptions after using the service.

**Student Loyalty:** It is the devotion of the student to his/her university and the service he/she provides.

Student Satisfaction: It is considered a short-term attitude that occurs as a result of a student's evaluation of his/her educational experience.

## CHAPTER I

## QUALITY, SERVICE QUALITY AND QUALITY CONCEPTS IN HIGHER EDUCATION

## 1.1.Quality

One of the fastest developing competitive tools of the 1980s and 1990s has been quality. As competition increases, the understanding of organization "I sell what I produce" has been replaced by the understanding of organization "I must produce what I can sell". Quality has become mandatory for businesses to survive, not to gain more. Businesses operating under the competitive conditions of the current market need to plan and implement their own quality policies and develop these policies over time (Aygün, 2014).

The concept of quality is frequently encountered in daily life. The reason for this is that quality is an important concept that affects almost every moment of human life. With the concept of the quality of the food consumed, the quality of the vehicles used in public transport, the quality of the services received, the quality of health institutions and many other examples, quality affects human life, the quality of life activities and health. Although price is still largely influential in purchasing decisions, quality variables such as reputation, communication, reliability and competence are becoming increasingly important. (Knowles, 2011).

Since quality is used in various fields and its boundaries are a constantly expanding concept, there is not a certain conceptual unity about quality. Quality is often a broad concept in which products or processes must meet expectations (Taguchi, Chowdhury & Wu, 2005). Therefore, definitions regarding quality are very diverse. The main quality definitions are as follows.

Ruskin defined the quality as saying "Quality is never an accident, it is always the result of intelligent effort,". In addition to Ruskin's words, Foster said, "Quality is never an accident, it is always the result of high purpose,

sincere effort, smart direction, and skillful execution." (Ree, 2009). According to Juran, quality is defined as both a feature related to the customer and compliance with the purpose of use. While Juran defines quality as the features of products or services that meet customers' expectations and lead to customer satisfaction, Grönroos defines quality as the way the customer perceives it. (Juran, 1988). The relationship between both definitions stems from the fact that quality is the result of an activity. While the definition of Grönroos emerges it as a result perceived by the customer, Juran shows that it is the result of satisfactorily meeting a customer's expectations (Lacle, 2013). Fitzsimmons shows quality as the result of an activity, but notes that quality assessment is usually done in the service delivery process that takes place in the encounter between a customer and an employee (Lacle, 2013).

Turkey Institute of Standards Agency describes the quality as follows: Quality is the content of some service capable of meeting the qualifications for the completion of a good or service (Çelenk, 2013). Quality is defined as the features that will enable a good or service to meet the needs and demands of consumers in the most economical way (Tekin,2012).

When viewed from different perspectives, many different definitions of quality have been made. In the mid-1980s, it was stated that the concept of quality was used in the field of marketing and aimed to achieve the goal of customer satisfaction, in the 1990s, with the changes in the world, the concept of quality began to be perceived and used in a different form and content. (Demirkiran, 2012).

It is also a deep concept that includes many definitions within the concept of quality. Based on this concept, various definitions have been obtained. These definitions were developed over time and their meanings were investigated in depth and more appropriate definitions were made. Quality, which expresses the quality of anything, is a concept that has different meanings according to its point of view, cannot be defined with a single sentence, and is difficult to measure and quantify (Sapancali, 2009).

Tengilimoğlu has included definitions related to the concept of quality in some articles. These definitions can be listed as follows:

- Quality is the value of a product or service.
- Quality is compliance with predetermined specifications.
- Quality is compliance with needs.
- Quality is avoiding shortcomings.
- Quality is suitability for use.
- Quality is compliance with conditions.
- Quality is the sum of the characteristics of a product or service based on its ability to meet specified or potential needs.
- Quality is a production system that produces products or services in an economical way and responds to consumer demands. (Tengilimoğlu, 2014).

Each of these definitions emphasizes different contents and features of quality. According to another definition, quality is the desired level of perfection. The concept of quality is an objective concept and a degree of well-being. It is a feature that specifies how people, objects or experiences are qualitatively, measures and evaluates their superiority that separates them from other things. Quality of life is a more subjective concept that should be evaluated in the light of Maslow's hierarchy of needs (Gazezoğlu, 2015; Öztürk, 2010). According to Maslow, it was emphasized that physiological needs are a luxury requirement that emerges first and other needs are a luxury requirement for the person. The most basic needs are physiological needs such as hunger and thirst, and the highest level is self-actualization.

Today, under conditions such as rapid technological developments, changing socio-economic environment, globalizing competition, complex organizational structures, quality has become one of the key concepts together with efficiency. At this point, it is seen that factors such as scientific approach, statistical methods and teamwork come to the fore to improve quality (Şenol, 2012).

Quality is a strategically important concept for businesses. The quality of an enterprise's good or service is directly related to its price and the supply-demand relationship. Quality is also in relation with the company's reputation, cost and market share, reliability of the product and its international impact. Explaining the nature of the concept of quality in the service sector is quite difficult when compared to other production sectors. The main reason for this difficulty is the subjectivity in the customer perception of the service.

Indeed, in the service sector, quality is directly proportional to variables such as compliance with the needs and expectations of the customer, continuous success, complete and error-free realization of the services offered, and customer satisfaction that can be measured and evaluated. In addition, due to the natural qualities of the product subject to service, problem areas such as measuring and evaluating the service quality, determining the criteria to be considered in quality measurement and determining the person who will evaluate the quality arise. Under these conditions, quality in the service sector indicates a very difficult, uncertain and complex process in terms of comprehension, applicability, control and continuity (Öztürk & Kenzhabayeva, 2013).

## 1.1.1. Dimensions of Quality

The reason for the many definitions about the concept of quality is that the quality is multi-dimensional. Each dimension of a good or service quality is independent from each other. While one dimension of quality can be felt at a high level, another dimension can be felt at a low level. This situation may differ from product to product and service to service (Ramaiyah, Zain, Nurulazam & Halim, 2007).

## 1.1.1.1. Performance

Performance describes the generally measurable, basic functioning characteristics of a good or service. Performance is also a good performance of the product's functions. A quality product will show a performance according to the expectations of the user and the manufacturer. When the products produced do not meet the expectations of the user, the users will be

disappointed and the products that perform poorly will also bring reputational loss and negative sales to the manufacturer. The link between performance and quality is greater than in other dimensions, and whether performance differences are perceived as quality differences depends on individual preferences. Consumers have a wide variety of interests and needs, each with the potential to equalize high performance with quality in their respective areas of interest. So high performance equals high quality (Jaskulska, 2013).

## 1.1.1.2. Features

Properties are the qualities or parts of the physical product that complement its basic function and make the product attractive. In addition to the basic features of the product, these are the side features that will increase its appeal to the user. Features are the dimensions that answer the question of what additional benefits to add to the product. Some features are available in all products, but some features are only available in quality products.

For example, all vehicles have wheels, steering wheel, gear, windows and seats, but only some vehicles have heated seats, parking assistance and bluetooth. These are also considered additional product advantages (Zargari, 2014). Various examples including free treats distributed by the airline company on flights, the cotton or wool program of the washing machine, the silent operation of the vacuum cleaner, the knowledge provided by an educational program, as well as leadership qualities for students can also given (Jaskulska, 2013).

## 1.1.1.3. Reliability

Reliability is that the product performs well and works consistently throughout its specified life. Many brands have given their customers confidence due to their reputation for reliability (Zargari, 2014). Reliability is the third quality dimension that reflects the likelihood of a product failing or malfunctioning within a certain time. Garvin argued that the most common reliability measures were the mean time to first failure, the time between decay times, and the failure rate per unit time. For example, the number of times a new refrigerator breaks down during the warranty period is a reliability measure. In the garment industry, reliability is equally important for short and long term

use. This quality dimension means how well a product will withstand the effects of everyday wear and renewal. Garments made for one-time use are produced for extremely important moments, such as weddings, and this disposable experience is very important for reliability (Koskennurmi & Pietarila, 2005).

## **1.1.1.4.** Conformity

Conformity is the degree to which the design and operating characteristics of a product comply with the specified standards. Conformity is measured by the incidence of defects, according to Garvin, and all units that fail to meet specifications must be reworked or repaired. Consumers can have an idea about the technical dimension of the quality thanks to its convenience dimension. At the same time, conformity is the rate at which product-related properties deviate from their nominal value in statistical quality control. Obtaining conformity data is considered difficult. Conformity is also similar to reliability, but the two have different meanings. Conformity refers to the degree to which a product's design and operating characteristics meet predetermined standards and industry specifications (Douglas & Connor, 2003). Reliability and Reliability are strictly committed to the quality-based production approach. Fit for clothing items can mean how well an item's design features such as sizing and construction features are met (Douglas & Connor, 2003).

## **1.1.1.5. Durability**

Garvin argued that durability is very similar to reliability, but not the same as reliability. Durability, which is a measure of product life, has both economic and technical dimensions. Technically, durability is defined as the amount of use obtained from a product before it deteriorates (Jaskulska, 2013). Durability is also defined as the period during which a good or service can be useful. An example of durability is the life span of a computer. In the apparel industry, durability means how long a garment will last before it's thrown away. In addition to these, durability is also expressed as technical (material and structural) and formal durability (Koskennurmi & Pietarila, 2005). Garvin argues that when repair is impossible, durability is easier, and when repair is

possible, durability becomes difficult. Later, the concept gained an additional dimension and the product life will change according to changing economic conditions. Durability is considered to be preferred in the continuation of renovation and repair (Hussain & Ranabhat, 2013).

## 1.1.1.6. Serviceability

Serviceability is expressed as speed, courtesy, competence and ease of repair. Serviceability is to consider the problems and complaints related to the product within the warranty period and to provide services such as repair, maintenance and repair as required. Garvin claimed that consumers were not only concerned about the breakdown of a product, but also about the time before the service was restored and the quality of their relationships with service personnel. Consumers' perception of quality is also affected by how quickly and economically routine maintenance activities can be carried out. Examples of serviceability feature can be listed as how long it takes to correct an error in the credit card statement by the bank or how fast and positive the service units respond to the request, the time spent in the service with the possibility of the refrigerator breakdown, the interest of the service personnel, the ability of the service to produce the right solution. (Jaskulska, 2013).

## **1.1.1.7. Aesthetics**

According to Garvin, the last two dimensions of quality are the most subjective and closely related to the users' approach to quality. Aesthetics is about the reflection of a personal judgment and individual preference, such as how a product looks, feels, effect, tastes or scent. Aesthetics is that the design of the product appeals to the senses and tastes. The packaging of the product, the color chosen for the product or packaging, the logo of the product can be given as examples of aesthetics. Aesthetics for garments means what a garment looks like or how attractive it looks, the size of the garment, or how well the wearer fits the garment. However, aesthetics is a dimension that depends on the users and each user's perspective and perception level of aesthetics are different from each other. For example, a wedding organization business can be very assertive in aesthetics, but the

customer may not like the aesthetic reflection of this business and prefer another organization company. Businesses should realize that it is impossible to please everyone (Koskennurmi & Pietarila, 2005).

## 1.1.1.8. Perceived Quality

Perception of quality can be as subjective as evaluating aesthetics. Some of these quality features are inherent in quality, and some are attributes attributed to products. While it is difficult or impossible to directly observe some fixed quality features, others are important for making inferences about quality. In this case, the products will be evaluated according to their visuality, advertisements or brand names rather than their objective features. Consumers do not always have detailed information about all the features of a product, and in such cases, certain criteria play an important role in consumers' decision-making. Factors such as product image and brand image that emerge as a result of advertising activities have a significant place in the consumer perception of product quality as positive or negative. Customer loyalty and repeat business are closely related to perceived quality. For example, if there are regular business trips with a certain airline company and almost always being late due to lost baggage or luggage, it will no longer be preferred to fly with that airline company and fly with a competitor (Zargari, 2014). Perceived quality is the intuitive evaluation or acceptance of the product compared to other products. According to a recent market research, the country in which a product is produced is considered by most consumers as an indicator of quality. Reputation is the primary and powerful ingredient of perceived quality. According to Mehta, Lalwani and Li Han (2000) when it comes to clothing, it is generally thought that the clothes produced in Italy, Germany or Japan are higher or higher quality than the clothes produced in some Asian countries.

## 1.1.2. Views on the Quality Improvement Process

There are three most well-known people whose contributions to quality have led to revolutionary changes. These; Edward Deming, Joseph Juran and Philip Crosby. This section includes their quality views.

## 1.1.2.1. Edward Deming

Different definitions of quality and its different handling are in parallel with the perception by those who express it. Deming defines quality as "not only meeting the expectations of its customers, but exceeding them". So priority is not only the customer's demand but also their needs. Therefore, Deming's philosophy starts with the customer and ends with the customer. Deming's ideas are summarized in four points. The first of the four points is the extended process. Deming thinks that the corporate process should include suppliers, investors, customers and the community. This point defines the importance of both internal and external stakeholders and the satisfaction of customers (Ghobadian, Speller, & Jones, 1994).

The second point is continuous improvement. Deming sees the continuous development of the expanded process concept as part of its quality philosophy. In order to provide quality service, organizations need to make continuous improvement and change in their methods and technologies.

The third is a matter of private and common variations. Deming argues that some quality problems have specific causes and some have common causes. Variations related to specific machines or operators and that require individual modifications are known as custom variations. Some are common variations that result from system operations and are the responsibility of management.

Finally, one of the important points is the responsibility of management and employees. According to Deming's philosophy, it is important for employees and managers to be aware of the view that a radical change can occur. For change to take place, complete commitment must be maintained by senior management and employees. In the light of all this information, Deming's focus is on how the improvement will continue. It sees the consumer as the primary component in the production line; It also believes that everyone in the organization must be in complete commitment to exceed and meet the customers' needs. Most importantly, Deming sees continuous improvement as the main point of its philosophy.

## 1.1.2.2. Joseph Juran

As an example of expressing quality in different meanings, Juran thinks that quality has two meanings. The first definition of "quality consists of product features that meet the needs of customers and thus ensure product satisfaction" defines a "revenue-oriented" quality style. This means high quality is costly. The second definition, "quality is to be devoid of defects," means that high quality is low cost (Juran & Godfrey, 1999). Accepting the need for a globally acceptable comprehensive definition of quality, Juran introduced the concept of "convenience for use", since none of the above definitions are internationally accepted.

Juran summarizes the points of quality management in three processes known as the "Juran trilogy". Like Deming, Juran believes that major quality problems arise from management. For this reason, he emphasizes that senior management should receive training on quality, and this is clearly presented at every stage of his trilogy, the methodology he proposes to achieve quality. "Quality planning" consists of actions for process and product development to meet the needs of customers. "Quality control" can be performed by evaluating the actual performance and comparing it with the quality targets in order to strengthen the operation to reach the product and process targets. "Quality improvement" aims to maximize the quality of performance as a goal.

Juran places great emphasis on product or service improvements and processes applied to internal and external customers. Juran defines external customers as those who are affected by the product or service but are not members of the organization. Examples of external customers include authorities regulated by the government, customers and the public. There may be situations in which individuals or departments within the institution exchange services or products. These buyers are known as "internal customers" (Pike & Barnes, 1996).

Juran agrees with Deming that the management is responsible for 80% of all problems. Juran's approach can be summarized as follows; the need for a three-step process (planning, control and action), measurable goals and a plan, responsibility for quality management, the importance of education and training, and the promotion of quality use.

## 1.1.2.3. Philip Crosby

Philip Crosby's philosophy has been summed up by many assumptions. The first assumption defines the quality as "conformity to the requirement"; In this sense, he states that quality is an element that can be managed, touched and measured in order to obtain needs and expectations. Then, with the statement "quality is measured by the cost of quality", Crosby believes that quality can be measured and that the costs of non-compliance are the cost of what is done wrong.

He points out that in the third assumption, "what is done right the first time is cheaper". Here Crosby points out the need for "prevention" rather than later correction (Crosby & Taylor, 1983). According to Crosby, the fourth assumption is related to the legend that sees the origin of quality problems, especially in the field of manufacturing, as "workers". According to Crosby, it is easier to assign problems to lower-level employees than to middle and upper-level individuals. It is thought that it is the management that will lead the workers to successful results. For example, high management in health institutions determines the policies, procedures and rules to be applied for their staff. If the concept of quality is adopted by top management, the results will be as planned (Crosby & Taylor, 1983). According to Crosby, the fifth and final assumption is based on the statement "quality originates from the quality department". Quality experts believe they are responsible for the quality of their organization. The people in the quality department should assign a solution to those who created the problem. Crosby believes in taking precaution and perfectionism as a quality system standard.

## 1.2. Quality of Service

The service sector has become an increasingly important sector with the increase in the level of income that emerged in parallel with the developments in industrialization. There is no consensus definition of service quality similar to the difficulties in defining quality. The main reason for this situation is that the service moves in a wide range of sectors and at the same time, it is due to the unique characteristics of the service sector (Kılıç & Eleren, 2009).

## 1.2.1. Importance of Service Quality and Development Process

The data obtained from studies on quality definition and measurement are not sufficient to define the concept of service quality. While the quality of physical products can be expressed with concrete indicators, service quality is measured as a result of customers' perception and evaluation. Services differ from physical products in terms of their abstract features, and service quality is revealed in an abstract way. In the literature, the expression "perceived service quality" is used more often than service quality (Gençer, Demir & Aycan, 2008).

The emergence of the concept of service quality i took place with the previously mentioned concept of total quality management led by Deming, Juran and Crosby after the World War II. The concept of quality, which created the agenda for the production sector in the 1980s, has been among the topics that have started to be discussed in the service sector. Businesses had to act by aiming to achieve perfect quality in product and service production in order to regain the values they lost in this period. It is easier to measure quality in physical products since they have certain concrete properties. However, this situation is slightly different in services. The characteristics of the services, such as the abstract nature of the services, their heterogeneity, the time difference between the two services, and the durability, make it difficult to evaluate the service quality. When we look at the academic studies on service quality, it is seen that there are studies on the measurement of service quality in many areas such as transportation and

accommodation, health services, public sector, retail sector, insurance companies and consultancy services (Banar & Ekergil, 2010).

As the measurement of service quality is difficult, it seems to be a very difficult and complex issue in terms of quality applications, controllability and measurement continuity in the service sector. The perception of service quality is perceived differently for many reasons. This situation generally differs according to the person providing the service and the customer receiving the service. This difference is due to the fact that the standardization of the service according to the products is negligible. Therefore, it is difficult to measure and evaluate such a concept (Kılıç & Eleren, 2009).

Service quality is an important element for the business providing the service to differentiate themselves from their competitors. The attention paid to this issue can provide permanent advantages to the company in competition. As in organizations producing with high quality, the quality element is an important part of long-term profit in the service sector. Superior service quality is a factor that precedes generating more business to achieve higher profits. Service quality, both positively and negatively, lays the groundwork for the next sale (Soft, 2006).

With globalization, the share of the service sector has increased significantly compared to the amount of production in the world. With this sudden rise, the importance of the concept of customer satisfaction in parallel with customer loyalty has emerged. Minimizing the production of faulty service and improving service quality has become important for service quality improvement. This situation has become an important factor that brings profit by preventing the loss of important values such as money and time, increasing productivity for businesses. In addition, it has enabled the production of higher quality services at lower costs. The rapid change in the service sector in recent years has made it necessary for service businesses to compete in larger markets. As societies are more conscious about quality, the importance of quality in service production has increased in a noticeable

way. This development has provided businesses with the opportunity to bring in new customers and serve more loyal customers. It has been observed that business volume will increase with loyal customers, and businesses can stand out in price-based competition with less labor and expense. With this awareness, businesses have focused on efforts to ensure and manage service quality and have made this issue their main goal (Öncü, Kutukız & Koçoğlu, 2010).

## 1.2.2. Definition of Service Quality

Service quality is a concept that attracts a lot of attention and is discussed in research materials. Researchers have difficulty in defining and measuring service quality (Wisniewski, 2001). Service quality is defined differently depending on the sector, purpose and the quality of the service. The growth and development of the service sector in the national economies has caused the problems related to service production to become up-to-date, and therefore, the researches on issues such as increasing efficiency in the service sector, controlling service quality, developing service quality models and measuring service quality have increased rapidly. Competition intensified with the increase in the number of businesses providing service has led businesses to adopt the service quality understanding in the services they provide (Kalidas, 2007).

Service quality is an expression or result of how customers perceive the difference between their service expectation and actual service output. The evaluation of this difference is as follows; If the perceived service is better or higher than expected, it is concluded that the service quality is higher. If the situation is the opposite, that is, if the perceived service is worse and below than expected, then the service quality will be perceived as low. The difference is the determinant of customer satisfaction. For customers, the element of satisfaction can be expressed as the level of satisfaction that occurs as a result of the experience of a particular product or service. The satisfaction factor, which is the result of the perception of service quality in customers, has a great impact on future preferences. Customers will advise

them by transferring their positive opinions and experiences about the companies they purchase the service from (Argan, 2009).

Service quality is the level of how well a service meets the demands and expectations of the customer. According to Parasuraman, service quality is the difference between customers' expectations and perceptions after using the service (Chi, 2014). Lewis and Mitchell define service quality as a service meeting the needs or expectations of customers. Service quality can be defined as the difference between customer expectation for service performance and customer perception regarding the service received. In other words, service quality is defined as the difference between customers' expectations and perceived service (Asubonteng, Mccleary & Swan, 1996). Service quality is the duties that a service is obliged to fulfill and it is shaped within the framework of two basic facts. The first of these phenomena is how much of the demands and expectations of the consumers are met by the service 31, and the second is to what extent the service features are perceived as suitable for use (Cengiz & Kırkbir, 2007).

Service quality is defined as comparing customers' expectations about a service and their perceptions of current service performance (Parasuraman, Zeithaml & Berry, 1985). At the same time, service quality is considered as a global judgment regarding the superiority of service (Nguyen, 2014). Nitecki and Hernon (2000) define service quality as meeting or exceeding customer expectations. Lehtinen and Lehtinen define service quality in three different aspects: physical quality, interactive quality and corporate image quality (Perez, Abad, Carillo & Fernandez, 2007). As the name suggests, physical quality is about the concrete aspects of the service. Interactive quality is related to the nature of service interaction and focuses on the two-way flow between service provider and customer. Corporate image quality is related to the general image of the service provider in the minds of current and potential customers. Compared to the first two quality aspects, the last one is more stable in the long run (Hussain & Ranabhat, 2013).

The quality of the service produced in a service business is determined by the consumers who use that service rather than the producers, and the service provided is appreciated to the extent that it meets the expectations of the consumers. Therefore, it is very important that the service quality is defined by the consumers. Customers' perceptions of service quality are reflected in their level of satisfaction with the services they have previously experienced. Service quality is determined by the perception of service, which means consumer satisfaction or dissatisfaction. After receiving a service, customers compare the service they perceive with the service they expect. When the perceived service falls below the expected service, customers lose interest in those service businesses (Kotler, 2008). Likewise, if the perceived service meets or exceeds the expectations of the customers, the customers continue to use the services of that enterprise (Schiffman, Kanuk, & Hansen, 2008). Research shows that getting new customers is much more difficult than retaining existing ones. Service businesses should strive to provide a higher level of quality service than their competitors in order to differentiate (Haider, 2001). High service quality is very important in terms of gaining new customers. In this context, the most important purpose and target is to meet the expectations of the customers and even go beyond these expectations. At the same time, high service quality is essential to maintaining a loyal customer base. As Foster says: "Quality is never an accident, quality is always the result of high intention, sincere effort, clever direction and skillful execution." Quality represents the smartest choice among many alternatives.

The concept of service quality has emerged as an important criterion that determines the success of businesses today. Especially when the service quality is not sufficient for consumers, businesses have the possibility of losing not only their customers who are not satisfied with the service but also their potential customers who will be affected by conveying their negative experiences (Dean & Evans, 2002). Having a good service quality is a strategic approach to the success of the business. Apart from the product produced by the business, the service quality is an essential element for the business to compete with other competitors in the market (Ladhari, 2009).

The quality of the service offered, the easy access to the place where the service is provided, the fact that the service providers are polite, professional and empathetic people, the extent to which the service responds to customer expectations and how long the service is delivered are important elements to ensure customer satisfaction.

There are many businesses that actively use a kind of customer satisfaction measurement that not only evaluates, motivates and compensates employees but also improving and monitoring their goods and service delivery. These businesses will always be one step ahead of their competitors as they take care to measure their service quality (Anderson, Fornell, & Lehmann, 1994). High service quality will ensure customer satisfaction. In order to achieve high quality, businesses should not only focus on abstract features such as mobile network quality in mobile telecommunications service, but also focus on improving customer service (Brink & Berndt, 2008). According to market researches, a customer who is not satisfied with the service he received shares his negative experience with at least three people. It can be concluded that poor quality service will narrow the potential customer base. Research shows that acquiring new customers costs four times more, and the discomfort with a bad service reaches six times more people than satisfaction with a good service. In addition, the progress of technology has enabled today's consumers to become more conscious and sensitive about quality. With the increase in the variety and number of services, the competition between service providers has also increased. For such reasons, it has become a goal to provide high service quality for businesses (Brink & Berndt, 2008).

