

**REPUBLIC OF TURKEY**  
**ISTANBUL GELISIM UNIVERSITY**  
**INSTITUTE OF GRADUATE STUDIES**  
Department of Business Administration

**THE EFFECT OF SERVICE QUALITY ON STUDENT  
SATISFACTION IN HIGHER EDUCATION SERVICE  
(COMPARING BETWEEN PUBLIC UNIVERSITIES  
AND PRIVATE UNIVERSITIES IN TURKEY)**

Master Thesis

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Supervisor

Prof. Dr. Anton Abdulbasah KAMIL

**Istanbul – 2021**



## THESIS INTRODUCTION FORM

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## **DECLARATION**

I hereby declare that in the preparation of this thesis, scientific ethical rules have been followed, the works of other persons have been referenced in accordance with the scientific norms if used, there is no falsification in the used data, any part of the thesis has not been submitted to this university or any other university as another thesis.

Salma Hussein

.../.../2021



**TO ISTANBUL GELISIM UNIVERSITY**  
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The thesis study of BUSINESS ADMINISTRATION titled as THE EFFECT OF SERVICE QUALITY ON STUDENT SATISFACTION IN HIGHER EDUCATION SERVICE (COMPARING BETWEEN PUBLIC UNIVERSITIES AND PRIVATE UNIVERSITIES IN TURKEY) has been accepted as MASTER THESIS in the department of BUSINESS ADMINISTRATION by out jury.

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## ÖZET

Bu çalışmanın amacı, özel ve devlet üniversitelerinde Algılanan hizmet kalitesi, algılanan değer, İmajın yabancı öğrenci memnuniyeti üzerindeki stratejilerini ve etkisini ve nasıl artırılabilirliğini değerlendirmek, analiz etmek ve yabancı öğrenci memnuniyetinin sonuçlarını belirlemektir. Özel Üniversiteler stratejisinin etkisi yabancı öğrencilerin memnuniyetinde önemli bir rol oynar ve memnuniyet ile Özel Üniversitelerin dikkate alması gereken davranışsal sonuçlar arasında güçlü bir ilişki vardır. Bu araştırmanın amaçları Üniversitelerin Stratejilerini değerlendirmek, hizmet kalitesinin öğrenci memnuniyeti üzerindeki etkisini göstermek ve üniversite imajının öğrencilerin bağlılığı ve memnuniyeti üzerindeki etkisini tartışmaktır. Bu çalışmada üniversite imajı, hizmet kalitesi, algılanan değer, öğrenci memnuniyeti ve öğrenci bağlılığı kavramları incelenmiştir. Uygulamada anket yöntemi kullanılmıştır. Araştırma alanı Gelişim Üniversitesi (özel üniversite) ve İstanbul Üniversitesi (Devlet üniversitesi) öğrencilerinden oluşmakta olup, 205 anketten oluşan bir örneklem grubunu oluşturmaktadır. Hipotez testi sonuçları, yükseköğretim kurumlarında hizmet kalitesinin öğrenci memnuniyeti üzerinde olumlu ve anlamlı bir etkisinin olmadığını göstermektedir. Yükseköğretim kurumlarında üniversite imajının öğrenci memnuniyeti üzerinde olumlu ve anlamlı bir etkisi vardır. Yüksek öğretim kurumlarında algılanan değer öğrenci memnuniyeti üzerinde olumlu yönde anlamlı bir etkisi vardır. Yükseköğretim kurumlarında öğrenci memnuniyetinin öğrenci bağlılığı üzerinde pozitif ve anlamlı bir etkisi vardır. Ayrıca Özel üniversite öğrencilerinin Devlet üniversite öğrencilerine göre Hizmet Kalitesi, Üniversite İmajı, Algılanan Değer, Müşteri Memnuniyeti ve Müşteri bağlılığından daha fazla etkilendiklerini tespit ettik.