#### 1.2.3. Service Quality Measurement Models

Increasing production level and increasing profitability are among the primary goals that every business wants to achieve. Acquiring new customers and expanding the number of existing customers are factors that can increase the profits, reputation and market share of the business. For such reasons, businesses want to measure and increase the service quality they provide (Ghotbabadi, Feiz & Baharun, 2015). Quality of service measurement is very

important to businesses because the measurement of service quality provides businesses the ability to explore potential problems and offers quality improvement efforts to meet the needs and desires of customers. In addition, measurement of service quality guides customers to analyze their experience and satisfaction with the services provided by the enterprise (Ghotbabadi, Feiz & Baharun, 2015). There is no consensus on a single method of measuring service quality, but several experts have developed methods for measuring service quality that businesses can use. Below are some indicators by which service quality models can be evaluated.

- 1. Is it suitable for more than one service type?
- 2. Is it capable of explaining any changes in customers' perceptions?
- 3. Is it possible to make changes according to the environment and service type?
- 4. Can it identify future needs that will enable the business to plan better?
- 5. Is it in a position to find ways to eliminate problems with employees and to follow them?
- 6. Can they provide the right directions to increase the quality of services?
- 7. Are they suitable for evaluating customers' satisfaction?

Main service quality models are as follows;

#### 1.2.3.1. The Service Quality Model of Grönroos

One of the first models proposed is the Grönroos model. In terms of service quality, it connects the service expected by the customers with the service they receive. Expected and received service quality is modeled according to two basic quality dimensions. These are technical quality and functional quality dimensions (Soft, 2006).

The first of these, technical quality, is related to the technical results of the service delivery process, "what" the customer gets as a result of its interaction with the service business. The technical quality dimension can often be objectively measured by customers. In addition, customers may be affected by the way technical quality is given as a result of their interaction

with the business. For example; ATM accessibility, consultancy service, appearance and behavior of any pharmaceutical company employee, aircraft cabin attendant, repair-maintenance technician, bank attendant doing his / her duty, what he said and how he/she did it, etc. will affect the consumer's view of the service (Grönroos, 1990).

Functional quality is about "how" the service is delivered. Customers will be concerned not only with the technical quality of the service but also with the functional quality to evaluate the overall quality (Grönroos, 1990). With technical quality, Grönroos expresses "what" consumers buy as a result of buyer-seller relationship, and "how" they buy with functional quality. In addition, it was emphasized that the business image can also affect customers. The quality model of Grönroos is as follows:

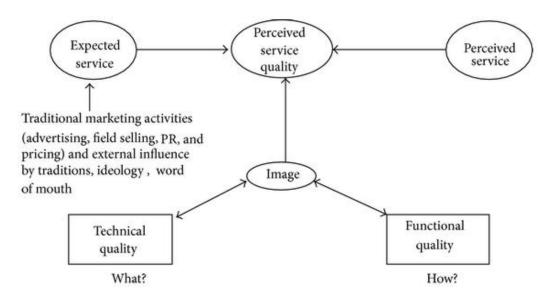


Figure 1. Quality Model of Grönross

# 1.2.3.2. Lehtinen & Lehtinen's Service Quality Model

Uolevi Lehtinen and Jarmo R. Lehtinen developed another service quality model with three-dimensional service quality. The model defines service quality as the concept between service provider and customers.

The three-dimensional model of the service quality offered by Lehtinen & Lehtinen is as follows (Kiran & Singh, 2016):

- 1. Physical Quality
- 2. Interactive Quality
- 3. Corporate Quality

In this model, physical quality is linked to concrete aspects of service. The model includes the physical appearance of the building, equipment used in providing service. Interactive quality includes the interactive nature of services and refers to the interaction that takes place between the customer and the service provider or between customers and other customers. Institutional quality refers to the image attributed by the public to a service provider, as well as to existing and potential customers. Institutional quality is generally more balanced in nature than physical quality and interactive quality (Kiran & Singh, 2016).

#### 1.2.3.3. Sasser, Olsen and Wyckoff's Quality of Service Model

Sasser, Olsen and Wyckoff mentioned three dimensions that determine the service level of an enterprise (Parasuraman, Zeithaml & Berry, 1985):

- The characteristics of the materials used in service production,
- The place where the service is created and the tools, equipment, etc. technical possibilities,
- Business employee behavior and attitude.

### 1.2.3.4. 4Q Model

The Gummesson 4Q model is the result of a synthesis process performed by Gummesson to create a comprehensive model that can explain quality in terms of both goods and services. Gummesson 4Q model is a model that takes into account both goods and services. This model compares consumer expectations, experiences and business image and brand with the quality perceived by the customer. The model integrates goods and services, and goods are considered as part of the services provided. Because it is difficult to separate goods and services from each other in the modern service economy. As in the perceived service quality model, the image included in the perceived service quality model developed by Grönroos expresses the image of the company. Brand variable brings a new perspective to perceived quality models. Although the image relates to the customers 'view of a business, brands represent the appearance of a product created in customers' minds. The term brand image is sometimes used for this phenomenon. According to the Gummesson 4Q model, the perception of the total quality by the customers affects the image of the firm on the one hand, and on the other hand contributes to the brand emerging in the minds of the customers (Palaima & Banytė, 2006). The following figure shows the Gummesson 4Q model.

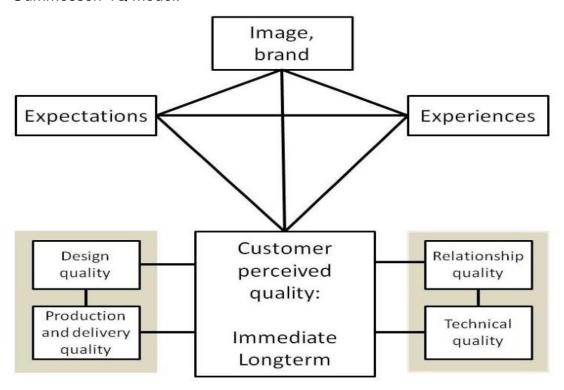


Figure 2. Gummesson 4Q model

According to Figure 2, the first two quality concepts are quality resources. Design quality expresses how well the combination of goods and services is developed and designed. Design quality errors result in poor performance and negative experiences (Dixon & Napolitano, 2006). Production quality is the successful production of goods or services in accordance with the desired specifications. Distribution quality is the distribution, offering of goods or services to customers. That is, the quality of production and distribution expresses how well services and goods are presented compared to design. Two other quality concepts are the result of the production of goods and the provision of services (Dixon & Napolitano, 2006). Relational quality, on the other hand, is the ability to establish an effective communication, shopping and cooperation network that includes relations with internal and external customers and stakeholders as a result of interactive marketing activities. In other words, relational quality refers to how the customer perceives the quality in their service processes (Dixon & Napolitano, 2006).

# 1.2.3.5. Integrated Model

One of the oldest service quality models developed is the perceived service quality model of Grönroos. However, Grönroos' service quality model has some criticisms. Therefore, the technical and functional quality dimensions that constitute the service quality model developed by Grönroos in 1983, and the dimensions of the 4Q model developed by Gummesson in 1993, were restructured with the joint work of both researchers in line with the sectoral requirements. While Grönroos' model is based on what and how customers buy, Gummesson's model consists of the sources of quality. The design and relational quality dimensions in the Gummesson 4Q model include dimensions that are not included in the Grönroos model but also concern the service sector. This model, created with the joint work of both researchers, has been generally accepted as an integrated model (Vanninen, 2013).

#### 1.2.3.6. Normann's Service Quality Model

Richard Normann stated as a result of his research that the performance of service providers in businesses in the service sector directly affects the quality of the service provided to customers and consumers. Therefore, choosing the right personnel, motivation of employees, in-service training of employees, career planning and retention in the business constitute an important place in terms of quality management (Normann, 1991).

Normann explains the reasons for good and bad quality in cycles. Accordingly, the good and bad cycles model has been developed based on the interaction of variable and unchanging directions with each other. Since a bad situation regarding quality management will cause the formation of the other, avoiding bad quality is considered very important for businesses (Seyfullayev, 2015). According to the model, if businesses abandon variable features to reduce costs, this will have a negative impact on customers and increase customer loss. Therefore, the business with reduced revenue will continue to reduce variable services and customer loss will occur due to customer dissatisfaction. As a result, the service quality will decrease. So businesses must move on to good quality cycles. The transition to the good cycle starts with the application of the business excellence in service. When a new variable feature is applied in the good cycle, the customer will notice it and customer satisfaction will be achieved. Customer satisfaction will increase the number of customers and good features will continue to be added to the cycle as revenue increases. In addition, the morale and motivation of the staff will increase depending on the success achieved and the company will have a stable sales trend, and its position in the market will also strengthen (Normann, 1991).

#### 1.2.3.7. Expected and Perceived Service Model

The concept of expectation can be explained as customer demands and wishes. Customers have some requests before receiving the service. In line with these requests, customers want to receive service and after receiving the service, they decide whether these requests are realized or not.

The expected quality is influenced by a number of factors depending on the customers and time. These can be grouped under five headings (Taş, 2009):

- Personal Needs,
- External Communication,

- Past Experiences,
- Business Image,
- Ear-to-Ear Communication,

Personal needs consist of four components: physical, social, psychological and functional. People will call the business that provides the best service in line with these requirements and will receive the service from this business.

External communication, on the other hand, is the communication between the customer and the company. The elements are used and are the elements that the business has. Business image is simply a result of the performance of the business.

Past experiences are the experiences that customers have gained from the service they have received before. Customers pass on these experiences to other potential customers through word of mouth.

Perceived quality is a subjective concept. Quality is achieved when the customer service meets their expectations. In other words, the customers believe that the service they expect is better than they expected or expected (Kekeç, 2008). During the formation of the perceived quality process, customers come to a conclusion by comparing their perceived service performance with their expectations. If customers' service perception is lower than their expectations, they will perceive service quality as low. Conversely, if the service they perceive is higher than their expectations, customers will perceive the quality as high.

If the customers do not have any previous experience about the service they will receive, they generally consider the service as price, brand, and place of sale. Experienced customers, on the other hand, consider the service they have received before and make a comparison. In this case, customers perceive many factors related to service and make sense of quality (Duygun, 2007).

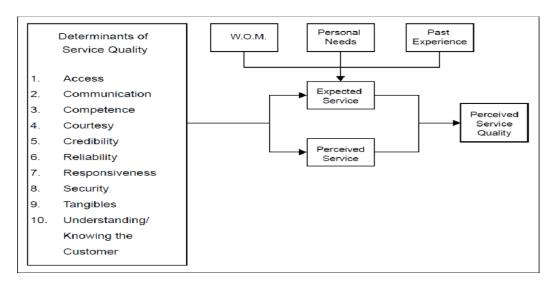


Figure 3. Expected and Perceived Service Model

#### 1.2.3.8. Hierarchical Model

Using previous studies in the literature, Brady and Cronin tried to present qualitative and empirical evidence that service quality is a multidimensional, hierarchical structure and developed a hierarchical model. In addition, they provided a model-based empirical support based on clients from four industries; fast food, photo enhancement, amusement parks and dry cleaning, etc. The hierarchical model of Brady and Cronin reveals that customers evaluate nine sub-dimensions to establish their perceptions of service performance in each of three main dimensions (Interaction Quality, Physical Environment Quality and Output Quality). These perceptions, in turn, constitute the general service quality perceptions of the customers (Shu, 2010).

The interaction quality dimension and the output quality dimension come from the approach of Grönroos (1984). The model basically arises from the combination of Parasuraman, Zeithaml and Berry, (1988) and Grönroos, (1984) approaches. Brady and Cronin (2001) provided strong evidence with their analysis of this new conceptualization. For semantic reasons, Brady and Cronin preferred not to name the first two dimensions as technical and functional quality and preferred to give these dimensions more descriptive

terms such as result and interaction (Ghotbabadi, Feiz & Baharun, 2015). The Hierarchical Approach Model is given in Figure 4 below.

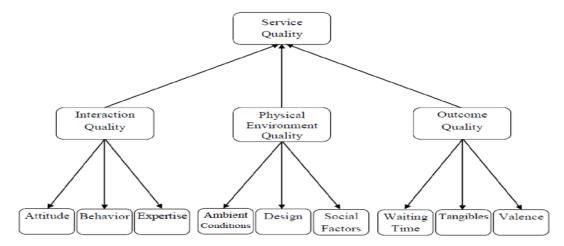


Figure 4. Hierarchical Approach Model

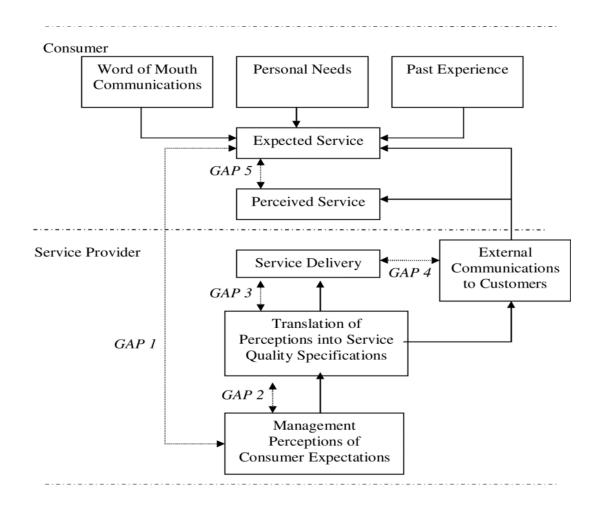
Brady and Cronin pointed out that service quality should be measured in multiple ways in enterprises, and proposed a framework in which service quality is discussed in terms of interaction quality, physical environment quality and output quality components. According to Figure 4, in the versatile and hierarchical measurement tool introduced by Brady and Cronin, the interaction quality consists of attitude, behavior and expertise subdimensions. While the physical properties dimension consists of environmental conditions, design and social factors sub-dimensions, it consists of sub-dimensions of output quality, waiting time, concrete elements and external factors (Bilgin, 2017).

#### 1.2.3.9. GAP-SERVQUAL Model

The Gap model was first proposed by Parasuraman, Zeithaml and Berry in 1985. The Gap model has been used in industries and around the world since 1985 as a competitive strategy to help businesses create quality service delivery strategies and integrate customer focus into firm functions. Moreover, it provides a strong foundation for service excellence (Mauri, Minazzi & Muccio, 2013).

The Gap model offers an integrated framework for managing service quality and customer-oriented service innovation. In the years since the introduction of the model, service quality, service innovation and customer focus have started to gain importance as competitive strategies for organizations. Therefore, basic, integrative frameworks have become more relevant in more industries than ever before. The distinguishing feature of the model is that it captures the cross functionality built into service management. Although the authors are academics in the field of marketing and their original publications are also featured in marketing journals, their work has been widely cited and used in academic disciplines and has also been applied to different functions in organizations. The model draws heavily on logic, theory and strategies in operations, human resources, marketing, and increasingly information systems. Another feature of the model is that it takes the customer as the focus and ensures customer integration throughout all gaps in the model. Each gap and each strategy used to bridge gaps in the model remains essentially customer focused. The main purpose of the model is to meet or exceed customer expectations. The strategies (operations, human resources, or technology-based) used to achieve this goal are ultimately customerfocused (Maglio, Kieliszewski, & Spohrer, 2010).

The model was presented for the first time in 1985 as the difference between how a customer experiences a service (perception) and the expectations created before the service is used. They stated that there are five differences (gaps) that reveal the existence of service quality problems for the Gap model developed by Parasuraman et al. In 1985 and stated that these differences are the differences between the expectations and perceptions of the customers, and the direction and size of the differences define the service quality (Ljubojević, 2004). The Gap model is based on the difference between expected quality and perceived quality (Service quality = Perceived Quality-Expected Quality) (Parasuraman, Zeithaml & Berry, 1985).



**Figure 5.** Conceptual Service Quality Model of Parasuraman, Zeithaml and Berry

# First Gap (Customer Expectations- Management Perceptions Gap):

The first gap is the difference between the expectations of the customers and the perception of these expectations by the service companies. Failure of the management to perceive customer expectations correctly causes a vacuum. In addition, as a result of misperception and evaluation of customer expectations, businesses waste money, time and other resources. There are two main reasons for the wrong evaluations that arise. While the first reason is that the idea of trying to learn customer expectations is underestimated by service businesses and they do not make any effort on this issue, the second reason is that customer expectations are tried to be learned through looking from the inside, not like an outside observer (Lacle, 2013).

# Second Gap (Management Perceptions- Service Quality Standards Gap):

It refers to the gap between management's perception of customer expectations and service quality standards. The second gap stems from the fact that although businesses perceive customer expectations correctly, they cannot form the quality standards and designs to convey them correctly (Değermen, 2006). Parasuraman et al. explain that misinterpreting customers' expectations can not only lead to wrong decisions, but also various other factors that negatively affect the ability to meet customer expectations. For example, the formation of long queues in an enterprise with staff shortages can lead to undesirable situations such as market conditions or the indifference of management between what customers want and what they expect from a service (Lacle, 2013). According to Parasuraman, Zeithaml and Berry, for most firms the second gap is a large gap. As a result of the studies of Parasuraman et al., it was stated that there are four conceptual factors that cause the second gap. These are listed as follows (Veljković, 2009):

- Unwillingness of the management to increase the service quality,
- Impossibility perception,
- Insufficient job standards,
- No goal detection.

# Third Gap (Service Quality Standards- Service Gap Offered):

It is the difference between the specified qualifications of the services and the service offered to the customer. In the third gap, even if managers correctly perceive customer expectations and implement appropriate standards, they may not be able to provide the desired service. It may not always be possible to expect the same performance from all service companies employees and to make this a standard. Therefore, quality standards should be simple, adopted by all employees, and conform to organizational culture (Parasuraman, Zeithaml & Berry, 1990).

Managers can define the features of the services according to the demands of the customers. However, it is expected that the employees cannot provide the service sufficiently. For example, a restaurant management promises that a certain meal must be delivered within 20 minutes, while the waiter can deliver the same meal after the requested time. Possible reasons for this can be listed as conflicts between staff, management and conflict with customers, unskilled personnel, inadequate motivation system, old fashioned kitchen equipment, etc. In order to minimize this difference, a teamwork environment at every level should be created within the company, everyone should be assigned to jobs according to their personal and technical abilities, the tools and equipment that can carry out the work should be appropriate and employees should be able to take risks and responsibilities and use their initiatives (Blešić, Ivkov-Džigurski, Dragin, Ivanović & Pantelić, 2011).

This gap is likely to be wide when the business communicates directly with its customers, the workforce is concentrated, and there are services scattered across many regions. According to the studies of Parasuraman et al., there are seven conceptual factors that lead to the third gap. These are listed as follows (Altan, Ata & Ediz, 2003):

- Having role ambiguity,
- Role conflict.
- Personnel not suitable for the job,
- Technology is not suitable for the job,
- Control systems are not suitable,
- Perceived lack of control,
- Lack of teamwork.

#### Fourth Gap (Service Provided- External Communication Gap):

The fourth gap occurs between the service provided and the perceived service. The fourth gap is the difference between the actual service performance offered by businesses and the service performance that businesses promise to deliver through various communication channels. Businesses reflect as if they could do extraordinary services that they could

not fulfill to attract customers. The fourth gap is considered as one of the most important factors affecting customers' perceptions of service quality (Parasuraman, Zeithaml & Berry, 1985).

Media is recognized as the most important tool that affects customer expectations. If the information provided to the customer through the media affects the concept of quality in the minds of the customers and the promises are not actually provided in the service provided, the customer expectation level will be high, whereas the quality level will be low. All businesses should be clear and reliable about what they promise their customers from the start of communication with customers. Otherwise, customers may think that they are deceived and that the service business does not want to see themselves as customers again in the future. What a customer expects depends greatly on the methods the company uses to introduce itself to the market. Customers should have realistic expectations that are considered more normal than extraordinary expectations (Kulašin & Fortuny-Santos, 2005).

Parasuraman et al. stated that there are two conceptual factors that cause the fourth gap. These are listed as follows (Blešić Ivkov-Džigurski, Dragin, Ivanović & Pantelić, 2011):

- Lack of communication between advertising and production departments in businesses,
- Insufficient communication between personnel management, marketing and production departments,
- Some differences between branches or departments in terms of policies and procedures,
- Tendency to exaggerate and make too much promise.

# Fifth Gap (Expected Quality of Service- Perceived Service Quality):

The fifth gap occurs between expected service and perceived service. This gap is the result of four gaps in the business that affect the customer's perception of quality. The fifth space can also be expressed as a function of the four spaces mentioned above (Parasuraman et al., 1985). The fifth space

can be formulated as follows (Pena, Santos Da Silva, Tronchin & Melleiro, 2013).

Difference 5 = f (Difference 1, Difference 2, Difference 3, Difference 4)

The expected service is the perceived service to the customer, and it is the result of some internal activities and decisions regarding the personnel providing the service and the business. Accordingly, advertisements, past experiences, information obtained from other customers, personal characteristics and requirements are factors that affect customer expectations or expected service.

With this model, it is stated that service businesses can find answers to the following questions about service quality (Paschalidou, 2017).

- Which is the most important of the four service quality gaps in explaining service quality changes? (Businesses have stated that SERVQUAL can be used to measure the perceptions of customers and the other four gaps to measure the perceptions of employees and managers.)
- What are the main organizational factors responsible for the size of the service quality gaps?

#### 1.2.3.10. SERVPERF Model

Cronin and Taylor investigated the perception of the basic questions of this scale on service satisfaction by examining the SERVQUAL scale. Claiming that the SERVQUAL scale was insufficient to measure performance, they developed the SERVPERF (Service and Performance) scale based on the content of the SERVQUAL scale in 1992 (Aydın & Yıldırım, 2013). SERVPERF model is a method that measures service quality based on customer perception. In the SERVPERF model developed by Cronin and Taylor, they focused only on performances as a single factor and did not evaluate customer expectations unlike the SERVQUAL model (Carman, 1990). Cronin and Taylor stated that the reason for the inadequacy of the

SERVQUAL scale is that consumers do not have any expectations about the service and do not know what to expect before receiving the service. The SERVPERF scale is used to measure service quality in amusement park, aerobics school and investment consultancy companies, retail businesses, banks, hospitals and universities (Yılmaz, 2011). As a result of the studies conducted by Cronin and Taylor, the following can be said about the SERVPERF scale:

- In the study conducted by Cronin and Taylor in 1992, it was stated that
  the SERVPERF scale is based on the SERVQUAL scale and this
  scale is one of the current changes that scientifically explains the
  service quality.
- It has been suggested by Cronin and Taylor that the regression analysis method is the most accepted method in terms of evaluating the SERVQUAL and SERVPERF scales. The reason for this is that both scales use the Likert scale.
- Cronin and Taylor stated that the perceptual components of the SERVQUAL method are more appropriate than the SERVQUAL gap scores in the measurement of service quality, and that service quality should be measured directly by perception scores rather than the gap between perception and expectation scores.
- Cronin and Taylor claimed that the model they developed provides greater satisfaction power compared to SERVQUAL, in other words, SERVPERF has the ability to provide more accurate service quality scores and that current performances reflect the service quality perceived by customers in the best way. In other words, SERVPERF measures the service quality validly and reliably.

Despite the criticism of the SERVPERF scale, Cronin and Taylor have tried this scale in four main service sectors (private bank, pest control, dry cleaning and fast food) in their study. They developed the SERVPERF scale against the SERVQUAL scale, which is a performance oriented tool only. Therefore, Cronin and Taylor argued that the difference between performance and expectation in service quality measurement should only be

measured based on performance (Yılmaz, 2011), and put forward the alternative measurement tool, SERVPERF. Twenty-two variables and five basic dimensions that Parasuraman et al. developed for the SERVQUAL scale in 1988 are included in the standard SERVPERF scale (Okumuş & Yaşin, 2007).

#### 1.2.3.11. HEdPERF Model

A performance-based HEdPERF model has been developed by Firdaus in order to determine the service quality in higher education institutions. HEdPERF (Higher Education Performance) is a more comprehensive and a performance-based measurement model to obtain reliable determinants of service quality in higher education (Firdaus, 2005). The HEdPERF scale, which aims to measure the quality of service in higher education institutions, is a scale of 41 items and 13 items were adapted from the Servperf scale, and the other 28 items were created as a result of qualitative studies such as focus groups, expert opinions, pilot tests and literature review.

In literature studies, it makes suggestions that support the efficiency of the Servperf model compared to other models that measure service quality. HedPERF is a model designed and implemented solely to evaluate the quality of service provided in higher education institutions. The HedPERF model was initially evaluated in four factors including non-academic characteristics, academic characteristics, reliability and empathy, but later it was made six-dimensional (Firdaus, 2005). It is aimed for students to evaluate the higher education institution together in terms of its academic characteristics, non-academic features, programs, accessibility, image and empathy (Bektaş & Akman, 2013).

### 1.3. Quality in Higher Education

In the last fifty years, significant changes have occurred in higher education institutions around the world. The first of these is the explosion in the number of individuals who want to get university education and a great growth in the higher education sector. In this case, new investments were needed to meet the increasing demand and financing problems arose in the higher education

sector. Universities have had to take into account the demands of society and students more. In addition, with increasing competition, international mobility in higher education has increased and recognition of diplomas obtained in other countries has become extremely important. In parallel with all these changes, it has gained quality in both local, national and international higher education especially after the 1980s (Altbach, Reisberg & Rumbley, 2009; Bayrak, 2007; Süngü & Bayrakcı, 2010; YÖK-Quality Assurance, 2018).

In this context, one of the factors that enable the change in higher education to occur successfully is quality. Quality is of paramount importance for a qualified higher education system that is necessary to raise the next generations. Since higher education institutions play very important roles in the development of the country and society functionally, they should be the institutions that prioritize service quality (Bayrak, 2007). The quality assurance system in higher education is the inspection, evaluation and review activities carried out to meet the minimum needs and expectations of the stakeholders benefiting from higher education services and to gain their trust (Skolnik, 2010). The birth of institutional quality assurance in higher education can be traced back to the emergence of accreditation bodies in the United States at the end of the 19th century (Çetinsaya, 2014; Özer, Gür & Küçükcan, 2010).

In Europe, in the 1990s, "European Quality Assurance Association in Higher Education" was established in order to create a quality assurance system based on a common understanding in the field of higher education. Later, with the Lisbon and Bologna declarations, the partnerships and agreements of European countries on this issue have become stronger. In particular, with the Bologna declaration put forward in 1999, standards in the field of higher education were developed in all European countries, the differences between countries were tried to be minimized, and the equivalence (recognition) of diplomas received in different countries was opened (Süngü & Bayrakcı, 2010).

In this sense, these studies, which were carried out to contribute to the creation of a common higher education system, have become key concepts not only in Europe but also at the global level (Schwarz & Westerheijden, 2007). As a result, many international organizations related to quality in higher education have emerged today. For example, global actors such as the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the World Bank are closely concerned with improving the quality of higher education and raising qualified individuals through qualified education (UNESCO, 2004). Parallel to this development, in many countries including Turkey, enhancing the quality of higher education and quality assurance system to create work gained momentum (from Westerheij, Stensak & Rose, 2007).

Turkey joined Bologna in 2001 and ensure compliance program with universities in Europe and too many regulations were brought to life in Turkey in order to create a quality assurance system. In this context, "Regulation for Academic Evaluation and Quality Improvement in Higher Education Institutions" was published in 2005. Within the scope of this regulation, Higher Education Academic Evaluation and Quality Improvement Commission and Higher Education Institution Academic Evaluation and Quality Improvement Boards were established. In 2015, the "Higher Education Quality Assurance Regulation" was issued, and within the scope of this regulation, Council of Higher Education was established, one of whose three main duties is to "ensure the internalization and dissemination of quality assurance culture in higher education institutions" (YÖK, 2018). Thus, it has become mandatory to establish quality commissions and quality assurance systems in all universities.

# 1.3.1. Quality Assurance in Higher Education

Quality assurance is the systematic monitoring and evaluation of various aspects of a project / service / institution in order to determine whether the quality standards are met and to create sufficient confidence to respond to requests (Özer, Gür & Küçükcan, 2011; Uçar & Levent, 2017). The International Standards Organization (ISO) defines quality assurance as "the

set of systematic and planned activities to ensure the conformity of a product and / or service to quality requirements" (ISO, 2015).

Quality assurance includes the activities of "determining appropriate working rules and determining their existence, checking the compliance with these rules, analyzing the causes in case of errors, eliminating the errors by applying corrective measures" (Ünlü & Fındık, 2001).

Quality assurance management first emerged as a methodology in the industry and trade sectors in the 1950s. In the 1980s, Total Quality Management in public institutions in many countries that are members of the Organization for Economic Development and Cooperation (OECD), and the understanding of quality assurance in Higher Education began to be established. As the higher education system expands, the decrease in public funds allocated to higher education, the need to implement different education methods, the need to respond to different demands of students from different backgrounds, the emergence of a competitive structure according to the needs of stakeholders and the increase in the importance of internationalization have further increased the importance of quality understanding in higher education (Atatekin & Dulupçu, 2018).

Higher education has three basic missions that are accepted as education, research and development and service to society. Studies have been carried out on Lisbon Recognition Convention and Bologna Process and education-training and research-development mission, but the mission of serving the society has not been sufficiently emphasized. Today, 47 countries have been involved in the process started with four countries in Sorbon, and this process has also affected many countries outside of Europe (Durman, 2008). Studies conducted within the scope of the Bologna Process were published in the "Quality Assurance Principles and Standards Report in the European Higher Education Area" of the European Quality Assurance Association in Higher Education in 2005. Thus, it is aimed that higher education institutions in the European Higher Education Area provide services in harmony with each other and at a comparable quality level. Quality Assurance Principles

and Standards in the European Higher Education Area acknowledge the priority of national systems in higher education and the importance of autonomy of institutions and agencies within national systems (Günay, 2012).

The quality assurance standards adopted by the European Commission are expected to include four basic criteria referred to as the "four-step model". These are "establishment of independent agencies on quality assurance, keeping internal and / or external evaluation criteria in quality assurance, participation of all stakeholders, especially students, in the studies on the subject, making the results traceable to the relevant stakeholders and the public". Quality assurance studies in the field of higher education in Europe are carried out under the coordination of "European Quality Assurance Organization in Higher Education (ENQA)". These studies are carried out by "European Universities Association (EUA)" and "European Association of Higher Education Institutions (EURASHE)" (Durman, 2008).

Council of Higher Education (YÖK, 2015) defines quality assurance as "a comprehensive, systematic and regular evaluation of the quality of education, training, research activities and administrative services of a higher education institution and improving their quality" in the Regulation on Quality Assurance in Higher Education (YÖK, 2015).

Council of Higher Education is responsible for quality assurance in higher education institutions in Turkey (YÖK). The work and job descriptions of Council of Higher Education, to which all universities are affiliated, were determined by the Higher Education Law No. 2547 enacted in 1981 and the 1982 Constitution. Since its establishment, Council of Higher Education has set some criteria while opening a higher education program or recruiting academic staff and it has made it compulsory to comply. This practice can actually be shown as an example of a pre-quality audit (Eurydice, 2018).

The Higher Education Council Qualifications, Quality Assurance and Accreditation (YÖKAK) Commission was established in 2014 to determine the principles of quality practices. The main objective of the YÖKAK

commission is situated in the studies related to the future quality model of higher education in Turkey (YÖK, 2015). Later, this board was rearranged in accordance with the "Law on Amending Certain Laws and Decree Laws for the Purpose of Improving the Industry and Supporting Production" dated July 1, 2017 and the Additional Article 35 of the Higher Education Law No. 2547. The purpose of the Board is defined as follows in the Regulation: "To evaluate the national and international quality standards regarding the quality levels of education, research and administrative activities, to carry out the processes of internal and external quality assurance, accreditation and authorization of independent external evaluation institutions."

In the board, there are representatives from Higher Education Board, university Board, Ministry of National Education, Vocational Qualifications Authority, Turkey Institutes of Health Department, TUBITAK, the Turkish Accreditation Agency, Turkey Union of Chambers and Commodity Exchanges. A student representative is also on duty. The board has legal personality, special budget, administrative and financial autonomy (Higher Education Quality Board, 2020).

#### 1.3.2. Accreditation in Higher Education

"Accreditation", a French word of Latin origin, means being reliable and credible. Monitoring being reliable is reliable and stating that it is credible is also expressed as "accredited" action in French (Doğan, 1999).

Accreditation in higher education is a system that aims to demonstrate that a higher education institution or any program implemented by a higher education institution has certain performance criteria such as quality, efficiency, effectiveness at national / international level, and thus, it is a system to provide trust in the public and those who demand higher education. Accreditation is a voluntary quality assurance process that allows both the periodic self-evaluation of the higher education institution (institutional self-evaluation) and the periodic evaluation of the higher education institution by external independent accreditation organizations (Aktan & Gencel 2010).

According to the Higher Education Quality Board, accreditation refers to the evaluation and external quality assurance process that measures whether academic and field-specific standards are met by a higher education program, predetermined by an accreditation body (YÖKAK, 2019). Accreditation in higher education is a tool of academic quality, transparency and accountability (YÖK, 2019).

There are generally two types of accreditation: "institutional accreditation" and "program oriented accreditation". Institutional accreditation is an accreditation process that aims to guarantee institutional quality at minimum standards. In the institutional accreditation process, the administrative, financial and academic capacity of the higher education institution is evaluated as a whole. Program-oriented accreditation is the accreditation of any program (for example, undergraduate education, graduate education or doctoral education) implemented by a higher education institution.

In this second type of accreditation, only a certain academic program of the higher education institution (for example, engineering education, legal education, or medical education) is evaluated in terms of quality standards and the accreditation process is realized if compliance is achieved (Aktan & Gencel 2010). The general features of accreditation in higher education can be listed as follows (Aktan & Gencel 2010; Güney, 2019):

- Accreditation is the process of issuing a reputable certificate that certifies that the program concerned meets certain criteria.
- It enables self-evaluation according to the performance criteria of higher education programs, as well as external evaluation by authorized accreditation bodies.
- It meets an institution / program at certain criteria and maintains them consistently. It is based on long term and regular evaluations, in other words, periodic internal and external evaluations.
- It facilitates the credibility and recognition of the higher education institution or program.

- It Guarantees that the accredited programs will meet the field-specific, predetermined criteria. Accreditation is a process, a tool that provides quality assurance in a higher education institution that aims to continuously improve quality.
- Accreditation, apart from ensuring the continuity of quality assurance, aims to put honesty and ethical standards into the system in the higher education institution.
- Accreditation is voluntary.

The main objectives of accreditation, which is widely applied in higher education, can be listed as follows (Güney, 2019; PEMDER, 2019; YÖK, 2019):

- To ensure that education and research are carried out effectively and efficiently,
- To work towards the realization of regulations that will allow the creation, development and implementation of new education programs,
- To evaluate and accredite educational programs upon the application of universities.
- To cooperate with national and international institutions, associations, professional organizations and accreditation organizations related to education, evaluation, accreditation,
- To inform service demanders about higher education units, systems and programs in other countries,
- To assure the students and all stakeholders that the quality of education is carried out based on certain criteria,
- To help compare diplomas and titles,
- To facilitate and accelerate the process of higher education institutions to get to know each other,
- To facilitate the exchange of students and teaching staff between countries and institutions.

- To determine the basic criteria that will be valid when starting the profession,
- To determine and secure the highest criteria by creating a label of excellence,

# 1.3.2.1. Accreditation Development and Applications in Higher Education

Accreditation first appeared in the American education system in the early twentieth century. Accreditation institutions in the USA have developed as a result of the increase in higher education and the emergence of new fields of study. The first regional accreditation agency in the USA was established in 1885, the first specialized accreditation agency was opened in the field of medicine in 1907, and the first accreditation was made in 1910. The aims of accreditation in American higher education can be summarized as quality assurance, benefiting from federal funds and facilitating student transfer (Kısakürek, 2007). It is possible to talk about two types of accreditation structures in higher education in the USA (Aktan & Gencel, 2010; Kısakürek, 2007):

- The first is "institutional accreditation". Institutional accreditation
  covers all two or four-year private or public higher education
  institutions or institutions for a specific purpose in higher education
  (such as career development institutes). Regional and national
  accreditation bodies deal with institutional accreditation.
- The second are organizations responsible for the accreditation of a single program and their purpose is to determine and confirm whether the education provided on the basis of a particular higher education program is aimed at meeting the expectations of practical life in the relevant field.

The recognition of accreditation organizations in the USA is carried out by two different institutions, official and private (Kısakürek, 2007):

- The United States Department of Education (USDE),
- Council for Higher Education Accreditation (CHEA).

Although the accreditation process is not governmental, it is the state's responsibility to recognize accreditation bodies. Accreditation bodies recognized by CHEA are re-accredited for a period of ten years, but the institution or program is required to prepare interim reports every five years. The evaluation is carried out by the "Recognition Committee", which is formed by CHEA and consists of institution representatives, accreditation bodies and public representatives. The committee reviews the accreditation body according to the self-assessment report and, if necessary, makes a decision on the recognition of the organization by making a field visit. At the end of the committee examinations, it gives its opinion to CHEA regarding whether the accreditation body should be recognized or not (Aslan, 2009).

US Department of Education standards focus on the quality of the institution or program. The USDE assesses whether the institution or program is of sufficient quality to benefit from federal funding, student aid funds, or other federal programs. The USDE reveals how well the accreditation institution meets the criteria set in certain areas such as student achievement, programs, faculty, facilities, financial and administrative capacity, and opportunities offered to students. Recognition of the accreditation body by USDE is valid for five years (Aslan, 2009).

Recognition by USDE allows institutions or programs to benefit from federal student funding. Recognition by CHEA also increases the prestige of the program or institution by providing academic legitimacy among accreditation organizations (Kısakürek, 2007).

In Europe, accreditation was not needed for a long time since higher education was considered as a public service provided by the state for many years (Aktan & Gencel, 2010). Evaluation of higher education started to gain importance in Europe in the 1980s. France, which made a detailed evaluation of its universities in 1984, is the first example in Europe. In Finland, the first institutional evaluation was made in the 1990s. Countries such as the Netherlands, England and Denmark also carried out program and field

evaluation studies in the early 1990s. The first country in Europe to use the concept of accreditation in terms of quality assurance is England. Hungary and some other Eastern European countries have used accreditation to determine the minimum level in the curriculum.

However, these efforts were accelerated with the signing of the Sorbonne and Bologna Declarations. It can be said that it is Germany, which started to apply accreditation in higher education in 1998 within the scope of restructuring in this field in Europe (Süngü & Bayrakçı, 2010).

The Bologna Process is a series of ministerial meetings and agreements designed between European countries to ensure comparability in standards and quality of higher education qualifications. The Ministers of Education of France, Italy, Germany and England proposed the view of establishing a common higher education area in Europe with the Sorbonne Declaration in 1998. As a result, the Bologna Process has emerged. In 1999, Bologna Declaration was signed and Bologna Process started. Turkey has been included in the Bologna Process in 2001. Four organizations stand out in the Bologna Process. It is named E4 because of their initials (Ayvaz, Kuşakçı & Bor, 2016):

- ENQA (European Association for Quality Assurance in Higher Education),
- ESU (European Students' Union),
- EUA (European University Association),
- EURASHE (European Association of Institutions in Higher Education).

The ENQA in higher education published in 2005 in the (ESG) European Standards and Guidelines for Quality Assurance of European Higher Education Area (EHEA) Kalite Güvence Standartları ve Yönergeleri Raporu'nda), that with specified criteria and guidelines, in EHEA, it is aimed that higher education institutions provide services in harmony with each other and at a comparable quality level. Each country determines the quality assurance standards suitable for its education system and evaluates its own education system in the light of these standards. At the same time, countries

establish quality agencies to evaluate the quality improvement activities of higher education institutions and ensure the determination of the quality levels of higher education institutions by using external evaluators (Ayvaz, Kuşakçı & Bor, 2016). European Consortium for Accreditation in Higher Education, ECA) was established in November 2003 (Kısakürek, 2007). Currently, 17 quality assurance agencies from 11 countries are members of ECA. It is open to organizations in countries that meet the acceptance criteria and sign the Bologna declaration. ECA contributes to the implementation of European Higher Education Area (EHEA) (ECA, 2019).

# 1.3.2.2. Accreditation Process and Criteria in Higher Education

The main stages in the accreditation process are as follows (Aktan & Gencel 2010).

- Determination of standards: The accreditation institution determines the criteria for evaluating a higher education institution or program.
- Preparation and self-evaluation: The higher education institution /
  program that wants to be accredited carries out the preliminary studies
  and completes the internal self-evaluation activities and prepares the
  required documents as a report in line with the standards of the
  accreditation institution.
- External evaluation and visit: The position and status of the relevant higher education institution or the program to be accredited are reviewed by the experts assigned by the accreditation institution in terms of performance standards and the higher education institution is visited. This process is called external evaluation.
- Monitoring: The Higher Education Institution or program is monitored for a certain period of time and it is observed whether it meets the desired criteria.
- Making the decision by the accreditation body: The accreditation body decides to approve or reject the status of the institution and / or program in the accreditation process in terms of excellence standards.
- Periodic review: The accredited higher education institution and / or program is subjected to external re-evaluation periodically. The

purpose of continuous monitoring and evaluation is to ensure that the accredited institution maintains the required standards.

Determining the level of meeting the evaluation criteria of the programs is a factor in the evaluation of the programs applying for accreditation. The criteria are generally grouped under the following main headings (Aktan & Gencel 2010; MÜDEK 2014):

- Criteria for students,
- Criteria for program educational objectives,
- Criteria for program outcomes and training plan,
- Teaching staff,
- Criteria for infrastructure,
- Criteria for financial resources,
- Disciplinary specific criteria.

# 1.3.3. Quality Assurance and Accreditation of Higher Education Institutions in Turkey

Between 1982-2005, higher education institutions were inspected by the Higher Education Supervisory Board since the enactment of the Higher Education Law No. 2547. These audits have the character of an internal audit and the evaluations have not been shared with the public (Ayvaz, Kuşakçı & Bor, 2016).

In 2005, YÖK issued the "Regulation for Academic Evaluation and Quality Improvement in Higher Education Institutions" and established the Academic Evaluation and Quality Improvement Commission (YÖDEK) in Higher Education Institutions in accordance with the principles of this regulation.

YÖDEK published the first version of the "Guide for Academic Evaluation and Quality Improvement in Higher Education Institutions" in 2006 and the second version in 2007. The membership application made by YÖDEK to the European Association for Quality Assurance in Higher Education (ENQA) was accepted by the ENQA Board in 2007. YÖDEK has defined the

processes and performance indicators required for higher education institutions to systematically carry out academic evaluation and quality improvement activities. According to the YÖDEK Guide, the Academic Evaluation and Quality Improvement Commission (ADEK) has been established in Higher Education Institutions.

In addition to preparing or having the internal evaluation report prepared, ADEK is tasked with making the necessary preparations and providing all kinds of support to the external evaluation institution, organization or board in case the relevant higher education institution has an "external evaluation" (Ayvaz, Kuşakçı & Bor, 2016).

"Higher Education Quality Assurance Regulation" was published in the Official Gazette dated 23 July 2015 and numbered 29423. Accordingly, the Higher Education Quality Board (YÖKAK) was formed as a partial consultant to the General Assembly of Higher Education. Again, according to this regulation, quality commissions are established in higher education institutions (Ayvaz, Kuşakçı & Bor, 2016).

Turkey is responsible for the Higher Education Quality Council of empowerment and recognition activities of accreditation bodies. The process of authorization of national accreditation bodies and recognition of international accreditation bodies are carried out within the scope of the principles and criteria determined by YÖKAK. Since 2016, the YKS Higher Education Programs and Quotas Guide (formerly ÖSYS Higher Education Programs and Quotas Guide) contains the program information accredited by the accreditation institutions authorized or recognized by YÖKAK. Authorization of national accreditation bodies is carried out by YÖKAK within the scope of the following criteria (YÖKAK, 2019):

 The organization should have predefined and announced missions and goals, should continue its activities in line with these goals, ensure broad stakeholder participation in governance processes and practices, the practices and criteria used for output-oriented program

- accreditation should be in line with national and international criteria (especially ESG), and decisions must be proven to be accurate.
- The institutional and financial structure of the organization must be in accordance with the legislation and its field of activity, strong and sustainable.
- The organization should act independently in terms of its organizational structure, operational processes and responsibility for official results.
- The organization should regularly publish general evaluation reports analyzing the results of program accreditation activities.
- The organization should have sufficient and appropriate resources both in human and financial terms to carry out program accreditation activities.
- The organization should have appropriate internal quality assurance processes in order to monitor, evaluate, secure the outputs of its activities and carry out continuous improvement studies.
- The organization should be involved in external evaluation processes in order to evaluate the compliance of its activities with national and international criteria (especially ESG) and to improve the quality assurance system continuously.

Recognition of international accreditation bodies is carried out by YÖKAK within the scope of the following criteria (YÖKAK, 2019):

- The organization must prove that its practices and criteria for program accreditation are in line with national (our country) and international criteria (especially ESG).
- The organization must demonstrate that it has adopted an "output oriented" approach to accreditation (learning outcomes, monitoring student achievement, assessment and evaluation approaches, graduate views, etc.).

Turkey's first national higher education accreditation body ENAEE – (European Network for Accreditation of Engineering Education) was established as an independent platform under the name of "Engineering Evaluation Board" by the Council of Engineering Deans composed of deans of the faculties giving engineering education inTurkey and the Turkish Republic of Northern Cyprus to organize and implement a detailed program and to evaluate the engineering undergraduate programs of these faculties. This organization continued to use the abbreviation MÜDEK on January 25, 2007 and became a legal entity named "Engineering Education Programs Evaluation and Accreditation Association". In the same year (16 November 2007), with the decision of the Council of Higher Education, it became the first national external evaluation institution to be officially recognized as a national accreditation body focused on national, sectoral and program competencies in the engineering programs of higher education institutions (Tantekin Ersolmaz, 2018),

# **CHAPTER 2**

# STUDENT LOYALTY AND STUDENT SATISFACTION

Preferences have been the main determinants of social life since the industrial revolution. The production of more and more types of products than the needs pushes individuals to make new choices in meeting their every need. Therefore, many questions such as which direction will be the preferences of individuals, what are the basic variables that determine the preferences, why the product or service is preferred, resulted in the introduction of numerous concepts such as brand, image, competition, sustainability, satisfaction, loyalty and loyalty to the field literature of the organization. According to Fornell et al. (1996), the most prominent of these concepts that determine the preference of a product or service are satisfaction, loyalty and loyalty towards the product or service. In addition, the brand that creates the product or service and the image of this brand are among the main determinants of satisfaction, loyalty and loyalty (Brown, Dacin, Pratt & Whetten, 2006; Chun, 2005).

Individuals' preferences for the product or service are conceptualized as "customer loyalty". The concept of customer loyalty, the deep commitment an individual shows to re-prefer a preferred product or service despite all marketing efforts and situational effects (Oliver, 1997); or deep loyalty and general commitment to a product, service, brand or organization (Lam et al., 2004). When evaluated from this point of view, the fact that the product or service provided by an organization is preferred by the people who benefit from this product or service is of great importance in terms of the vital functions of the organization (Reichheld, 1996).

Customer loyalty is a concept that is still used to define the customer's behavior and attitude towards the product. Researchers who consider loyalty with its behavioral dimension define loyalty as the customer's tendency to repurchase and use the product after using it, while researchers who treat it with an attitudinal dimension define it as the customer's trust in the product and recommending it to others (Foscht, Schloffer, Maloles & Chia, 2009).

Researchers who deal with customer loyalty with a mixed approach define customer loyalty as the combination of the positive attitude of the customer and repeat purchasing behavior (Kim, Han & Park, 2001). It is more difficult to define the concept of customer loyalty in the service sector, where the customer-service provider relationship is much deeper and more complex (Purgailis & Zaksa, 2012).

Continuity of preference is also of great importance for educational organizations. When considered for educational organizations, it can be said that ensuring "student loyalty" has become a necessity (Hening-Thurau, Larger & Hansen, 2001). Especially students, the state, families, employers and a large part of the society benefit from the services provided by educational organizations especially at the higher education level. Therefore, all these segments can be defined as "customers" for higher education institutions (Helgesen & Nesset, 2007; Martensen, Grønhold, Eskildsen, & Kristensen, 2000).

Higher education institutions also question their own education quality in a period when quality expectations and competition are increasing in every field and institutions question their own service quality for their customers (Özevren, 2000). From the point of view of student development, contemporary education should support the individual in all areas of development, to be multi-faceted, participatory, creative and sensitive, and prepare the individual for adulthood and business life by giving importance to individual differences (Nacakcı, 2004). In order to adapt to this change, higher education institutions should be able to train students and graduates with high level of loyalty to the university, and should direct their policies by

evaluating the variables that provide loyalty towards the university and that result from loyalty (Wong & Wong, 2011).

### 2.1. Student Loyalty

Since the second half of the 20th century, globalization, the perspective of the society on education and the increasing need for qualified workforce in the industry have increased the importance of higher education institutions. In addition, higher education institutions are gaining more and more importance both within themselves and within the national economies in terms of the economic value they create. When the historical development of higher education is examined, important researches are observed in the number of universities, especially after the Second World War.

The increase in the number of higher education institutions or the widening of the selection range of students has brought the operation of these institutions to be commercial and competitive. This commercial and competitive structure has led to the questioning of the perspective of students and the service that institutions provide or provide (Eskildsen, Martensen, Grønholdt & Kristensen, 2000). In this new structure, students are redefined as customers, and the training provided as products. However, it should not be forgotten that; The fact that universities are publicly funded and educational policies are under public control prevent these institutions from being fully commercial organizations.

Primary customers of educational institutions are students. In addition, employers, employees, government, industry, families and society are also accepted as customers of educational institutions (Eskildsen, Martensen, Grønholdt & Kristensen, 2000; Helgesen & Nesset, 2007). Rashid & Raj (2006) emphasized that students should not be considered as traditional customers on a commercial basis, but as individuals who pay a partial fee for the learning service they receive. The understanding of seeing students as customers in higher education institutions brings with it whether the customer is satisfied with the service they receive. As customers are satisfied with the service they receive, loyalty to the institution will also increase. Customer

loyalty is a deep commitment to repurchase or product, service or organization (Helgesen & Nesset, 2007). Organizing and predicting repeat purchases by loyal customers requires businesses to use their resources more effectively (Hening-Thurau, Larger & Hansen, 2001).

Student loyalty can be defined as the commitment to the university and the service it provides, in a sense in parallel with customer loyalty.

Köse (2012), on the other hand, defined student loyalty as a student's commitment to their university and to the service they provide.