**Anahtar Kelimeler:** Eğitim, Yüksek Öğretim, Hizmetin Kalitesi, Değer, Memnuniyet, Bağlılık, Kalite, İmaj.

## SUMMARY

The purpose of this paper is to evaluating and analyze the strategies and influence of Perceived service quality, perceived value, Image on foreign student satisfaction, and how to increase it and determine the consequences of foreign student satisfaction in private universities and public universities, The effect of the private Universities strategy plays an important role in the satisfaction of the foreign students and there is a strong relationship between satisfaction and behavioral consequences that Private Universities should consider about it ,The objectives of this research are evaluating the Universities Strategies and Showing the impact of service quality on the students' satisfaction, and Discuss the impact of universities image on the students' loyalty and satisfaction, In this research, university image, service quality, perceived value, student satisfaction, and student loyalty concepts are examined. In practice, the survey method was used. Area of research is composed of students of Gelisim university (private university) and Istanbul university (Public university) which composed a sample group of 205 surveys, The hypotheses test results show that, There is no positive significant effect of service quality on student satisfaction in higher educational institutions, There is a positive significant effect of university image on student satisfaction in higher educational institutions ,There is a positive significant effect of the perceived value on student satisfaction in higher educational institutions , There is a positive significant effect of student satisfaction on student loyalty in higher educational institutions, Also I found that Private university students affected by the Service Quality, University Image, Perceived Value, Customer Satisfaction and Customer loyalty more than Public university students.

**Keywords:** Education, Higher education, Service quality, Value, Satisfaction, Loyalty, Quality, Image.



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## ABBREVIATIONS

<b>AGFI</b>	: Adjusted Goodness – of- fit statistic
<b>CFI</b>	: Comparative Fit Index
<b>DF</b>	: Degree of Freedom
<b>GFI</b>	: Goodness -of- fit statistic
<b>IFI</b>	: Incremental Fit Index
<b>NFI</b>	: Normal Fit Index
<b>PGFI</b>	: Parsimony Goodness – of – Fit Index
<b>RMSEA</b>	: Root Mean Square Error of Approximation
<b>RMR</b>	: Root Mean Square Residual
<b>SEM</b>	: Structural Equation Modelling
<b>SRMR</b>	: Standardized Root Mean Square Residual
<b>STD. DEVIATION</b>	: Standard Deviation
$\chi^2$	: Model Chi - Square

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## **PREFACE**

Thank you for every one help me, support me, encourage me and give me an opportunity for being something good in the future.



# CHAPTER ONE

## INTRODUCTION

Education is the most vital industries and gambling an important position in national development. In relation to the significance of training, there's a correlation between training and financial growth, additionally the training region offers the society through human resource. In the remaining ten years the arena of Higher Education in Turkey has suffered pretty profound changes, a growth took place in the variety of establishments running on this quarter and therefore a growth in the variety of college students, additionally the Private education region is developing rapidly over the last few year, whereas the quantity of personal universities status quo rises rapidly. The intention of the non-public Higher training enterprise is to provide an opportunity street map for tertiary training for people who didn't get admission into nearby universities and for people who intend to move for better training locally.

This way, the arena of Higher Education in Turkey faces greater aggressive marketplace Structures, consequently it turns into essential to investigate and take a look at student's delight in better training, as establishments of better training ought to significantly gain from being capable of growth the extent of college students delight, delight can provide an organization with a kind of aggressive advantage, especially at a positive phrase of mouth (File & Prince, 1992), new customers (Bolton & Drew, 1991) , Lowering consumer defection rates (Mittal & Kamakula, 2001), economic benefits (Anderson &Mittal, 2000)

### 1.1 Literature Review

Since the creation of the idea of purchaser delight by Cardozo (1965), it has grown to be a subject of massive importance, with inside the fields of each educational studies and organization and company management. Oliver (1980) sees purchaser delight as a comparative judgment among expectancy and obtained carrier, in accordance to (Williams, 1982). After the use of the brand, the patron compares perceived real overall performance with predicted overall performance. Confirmation outcomes whilst the 2 performances match. A mismatch will reason a positive (perceived overall performance exceeds expectancies) or a negative (perceived overall

performance falls underneath expectancies) disconfirmation. In turn, confirmation/disconfirmation ends in an emotional response called delight/dissatisfaction. (Parasurman et al, 1988) Show that delight is a precise mental kingdom ensuing whilst the emotion surrounding disconfirmed expectancies is coupled with the purchasers' previous emotions about the intake experience, in general, the patron delight is the end result of interaction among the purchasers repurchase expectancies and put up buy assessment