Student loyalty can be defined as the psychological commitment of the student, which includes feelings, descriptions and relationships towards the university. This is not the result of the student's financial situation or any other situation, it is entirely related to the student's positive feelings for the university (Yu & Kim, 2008).

At this point, it can be said that the concept of student loyalty differs from the concept of customer loyalty. Satisfaction in customer loyalty is related to the person who directly benefits from the service or product; student loyalty is not only with the educational service provided by educational organizations; It also includes components related to attitudes and behavioral components created by the influence of all stakeholders indirectly affected by the education service (Marzo-Navarro, Pedraja-Iglesias & Rivera-Torres, 2005). According to Helgesen and Nesset (2007), components related to attitudes consist of three dimensions. These dimensions include cognitive, affective and psycho-motor activities. Behavioral components, on the other hand, include the decisions students make about their loyalty to their education, taking into account their habits. Despite all the environmental impacts of a higher education institution, one of the primary goals is to gain the loyalty of its students (Guilding & McManus, 2002; Zeithaml, 2000).

Student loyalty has become a very important strategic issue for institutions offering higher education (Helgesen & Nesset, 2007; Henning-Thurau, Langer & Hansen, 2001). A student's commitment to a university is an

important indicator of permanence (Vianden & Barlow, 2014). In other words, student loyalty is a commitment that shows students' commitment to the institution (Yu & Kim, 2008).

#### 2.1.1. Conceptual Models Related to Student Loyalty

#### 2.1.1.1. Student Loyalty Structural Model

Helgesen and Nesset (2007) developed the model on image, expectation, quality of hardware, quality of software, perceived value, student loyalty and student satisfaction; they examined the service quality, student loyalty and student satisfaction. In Figure 6, Helgesen and Nesset (2007) Student Loyalty Conceptual Model can be seen.

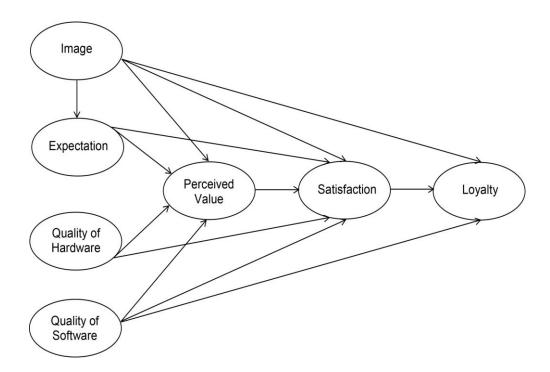
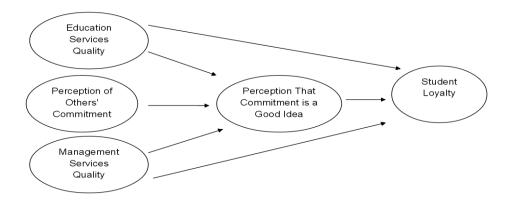


Figure 6. Helgesen & Nesset Student Loyalty Conceptual Model

#### 2.1.1.2. ICSL- Information cascades-based student loyalty model

Lin and Tsai (2008) examined the relationship between the variables of student loyalty, educational services and management services quality perception, the perception that commitment is a good idea, and the perception of others' attachment. Figure 7 shows the information cascades-based student loyalty model developed by Lin and Tsai (2008).

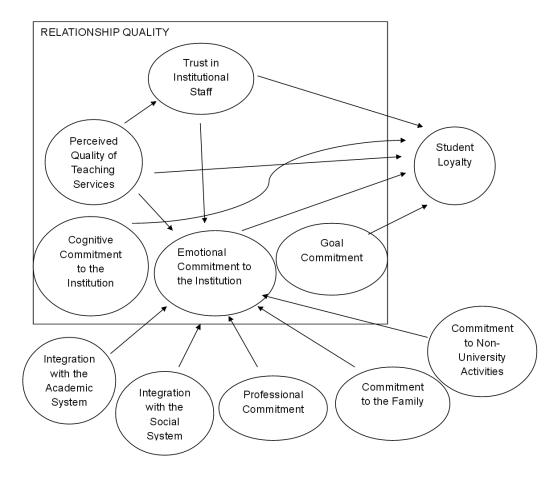


**Figure 7.** Lin & Tsai Education Quality and Student Loyalty Conceptual Model

In the model they named the information cascades-based student loyalty, they determined that the perception of educational services quality, the perception of others' commitment predicted the perception of management services quality, and the perception that commitment was a good idea, and that the perception of education services quality predicted student loyalty.

### 2.1.1.3. Hennig- Thurau, Langer and Hansen-The relationship quality-based student loyalty model

Hennig-Thurau, Langer, and Hansen (2001) developed a student loyalty model (RQSL- The relationship quality-based student loyalty model) based on the relationship between perceived quality of educational services, trust in the academic staff of the institution, cognitive, emotional and purposeful commitment to the institution and student loyalty. The relationship qualitybased student loyalty model can be seen in Figure 8.



**Figure 8.** Hennig- Thurau, Langer, & Hansen (2001) Student Loyalty Model Based on Relationship Quality

#### 2.2. Student Satisfaction

Today, the importance given to education is increasing. With the increasing importance given to education, the importance of quality in education also increases. It is necessary to understand the expectations of students well and to provide educational services that can meet and respond to these expectations. In educational services, in addition to increasing the basic needs, namely classrooms, libraries and computers, compulsory needs such as food, accommodation and security needs of the students and all kinds of needs for the student's socialization should be met. (Dilşeker, 2011). Student satisfaction towards the institution where he / she was educated is basically a multidimensional phenomenon. This phenomenon can be examined with an approach that includes different dimensions such as the quality of education, physical spaces, application possibilities, social, cultural and sports

opportunities, and individual characteristics of the student (Uzgören & Uzgören, 2007).

Since education is a service and universities are institutions that produce services, the education service that students who are customers of education service receive and the satisfaction they provide from this service are important for universities (Dilşeker, 2011).

Increasing competition with globalization, changing customer demands and needs have made it difficult to achieve customer satisfaction and customer loyalty. The way to ensure customer satisfaction and loyalty requires regularly measuring customer expectations and developing goods and services in line with customers' expectations. The customer, who accepted the service provided by the service provider as it was in the past, gradually left his/her place to the customer who asked for more information about the relevant service and inquired about this information, and even needed to consult another service provider (Koçak, 2009).

Customer satisfaction is all of the positive or negative feelings of the customer about the value, quality and features of this product or service as a result of the use of a product or service. (Altan & Engin, 2004). When we look at some researches showing the relationship between customer satisfaction and businesses, we can list the factors affecting customer satisfaction as service quality, price, loyalty, staff behavior and educational status, demographic characteristics and business cleanliness (Koçak, 2009). As in all businesses, customer satisfaction must be provided in a continuous manner in service businesses (Altan & Engin, 2004).

Handling and resolving customer complaints, which are defined as expressing dissatisfaction as a result of not meeting customer expectations, is seen as an important method in marketing science to ensure customer satisfaction and retain customers (Gökdeniz, Bozacı & Karakaya, 2011). Factors affecting this situation should be known very well in order to resolve customer complaints, which are considered as opportunities for businesses,

and to ensure customer satisfaction after the complaint process (Gökdeniz, Bozacı & Karakaya, 2011).

Improving education and training programs is important in terms of gaining qualified, conscious and self-confident workforce to the society, development and advancement of the society. In addition to the increase in the quantity of educational institutions, their quality should also increase. Achieving a desired level of education is possible by focusing on issues such as quality, satisfaction and performance. However, the unilateral design of the education and training services offered and the realization of the students independently from their evaluations may cause problems in achieving the desired degree of goodness. Students' satisfaction with the available services can be considered as an important premise in planning the actions to be taken to prevent such problems from occurring. Student satisfaction is considered to be a short-term attitude that occurs as a result of a student's assessment of their educational experience. Student satisfaction occurs when the student's needs are met or exceeded (Elliot & Healy, 2008). Satisfaction does not only mean meeting the needs. At the same time, expectations must be met (Zemke, 2000). However, the need for service in higher education and the expectations of students have a very complex structure (Oldfield & Baron, 2000).

Student satisfaction is essential for universities to gain popularity and competitive advantage (Yeo, 2009). Although the main purpose of universities is to ensure that students complete their education and development successfully, universities tend to focus on attracting the attention of potential students and increasing the number of students (DeShields, Kara & Kaynak, 2005).

The commercialization of these institutions causes students to be seen as customers. In fact, the labeling of the student as a customer and the support of the commercial belief that the expression "the customer is right" in higher education is met with concern in academic circles. It cannot be said that the thoughts that provide customer satisfaction in the market, "the customer is

always right" and "it is necessary to meet customer expectations at the highest level" are also valid for students (Yeo, 2009).

For this reason, it is necessary to state that students are an important part of the learning experience, gaining knowledge and the structure that gives meaning to information (Yeo, 2009) and it is necessary to separate students from the concept of customers in commercial terms. Training is more important than meeting customer demands and needs. Education seeks to fulfill the expectations of customers and education providers and seeks ways to strengthen students' competent and effective participation in society. Being student-oriented is one of these ways. Being student-oriented and ensuring student satisfaction positively affect students' motivation and commitment (Elliott & Shin, 2002).

#### 2.2.1. Factors Affecting Student Satisfaction

The main purpose of universities for students who want educational services is to raise self-confident, contemporary individuals who emphasize their social skills and hobbies through the provision of a quality education and training environment, and in a sense, to increase their satisfaction towards the university (Taş, 2015).

It is stated that in Turkey, universities differ from each other in many possibilities such as education and training opportunities, visions, management styles, research and development, interaction, information and transportation facilities, data collection, business and knowledge generation opportunities and capacities. This situation may cause differences in students' expectations about the university and their future (Korukoğlu, 2003).

The main purpose of existence of dormitory institutions is the students they serve. Institutions can exist as long as they can please their students. Therefore, the criteria for an institution to be successful and unsuccessful is measured by the extent to which it manages the process of satisfying the

student. It should not be forgotten that all employees in the institution carry out all the activities that the student can be satisfied with (Eroğlu, 2004).

There are situations that affect student satisfaction such as personal approach, pleasant environment, giving information, care, trust, and not letting go (Bozkurt, 2011):

- Personal Approach: The value shown to the people who provide the service should be known by the buyer. The most basic condition for this is that the requests and demands of the buyers are not ignored and efforts are made to fulfill these requests and demands. The reason why many service providers come back repeatedly is because of the personal approach of the service provider.
- Pleasant Environment: The appeal of the environment in which the service is provided is very important.
- Giving Information: The buyer should know all aspects of the service to be provided. Giving incomplete or false information that will cause disagreements and discomfort afterwards is not a good seller.
   Providing accurate and complete information to the recipients is the basic step in communicating with the recipients.
- Attention: Not everything is always going as well. The buyer needs to know that he will not be left alone when unusual situations or developments occur. It is necessary to inform the passengers of the delay in the scheduled departure of an aircraft on time (Esin, 2000).
- Trust: It means fulfilling the promise given in every aspect (İslamoğlu,
   Candan, Hacıefendioğlu & Aydın, 2006).
- Not letting go: The buyer should know that the service he/she receives will continue until the end of the service (Esin, 2000).

As indicated in Figure 9, the reasons determining the satisfaction levels of the students consist of institutional factors, sociological factors, students' expectations and personal characteristics. Institutional factors are divided into two groups as academic elements and management philosophy. These

factors create positive or negative effects on students' satisfaction levels or satisfaction.

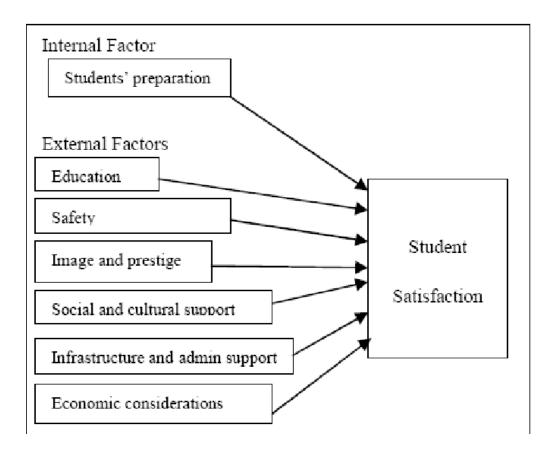


Figure 9. Factors affecting student satisfaction

**Institutional Factors:** One of the situations frequently added to administrative tendencies and practices occurring in this direction is the attitudes of academicians. Academicians have an important role in all the successes and failures of universities. In this factor, there are the quality of the education offered, the communication developed with the students inside or outside the institution, the course programs prepared, the materials to be used in the course process. The level of satisfaction developed by the students within the institution with the academicians is at the focal point of student evaluations, especially in many institutions. This issue is one of the main factors that reveal students' satisfaction (Gülcan, Kuştepeli & Aldemir, 2002).

**Social Factors:** Another factor that determines the satisfaction of students is the cultural, sports or social opportunities that educational institutions offer to their students. In this direction, many universities have formed units to organize and manage these activities. Students' assessment of their skills and interests in clubs established within the university is also considered within this scope (Dilşeker, 2011).

**Expectations:** Expectations that come to life in the minds of consumers are very important in terms of evaluations regarding service quality. These expectations include the needs and demands of consumers. It is possible to evaluate the quality expectation of service provision as the desired service. Based on the effect of expectations on customer satisfaction, expectations must be determined in order to achieve satisfaction (Dilşeker, 2011).

Higher education activities consist of long-term programs. Before starting their university education, students can make an expectation performance assessment in line with the expectations they envisioned in their minds and what they have achieved during their education process.

If the difference between these two concepts is close to performance, satisfaction and pleasure are experienced, if close to expectations, dissatisfaction and displeasure are experienced. In the studies conducted on students, it is seen that the satisfaction levels of the newcomers to the university are higher, while dissatisfaction may be experienced in the following years in line with the expectations (Gülcan, Kuştepeli & Aldemir, 2002).

Another important situation that has an effect on students' feelings of satisfaction is the expectations of the students regarding their choice of department. The harmony between expectations and performance is effective in the emergence of the concept of satisfaction. Feeling of satisfaction is not expected in cases where adaptation is not achieved. Among these expectations are the prospects of students to find a job in their future life and their expectations from the education they will receive from the relevant departments. The quality of the education services provided and

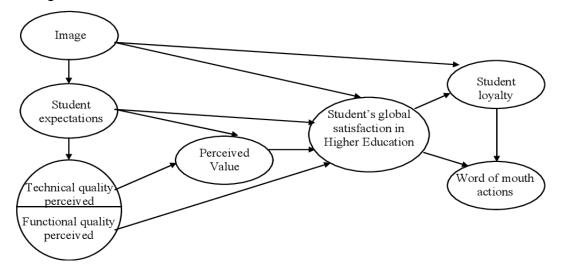
future expectations are the main factors that determine student satisfaction (Gülcan, Kuştepeli & Aldemir, 2002).

**Personal Factors:** The personal characteristics of individuals is another feature that has an effect on their satisfaction. Within this factor, there are many factors such as demographic factors, the positions individuals acquire in their private lives, and their social environment (Dilşeker, 2011).

#### 2.2.2. Student satisfaction conceptual model in higher education

Alves and Raposo (2007) developed a model that explains the relationship between the university's image, technical and functional quality, value perception, word-of-mouth communication, student satisfaction and student loyalty.

In the model, it was observed that the image of the university, the technical and functional quality and the perception of value affect student satisfaction, student satisfaction and image affect student loyalty, and student satisfaction does not affect word of mouth communication. The conceptual model of student satisfaction in higher education of Alves and Raposo (2007) is given in Figure 10.



**Figure 10.** Alves and Raposo Conceptual Model of Student Satisfaction in Higher Education

Many different definitions of satisfaction have been proposed. It was expressed by Oliver (1997) as "performing a certain job with pleasure, realization of a sense of satisfaction" (Tatlı, Kokoç & Karal, 2011).

The satisfaction of undergraduate students in terms of functionality is expressed by Astin (1993) as the evaluation of the university acquisitions, teaching staff, management styles, interaction between students, the effectiveness of education programs, and the institution's facilities in line with the quality standards. Students studying in higher education institutions use these criteria in determining the quality standards. Okumuş and Duygun (2008) suggest that there is a directly proportional relationship between perceived service quality and customer satisfaction.

Deshields (2005) states that universities, which aim to provide students' sense of satisfaction and satisfaction, should be emphasized on other factors as well as the quality that emerges in their educational activities. The fact that universities respond to the expectations and demands of students is a very important factor in ensuring satisfaction (Kantoğlu, 2012).

Regardless of their level, all educational institutions must ensure the satisfaction of existing students in order to become preferred by students. Education and training activities need to be improved continuously in order to maintain existing satisfaction or to improve satisfaction (Şahin & Yıldırım, 2010). It is possible for higher education institutions to develop the current system and to increase the service quality if they dominate the elements that make up the satisfaction.

Harvey, Plimmer, Moon, and Geall (1997) stated that the approach of determining student satisfaction should be seen as the collection of data that contributes to the provision of administrative development, reporting and implementation cycle, and should be managed in the light of the following principles (Şahin, 2009).

- The environment of educational institutions has an impact on learning.
- Student evaluations should be given importance.

- The most important members of higher education institutions are students.
- The satisfaction approach does not only have an administrative informative function.

Within educational institutions, surveys are conducted with the participation of students to determine student satisfaction. The main goal of these studies is to identify problems based on the perceptions of students regarding the qualifications of educational services carried out in educational institutions and to determine the areas in which steps should be taken to increase the service quality (Bektaş & Akman, 2013). In this direction, such studies are very important for institutions that are conducting productivity research in the light of the opinions of individuals who benefit from service provision through the evaluation of educational services and determination of qualifications related to education (Ekinci & Burgaz, 2007).

#### **CHAPTER 3**

#### **METHODOLOGY**

In this part of the study, the relationship between the service quality perceptions of the Medical Faculty students and student loyalty and satisfaction will be examined within the framework of the concepts explained and discussed together with their theoretical foundations in the previous literature section. In this context, first of all, the model and hypotheses of the research, the population and sample of the research, the scales in the questionnaire form used to collect data, the research sample and descriptive statistics regarding the subjects participating in the research will be included and discussed in detail. The data obtained in the study were stated as frequency, percentage, arithmetic mean, table average and standard deviations according to each question and subject distribution. Correlation analysis was performed with the reliability analysis. "Correlation analysis", "F", "Tukey" and "t test" among the parametric hypothesis tests were used to test the research hypotheses.

#### 3.1. Research Model and Hypotheses

This study was carried out to examine the relationship between perceptions of service quality and student loyalty and student satisfaction of the Medical Faculty students in the Mediterranean Region. Therefore, the research is in descriptive scanning model. Scanning model is a research approach that aims to describe a past or present situation as it exists. In this model, the subject of the research is tried to be described in its own conditions and as it exists (Karasar, 2012).

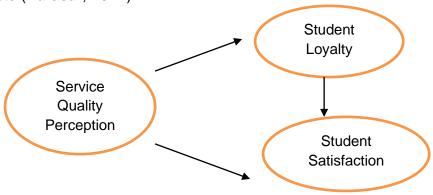


Figure 11. Research Model

According to the research model, students' perceptions of service quality affect student loyalty and student satisfaction. The hypotheses of the study are based on the explanations and empirical studies given in the section above, where the relationships between the concepts of service quality, student loyalty and student satisfaction are examined. The hypotheses (H) established in accordance with the purpose of the research are as follows:

H1: Service perceptions of medical students differ according to their demographic characteristics.

H2: Student loyalty differs according to the demographic characteristics of Faculty of Medicine students.

H3: Student satisfaction varies according to the demographic characteristics of the Faculty of Medicine students.

H4: There is a relationship between the service quality of medical students and student loyalty and student satisfaction.

#### 3.2. Population and Sample of the Study

The population of the research consists of 883 students studying in Term 3 at Mersin University, Çukurova University, Kahramanmaraş Sütçü İmam University and Hatay Mustafa Kemal University Faculty of Medicine in the 2018-2019 academic year. The sample of the study was determined by random sampling method. Semester 3 students in medical faculties were selected for the sample.

To determine the sample size, the sample size formula "n = [n0 / (1+ (n0 / N))]" and "n0 = [t \* S) / d] 2" were used (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz & Demirel). , 2017). Since the scale based on the five-point Likert type was used in the study, the deviation amount was based on d = .05, the standard deviation was .5 and the confidence interval was based on  $\alpha$  = .05 for the estimation of the mean of the responses to the items. The t value corresponding to the reliability level is 1.96. When the numbers are placed in the formula, the order of operation is as follows.

```
n0= [t*S)/d]2
n0= [1.96*.5)/.05]2 =384.16
n=[n0/(1+(n0/N))]
n=[384.16/(1+(384.16/883))]=347.55
```

Accordingly, the sample size in this study can be at least 348. Considering the possibility of missing and incorrectly answered scales within the scope of the study, it was planned to conduct an application with 400 students with 10% margin of error. In this context, the sample of the study consisted of 484 students studying at the University Faculty of Medicine in the 2018-2019 academic year.

The reason why students are selected from the third year is;

In the medical school where the research was conducted, the third-year courses are different from the first two-year courses. In the third year, there are 20 different theoretical courses on ethics, pharmacology, nuclear medicine, pathology, radiology, biochemistry, microbiology, as well as surgical and internal sciences. In addition, practical lessons for vocational skills are included in the curriculum more intensely than in the first and second grade. Before entering the hospital environment, they receive training for the diagnosis and treatment of the patient from the lecturers who both work in the hospital and in basic medical sciences, and receive education service by using the laboratory and other facilities of the basic medical sciences building.

#### 3.3. Data Collection Tools

Questionnaire was used as data collection tool in the study. The questionnaire consists of four parts: Personal Information Form, Service Quality in Higher Education Scale, Student Loyalty Scale and Student Satisfaction Scale. Information on the scales is given below.

#### 3.3.1. Service Quality Scale in Higher Education

The HEdPERF scale was developed by Firdaus in 2005 as a scale that is more comprehensive than other scales and is based on performance in determining the quality of service in higher education institutions.

The HEdPERF scale is based on the SERPERF scale, which we briefly mentioned before, and has been developed for use only in higher education institutions. The HEdPERF scale consists of 41 items, and 13 items were adapted from the SERPERF scale. Other items were shaped by qualitative studies such as literature review, focus group interviews, pilot studies and expert opinions (Firdaus, 2005).

The scale, which initially evaluated the higher education institution in 4 dimensions as non-academic characteristics, academic characteristics, reliability and empathy, was later changed to 6 dimensions. With the HEdPERF scale, it is aimed for students to evaluate the higher education institution together in terms of its non-academic characteristics, academic characteristics, accessibility, image, programs it offers and empathy. The HEdPERF scale consists of 41 questions and students are asked to evaluate these questions on a 7-degree Likert-type scale. The sub-dimensions of the scale are "Factor 1 - Administrative Side of the Institution", "Factor 2 - Academic Aspect of the Institution", "Factor 3 - The Image of the Institution", "Factor 4 - Accessibility", "Factor 5 - The diploma programs offered by the institution" and "Factor 6 - It consists of the physical facilities of the institution. The scale was adapted to Turkish by Bektaş and Ulutürk Akman in 2013 (Bektaş & Ulutürk Akman, 2013).

#### 3.3.2. Student Loyalty Scale

Student Loyalty Scale was developed by Çalık Var (2013) to determine the loyalty of students to their universities. During the scale development process, expert opinions and various scale studies were used. Some of these studies are Student Loyalty Scale (Yu & Kim, 2008), Student Loyalty Scale

(Helgesen & Nesset, 2007), and Student Loyalty Scale (Hennig Thurau, Langer & Hansen, 2001).

As a result of the studies, a 5-point, 40-item scale was developed (Çalık Var, 2013). The scale was applied to 250 people and the factor structure and factor loading values of the items were examined. Exploratory factor analysis was performed for the construct validity of the scale, and as a result of the analysis, the Kaiser Meyer Olkin value was found to be 94.5. When the scale items with high load values in more than one factor were examined, the items that were decided to be removed from the analysis were removed one by one and the analysis was repeated.

As the expressions in the first and second dimensions are similar to the scale expressions developed in the literature and supported by expert opinions, the first dimension is named Organizational Identification, the second dimension is Self-Dedication, and the third dimension is Stability. Since the expressions of recommending the university to others, re-choosing and maintaining relationships after graduation, which are in the third sub-dimension, determine the stability of the concept of Student Loyalty over time, this dimension has been named as Stability (Çalık Var, 2013).

In this study, Stability (items 1,2,3,4,5,6) and Commitment (items 7,8,9,10,11,12), which are sub-dimensions of Student Loyalty Scale, were included in the study. Organizational Identification is excluded. The Cronbach Alpha Coefficient was calculated for the internal consistency of the items that make up the scale. It was determined that the scale was .94 for the whole, .92 for the Identification sub-dimension, .88 for the Dedication sub-dimension, and .84 for the Stability sub-dimension (Çalık Var, 2013). In this study, it was determined that it was .93 for the Student Loyalty Scale, .82 for the Commitment sub-dimension, and .93 for the Commitment sub-dimension.

#### 3.3.3. Student Satisfaction Scale

In the preparation of the questionnaire, the relevant literature was first scanned, the questionnaires used in previous studies were examined (Altaş, 2006; Okay, 2009; Tekin & Gül, 2007; Güleç, Kabasakal & Kuzu, 2011) and as a result, it has been decided to use the questionnaire named "High School Quality Qualifications Evaluation and Student Satisfaction", prepared by Ş. Tekin, Karahan, Kuzu and Şahin (2010), in which validity and reliability studies have been conducted. Cronbach Alpha reliability calculation result was found as 0.97. This result shows that the questionnaire used is quite reliable.