### **1.2 The Research Problem:**

The purpose of this paper is to evaluate and analyze the strategies and influence of Perceived service quality, perceived value, Image on foreign student satisfaction, and how to increase it and determine the consequences of foreign student satisfaction in private universities and public universities. The effect of the private Universities strategy plays an important role in the satisfaction of the foreign students and there is a strong relationship between satisfaction and behavioral consequences that Private Universities should consider about it.

### **1.3 The Research Questions:**

- a) How to increase the communication channels between the university and students?
- b) How the university can interact properly with the students complains and problems?
- c) What the Suggested way to improve the revenue of the university with accordance to increasing the quality of the education?
- d) What the determinants of students Satisfaction?
- e) What's the relationship between student satisfaction and organizational productivity?
- f) What kind of human resources development impact on productivity?

#### **1.4 The Research Hypothesis:**

**H1:** service quality has a positive effect on student satisfaction.

**H2:** University image has a positive effect in student satisfaction.

**H3:** Perceived value has a positive effect on student satisfaction.

**H4:** Student satisfaction has a positive effect on student loyalty.

#### **1.5 Research Approaches:**

A Case Study methodology on Private Universities with Regard to their Educational Domains. In Turkey, Strategic Planning was made law with the State Financial Management and Controlling Law, 5018, which became compulsory for the state institutions. The objective of this regulation is to strengthen the relationship between budget and the institutions' plans and policies (Strategic Planning, 2015). In Strategic Planning, there are statements of vision and mission, objectives, and strategies. The preparation of the Strategic Planning agenda, which has become a kind of "must" for state institutions and public universities, has been the responsibility of the universities as a whole in recent years.

#### **1.6 Research limitation and Future Research**

In this study, the impact of charge has now no longer been studied as decide of scholar satisfaction, so a destiny region have to seek with inside the function of charge and different determinants including expectation and beyond experience, and need to expand this work to consist of that, Hence, a destiny region of research is to repeat this study, looking for opportunity signs to degree the constructs.

#### **1.7 Reasons for Choosing the Subject:**

- a) Education is one of the most important industries and playing a vital role in national development.
- b) The correlation between education and economic growth.
- c) The education sector provides the society by human resource.

- d) The sector of Higher Education in Turkey faces more competitive market Structure.
- e) It's fundamental to analyze and study student's satisfaction in higher education.
- f) Institutions of higher education could greatly benefit from being able to increase the level of student's satisfaction.
- g) Satisfaction can provide an institution with a type of competitive advantage.
- h) Private education sector is growing rapidly over the past few year.
- i) Determine the consequences of student satisfaction in Turkish universities.
- j) Student's satisfaction is important to attract and retain customers.

### **1.8 Research Objectives:**

- a) Evaluating the Private Universities Strategies.
- b) Clarify the aim of the private Higher education industry.
- c) Showing the impact of service quality on the students' satisfaction.
- d) Discuss the impact of private universities image on the students' loyalty and satisfaction.
- e) Suggested ways in which the university can attract more students.
- f) Suggested way to improve the revenue of the university with accordance to increasing the quality of the education.
- g) Clarify different challenging that facing the development of high school education especially in the private sector.
- h) Explain the various obstacles that are holding many students back in their higher education.

### **1.9 Research Importance:**

- a) The relationship between student satisfaction and organizational productivity.
- b) Increase the communication channels between the university and students.
- c) The Suggested way to improve the revenue of the university with accordance to increasing the quality of the education.
- d) Kind of human resources development impact on productivity.

- e) The Suggested way to improve the revenue of the university with accordance to increasing the quality of the education.
- f) The determinants of students Satisfaction.
- g) University image and its positive effect in student satisfaction.