The scale was prepared as a 27-item, 5-point Likert type, and it was written in a way to cover the sub-dimensions of the scale, opportunities that create a positive education atmosphere, opportunities that create a positive life atmosphere, education programs and instruction, assessment and evaluation.

#### **CHAPTER 4**

#### **FINDINGS**

The research findings are included in this section. Descriptive statistics regarding the scores obtained from the scales and the relationships between variables (service quality, student loyalty and student satisfaction) were examined.

In addition, it was examined whether the total scores of the Faculty of Medicine students obtained from the service quality, loyalty and satisfaction scales show a statistically significant difference according to variables such as gender, marital status, and age.

## 4.1. Distribution of Faculty of Medicine Students Participating in the Study According to Demographic Features

The distribution of the Faculty of Medicine students participating in the study regarding gender, marital status and the university they attend is given in Table 1.

Table 1.Socio-demographic Distribution of the Faculty of Medicine StudentsParticipating in the Study

	Groups	Frequency (n)	Percent (%)
Gender	Female	265	54.8
	Male	219	45.2
Marital status	Married	4	0.8
	Single	480	99.2
Continued Uni.	Mersin University	186	38.4
	ÇukurovaUniversity	145	30
	Kahramanmaraş Sütçü İmam Univ.	71	14.7
	Hatay Mustafa Kemal Univ.	82	16.9
Total		484	%100

According to the findings, 265 (54.8%) of 484 Faculty of Medicine students participating in the study are female and 219 (45.2%) are male.

According to the distribution according to the marital status of the Faculty of Medicine student participating in the study, 4 (0.8%) of the students are married and 480 (99.2%) are single.

Considering the distribution of the universities in which the Faculty of Medicine students who participated in the study, 186 (38.4%) of the students at Mersin University, 145 (30%) at Çukurova University, 71 (14.7%) at Kahramanmaraş Sütçü İmam University and finally 82 ' of them (16.9%) at Hatay Mustafa Kemal University are stated to continue their education.

# 4.2. The Average of Perception of Service Quality, Student Loyalty and Student Satisfaction of the Medical Faculty Students Participating in the Study

**Table 2.**The Average of Service Quality Perceptions of the Faculty of Medicine Students Participating in the Study

	N	Average	Ss	Min.	Max.
Administrative Aspect of the	484	3.246	0.907	1.000	5.000
Institution					
Academic Aspect of the	484	3.569	1.002	1.000	5.000
Institution					
Image of the Institution	484	3.864	1.130	1.000	5.000
Accessibility	484	3.501	0.787	1.000	5.000
Diploma Programs Offered by	484	3.710	0.699	1.000	5.000
the Institution					
Physical Facilities of the	484	3.646	0.907	1.000	5.000
Institution					
Service Quality Perception	484	3.623	0.924	1.000	5.000

When the average level of service quality perception of the students participating in the study is examined, the average level of the "administrative aspect of the institution" is medium (3.246  $\pm$  0.907), the average level of the "academic aspect of the institution" is medium (3.569  $\pm$  1.002), the average level of the "image of the institution" is medium (3.864  $\pm$  1.130), The average

of the "accessibility" level is medium  $(3.501 \pm 0.787)$ , the average of the "diploma programs offered by the institution" level  $(3.710 \pm 0.699)$  is the average of the "physical facilities of the institution" level  $(3.646 \pm 0.907)$  is the average of the "service quality perception" level  $(3.623) \pm 0.924$ ) level.

 Table 3.

 Average Student Loyalty of Medical Faculty Students Participating in the

 Study

	N	Avarage	Ss	Min.	Max.
Student Loyalty	484	3.745	1.102	1.000	5000

When the average level of student loyalty of the students participating in the study is examined, it is seen that the level of student loyalty is medium  $(3.745 \pm 1.102)$ .

**Table 4.**The Average of the Student Satisfaction of the Faculty of Medicine Students
Participating in the Study

-		N	Avarage	Ss	Min.	Max.
Positive Edu	cation Atmosphere	484	3.885	1.036	1.000	5.000
Positive Livi	ng Atmosphere	484	3.951	1.086	1.000	5.000
Education	Programs and	<b>d</b> 484	3.656	0.953	1.000	5.000
Teaching						
Assesment a	and Evaluation	484	3.715	0.688	1.000	5.000
Student Satis	sfaction	484	3.685	1.036	1.000	5.000

When the average level of student satisfaction of the students participating in the study is examined, It is seen that the average level of "positive education atmosphere" is medium (3.885  $\pm$  1.036), the average level of "positive living atmosphere" is medium (3.951  $\pm$  1.086), the average level of "education programs and education" is medium (3.656  $\pm$  0.954) , the average of the level of "assessment and evaluation" is medium (3.715  $\pm$  0.688) and the average of the level of "student satisfaction" is medium (3.685  $\pm$  0.688).

# 4.3. The Average of Perception of Service Quality, Student Loyalty and Student Satisfaction of the Faculty of Medicine Students Participating in the Study by Demographic Features

**Table 5.**T test results regarding service quality perception, student loyalty and student satisfaction of the Medical Faculty Students Participating in the Study

	t	sd	р
Service Quality Perception	-3,659	482	0,000*
Student Loyalty	-1,551	414	0,122
Student Satisfaction	-3,565	482	0,000*

p<0,05

A statistically significant difference was found between female students and male students in terms of Service Quality Perceptions and Student Satisfaction scores (p <0.05). Service Quality Perception and Student Satisfaction vary by gender. No statistically significant difference was found between female students and male students in terms of Student Loyalty scores (p> 0.05).

**Table 6.**T test results on the sub-dimensions of the service quality perception and student satisfaction scales of the Medical Faculty Students Participating in the Study

	t	sd	P
Administrative Aspect of the Institution	-4,372	482	0,000*
Academic Aspect of the Institution	-1,735	482	0,083
Image of the Institution	-3,151	482	0,002*
Accessibility	-1,803	482	0,072
Diploma Programs Offered by the Institution	-1,926	482	0,055
Physical Facilities of the Institution	0,479	482	0,820
Favorable Education Atmosphere	-2,261	433	0,024*
Positive Living Atmosphere	-4,610	482	0,000*
<b>Education Programs and Teaching</b>	-2,516	482	0,012*
Assesment and Evaluation	-2,269	482	0,024*

<sup>\*</sup>p<0,05

Among female students and male students, the sub-dimensions of the service quality: "Administrative Side of the Institution" and "The Image of the Institution", "Opportunities Creating a Positive Educational Atmosphere", "Opportunities Creating a Positive Life Atmosphere", "Educational Programs and Teaching" and "Measurement A statistically significant difference was found in terms of "Evaluation" sub-dimension scores (p < 0.05).

**Table 7.**T test results on service quality perception, student loyalty and student satisfaction according to the marital status of the Medical Faculty Students Participating in the Study

	t	sd	P
Service Quality Perception	-0,786	482	0,432
Student Loyalty	-0,344	3	0,754
Student Satisfaction	-3,565	482	0,647

#### p<0,05

No statistically significant difference was found between single students and married students in terms of Service Quality Perception, Student Loyalty and Student Satisfaction scores (p> 0.05). Service Quality Perception, Student Loyalty and Student Satisfaction do not change according to marital status.

**Table 8.**F test results regarding service quality perception, student loyalty and student satisfaction according to the universities (accredited or not) attended by the Medical Faculty Students participating in the study

	F	sd	р
Service Quality Perception	9,972	3	0,000*
Student Loyalty	13,526	3	0,000*
Student Satisfaction	19,534	3	0,000*

#### p<0,05

A statistically significant difference was found between the medical faculty students with different universities in terms of Service Quality Perception, Student Loyalty and Student Satisfaction scores (p <0.05). Service Quality Perception, Student Loyalty and Student Satisfaction vary depending on the university (accredited or not).

The results of multiple comparisons within the group (Tukey test) are as follows; A statistically significant difference was found between the students of Kahramanmaraş Sütçü İmam University and Mersin University, Çukurova University, between the students of Hatay Mustafa Kemal University and Mersin University and Çukurova University in terms of Service Quality score (p <0.05). A statistically significant difference was found between the students of Kahramanmaraş Sütçü İmam University and Mersin University, Çukurova University, between the students of Çukurova University and Mersin University, Hatay Mustafa Kemal University in terms of Student Loyalty scores (p <0.05). A statistically significant difference was found between the students of Kahramanmaraş Sütçü İmam University and Mersin University, Çukurova University, between the students of Çukurova University and Mersin University, Austafa Kemal University, and between the students of Mustafa Kemal University and Mersin University in terms of Student Satisfaction scores (p <0,05).

**Table 9.**F test results on service quality perception and student satisfaction sub-dimensions according to the universities (accredited or not) attended by the Medical Faculty Students participating in the study

	F	sd	р
Administrative Aspect of the Institution	12,147	3	0,000*
	1,711	3	0,164
Academic Aspect of the Institution			
	16,293	3	0,000*
Image of the Institution			
	0,788	3	0,501
Accessibility			
	18,541	3	0,000*
<b>Diploma Programs Offered by the Institution</b>			
	27,091	3	0,000*
Physical Facilities of the Institution			·
Favorable Education Atmosphere	29,364	3	0,000*
Positive Living Atmosphere	9,091	3	0,000*
Education Programs and Teaching	34,437	3	0,000*
	5 ., 101	Ū	2,230
Assesment and evaluation	3,256	3	0,021*

<sup>\*</sup>p<0,05

A statistically significant difference was found among the students with different universities, "The Administrative Side of the Institution", "The Image of the Institution", "The Diploma Programs Offered by the Institution" and "The Physical Facilities of the Institution", "Opportunities Creating a Positive Educational Atmosphere", "Opportunities That Create a Positive Life Atmosphere", "Educational Programs and Teaching in terms of "Assessment and Evaluation" scores (p <0.05). The results of multiple comparisons within the group (Tukey test) are as follows; A significant difference was found between the students of Hatay Mustafa Kemal University and the students of Kahramanmaraş Sütçü İmam University, Mersin University and Çukurova University in terms of the "Administrative Side of the Institution" score (p <0.05). A significant difference was found between the students of Kahramanmaraş Sütçü İmam University and the Mersin University, Çukurova University, and the students of Çukurova University and Mersin University, Hatay Mustafa Kemal University in terms of the "Image of the Institution" score (p < 0.05).

A significant difference was found between the students of Kahramanmaraş Sütçü İmam University and Mersin University, Çukurova University, between the students of Çukurova University and the students of Mersin University, Hatay Mustafa Kemal University in terms of the "diploma programs offered by the institution" (p <0.05). A significant difference was found between the students of Kahramanmaraş Sütçü İmam University and Mersin University, Çukurova University and Hatay Mustafa Kemal University in terms of the "Physical facilities of the institution" score (p <0.05).

A significant difference was found between the students of Kahramanmaraş Sütçü İmam University and Mersin University and Çukurova University, between the students of Hatay Mustafa Kemal University and Mersin University and Çukurova University in terms of "Possibilities Creating a Positive Educational Atmosphere" score (p <0.05). A significant difference was found between the students of Kahramanmaraş Sütçü İmam University and Mersin University, Çukurova University, between the students of Hatay Mustafa Kemal University and Mersin University and Çukurova University in

terms of "Possibilities That Create a Positive Living Atmosphere" score (p <0.05). A significant difference was found between Çukurova University and Hatay Mustafa Kemal University students in all comparisons (p <0.05) for the "Education Programs and Teaching" score. A significant difference was found between Mersin University students and Kahramanmaraş Sütçü İmam University students in terms of their "Assessment and Evaluation" score (p <0.05).

### 4.4. Findings Regarding the Relationships Between Service Quality, Student Loyalty and Student Satisfaction

Pearson correlation analysis was conducted to examine the relationships between Service Quality, Student Loyalty and Student Satisfaction. Findings on the relationships between the scores obtained from the scales are given in Table 10.

**Table 10.**Correlation analysis of the relationship between service quality perception, student loyalty and student satisfaction of the Medical Faculty Students Participating in the Study

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Administrative Aspect of the Institution													
2. Academic Aspect of the Institution	.452**												
3. Image of the Institution	.535**	.733**											
4. Accessibility	.692**	.691**	.699**										
5. Diploma Programs Offered by the Institution	.589**	.683**	.931**	.821**									
6. Physical Facilities of the Institution	.561**	.529**	.541**	.576**	.522**								
7. Favorable Education Atmosphere	.511**	.580**	.837**	.831**	.839**	.857**							
8. Positive Living Atmosphere	.581**	.739**	.811**	.791**	.832**	.830**	.842**						
9. Education Programs and Teaching	.581**	.547**	.545**	.568**	.541**	.569**	.549**	.539**					
10. Assesment and evaluation	.597**	.553**	.530**	.542**	.539**	.531**	.518**	.571**	.591**				
11. Service Quality Perception	.543**	.551**	.501**	.489**	.519**	.439**	.428**	.561**	.841**	.897**			
12. Student Loyalty	.551**	.517**	.491**	.533**	.467**	491**	.481**	.482**	.847**	.711**	.811**		
13. Student Satisfaction	.593**	.499**	.512**	.363**	.411**	.362**	.362**	550**	.469**	.492**	.581**	.591**	

As a result of the research, the following data were obtained as a result of the Pearson correlation analysis performed to determine the relationship levels of the scales.

- There is a positive medium strong (r = 0.452; p = .000 <0.05) relationship between the Administrative Side of the Institution and the Academic Side of the Institution.
- Between the Administrative Aspect of the Institution and the Image of the Institution, positive directional medium strength (r = 0.535; p = .000<0.05), with Accessibility (r = 0.692; p = .000 <0.05), positive direction with the Institution's Diploma Programs (r = 0.535; p = .000 < 0.05). 0.589; p = .000 < 0.05) positive directional medium strong, positive direction with the Physical Facilities of the Institution (r = 0.561; p =.000 <0.05), positive direction with the Physical Facilities of the Institution (r = 0.561; p = .000 < 0.05) positive medium strong, Encounter Education Atmosphere (r = 0.511; p = .000 < 0.05) positive medium strong, positive Life Atmosphere (r = 0.581; p = .000 < 0.05) positive positive medium strong, Training Programs and with Teaching (r = 0.581; p = .000 < 0.05) positive medium strong, with Assessment Assessment (r = 0.581; p = .000 < 0.05) positive direction with medium strong, with Service Quality Perception (r = 0.543; p = .000 < 0.05) positive direction, medium strength, positive direction with Student Loyalty (r = 0.551; p = .000 < 0.05) positive direction with student satisfaction (r = 0.553; p = .000 < 0.05) positive direction It is a medium strong relationship.
- There is a positive medium strong (r = 0.535; p = .000 <0.05) relationship between the Image of the Institution and the Administrative Side of the Institution, and a strong positive correlation (r = 0.733; p = .000 <0.05) between the Academic Aspect of the Institution.</li>
- There is a positive medium strong relationship between Accessibility and Administrative Aspect of the Institution (r = 0.692; p = .000 < 0.05) and the Academic Aspect of the Institution (r = 0.691; p = .000 < 0.05) and the Image of the Institution (r = 0.699; p = .000 < 0.05).

- There is a positive medium strong relationship between the Diploma Programs offered by the Institution and the Administrative Side of the Institution (r = 0.589; p = .000 <0.05) and the Academic Aspect of the Institution (r = 0.683; p = .000 <0.05). There is a strong positive correlation between the Image of the Institution (r = 0.931; p = .000 <0.05) and the Accessibility dimension (r = 0.821; p = .000 <0.05).</p>
- There is a moderate positive correlation between Physical Facilities of the Institution and Administrative Side of the Institution (r = 0.561; p = .000 <0.05), Academic Aspect of the Institution (r = 0.529; p = .000 <0.05), Image of the Institution (r =- 0.541; p = .000<0.05), Accessibility (r = 0.576; p = .000 <0.05) and the Diploma Programs offered by the Institution (r = 0.522; p = .000 <0.05).</li>
- There is a strong positive relationship between the Positive Education Atmosphere and the Administrative Aspect of the Institution (r = 0.511; p = .000 <0.05) and the Academic Aspect of the Institution (r = 0.580; p = .000 <0.05), the Institution's Image (r = 0.837; p Accessibility (r = 0.831; p = .000 <0.05) with = .000 <0.05), Diploma Programs Offered by the Institution (r = 0.839; p = .000 <0.05) and Physical Facilities of the Institution (r = 0.857; p = .000 <0.05).</p>
- There is a positive medium strong relationship between the Positive Atmosphere of Life and the Administrative Side of the Institution (r = 0.581; p = .000 <0.05). There is a strong positive correlation between Academic Aspect of the Institution (r = 0.739; p = .000 <0.05), Image of the Institution (r = 0.811; p = .000 <0.05), Accessibility (r = 0.791; p = .000 <0.05), Diploma Programs Offered by the Institution (r = 0.832; p = .000 <0.05), Physical Facilities of the Institution (r = 0.830; p = .000 <0.05) and Positive Education Atmosphere (r = 0.842; p = .000 <0.05).
- There is a positive moderate strong relationship between Educational Programs and Instruction and Administrative Side of the Institution (r = 0.581; p = .000 <0.05), Academic Aspect of the Institution (r = 0.547; p = .000 <0.05), Image of the Institution (r = 0.545; p = .000 < 0.05), Accessibility (r = 0.568; p = .000 <0.05), Diploma Programs Offered by</li>

- the Institution (r = 0.541; p = .000 < 0.05), Physical Facilities of the Institution (r = 0.569; p = .000 < 0.05) Positive Education Atmosphere (r = 0.549; p = .000 < 0.05) and Positive Atmosphere of Life (r = 0.539; p = .000 < 0.05).
- There is a directional medium strong relationship Administrative Aspect of the Institution by Assessment and Evaluation (r = 0.581; p = .000 <0.05), Academic Aspect of the Institution (r = 0.553; p = .000 <0.05), The Image of the Institution (r = 0.530; p = .000 <0.05), Accessibility (r = 0.542; p = .000 <0.05), Diploma Programs Offered by the Institution (r = 0.539; p = .000 <0.05), Physical Facilities of the Institution (r = 0.531; p = .000 <0.05), Positive Education Positive atmosphere (r = 0.518; p = .000 <0.05), Positive Atmosphere of Life (r = 0.571; p = .000 <0.05) and Education Programs and Teaching (r = 0.591; p = .000 <0.05).
- There is a positive moderate strong relationship between Service Quality Perception and Administrative Side of the Institution (r = 0.543; p = .000 <0.05), Academic Aspect of the Institution (r = 0.551; p = .000 <0.05), Image of the Institution (r = 0.501; p = .000 <0.05)), Accessibility (r = 0.489; p = .000 <0.05), Diploma Programs Offered by the Institution (r = 0.519; p = .000 <0.05), Physical Facilities of the Institution (r = 0.439; p = .000 <0.05) Positive Education Atmosphere (r = 0.428; p = .000 <0.05) and the Positive Atmosphere of Life (r = 0.561; p = .000 <0.05) sub-dimensions. There is a strong positive correlation between Education Programs and Instruction (r = 0.841; p = .000 <0.05) and Assessment and Assessment (r = 0.897; p = .000 <0.05) sub-dimensions.
- There is a moderately strong positive correlation between Student Loyalty and Administrative Aspect of the Institution (r = 0.551; p = .000 <0.05), Academic Aspect of the Institution (r = 0.517; p = .000 <0.05), The Image of the Institution (r = 0.491; p = .000 <0.05), Accessibility (r = 0.533; p = .000 <0.05), Diploma Programs Offered by the Institution (r = 0.467; p = .000 <0.05), Physical Facilities of the Institution (r = 0.491; p = .000 <0.05) Positive Education Atmosphere (r = 0.481; p = .000 <0.05) and Positive Atmosphere of Life (r = 0.482;</p>

- p = .000 <0.05) sub-dimensions. There is a strong positive relationship between Education Programs and Instruction (r = 0.847; p = .000 <0.05), Assessment Assessment (r = 0.711; p = .000 <0.05) and Service Quality Perception (r = 0.711; p = .000 <0.05) There is a strong positive relationship.
- There is a positive medium strong relationship between the sub-dimensions of Student Satisfaction and Administrative Side of the Institution (r = 0.553; p = .000 <0.05), Academic Aspect of the Institution (r = 0.499; p = .000 <0.05), The Image of the Institution (r = 0.522; p = .000 <0.05), Accessibility (r = 0.463; p = .000 <0.05), Diploma Programs Offered by the Institution (r = 0.411; p = .000 <0.05), Physical Facilities of the Institution (r = 0.462; p = .000 <0.05), Positive Education Atmosphere (r = 0.462; p = .000 <0.05), Positive Living Atmosphere (r = 0.550; p = .000 <0.05), Education Programs and Instruction (r = 0.469; p = .000 <0.05), Assessment and Evaluation (r = 0.482; p = .000 <0.05), Service Quality Perception (r = 0.561; p = .000 <0.05) and Student Loyalty (r = 0.581; p = .000 <0.05).

#### CHAPTER 5

#### DISCUSSION AND INTERPRETATION

The aim of this study is to investigate the relationship between Service Quality Perception and Student Loyalty and Student Satisfaction variables. For this purpose, the findings obtained from the statistical analysis are discussed in this section in the context of the problems and sub-problems that form the basis of the research, and the comments regarding the obtained findings are presented.

The questionnaire form developed in order to examine these relationships was distributed to 484 Medical Faculty 3rd grade students.

According to the findings, 265 (54.8%) of 484 Faculty of Medicine students participating in the study are women and 219 (45.2%) are men.

According to the distribution according to the marital status of the Faculty of Medicine student participating in the study, 4 (0.8%) of the students are married and 480 (99.2%) are single.

Considering the distribution of the universities in which the Faculty of Medicine students who participated in the study are still working, 186 (38.4%) of the students stated that they continued their education at Mersin University, 145 (30%) at Çukurova University, 71 (14.7%) at Kahramanmaraş Sütçü İmam University and finally 82 ' of them (16.9%) at Hatay Mustafa Kemal University.

When the average level of service quality perception of the students participating in the research is examined, it is seen that the average score of "Administrative Aspect of the Institution", "Academic Aspect of the Institution", "The Image of the Institution", "Accessibility", "The Institution's Diploma Programs", "The Institution's Physical Facilities" and "Service Quality Perception" seem to be at a medium level.

A research was conducted by Yousapronpaiboon (2014) on 350 undergraduate students in Thailand using the SERVQUAL scale. According

to the results of the research, it is stated that the quality of higher education in the aforementioned country is below the level expected by students and at a moderate level, and it is suggested that institutions should make serious improvements especially in the dimensions of enthusiasm and physical facilities (Yousapronpaiboon, 2014). Another research on this subject was carried out by Chopra, Chawla and Sharma (2014) on 500 students studying in 10 different universities of India. The results of the research revealed that the perceived quality level in all dimensions of service quality is moderate and students are generally not satisfied (Chopra, Chawla & Sharma, 2014).

Kontic (2014), in his study with the students of the business administration department on service quality in higher education, concluded that faculty buildings and the appearance of their surroundings are the factors that affect the quality dimension at least. It was found that the students were very satisfied with the dimension of academic staff, they were at a low level of satisfaction with the dimension of administrative staff, and they had a moderate positive perception about the dimension of service quality. Maksüdünov, Sergeant, and Eleren (2016) in their research on 419 students found that student perceptions of the quality of the service offered were generally above the medium level. These findings support our research.

When the average of student loyalty of the students participating in the study is examined, it is seen that it is at a medium level.

In the study of Öztürk and Faiz (2020) on 567 students studying at Düzce University, the perception of student loyalty was found to be moderate in higher education students. In the studies of Saydam (2018) on four universities and 1300 students, the student loyalty of the students was found to be at a moderate level, these findings support our research.

It is seen that the average level of "positive education atmosphere" of the students participating in the study is medium, the average level of "positive life atmosphere" is medium, the average level of "education programs and education" is medium, the average level of "assessment and evaluation" is medium, and the average level of "student satisfaction" is medium.

In his study, Aygün (2014) investigated the degree of satisfaction of the students studying at Bitlis Eren University with the service offered by the university. The research revealed that the students did not find the university's facilities and quality of service sufficient.

Gülcan, Kuştepeli, and Aldemir (2015) measured the service quality perceptions and satisfaction levels of Nazilli Vocational School students regarding the programs they study. According to the results, students have a higher level of satisfaction from the academic and administrative staff of the school compared to other cases. The level of satisfaction is lower in terms of physical characteristics and support services.

Douglas, Douglas and Barnes (2006) concluded in their study in the business and law faculties in England that student satisfaction is poor and it is related to education and teaching rather than physical facilities.

In the study of Ukav (2017) in which student satisfaction of 107 university students was investigated, it was found that student satisfaction was at medium levels. Akan (2014), in his study on student satisfaction within the framework of total quality management, evaluated the effects of factors such as academic staff and counseling, education and training, and physical conditions on satisfaction, and student satisfaction was found to be moderate, these findings support our research.

A statistically significant difference was found between female students participating in the study and male students in terms of Service Quality Perceptions and Student Satisfaction scores. H1 and H3 hypotheses were accepted. H2 hypothesis is rejected.

According to the results of another study made by Min and Khoon (2013) on foreign students in Singapore, it was observed that there were differences

between the perceived quality levels of the service provided according to gender, nationality and classes (Min & Khoon, 2013).

Karakaya, Kılıç and Uçar (2016) concluded that gender significantly differentiates the perception of higher education service quality. In their study, compared to male students, female students stated that they found the variables of teaching programs and lecturers higher in quality. In addition, there is a significant difference in favor of those residing with their families regarding the dimension of education conditions between students residing with their families and students living in dormitories and student houses. According to the research results of Yavuz and Gülmez (2016), while the perception of the service quality of the students regarding the higher education institutions they graduated from did not show a significant difference according to gender, a significant difference was found according to the foundation years of higher education institutions and the faculty from which the students graduated.

Maksüdünov, Sergeant, and Eleren (2016) conducted a study with 419 students and found that there was no gender difference in terms of hygiene and environmental cleanliness, physical facilities, ease of transportation and empathy. On the other hand, it was found that there is a significant difference in the dimensions of enthusiasm and reliability. In both dimensions, female students' perceptions were higher than male students and the difference between them was found to be statistically significant.

In the study of Ataman and Adıgüzel (2019), with the participation of 274 undergraduate students studying at Düzce University in the 2017-2018 academic year, it was aimed to determine the students' perceptions of quality in higher education and whether they differ according to the demographic characteristics of the students. As a result of the study, it was determined that the sub-dimensions that students consider important are, respectively, management, physical infrastructure and facility facilities, teaching-learning process, scientific and social activities, teaching staff and other students. It

was determined that there is a significant difference in favor of female students in terms of giving importance to female and male students.

In the study of Bacıoğlu and Vural (2018), It is aimed to examine whether the determination of the opinions of teacher candidates studying at Trakya University Faculty of Education in the 2016-2017 academic year on some academic services and the satisfaction levels of these opinions towards the university and the education faculty according to the variables of gender, class differ or not. As a result of the study conducted with 300 pre-service teachers, it was determined that teacher candidates' level of satisfaction with the university and faculty was moderate, there was no significant difference in the satisfaction levels of the teacher candidates according to the gender variable, and there were significant differences according to the class level and the department where they were educated.

In the study carried out by Ukav (2017) with the participation of 109 students studying at Adıyaman University Kahta Vocational School, it was aimed to reveal student satisfaction, satisfaction with the services provided to the student, and student expectations. As a result of the research, it was determined that female students have higher levels of satisfaction than male students according to gender. These findings support our research.

No statistically significant difference was found between the single students participating in the study and the married students in terms of Service Quality Perception, Student Loyalty and Student Satisfaction scores. Service Quality Perception, Student Loyalty and Student Satisfaction do not change according to marital status.

According to the answers given by the students (accredited or not) to the service quality scale of the universities participating in the research, A statistically significant difference was found for "The Administrative Aspect of the Institution", "The Image of the Institution", "The Diploma Programs Offered by the Institution" and "The Physical Facilities of the Institution", "Opportunities Creating a Positive Educational Atmosphere", in terms of

"Possibilities Creating a Positive Living Atmosphere", "Education Programs and Instruction" and "Assessment and Evaluation" scores. The Service Quality Perception, Student Loyalty and Student Satisfaction and all sub-dimensions of Mersin University and Çukurova University students who have accreditation certificates were found to be higher than non-accredited universities.

In order to compare the quality of service in Turkey's state and private universities, in the research done in the Aegean and in Usak Yasar University by Tayyar ve Dilşeker (2012), it has been revealed that the perceived quality of service is higher in foundation universities compared to state universities (Tayyar & Dilşeker, 2012).

Positive, medium and high-level relationships were found between the service quality perception, student loyalty, student satisfaction and sub-dimensions of all variables of the Medical Faculty students participating in the study. H4 hypothesis was accepted.

Lin and Tsai (2008) examined the relationship between the variables of student loyalty, perception of educational services quality, perception that commitment is a good idea and the perception of others' attachment. They found that the perception of educational services quality, the perception of others' commitment predicted the perception of management services quality, and the perception that commitment was a good idea, and the perception of educational services quality predicting student loyalty.

Hennig-Thurau, Langer, and Hansen (2001) determined that the relationship between student loyalty and the perceived quality of educational services, trust in the university's staff, and cognitive, emotional and purposeful commitment to the institution, trust in the university, affect the emotional commitment to the institution. On the other hand, it was determined that there is a strong relationship between the perception of teaching quality and the emotional attachment of students to their universities, and there is a direct and intermediate relationship between trust and Student Loyalty.

Rojas-Mendez noted the same directional effect of satisfaction on loyalty in the literature (Rojas-Mendez, 2009) and Clemes, Gan & Kao emphasised the same directional effect on recommendation and repeat purchase intention (Clemes, Gan & Kao, 2007). Tayyar and Dilşeker (2012) found that student satisfaction has an effect on loyalty and advice in their study on students studying at state and foundation universities; He stated that the variables that affect student satisfaction are service quality.

Dilşeker (2011), in a study examining the relationship between service quality, student satisfaction, image, loyalty and advice in state and foundation universities, found that the satisfaction levels of the students studying at the foundation university were higher than the students studying at the state university and that satisfaction affected the advice and loyalty in the same direction determined.

When the relevant literature is examined, the relationship between service quality and satisfaction in the education sector has been reported in many studies (Ali, Zhou, Hussain, Nair & Ragavan, 2016; Brochado, 2009; Nadiri, Kandampully & Hussain, 2009; Sultan & Yin Wong, 2014). However, as a result of the study conducted by Duygun and Okumuş (2008) in order to determine the perceived service quality of the students receiving education service and to determine the relationship between the perceived service quality and customer satisfaction, it was determined that there is a positive relationship between perceived service quality and customer satisfaction.

Similarly, Cingöz (2009) stated the positive effect of service quality on customer satisfaction in a study they conducted on Dumlupinar University Institute of Social Sciences students.

In the research conducted by Derebaş (2010) in Private Education Institutions, a positive relationship was determined between the service quality perceived by students and their general satisfaction level, and it was emphasized that the perceived service quality increases as the satisfaction increases.

In the study conducted by Wei and Ramalu (2011), it was aimed to examine the role of service quality in students' university satisfaction. The study was carried out with the participation of 100 undergraduate students in Utara University, Malaysia. In order to determine the quality of service, the opinions of the students about the education and training services of the university, the university campus, the places where social and sports activities are held, transportation and information services were taken. As a result of the study, it was determined that the service quality at the university is related to the satisfaction of the students. However, within the scope of responsiveness (sensitivity), self-confidence and empathy dimensions associated with customer satisfaction, it was stated that when attention is paid to university students, students' satisfaction will increase. All these findings support our research.

### CHAPTER 6

## CONCLUSION AND RECOMMENDATIONS

The main purpose of this study is to investigate the relationship between service quality and student loyalty and satisfaction in universities. The following results have been reached with the research.

#### Results

- It was found that the average of the service quality perception and sub-dimension scores of the students participating in the study were at a medium level.
- **2.** It was concluded that the average level of student loyalty of the students participating in the research is at a medium level.
- It was found that the mean scores of the students' satisfaction and sub-dimensions of the students participating in the study were at a medium level.
- **4.** Perception of service quality and student satisfaction of the students participating in the research varies by gender.
- 5. No statistically significant difference was found between single students participating in the study and married students in terms of service quality perception, student loyalty and student satisfaction scores.
- **6.** The service quality perception, student loyalty and student satisfaction of the students participating in the research vary according to the university (accredited or not).
- 7. A positive, medium and high level relationship was found between the service quality perception of the students participating in the study, student loyalty, student satisfaction and the sub-dimensions of all variables.
- 8. On the basis of customer satisfaction is the provision of quality services to meet their expectations. Quality assessment is not easy due to the characteristics of the services. The perceptions, loyalty and satisfaction levels of the students who are in the position of education service customers about the quality of the services offered by the

- university they study at vary. It is important for universities to determine the relationship between these variables and to determine strategies in this direction.
- 9. This study is important in terms of providing useful information for university administrations and improving the quality of education services provided.
- 10. Service quality in education will ensure that the student is loyal to the institution. It is believed that the faculty management has an important competence in revealing the positive aspects of service quality practices in the accreditation process by revealing the relationship between the scale of loyalty and service quality and satisfaction.
- 11. Creating awareness on quality, quality assurance and sustainable quality in higher education, raising awareness, and internalizing and disseminating quality culture in universities, this research; It presents qualitative findings for the development of the Turkish higher education system. It is thought that these findings will contribute to the development and maintenance of a national quality assurance model specific to our country, which is important in increasing the international visibility and reputation of our higher education system.
- 12. It also supports achieving quality and continuous improvement in institutions and programs using accreditation, self-assessment and professional control. The accreditation system is a strategic planning approach. Today, quality and accreditation are no longer a luxury for educational institutions, but a necessity. In order to compete at the international level, it is very important that higher education institutions accelerate their accreditation studies and complete their studies in this direction and certify them in a short time.
- 13. Accreditation in higher education institutions does not only concern the institution and students, but also institutions such as local governments, non-governmental organizations, relevant ministries regularly contribute to institutional development. Increasing studies on quality and accreditation will enrich the quality awareness in the social sense. Graduates who are the outputs of a program accredited by an

international accreditation institution will also have high competitive power in the national and international arena.

As a result of the findings obtained from this research, the following suggestions are made.

- Determining the positive aspects of the applications made in the process after accreditation in the light of the data obtained from the students, determining and correcting the negative aspects in terms of ensuring their continuity can provide continuous improvement and development in quality.
- A more appropriate distribution of the resources allocated to students by the higher education institution can be provided.
- It is important in terms of detecting and eliminating the negativities that
  may arise in cases such as the working style, attitude, regularity and
  accessibility of the personnel in the administrative direction of the
  institution.
- The existing deficiencies in the image of the institution in the perception of the students should be determined, and studies that can motivate students for current and future studies should be planned.
- It is also important in terms of eliminating the negativities and determining the current situation regarding the access of the lecturer by the student, the contribution to the student in the development process.
- Student perception about the university's diploma reputation should be determined and students should be informed about the existing regulations.
- The perception levels of the students about the physical facilities of the medical faculty should be determined and studies should be carried out to determine the conditions that prevent them from accessing the services available in this regard.

- Students' perceived quality dimensions resulting from this research can be used to measure the institution's performance according to the perceptions of students of the medical school.
- With the help of the research, it will be ensured that the strengths and weaknesses of the faculty can be identified by receiving feedback from the students.

## REFERENCES

- Acar Gürel, D. (2010). Hizmet Tasarım Sürecinde Katılımcılık: Bir Otel İşletmesi Örneği [Participation in the Service Design Process: A Hotel Business Case]. Doctoral Thesis, Anadolu University Institute of Social Sciences, Eskişehir.
- Acar, İ. A., Gençtürk, M., Göktepe, Ö., Keçeci, D., Kırdemir, V., & Yılmaz, C. (2005). Üniversitelerde stratejik planlama sürecinde eğitime yönelik sürdürülebilir kalite uygulamaları-Süleyman Demirel Üniversitesi örneği [Sustainable Quality Practices for Education in the Strategic Planning Process in Universities- Süleyman Demirel University Example]. V. National Production Research Symposium, Istanbul Commerce University, 25- 27 November 2005.
- Aktan, C.C., & Gencel, U. (2010). Yükseköğretimde Akreditasyon [Accreditation in Higher Education]. *Journal of Organization and Management Sciences*, *2*(2). ISSN: 1309-8039.
- Ali, F., Zhou, Y., Hussain, K., Nair, P. K., & Ragavan, N. A. (2016). Does Higher Education Service Quality Effect Student Satisfaction, Image and Loyalty? A Study of International Students in Malaysian Public Universities. Quality Assurance in Education, 24(1), 70-94.
- Altan, M., & Engin, O. (2004). Bir Seyahat İşletmesinde Müşteri Memnuniyetinin Ölçülmesi [Measuring Customer Satisfaction in a Travel Business]. Selçuk University Faculty of Economics and Administrative Sciences Journal.
- Altan, Ş., Ata, M., & Ediz, A. (2003). Servqual Analizi ile Toplam Hizmet Kalitesinin Ölçümü ve Yüksek Eğitimde Bir Uygulama [Measurement of Total Service Quality with Servqual Analysis and an Application in Higher Education]. 12th National Quality Congress, 13-15 October 2003, KalDer- Turkey Quality Association Lutfi Kirdar Convention and Exhibition Center.

- Altaş, D. (2006). Üniversite Öğrencileri Memnuniyet Araştırması [University Students Satisfaction Survey]. *Marmara University Journal of Economics and Administrative Sciences*, *21*(1), 439-458.
- Altbach, P.G., Reisberg, L., & Rumbley, L.E. (2009). Trends in Global Higher Education: Tracking an Academic Revolution. Paris: UNESCO.
- Alves, H., & Raposo, M. (2007). Conceptual Model of Student Satisfaction in Higher Education. *Total Quality Management and Business Excellence*, 18 (5), 571-588.
- Anderson, E. W. Fornell, C., & Lehmann, D. R. (1994). Customer Satisfaction, Market Share, and Profitability: Findings from Sweden. *The Journal of Marketing*, *58*(3), 53–66.
- Argan, M. T. (2009). Sanat Galerilerinin Sergi Salonunda Algılanan Hizmet Kalitesi Boyutları [Dimensions of Perceived Service Quality in Exhibition Room of Art Galleries]. *Anadolu University Journal of Social Sciences*, *9*(1), 1-18.
- Aslan, B. (2009). Accreditation of Higher Education in Different Countries and Improvements in Turkish Higher Education. *Ankara University Journal of Educational Sciences*, *42*(1), 287-309.
- Astin, A. W. (1993). What Matters in College? Four Critical Years Revisited. San Francisco, CA: Jossey-Bass.
- Asubonteng, P. Mccleary, K. J., & Swan, J. E. (1996). SERVQUAL Revisited:

  A Critical Review of Service Quality. *Journal of Services Marketing*, 10(6), 62-81.
- Ataman, O., & Adıgüzel, A. (2019). Yükseköğretimde Kalite Algısı: Düzce Üniversitesi Örneği [Quality Perception in Higher Education: Sample of Duzce University]. *Electronic Journal of Education Sciences, 8*(15), 39-56.

- Atatekin, E., & Dulupçu, M.A. (2018). Kalitede Yeni Bir Sayfa mı Yoksa Eskilerin Tekrarı mı? Bazı Devlet Üniversitelerinin Kurumsal İç Değerlendirme Raporlarının Eğitim Perspektifi [A New Chapter or a Repetition of the Past in Quality? The Education Perspective of the Internal Institutional Evaluation Reports of the Selected State Universities]. *Journal of University Studies*, 1(1), 14-24.
- Aydın, K., & Yıldırım, S. (2013). Hizmet Sektöründe SERVPERF Ölçeği ile Hizmet Kalitesinin Belirlenmesi (Sağlık Hizmetleri Sektöründe Bir Uygulama) [The Determining of Service Quality With Servperf Scale in Service Sector (An Implementation in Health Care Sector)]. *Muğla Sıtkı Koçman University Faculty of Economics and Administrative Sciences Journal of Economics and Management Studies, 1*(2), 33-52.
- Aygün, M. S. (2014). Hizmet Kalitesinin Öğrenci Memnuniyeti Üzerindeki Etkisi: Bitlis Eren Üniversitesi Örneği [Effects of Service Quality on Student Satisfaction: The Case of Bitlis Eren University]. Master Thesis, Kahramanmaraş Sütçü İmam University Institute of Social Sciences, Kahramanmaraş.
- Ayvaz, B., Kuşakçı, A.O., & Bor, O. (2016). Kalite Güvencesi ve Akreditasyon Süreçleri [Quality Assurance and Accreditation Processes]. *New Turkey*, 88.
- Bacıoğlu, S. D. & Vural, L. (2018). Öğretmen Adaylarının Akademik Hizmetlere İlişkin Görüşleri ve Memnuniyet Düzeyleri [Teacher Candidates' Opinions Regarding Academic Services and Satisfaction Levels]. *Mehmet Akif Ersoy University Journal of Education Faculty*, (47), 158-178.
- Banar, K., & Ekergil, V. (2010). Muhasebe Meslek Mensuplarının Hizmet Kalitesi: Sunulan Hizmetlerin Kalitesi ile Müşteri Memnuniyeti İlişkisi Eskişehir Uygulaması [Service Quality of Members of Accounting Profession: The Relationship Between Servis Quality to Customer Satisfaction Eskişehir Application]. *Anadolu University Journal of Social Sciences*, 10(1), 39-60.

- Bayrak, B. (2007). Yükseköğretim kurumlarından beklenen hizmet kalitesi ve hizmet kalitesinin algılanmasına yönelik bir araştırma [A research on the Perception of the Service Quality and Service Quality Expected From Higher Education Institutions]. Doctoral Thesis, Marmara University, Institute of Social Sciences, İstanbul.
- Bektaş, H., & Akman, S. (2013). Yükseköğretimde Hizmet Kalitesi Ölçeği: Güvenilirlik ve Geçerlilik Analizi [Service Quality Scale in Higher Education: Reliability and Validity Analysis]. *Istanbul University Faculty of Economics Journal of Econometrics and Statistics*, 18, 116-133.
- Bilgin, Y. (2017). Restoran İşletmelerinde Hizmet Kalitesi, Müşteri Memnuniyeti ve Müşteri Sadakatının Ağızdan Ağıza Pazarlamaya Etkisi [The Effect of Service Quality, Customer Satisfaction and Customer Loyalty on Word of Mouth Marketing in Restaurants]. *Journal of Business Studies*, *9*(4), 33-62.
- Blešić, I., Ivkov-Džigurski, A., Dragin, A., Ivanović, L., & Pantelić, M. (2011).

  Application of Gap Model in the Researches of Hotel Services Quality. *TURIZAM*, 15(1), 40-52.
- Brink, A., & Berndt, A. (2008). Customer Relationship Management and Customer Service (3rd Editon), Lansdowne: Juta and Co. Ltd. 37.
- Bozkurt, B. (2011). Kredi ve Yurtlar Kurumunda Kalan Öğrencilerin Memnuniyet Derecelerinin Lojistik Regresyon Yöntemi ile Araştırılması: Edirne İli Örneği [Investigation of Satisfaction Levels of Students Remaining in Credit and Dormitories Institution by Logistic Regression Method: The Case of Edirne Province]. Postgraduate Term Project, Trakya University Institute of Social Sciences, Edirne.
- Brochado, A. (2009). Comparing Alternative Instruments to Measure Service Quality in Higher Education. *Quality Assurance in Education*, *17*(2), 174-190.

- Brown, T. J., Dacin, P. A., Pratt, M. G., & Whetten, D. A. (2006). Identity, lintended Image, Construed Image, and Reputation: An Interdisciplinary Framework and Suggested Terminology. *Journal of the Academy of Marketing Science*, *34*(2), 99-106.
- Carman, J. M. (1990). Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions. *Journal of Retailing*, 66(1), 33.
- Cengiz, E., & Kırkbir, F. (2007). Kâr Amacı Gütmeyen Kurumlarda Müşteri Memnuniyeti ve Hizmet Kalitesi İlişkisi: Karadeniz Bölgesi Örneği [The Relationship Between Customer Satisfaction and Service Quality in Nonprofit Organizations: The Case of the Black Sea Region]. *Atatürk University Journal of Economic and Administrative Sciences*, 21(1), 263-285.
- Chi, N.M. (2014). A Study of Improving Service Quality and Customer Loyalty, Master Thesis, I-Shou University Department of Business Administration, Taiwan.
- Chopra, R., Chawla, M. & Sharma, T. (2014). Service Quality in Higher Education: A Comparative Study of Management and Education Institutions. NMIMS Management Review Volume XXIV April-May, http://nmims.edu/NMIMSmanagementreview/pdf/april-may-14/service-quality-higher-educationcomparative-study-management-and-education-institutions-rita-mamta-and-tejinder.pdf, 15.11.2014.
- Chun, R. (2005). Corporate Reputation: Meaning and Measurement. International Journal of Management Reviews, 7(2), 91-109.
- Cingöz, M. (2009). Eğitimde Hizmet Kalitesinin Müşteri Memnuniyetine Etkisi:

  Dumlupınar Üniversitesi Sosyal Bilimler Enstitüsü'nde Bir Uygulama
  [The Effect of Service Quality in Education on Customer Satisfaction:

  An Application in Dumlupınar University Social Sciences Institute].

  Master's Thesis, Dumlupınar University Institute of Social Sciences,

  Kütahya.

- Clemes M.D., Gan C.E.C., & Kao, T. (2007). University Student Satisfaction:

  An Empirical Analysis. *Journal of Marketing for Higher Education*,

  17(2), 292-325.
- Crosby, L.A., & Taylor, J.R. (1983). Psychological Commitment and its Effects on Postdecision Evaluation and Preference Stability Among Voters. *Journal of Consumer Research*, *9*, 413-431.
- Çelenk, İ. (2013). Hizmet Kalitesi ile Müşteri Sadakati Arasındaki İlişki: Üniversite Hazırlık Dershaneleri Üzerine Bir Uygulama [The Relationship Between Service Quality and Customer Loyalty: An Application on University Preparation Classrooms]. Master's Thesis, Uşak University Institute of Social Sciences, Uşak.
- Cetinsaya, G. (2014).Büyüme, Kalite, Uluslararasılaşma: Türkiye Yükseköğretimi İcin Bir Yol Haritası [Growth. Quality, Internationalization: A Roadmap For Turkey's Higher Education]. Council of Higher Education Publication No: 2014/2.
- Dean, J. W., & Evans, J. R. (2002). Total Quality Management Organization, and Strategy (3rd Edition), South-Western College Publishing.
- Değermen, A. (2006). Hizmet Ürünlerinde Kalite, Müşteri Tatmini ve Sadakati [Quality, Customer Satisfaction and Loyalty in Service Products]. (1st edition), Turkmen Bookstore, İstanbul.
- Demirkiran, S. (2012). Healthcare Workers of Quality of Life. Master Thesis, Beykent University, Social Sciences Institute, İstanbul.
- Derebaş, S. (2010). Özel Eğitim Kurumlarında Hizmet Kalitesinin Arttırılmasına Yönelik Yönetim Faaliyetleri Açık öğretim ve KPSS Kursları Üzerine Bir Uygulama [Management Activities for Improving Service Quality in Private Education Institutions, An Application on Open Education and KPSS Courses]. Master's Thesis. Celal Bayar University Institute of Social Sciences, Manisa.

- DeShields Jr. O.W., Kara, A., & Kaynak, E. (2005). Determinants of Business Student Satisfaction and Retention in Higher Education: Applying Herzberg's Two-Factor Theory. *International Journal of Educational Management*. 19(2), 128-139.
- Dilşeker, F. (2011). Devlet ve Vakıf Üniversitelerinde Hizmet Kalitesi, Öğrenci Memnuniyeti, İmaj, Sadakat ve Tavsiye Etme Arasındaki İlişkinin İncelenmesi [Examining the Relationship between Service Quality, Student Satisfaction, Image, Loyalty and Recommendation in State and Foundation Universities]. Master's Thesis, Uşak University Institute of Social Sciences, Uşak.
- Dixon, B., & Napolitano A. (2006). Service Quality in Relation to Tangibility, Masters Thesis, MIMA International Marketing Program, Mälardalens Högskola University, Sweden.
- Doğan, İ. (1999). Eğitimde Kalite ve Akreditasyon Sorunu: Eğitim Fakülteleri Üzerine Bir Deneme [The Problem of Quality and Accreditation in Education: An Essay on Education Faculties]. *Educational Administration: Theory and Practice*, *5*(4).
- Douglas, L., & Connor, R. (2003). Attitudes to Service Quality- the Expectation Gap. *Nutrition & Food Science*, 33(4), 165-172.
- Douglas, J., Douglas, A., & Barnes, B. (2006). Measuring student satisfaction at a UK university. *Quality Assurance in Education*, *14*(3), 251 267.
- Durman, M. (2008). Yükseköğretimde Kalite Güvencesi [Quality Assurance in Higher Education]. Edinsel K. (Ed.), Implementation of the Bologna Process in Turkey "Bologna Experts National Team Project". 2007-2008 Final Report.
- Duygun, A. (2007). Eğitim Hizmetlerinin Pazarlanmasında Hizmet Kalitesinin Ölçümü: Bir Pilot Araştırma [Marketing of Education Services Measurement of Service Quality: A Pilot Study]. Master's Tesis, Istanbul University.

- Duygun, A., & Okumuş, A. (2008). Eğitim Hizmetlerinin Pazarlanmasında Hizmet Kalitesinin Ölçümü ve Algılanan Hizmet Kalitesi ile Öğrenci Memnuniyeti Arasındaki İlişki [The Relationship Between Service Quality, Perceived Service Quality and Student Satisfaction in Marketing of Educational Services]. *Anadolu University Journal of Social Sciences*, 8(2), 17-38.
- ECA (2019). Organization, http://ecahe.eu/home/about/organisation/ (Date of access: 25.12.2020).
- Ekinci, C. E., & Burgaz, B. (2007). Hacettepe Üniversitesi Öğrencilerinin Bazı Akademik Hizmetlere İlişkin Beklenti ve Memnuniyet Düzeyleri [The Expectation and Satisfaction Levels of the Students at Hacettepe University With Respect to Academic Services]. *Hacettepe University Journal of Education Faculty*, 33(33), 120-134.
- Elliott, K. M., &. Healy, M. A. (2001). Key Factors Influencing Student Satisfaction Related to Recruitment and Retention. *Journal of Marketing for Higher Education*, 10(4), 1-11.
- Elliott, K. M., & Shin, D. (2002). Student Satisfaction: An Alternative Approach to Assessing this Important Concept. *Journal Of Higher Education Policy And Management*, *24*(2), 197-209.
- Erdoğan, E., & Aksoy, R. (2014). Algılanan Hizmet Kalitesi Ölçüm Modelleri İle İlgili İndirilme Taraması [A Literature Review on Perceived Service Quality Measurement]. *Tisk Academy*, (1), 156- 185.
- Eroğlu, E. (2004). Yükseköğretimde Hizmet Kalitesi [Service Quality in Higher Education]. Nobel Publishing Distribution.
- Esin, A. (2000). ISO 9001:2000 Işığında Hizmette Toplam Kalite [Total Quality in Service in the Light of ISO 9001: 2000]. Metu Press.
- Eskildsen, J. K., Martensen, A., Grønholdt, L., & Kristensen, K. (2000). Benchmarking Student Satisfaction in Higher Education Based on the ECSI Methodology. *Sinergie-Rapporti Di Ricerca*, *9* (18), 385-402.

- Eurydice, (2018). Türkiye'de Yükseköğretimde Kalite Güvencesi [Quality Assurance in Higher Education in Turkey]. https://eacea.ec.europa.eu/national-policies/eurydice/content/quality-assurance-highereducation-86\_tr , (Date of access: 28.12.2020).
- Firdaus, A. (2005). HEDPERF Versus SERVPERF The Quest for Ideal Measuring Instrument of Service Quality in Higher Education Sector. *Quality Assurance in Education*, *13*(4), 305-328.
- Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American Customer Satisfaction Index: Nature, Purpose, and Findings. *Journal of Marketing*, *60*, 7-18.
- Foscht, T., Schloffer, J., Maloles, C., & Chia, S.L. (2009). Assessing the Outcomes of Generation-Y Consumers' Loyalty. *International Journal of Bank Marketing*, 27(3) 218–241.
- Gagliano, K.B., & Hathcote, J. (1994). Customer Expectations and Perceptions of Service Quality in Apparel Retailing. *Journal of Services Marketing*, 8(1),60-69.
- Gazezoğlu, O.U. (2015). Quality of Life in Hemodialysis Healthcare Professionals: Example of Muğla Province. Master Thesis, Beykent University, Institute of Social Sciences, Istanbul.
- Gençer, R.T., Demir, C., & Aycan, A. (2008). Kayak Merkezlerindeki Spor Turistlerinin Hizmet Kalitesi Algılarını Etkileyen Değişkenler [Variables Affecting Sports Tourists' Service Quality Perceptions in Ski Resorts]. *Ege Academic Overview, 8*(2), 440-441.
- Ghobadian, A., Speller, S., & Jones, M. (1994). Service Quality Concepts and Models. *International Journal of Quality & Reliability Management,* 11 (9),43-66.
- Ghotbabadi, A.R., Feiz, S., & Baharun, R. (2015). Service Quality Measurements: A Review. *International Journal of Academic Research in Business and Social Sciences*, *5*(2), 267-286.

- Gökdeniz, İ., Bozacı, İ., & Karakaya, E. (2011). Şikâyet Yönetim Süreci Sonrası Memnuniyeti Etkileyen Faktörler Üzerine Uygulamalı Bir Araştırma [An Emprical Research on Factors Affecting Satisfaction After Complaint Management Process]. Selçuk University Journal of Social Sciences Institute, 26.
- Grönroos, C. (1984). A Service Quality Model and Its Marketing Implications, European Journal of Marketing, 18 (4): 36-44
- Grönroos, C. (1990). Service Management and Marketing. Lexington: Lexington Books.
- Grönroos, C. (2001). The Perceived Service Quality Concept-A Mistake? *Managing Service Quality, 11* (3),150-152.
- Guilding, C., & McManus, L. (2002). The Incidence, Perceived Merit and Antecedents of Customer Accounting: An Exploratory Note.

  \*\*Accounting, Organizations and Society, 27(1), 45-59.
- Gülcan, Y., Kuştepeli, Y., & Aldemir, C. (2002). Yüksek Öğrenimde Öğrenci Doyumu: Kurumsal Bir Çerçeve ve Görgül Bir Araştırma [Student Satisfaction in Higher Education: An Institutional Framework and an Empirical Research]. Süleyman Demirel University, Journal of the Faculty of Economics and Administrative Sciences, 7(1),99-114.
- Güleç, H.K., Kabasakal, Ö., & Kuzu, Ö.H. (2011). Yükseköğretimde Kalite Güvence Sisteminin Öğrenci Memnuniyeti Açısından Sürdürülebilirlik Değerlendirmesi: Meslek Yüksekokullarında ISO 9000 KYS Uygulamaları Örneği [Sustainability Assessment of the Quality Assurance System in Higher Education in terms of Student Satisfaction: ISO 9000 QMS Applications Example in Vocational Schools]. International Higher Education Congress: New Trends and Problems. 27-29 May 2011, İstanbul.

- Günay, D. (2012). Türkiyede Yükseköğretimin Yeniden Yapılandırılması ve Kalite Güvence Sistemi [Restructuring of Higher Education in Turkey and Quality Assurance System]. Seta Workshop Book. Bülent Ecevit University, Seta Workshop, 1, 20 February 2012, Zonguldak, 13-21.
- Güney, A. (2019). Kalite Yönetimi Çerçevesinde Yükseköğretimde Akreditasyon Süreci [Accreditation Process in Higher Education in the Framework of Quality Management]. *Turkish Studies, 14*(2), 401-412.
- Haider, S. (2001). Document Development Compliance Manual, Boca Raton, Florida: St. Lucie Press.
- Harvey, L., Plimmer, L., Moon, S., & Geall, V. (1997). Student Satisfaction Manual. Bristol. PA: Society for Research into Higher Education and Open University Press.
- Helgesen, Q., & Nesset, E. (2007). Images, Satisfaction and Antecedents:

  Drivers of Student Loyalty? A Case Study of a Norwegian University

  College. *Corporate Reputation Review.* 10 (1), 22-38.
- Hennig-Thurau, T., Langer, M. F., & Hansen, U. (2001). Modeling and Managing Student Loyalty An Approach Based on The Concept of Relationship Quality. *Journal of Service Research*, 3 (4), 331–344.
- Hussain, M., & Ranabhat, P. (2013). Influence of Service and Product Quality on Customer Retention, MBA Thesis, University of Gävle Department of Business and Economic Studies, Sweden.
- ISO. (2015). Quality Management Systems Fundamentals and Vocabulary,
  ISO Copyright Office, Switzerland.
  https://www.iso.org/standard/45481.html Date of access: 02.05.2019.
- İslamoğlu, A.H., Candan, B., Hacıefendioğlu, Ş., & Aydın, K. (2006). Hizmet Pazarlaması [Service Marketing]. Beta Publishing, Ankara.

- Jaskulska, J. (2013). Quality of Service and Product as the Main Factors Influencing Customers' Satisfaction in the Clothing Retailing Industry in Ireland- Case Study of ZARA Plc, MBA Thesis, Dublin Business School, Ireland.
- Juran, J. M. (1988). Juran on Planning for Quality (1st Edition), Collier Macmillan.
- Juran, J.M., & Godfrey, B. A. (1999). Quality Handbook (5th Edition), McGraw-Hill, New York, 21-22.
- Kalidas, M.G. (2007). Financial Services Marketing: A study on Marketing Practices of Banks in Kerala on Service Quality Dimensions, Master Thesis, University of Calicut Department of Commerce and Management Studies, India.
- Kantoğlu, B. (2012). E-Öğrenmede Öğrenci Memnuniyeti Ölçümü [Student Satisfaction Measurement in E-Learning]. Doctoral Thesis, Sakarya University Institute of Social Sciences.
- Karakaya, A., Kılıç, İ., & Uçar, M. (2016). Üniversite Öğrencilerinin Öğretim Kalitesi Algısı Üzerine Bir Araştırma [A Survey on University Students' Perceptions on Teaching Quality]. *Karabuk University Journal of Social Sciences Institute, (2).*
- Karasar, N. (2012). Bilimsel Araştırma Yöntemleri [Scientific Research Methods]. Ankara: Nobel.
- Kekeç, D. (2008). Hizmet Kalitesi Ölçümünde Servqual Ölçeği ve Otelcilik Sektöründe Bir Uygulama [Servqual Scale in Measuring the Service Quality and an Application in Hotel Sector]. Master's Thesis. Marmara University.
- Kılıç, B., & Eleren, A. (2009). Turizm Sektöründe Hizmet Kalitesi Ölçümü Üzerine Bir Literatür Araştırması [A Literature Review on Service Quality Measurement in Tourism]. Alanya Journal of Business Administration, 1(1), 90-94.

- Kısakürek, M.A. (2007). Çeşitli Ülkelerde Akreditasyon [Accreditation in Various Countries]. Education Faculties and Accreditation Workshop from the Educational Sciences Perspective. *Ankara University Faculty of Educational Sciences Publications: Ankara, 204.*
- Kim, C. K., Han, D., & Park, S. B. (2001). The Effect of Brand Personality and Brand Identification on Brand Loyalty: Applying The Theory of Social Identification. Japanese Psychological Research, 43(4), 195-206
- Kiran & Singh, A. (2016). Service Quality Models: A Gap Study. *Macrothink Instute Business and Economic Research*, *6*(1), 464-480.
- Knowles, G. (2011). Quality Management (1st Edition), London: Bookboon.
- Koçak, F. Ö. (2009). Gıda Sektöründe Müşteri Memnuniyeti ve Muğla Üniversitesi Örneği [Customer Satisfaction in Food Sector and Muğla University Sample]. Graduation Project, Süleyman Demirel University, Isparta.
- Kontic, L. (2014). Measuring Service Quality in Higher Education: The Case of Serbia. In Human Capital without Borders: Knowledge and Learning for Quality of Life; Proceedings of the Management, Knowledge and Learning International Conference. ToKnowPress.
- Korukoğlu, A. (2003). Üniversite Öğrencilerinin Eğitimden Beklentileri: Ege Üniversitesi İ.İ.B.F. Örneği [University Students' Expectations from Education: Ege University Faculty of Economics and Administrative Sciences Example]. Süleyman Demirel University, Journal of Faculty of Economics and Administrative Sciences, 8(1), 79-80.
- Koskennurmi-Sivonen, R., & Pietarila, P. (2005). Quality Clothes An Outline of a Model for Assessing the Quality of Customized Clothing, May 29-31, Nordic Design Research Conference Copenhagen, Nordes.
- Kotler, P. (2008). Marketing Management, 13th Edition, New Jersey: Prentice Hall.

- Köse, İ. A. (2012). Yükseköğretim Kurumlarında Öğrenci Sadakâti [Student Loyalty in Higher Education Institutions]. *Journal of Higher Education and Science*, *2*(2), 114-118.
- Kulašin, D., & Fortuny-Santos, J. (2005). Review of the SERVQUAL Concept. In: The 4th Research/Expert Conference with International Participation Quality 2005, Fojnica, B&H, 09-12 November, 1, 133-137.
- Kumar, S., Dash, M. K. (2014). The INSTAQUAL Scale: An Instrument for Measuring Service Quality of Management Institutions. *International Journal of Services, Economics and Management*, 6(4), 377.
- Lacle R. (2013). Management Perception of Service Quality in the Hospitality Industry, Bachelour's Thesis, Degree Program in Hotel Management, Haaga Helia University, Finland.
- Ladhari, R. (2009). A Review of Twenty Years of SERVQUAL Research.

  International Journal of Quality and Service Sciences, 1(2), 172-198.
- Lin, C., & Tsai, Y. (2008). Modeling Educational Quality and Student Loyalty:

  A Quantitative Approach Based on the Theory of Information
  Cascades. *Quality and Quantity, 42*, 397–415.
- Ljubojević, Č. (2004). Marketing of Services, Faculty of Service Business, Novi Sad.
- Maglio, P.P., Kieliszewski, C.A., & Spohrer, J.C. (2010). Handbook of Service Science (1st edition), US: Springer.
- Maksüdünov, A., Çavuş, Ş., & Eleren, A. (2016). Yüksek Öğretimde Öğrencilerin Hizmet Kalitesine Yönelik Algılamaları [Students' Perceptions Toward Service Quality in Higher Education]. *Manas Journal of Social Research*, 5 (4),65-76.
- Martensen, A., Grønhold, L., Eskildsen, K., & Kristensen, K. (2000).
  Measuring Student Oriented Quality in Higher Education: Application of the Ecsi Methodology, 1-13.

- Marzo-Navarro, M., Pedraja-Iglesias, M., & Rivera-Torres, P. (2005). A New Management Element for Universities: Satisfaction With the Offered Courses. *International Journal of Educational Management*, 19(6), 505-526.
- Mauri, A.G., Minazzi, R., & Muccio, S. (2013). A Review of Literature on the Gaps Model on Service Quality: A 3-Decades Period: 1985–2013. International Business Research, [e-journal] 6(12),134-144. DOI: 10.5539/ibr.v6n12p134.
- Mehta, S.C., Lalwani, A.K. & Li Han, S. (2000). Service Quality in Retailing: Relative Efficiency of Alternative Measurement Scales for Different Product-Service Environments. *International Journal of Retail & Distribution Management*, 28(2),62-72.
- Melchor Cardona, M., & Bravo, J. J. (2012). Service Quality Perceptions in Higher Education Institutions: The Case of a Colombian University. *Estudios Gerenciales*, 28(125), 23-29.
- Min, S. & Khoon, C. (2013). Demographic Factors in the Evaluation of Service Quality in Higher Education: International Students' Perspective. *International Review of Management and Business* Research 2(4). http://irmbrjournal.com/papers/1384878277.pdf, 15.11.2014.
- MÜDEK (2014). Mühendislik Lisans Programları Değerlendirme Ölçütleri [Engineering Undergraduate Programs Evaluation Criteria]. 13.
- Nacakcı, Z. (2004). Eğitimde Toplam Kalite Yönetim Felsefesinin Müzik Öğretmeni Yetiştiren Kurumlarda Gerekliliği [Total Quality Management Philosophy in Education Necessity in Institutions Training Music Teachers]. *Journal of National Education*, 164, 142-153.
- Nadiri, H., Kandampully, J., & Hussain, K. (2009). Students' Perceptions of Service Quality in Higher education. *Total Quality Management*, 20(5), 523-535.

- Nguyen, T.P. (2014). Measuring Customer Satisfaction on Perceived Service Quality Case: Mobile Telecommunications Service of Bouygues Telecom, France, Bachelo's Thesis, Turku University of Applied Sciences, Finland.
- Nitecki, D.A., & Hernon, P. (2000). Measuring Service Quality in Yale University's Libraries. *Journal of Academic Librarianship*, *26*(4), 259-273.
- Normann, R. (1991). Service Management, Strategy and Leadership in Service Business (2nd Edition), New York, John Wiley&Sons.
- Odunlami, I. B., & Asabi. O. M. (2015). Impact of Customer Satisfaction on Customer Loyalty: A Case Study of a Reputable Bank in Oyo, Oyo State, Nigeria. *International Journal of Managerial Studies and Research*, 3 (2), 59-69.
- Okay, Ş. (2009). Yönetici ve Öğretmenlerin Algılarına Göre Mesleki ve Teknik Ortaöğretimde Toplam Kalite Yönetimi Uygulamalarının Öğrencilerin Akademik ve Sosyal Başarılarına Etkisi [According to the Perceptions of Administrators and Teachers in Vocational and Technical Secondary Education Total Quality Management Applications the Effect of Students on Academic and Social Achievement]. *TSA*, *13*(1), 131-148.
- Okumuş, A. & Duygun, A. (2008). Eğitim Hizmetlerinin Pazarlanmasında Hizmet Kalitesinin Ölçümü ve Algılanan Hizmet kalitesi ile Öğrenci Memnuniyeti Arasındaki İlişki [The Measurement of Service Quality in Marketing of Educational Services and the Relationship Between Perceived Service Quality and Student Satisfaction]. *Anadolu University Journal of Social Sciences*, 8(2), 17-38.
- Okumuş, A., & Yaşin, B. (2007). Yapı Market Müşterilerinin Hizmet Kalitesi Değerlendirmelerine Göre Pazar Bölümlerinin İncelenmesi [Examining Market Segments According to Service Quality Evaluations of do it Yourself Stores]. *Erciyes University, Journal of Faculty of Economics and Administrative Sciences*, 28, 87-106.

- Oldfield B. M., & Baron, S. (2000). Student Perceptions of Service Quality in a UK University Business and Management Faculty. *Quality Assurance in Education*, 8(2), 85-95.
- Oliver, R. L. (1997). Satisfaction: A Behavioral Perspective on the Consumer. McGraw-Hill, New York: Routledge.
- Öncü, M.A., Kutukız, D., & Koçoğlu, C.M. (2010). Hizmet Kalitesinin Ölçülmesi ve Bankacılık Sektöründe Bir Uygulama [Measuring Service Quality and An Application in Banking Sector]. *Journal of Accounting and Finance*, 45, 238-244.
- Özer, M., Gür, B. S., & Küçükcan, T. (2010). Yükseköğretimde Kalite Güvencesi [Quality Assurance in Higher Education]. Ankara: SETA Publications.
- Özer, M., Gür, B.S., & Küçükcan, T. (2011). Kalite Güvencesi: Türkiye Yükseköğretimi için Stratejik Tercihler [Quality Assurance: Strategic Choices for Higher Education in Turkey]. *Journal of Higher Education and Science*, 1(2), 59-65.
- Özevren, M. (2000). Toplam Kalite Yönetimi Temel Kavramlar ve Uygulamalar [Total Quality Management- Basic Concepts and Applications]. İstanbul: Alfa Publications.
- Öztürk Ö. (2010). Evaluation of Quality of Life in Children with Common Developmental Disorders, Determination of Factors Affecting Quality of Life by Comparing with Control Groups. Ege University Faculty of Medicine, Department of Pediatric Surgery, Specialization Program, Izmir.
- Öztürk, E., & Faiz, E. (2020). Algılanan Öğretim Kalitesi ve Öğrenci Tatmininin Öğrenci Sadakatı Üzerindeki Etkisi: Düzce Üniversitesi Örneği [The Effect of Perceived Teaching Quality and Student Satisfaction on Student Loyalty: A Case of Duzce University]. International Journal of Tourism, Economic and Business Sciences. E-ISSN: 2602-4411, 4(1): 01-15.

- Öztürk, Y., & Kenzhebayeva, A. (2013). Turizm Sektöründe Hizmet Kalitesi: Türkiye ve Kazakistan'daki Termal Otel İşletmelerinde Karşılaştırmalı Bir Araştırma [Service Quality in Tourism Sector: Comparative Study on Thermal Hotel Enterprises in Turkey and Kazakhstan]. *Journal of Tourism and Gastronomy Studies, 1* (4), 35-46.
- Pakurár, M., Haddad, H., Nagy, J., Popp, J. & Oláh, J., (2019). The Service Quality Dimensions that Affect Customer Satisfaction in the Jordanian Banking Sector. *Sustainability*, *11*(1113), 1-24.
- Palaima, T., & Banytė J. (2006). Marketing Service Relationships: the Relative Role of Service Quality. *Engineering Economics*, 1(46), 83-94.
- Parasuraman, A. Zeithaml, V., & Berry, L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*, 49(4), 41-50.
- Parasuraman, A., Zeithaml, V.A., & Berry, L. (1990) Delivering Quality Service Balancing Customer Perceptions and Expectations. The Free Press, New York, 20-28.
- Paschalidou, M. (2017). Service Quality Assessment: A SERVQUAL Application in the Greek Municipal Swimming Pool Center in Panorama of Thessaloniki School of Economic Sciences. Master Thesis, Aristotle University of Thessaloniki: Greece.
- PEMDER (2019). Akreditasyon [Accreditation]. http://pemder.org.tr/akreditasyon/ (Date of access: 27.11.2019).
- Pena, M. M., Santos Da Silva, E.M., Tronchin, D. M. R., & Melleiro, M. M. (2013). The Use of The Quality Model of Parasuraman, Zeithaml and Berry in Health Services. *Rev Esc Enferm USP*, *47*(5), 1227-32.
- Perez, M.S., Abad J.C.G., Carillo, G.M.M., & Fernandez, R.S. (2007). Effects of Service Quality Dimensions on Behavioural Purchase Intentions: A Study in Public Sector Transport. Managing Service Quality, 17(2), 134-151.

- Pike, J., & Barnes, R. (1996). TQM in Action: A Practical Approach to Continuous Performance Improvement. Chapman and Hall, London, 29.
- Purgailis, M., & Zaksa, K. (2012). The Impact of Perceived Service Quality on Student Loyalty in Higher Education Institutions. Journal of Business Management,6,138-152.
- Ramaiyah, A. Zain, M. Nurulazam, A., & Halim, A. (2007). Exploring the Dimensions of Service Quality in Higher Education Research, In Regional Conference on Quality in Higher Education Quality Driven Initiatives: Sharing Good Practices in Higher Education.
- Rashid, T., & Raj, R. (2006). Customer Satisfaction: Relationship Marketing in Higher Education E-learning. *Innovative Marketing*, *2*(3), 24-34.
- Ree, V. H. J. (2009). Service Quality Indicators for Business Support Services. Doctoral Thesis, University College, London.
- Rehaman B., & Husnain M. (2018). The Impact of Service Quality Dimensions on Patient Satisfaction in the Private Healthcare Industry in Pakistan. *Journal of Hospital & Medical Management*, 1(41),1-8.
- Reichheld, F. F. (1996). The Loyalty Effect: The Hidden Force Behind Growth, Profits, and Lasting Value. Boston: Harvard Business School Press.
- Rojas-Mendez, J. I. (2009). Determinants of Student Loyalty in Higher Education: A Tested Relationship Approach in Latin America. *Latin American Business Review*, 10, 21-39.
- Sapancalı, F. (2009). Quality of Life from Social. Altın Nokta Press Release Distribution.

- Saydam, S. (2018). Yükseköğretimde Örgütsel İmaj ve Aidiyetin, Mesleki Sonuç Beklentisi ve Öğrenci Sadakatini Yordaması [Prediction of Organizational Image and Belonging in Higher Education, Vocational Outcome Expectation and Prediction of Student Loyalty]. Master's Thesis, Istanbul Sabahattin Zaim University, Institute of Social Sciences, İstanbul.
- Schiffman, L.G., Kanuk, L.L., & Hansen, H. (2008). Consumer Behaviour: A European Outlook (1st Edition), Harlow: Pearson Education Limited.
- Schwarz, S., & Westerheijden, D.F. (2007). Preface. S. Schwarz ve D. F. Westerheijden (Eds.), Accreditation and Evaluation in the European Higher Education Area, (ix-xii). Springer.
- Seyfullayev, H. (2015). Yüksek Öğretim Kurumlarında Hizmet Kalitesinin Ölçümü: Ankarada Kamu ve Vakıf Üniversitelerinde Bir Araştırma [Measurement of Service Quality in Higher Education Institutions: A Research in Public and Foundation Universities in Ankara.]. Master's Thesis Gazi University Institute of Social Sciences, Ankara.
- Shu, X. (2010). A Hierarchical Model of the Chinese Mobile Communications Market: An Empirical Analysis. Doctoral Thesis, Lincoln University, England.
- Skolnik, M. L. (2010). Quality Assurance in Higher Education as a Political Process. *Higher Education Management and Policy*, 22(1), 67-86.
- Sultan, P. & Yin Wong, H. (2014). Service Quality in a Higher Education Context: An Integrated Model. *Asia Pacific Journal of Marketing and Logistics*, *24*(5), 755-784.
- Sumaedi, S., Mahatma Yuda Bakti, G., Metasari, N. (2012). An Empirical Study of State University Students' Perceived Service Quality. *Quality Assurance in Education*, *20*(2), 164-183.

- Süngü, H., & Bayrakcı, M. (2010). Bolonya Süreci Sonrası Yükseköğretimde Akreditasyon Çalışmaları [Accreditation Studies in Higher Education After the Bologna Process]. *Turkish Journal of Educational Sciences*, 8(4), 895-912.
- Şahin, A. (2009). Eğitim Fakültesinde Hizmet Kalitesinin Eğitim Fakültesi Öğrenci Memnuniyet Ölçeği ile Değerlendirilmesi [Assessing Service Quality in Faculty of Education Via Student Satisfaction Scale (FESSS)]. Hacettepe University Journal of Education Faculty, 37, 106-122.
- Şahin, S., & Yıldırım, S. (2010). Öğrenme Tercihleri ve Ders Algısı [Learning Preferences and Course Perception]. *Ahi Evran University Journal of Education Faculty, 11*(3), 153-168.
- Şenol, Ş. (2012). İstatistiksel Kalite Kontrol [Statistical Quality Control]. Nobel Publications, Ankara.
- Tantekin Ersolmaz, Ş (2018). MÜDEK: Yükseköğretimde İlk Ulusal Akreditasyon Kuruluşu [MAK: First National Accreditation Organization in Higher Education]. *Journal of Istanbul Technical University Foundation*, 79, 76-79.
- Taguchi, G. Chowdhury, S., & Wu, Y. (2005). Taguchi's Quality Engineering Handbook, NJ: Wiley.
- Taş, D. (2009). Sağlık Hizmet Kalitesinin Ölçümüne Yönelik Bir Uygulama [Health Service Quality a Study on the Measurement of]. Master's Thesis, Istanbul University.
- Taş, H. (2015). Üniversitelerde Öğrenci Memnuniyeti Üzerine Gaziantep İlinde Bir Alan Çalışması [In universities on Student Satisfaction a Field Study in Gaziantep Province]. Master's Thesis, Hasan Kalyoncu University Institute of Social Sciences, Gaziantep.
- Taşçı, D., & Çabuk, S. N. (2013). Kalite Yönetim Sistemleri [Quality Management Systems]. Eskişehir: Anadolu University Publications.

- Tatlı, H. Z., Kokoç, M., & Karal, H. (2011). Satisfaction State of Computer Education and Instructional Technologies Students: Karadeniz Technical University Case. *Elementary Education Online*, 10(3), 836-849.
- Tayyar, N. & Dilşeker, F. (2012). Devlet ve Vakıf Üniversitelerinde Hizmet Kalitesi ve İmajın Öğrenci Memnuniyetine Etkisi [The Effect of Service Quality and Image on Student Satisfaction at State and Private Universities]. *Muğla University Journal of Social Sciences Institute*, 28, 184-203.
- Tengilimoğlu, D. (2014). Services Marketing. Ankara Political Bookstore, 3rd Edition.
- Tekin, M. (2012). Kalite Güvence ve Standartlar [Quality Assurance and Standards]. 5th edition, Konya: Günay Offset.
- Tekin, M., & Gül, H. (2007). Eğitim Kurumlarında Toplam Kalite Yönetimi Anlayışı ve Uygulamaları Üzerine Gazi Osman Paşa Üniversitesinde Bir Araştırma [In Educational Institutions on Total Quality Management Understanding and Applications a Research at Gazi Osman Paşa University]. http://www.kalder.org/genel/12ukk/hasangul.doc.
- Tekin, M., Karahan, M., Kuzu, ÖH., & Şahin, Ş. (2010). Yükseköğretimde ISO 9000 Kalite Yönetim Uygulamalarının Toplam Kalite Yönetimi Bağlamında Değerlendirilmesi: Meslek Yüksekokulları Örneği [ISO 9000 Quality Management Practices in Higher Education its Evaluation in the Context of Total Quality Management: The Case of Vocational Schools.]. 10. Production Research Symposium, 16-18 September 2010, Girne American University.
- Uçar, E.M., & Levent, F. (2017). Yükseköğretimde Uluslararası Akreditasyon Deneyimi: Bir Vakıf Üniversitesi Yabancı Diller Hazırlık Okulu Örneği [International Accreditation Experience in Higher Education: An Example of a Foundation University Foreign Languages Preparatory School]. *International Journal of Social Research*, 10 (52), 846-857.

- Ukav, İ. (2017). Meslek Yüksekokullarında Öğrenci Memnuniyetine İlişkin Bir Analiz: Kahta MYO Örneği [An Analysis Related to Students Satisfaction in Vocational Schools the Sample of Kahta Vocational School]. *Journal of Professional Sciences*, 6(1),1-9.
- UNESCO. (2004). Higher Education in a Globalized Society: UNESCO Education Position Paper. Paris: UNESCO.
- Uzgören, N., & Uzgören, E., (2007). Dumlupınar Üniversitesi Lisans Öğrencilerinin Memnuniyetini Etkileyen Bireysel Özelliklerin İstatistiksel Analizi Hipotez Testi, Ki-Kare Testi ve Doğrusal Olasılık Modeli [The Statistical Analysis of the Personal Characteristics Affecting the Satisfaction of the Undergraduates in Dumlupinar University- Hypothesis Testing, Chi-Square Test and Linear Probability Modell. Dumlupinar University, Faculty of Economics Administrative Sciences. Department of Business-Economics, Kütahya.
- Vanninen, J. (2013). Student's Experiences on Degree Programme in International Business At Saimaa University of Applied Sciences. Bachelor's Thesis, Saimaa University of Applied Sciences Faculty of Business Administration, Lappeenranta, Finland.
- Veljković, S. (2009). Marketing of Services (3rd Edition). Faculty of Economics, Belgrade.
- Vianden, J., & Barlow, P. J. (2014). Showing the Love: Predictors of Student Loyalty to Undergraduate Institutions. *Journal of Student Affairs Research and Practice*, *51*(1), 16-29.
- Wei, C.C., & Ramalu, S.S. (2011). Students Satisfaction Towards the University: Does Service Quality Matters? *International Journal of Education*, *3*(2),1-15.

- Westerheijden, D.F., Stensaker, B., & Rosa, M.R. (2007). Introduction. D.F. Westerheijden, B. Stensaker ve M.R. Rosa, (Eds.) Quality Assurance in Higher Education: Trends in Regulation. Translation and Transformation, 1-11.
- Wisniewski, M. (2001). Using SERVQUAL to Assess Customer Satisfaction With Public Sector Services. *Managing Service Quality, 11*(6), 380-388.
- Wong, H., & Wong, H. K. (2011). Building Relationship Between Education Institutions and Students: Student Loyalty in Self-Financed Tertiary Education. *IBIMA Business Review*, 1-31.
- Yavuz, M., & Gülmez, D. (2016). The Assessment of Service Quality Perception in Higher Education. *Education and Science*, *41*(184), 251-165.
- Yeo, R. K. (2009). Service quality ideals in a competitive tertiary environment. *International Journal Of Educational Research*, 48(1), 62-76.
- Yılmaz, I. (2011). Müze Ziyaretçilerinin Hizmet Kalitesi Algılamaları: Göreme Açıkhava Müzesi Örneği [Service Quality Perceptions of Museum Visitors: The Case of Göreme Open Air Museum]. *Anatolia: Journal of Tourism Research*, 22(2), 183-193.
- Yousapronpaiboon, K. (2014). SERVQUAL: Measuring Higher Education Service Quality in Thailand. *Procedia-Socialand Behavioral Sciences*, 116, 1088-1095. doi: 10.1016/j. sbspro.2014.01.350.
- YÖDEK (2007). Yükseköğretim Kurumlarında Akademik Değerlendirme ve Kalite Geliştirme Rehberi [Academic Evaluation and Quality Improvement Guide in Higher Education Institutions]. Ankara.
- YÖK. (2015). Yükseköğretim Kalite Güvencesi Yönetmeliği [Higher Education Quality Assurance Regulation]. 23 July 2015.
- YÖK. (2018). http://yokak.gov.tr/hakkinda accessed from.

- YÖK. (2019). Department of Accreditation, Recognition and Equivalence Services in Higher Education, https://denklik.yok.gov.tr/akreditasyontanima-denklik-nedir (Date of access: 22.11.2019).
- YÖK- Quality Assurance. (2018).http://www.yok.gov.tr/ar/web/uluslararasi-iliskiler/kalite-guvencesi accessed from.
- YÖKAK (2019). Higher Education Quality Board. https://www.yokak.gov.tr/akreditasyonkuruluslari/akreditasyon-kuruluslari-nedir (Date of access: 22.11.2019).
- Yu, G., & Kim, J. (2008). Testing the Mediating Effect of the Quality of College Life in the Student Satisfaction and Student Loyalty Relationship. *Applied Research Quality Life*, 3, 1-21.
- Yumuşak, N.C. (2006). Hizmet Kalitesinin Ölçümü ve Hizmet Kalitesini Etkileyen Faktörler: Uşak Ticaret ve Sanayi Odası Uygulaması [Measurement of Service Quality and Factors Affecting Service Quality: Application of Uşak Chamber of Commerce and Industry]. Master's Thesis, Dokuz Eylül University Institute of Social Sciences, İzmir.
- Yükseköğretim Kalite Kurulu [Higher Education Quality Board]. (2020). http://yokak.gov.tr/hakkinda, (Date of access: 29.12.2020).
- Zargari A. (2014). Dimensions of Quality Laura M Williams IET603: Spring 2014 Discussion Board: Forum 3.
- Zeithaml, V. A. (2000). Service Quality, Profitability, and the Economic Worth of Customers: What We Know and What We Need to Learn. *Journal of the Academy of Marketing Science*, 28(1), 67-85.
- Zemke, R. (2000). The Best Customer to Have is the One You Have Already Got. *The Journal For Qualty & Participation, March/April.*

# **ANNEXES**

#### ANNEX 1

## PERSONAL INFORMATION SURVEY FORM

Dear Participant,

This questionnaire form has been prepared for the application part of the doctoral thesis study titled "The Service Quality Perceptions of Medical Faculty Students and The Relationship Between Student Loyalty and Satisfaction: The Mediterranean Region Example". The collected data will only be used for research purposes and will not be given to any other person or organization. The responses to the questionnaire will contribute to improving the service quality of education and solving problems in proportion to its objectivity and accuracy. Thank you for your sensitivity and contribution in answering the questions.

Fatma BOLAÇ

Near East University

Institute Of Graduate Studies

Business Administration / PhD Student

Personal Information
Period:
Age:
Gender:
Marital status:
Grade average:
Student Selection and Placement System Score:
Income:
City where your family live:

# ANNEX: 2

# SERVICE QUALITY SCALE IN HIGHER EDUCATION

Dear Participant,  The Scale of Service Quality in Higher Education has been prepared for the application part of the doctoral thesis on "The Relationship Between Medical Faculty Students' Service Quality Perceptions and Student Loyalty and Satisfaction: The Mediterranean Region Example". The collected data will only be used for research purposes and will not be given to any other person or organization. The responses to the scale will contribute to improving the service quality of education and solving problems in proportion to its objectivity and accuracy. Thank you for your sensitivity and contribution in answering the questions.											
trie qu	estions.	Fatma BOLAÇ									
		Near East University									
		Institute Of Graduate Studies									
		Business Administration / PhD Student									
Facto	or 1- Administrative Aspect of the Institution	l absolutely agree	l agree	l partially agree	l disagree	l never agree					
1.	Communication of administrative staff with students is at a good level.										
2.	Administrative staff have a positive attitude towards students.										
3.	Administrative staff deal with students' questions / complaints effectively and on time.										
4.	Administrative staff fulfills their promise to the student on time.										
5.	Administrative staff show attentive and individual attention to students.										
6.	The administrative staff has sufficient knowledge of the procedure in their field of duty.										

	7.	Administrative staff are never too busy to respond to students' requests.				<b>l</b>	
	Administrative units keep students' records and information accurate and accessible.					<b>I</b>	
	9. When the student has a problem, the administrative staff show genuine interest in solving the problem.					<b>l</b>	
	<b>10.</b> Administrative staff treat students indiscriminately and respectfully.					l	
		Factor 2 - Academic Aspect of the Institution					
11.		esearch assistants have a positive attitude towards udents.					
12.		esearch assistants have a good command of the subjects ey will tell in practice lessons and are willing to lecture.					
13.		he lecturer has enough knowledge to answer my uestions about the course.					
14.		he lecturer approaches the student in a courteous and espectful manner.					
15.		e-class communication of the instructor with the students is ufficient.					
16.		he lecturer is quite knowledgeable and experienced in s/her field.					
		Factor 3 - Image of the Institution					
17	<b>'</b> .	f I had the chance to choose a university once more, I would of Qukurova University again.	choose				
18	3 <b>.</b> I	recommend my university to others.					
19	).	The service I received from my university has completely fulfill expectations.	ed my				
		Factor 4 - Accessibility					
	<b>20.</b> The faculty member can spare enough time to guide the students.						
	21.	The lecturer provides feedback on the development process of my knowledge and skills (my performance).					]

	22.	The lecturer shows a sincere attitude to solve when I have a problem.			
		Factor 5 - Diploma programs offered by the institution			
2	3.	Many and varied specialist programs are offered at my university.			
2	4.	My university offers programs with a flexible curriculum structure.			
2	5.	My university offers highly respected degree programs.			
		Factor 6 - Physical facilities of the institution			
20	6.	My university has student dormitories and they are sufficient.			
2	7.	The university's social facilities are suitable and sufficient for the use of students.			
28	<b>3</b> .	The academic facilities of the university (classrooms, laboratories, conference halls, etc.) are sufficient.			

## ANNEX: 3

## **STUDENT LOYALTY SCALE**

Dear Participant,								
Med Exar orga prob	The Student Loyalty Scale was prepared for the application part of the doctoral thesis on "The Relationship Between Medical Faculty Students' Service Quality Perceptions and Student Loyalty and Satisfaction: The Mediterranean Region Example". The data collected will only be used for research purposes and will not be given to any other person or organization. The responses to the scale will contribute to improving the service quality of education and solving problems in proportion to its objectivity and accuracy. Thank you for your sensitivity and contribution in answering the questions.							
				Fatma Bo	OLAÇ			
				Near East	Universit	у		
			Ins	titute Of G	Fraduate S	Studies		
		E	Business /	Administra	tion / PhD	Student		
		l absolutely agree	l agree	l partially agree	l disagree	l never agree		
1.	When someone criticizes the university where I was studying, I am impressed as if this criticism were made personally.							
2.	I'm very interested in other people's opinions about my university.							
3.	When I talk about my university, I usually use the expression "our university".							
4.	I also benefit myself from the success of my university.							
5.	When someone praises the university where I was studying, I would be very proud of it personally.							
6.	If this university were criticized in a news report, I would be ashamed of it.							
7.	If I am going to take advanced courses for my personal and professional development in the future, I would prefer to take it from my own university.							
8.	If I want to continue my postgraduate education, my first choice will be my own university.							

9.	I would like my child to study at the university where I studied.			
10.	If it were possible, I would like to transfer to another university.			
11.	I also recommend my university to others.			
12.	If I had the chance to choose again, I would prefer the same university again.			
13.	I attend events organized by the university.			
14.	If anyone detracts from my university, I will defend my university immediately.			
15.	If the university where I am studying is treated unfairly, I will start to defend the rights of my university.			
16.	I try to evaluate the events from the perspective of my university in order to protect the interests of the university where I am studying.			
17.	I support the university where I am studying in all circumstances.			
18.	Even if I get better offers, I would rather work at my own university.			
19.	I would like to work for my university, whether I have a personal gain or not.			
20.	I use items bearing the logo or symbols of my university.			
21.	The achievements of my university are my achievements.			
22.	When people criticize my university, I try to answer them on behalf of my university.			
23.	When a graduate of our university achieves a national or international success, I am also positively affected by it.			
24.	While I introduce myself in any setting, I proudly state the university I studied at.			

## **ANNEX: 4**

## **MEDICAL FACULTY SATISFACTION SURVEY**

Dea	r Participant,							
Related Medical Medica	The Faculty of Medicine Satisfaction Questionnaire was prepared for the application part of the doctoral thesis on "The Relationship Between Medical Faculty Students' Service Quality Perceptions and Student Loyalty and Satisfaction: The Mediterranean Region Example". The collected data will only be used for research purposes and will not be given to any other person or organization. The responses to the scale will contribute to improving the service quality of education and solving problems in proportion to its objectivity and accuracy. Thank you for your sensitivity and contribution in answering the questions.							
				Fatma	BOLAÇ			
				Near East	University	У		
			Insti	tute Of Gra	aduate St	udies		
		E	Business A	dministra	tion / PhD	Student		
		absolutely agree	l agree	l partially agree	l disagree	l never agree		
A- (	Opportunities Creating a Positive Education Atmosphere	_						
1.	Management is sensitive to students' problems and suggestions.							
2.	Student representatives are on the boards.							
3.	Administrative staff has positive attitudes towards students.							
4.	I can easily reach my Term Coordinator (Advisor) and get answers to my questions.							
5.	Technological facilities and laboratories (skill lab, computer lab, multidisciplinary lab) are sufficient for practical courses.							
6.	In general, I am satisfied with my Faculty.							

# **B – Opportunities Creating a Positive Living Atmosphere**

7.	I can easily access health services when I need them.			
8.	The physical conditions of the classrooms (cleaning, lighting, ventilation) are good.			
9.	Canteen environment is clean, safe and sufficient.			
10.	The scholarship opportunities provided are sufficient.			
11.	Photocopy services are sufficient.			
12.	Toilets and sinks are clean and adequate.			
	C - Education Programs and Instruction			
13.	The annual course schedule is given at the beginning of the academic year.			
14.	The learning objectives of the semesters and course committees have been determined.			
15.	Course schedules are updated.			
16.	Sufficient audio-visual (projection device etc.) and humanistic (models) lesson tools are used in the lessons.			
17.	The applied lessons in the program are sufficient in terms of duration and rate.			
18.	Lessons are held regularly, at the times specified in the program.  (Lessons start on time and finish on time.)			
19.	The basic and supplementary source list for the courses is given at the beginning of the term and its use is encouraged.			
20.	There is an effective communication between the student and the instructor.			
21.	The lecturer can be reached easily during extracurricular times.			
22.	The curriculum covers the knowledge and skills that I will use in my professional life.			

## **D** - Measurement and Evaluation

23.	The exams conducted are objective.			
24.	How the exams will be conducted and the evaluation criteria are given in a printed form (education guide) at the beginning of the term.			
25.	Exam questions are prepared according to the course content.			
26.	After each exam, students are informed about the exam results.			

# Curriculum Vitae (CV)

## FATMA BOLAÇ – MERSİN (1975)

E-mail: fatmabolac@mersin.edu.tr

#### **Work Experiences**

- Mersin University Faculty of Medicine Dean's Office / 1999 Currently
  - Higher Scholl Secretary
- Mersin University Faculty of Medicine Academic Evaluation and Quality Improvement Board
  - Unit Manager / 2009 2013
- Mersin University Faculty of Medicine Dean's Office
  - o Unit Quality Officer / 2003 2013
- Mersin University Department of Library and Documentation
  - o Cataloging Staff / 1995-1999

#### Education

Doctorate : Near East University Institute Of Graduate Studies - Phd. in

Business Administration Programme / (Turkish Republic of Northern

Cyprus)

Doctorate : Southern University (IMBL) - Institute of Management Business

and Law - Doctor of Business Administration (DrBA) (Russian

Federation)

Post Graduate : Akhmet Yassawi University Faculty of Economics

Management and Organization Graduate Program

Undergraduate : Anadolu University Faculty of Economics

Programme of Public Administration

High school : Silifke High School Social Sciences and Literature Programme

## Memberships

- National Medical Education Accreditation Board Mersin University Faculty of Medicine Self-Assessment Committee Member (First Accreditation Certificate) / 2011 - 2014
- National Medical Education Accreditation Board Mersin University Faculty of Medicine, Member of Interim Evaluation Commission (First Accreditation Certificate) / 2014 – 2017
- Mersin University Faculty of Medicine Academic Evaluation and Quality Improvement Board Membership / 2009-2013

- National Medical Education Accreditation Board Mersin University Faculty of Medicine Self-Assessment Committee Member (Renewal of Accreditation Certificate for the 2nd time) / 2017 – 2019
- Undergraduate Medical Education Before and Accreditation Commission Membership / 2019 – 2020
- Mersin University Faculty of Medicine Quality Management Board Member / 2017 - Currently
- Mersin University Faculty of Medicine Graduate Commission Membership / 2017 - Currently
- Mersin University Faculty of Medicine Alumni Monitoring Committee Membership / 2017 - Currently
- Mersin University Faculty of Medicine Program and Curriculum Development Committee Member / 2018- Currently
- Mersin University Faculty of Medicine Measurement and Evaluation Committee Member /2018- Halen
- Mersin University Faculty of Medicine Promotion Commission Membership /2017 – Currently
- Mersin University Faculty of Medicine Career Days Organization Committee Member /2017 – Currently
- Mersin University Faculty of Medicine Social and Cultural Activities Committee Member / 2017 – Currently
- Mersin University Faculty of Medicine Student Consultancy Coordination Committee Member /2018- Currently
- Mersin University Faculty of Medicine Academic and Administrative Unit Event Organizing Committee Member / 2019- Currently
- Mersin University Faculty of Medicine Career Days Organization Commission / 2020 – Currently
- Mersin University Faculty of Medicine Self-Evaluation Board / 2020 Currently

#### **Publications**

**Bolaç, F.,** & Ögenler, O. (2016). Evaluation of a Group of Medical School Students' Opinions on Quality of Education. Educational Sciences: Sanitas Magisterium, 2, 63-70.

**Bolaç, F.** (2015). A Brief Overview of Education Services Presentation for the Disabled in a Sample of University, The Russian Academic Journal | Vol. 32, #2 (2015), Russian

**Bolaç, F.** (2015). A Factor Effecting Quality in Higher Education: A Brief Overview On Internationalism, The Journal of International Management Research, Year 1, Number 1, December 2015, p. 27-34.

**Bolaç, F.,** & Ögenler, O. (2018). Yüksek Öğretimde Kalite Yönetimi Açısından Mobbing (Yıldırma) Hakkında Bir Değerlendirme / A Evaluation About Mobbing In Terms Of Quality Managemen In Higher Education. Academic Research in Health Sciences, Medical Studies Book Chapter, Gece Kitaplığı International Publishing House, s. 277-288.

#### **Books**

Mersin Üniversitesi Tıp Fakültesi'nin On Beş Yılı (1998-2013) [Fifteen Years of Mersin University Faculty of Medicine (1998-2013)] / ed. Tamer Akça; writers **Fatma Bolaç**...[ et al] 1st edition, Ankara. (BAYT cientific Research Press and Publicity, 214. 250 s. (University Publications; 39, Faculty of Medicine Publications; 7).

**Bolaç, F.,** & Ögenler, O. (2018). Yüksek Öğretimde Kalite Yönetimi Açısından Mobbing (Yıldırma) Hakkında Bir Değerlendirme / A Evaluation About Mobbing In Terms Of Quality Managemen In Higher Education. Academic Research in Health Sciences, Medical Studies Book Chapter, Gece Kitaplığı International Publishing House, s. 277-288.

#### **Theses**

Higher Education Quality Assurance in Turkey. – DBA Thesis – Southern University (IMBL) Institute of Management, Business and Law Doctor of Business Administration – Prepared by **Fatma Bolaç**, Supervisor Prof. Dr. İmran Akperov – 2019.

#### **Project**

Aile İşletmelerinde Kurumsallaşma ve Stratejik Plan [Institutionalization and Strategic Plan in Family Businesses] – Postgraduate Term Project – Prepared by **Fatma Bolaç**, Supervisor Prof. Dr. Mehmet Barca – 2013.

### Foreign language

English, Russian

# **DISCLAIMER REPORT**

# SERVICE QUALITY PERCEPTION OF MEDICAL FACULTY STUDENTS AND THE RELATIONSHIP BETWEEN STUDENT LOYALTY AND SATISFACTION: MEDITERRANEAN REGION EXAMPLE

Gönderim Tarihi: 24-Mar-2021 09:41PM (UTCYazar+0300) Fatma Bolaç

Gönderim Numarası: 1541363770

Dosya adı: FATMA\_BOLA\_DOKTORA\_TEZ\_\_\_ngilizce\_1.docx (1.37M)

Kelime sayısı: 37529 Karakter sayısı: 222789

# **DISCLAIMER REPORT**

SERVICE QUALITY PERCEPTION OF MEDICAL FACULTY STUDENTS AND THE RELATIONSHIP BETWEEN STUDENT LOYALTY AND SATISFACTION: MEDITERRANEAN REGION EXAMPLE FATMA BOLAÇ DOCTORAL THESIS

ORIJINALLIK RAPORU

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# **ETHICS COMMITEE APPROVAL**



BİLİMSEL AKAŞTIRMALAR ETIK KURULU

11.10.2018

Sayın Prof. Dr. İsmail Sıla

Bilimsel Araştırmalar Etik Kurulu'na yapmış olduğunuz YDÜ/SB/2018/195 proje numaralı ve "Tıp Fakültesi Öğrencilerinin Hizmet Kalite Algıları ve Öğrenci Sadakatleri ile Memnuniyet Arasındaki İlişki: Akdeniz Bölgesi Örneği" başlıklı proje önerisi kurulumuzca değerlendirilmiş olup, etik olarak uygun bulunmuştur. Bu yazı ile birlikte, başvuru formunuzda belirttiğiniz bilgilerin dışına çıkmamak suretiyle araştırmaya başlayabilirsiniz.

Doçent Doktor Direnç Kanol

Bilimsel Araştırmalar Etik Kurulu Raportörü

Direnc Kanol

Not: Eğer bir kuruma resmi bir kabul yazısı sunmak istiyorsanız, Yakın Doğu Üniversitesi Bilimsel Araştırmalar Etik Kurulu'na bu yazı ile başvurup, kurulun başkanının imzasını taşıyan resmi bir yazı temin edebilirsiniz.



16.10. 2018

Sayın Prof. Dr. İsmail Sıla

Bilimsel Araştırmalar Etik Kurulu'na yapmış olduğunuz YDU/SB/2018/195 proje numaralı ve "Tıp Fakültesi Öğrencilerinin Hizmet Kalite Algıları ve Öğrenci Sadakatleri ile Memnuniyet Arasındaki İlişki: Akdeniz Bölgesi Örneği" başlıklı proje önerisi kurulumuzca değerlendirilmiş olup, etik olarak uygun bulunmuştur.

Yakın Doğu Üniversitesi

Bilimsel Araştırmalar Etik Kurulu Başkanı