### **1.10 Research Concept and Definitions:**

**Service Quality Definition:** Service quality is the value of a service to customers. This is inherently subjective as it is driven by the needs, expectations and perceptions of customers. As such, it is typically measured by quantifying customer surveys. The following are common types of service quality. A reliable service such as an airline that's usually on time,( Parasuraman, A. Zeithaml, V. A. and Berry, L. L., 1988).

**Service definition:** a government system or private organization that is responsible for a particular type of activity, or for providing a particular thing that people need,(Cambrige Dictionary).

**Quality Definition:** a characteristic or feature of someone or something, (Merriam-Webster).

**Value Definition:** the importance or worth of something for someone, (Cambrige Dictionary).

**Image Definition:** the way that something or someone is thought of by other people or a picture in your mind or an idea of how someone or something is, (Cambrige Dictionary).

**Satisfaction Definition:** fulfilment of one's wishes, expectations, or needs, or the pleasure derived from this, (Potter, James J. and Cantarero, Rodrigo, 2014).

**Loyalty Definition:** firm and not changing in your friendship with or support for a person or an organization, or in your belief in your principles, (Cambrige Dictionary).

**Improvement Definition:** an occasion when something gets better or when you make it better, (Cambrige Dictionary).

**Strategy Definition:** a detailed plan for achieving success in situations such as war, politics, business, industry, or sport, or the skill of planning for such situations, (Cambrige Dictionary).

**Evaluation Definition:** the process of judging or calculating the quality, importance, amount, or value of something, (Cambridge Dictionary).

In today's competition, the important thing to sustainable aggressive benefit lies in delivering excessive best offerings so one can in turn bring about happy customers, therefore, there isn't always even an iota of doubt regarding the significance of provider best because the final intention of provider companies during the global.

Many researches pointed out the dating among provider best and client pride, (Fornell et al, 1996) Concluded that service best is one of the maximum critical determinants of the American Customer Satisfaction, (Parasurman et al, 1988) display that service best is the discrepancy Between the expected services and perceived service : When expected service is greater than perceived service, perceived best is much less than high-satisfactory and could generally tend towards totally Unacceptable best, with improved discrepancy among ES and PS and When expected service equal to perceived service , perceived quality is high-satisfactory, and when expected service is less than perceived service quality, with improved discrepancy among expected service and perceived service. As the physical environment, interplay and support, comments and Assessment, and administration, are robust elements which bring about college students' pride, the provider best and perceived price have wonderful impact on scholar pride in accordance to (Ismail & Parasurman, 2009), this ends in H1

**H1: service quality has a positive effect on student satisfaction.**

The impact of company picture has been studied with the aid of using many researchers, (Helegsen & Nettet, 2007) argue that an picture is universal impact made at the minds of the general public approximately a firm, together with commercial enterprise name, architecture, variety of products/services, and to the impact of fine communicated with the aid of using each character interacting with the firm's clients, (Torpor, 1983) stated that universities should compete thru picture want to realize numerous things:

1. The university's picture compared to opposition universities
2. The inner and outside public notion to the university's picture additionally, a picture is one of the maximum crucial determinants of customer delight and loyalty according (Alves&Raposo, 2010), this results in H2.

**H2: University image has a positive effect in student satisfaction.**

The client's average evaluation of the application of a product primarily based totally on perceptions of what's obtained and what's given (Zeithaml, 1988), while (Bolton&Drew, 1991) display that A client's evaluation of cost relies upon on sacrifice (i.e., the economic and nonmonetary costs related to utilizing the service), Customer characteristics, customer intention, while (Helgesen&Nesset, 2007) concluded that perceived cost has a massive impact on scholar satisfaction, this ends in H3.

**H3: Perceived value has a positive effect on student satisfaction.**

Customer loyalty is the conduct of customers to preserve a relation with an institute thru buy of its services and products (Duffy,2003), 4 traits of loyalty, as recognized via way of means of (MacLory & Barnett, 2000) consist of:

(1) steady sample of repurchase sports; (2) buy of numerous services and products from the institute; (3) voluntarily selling the institute; and (4) a popular resistance to the promotional sports of opportunity institutes, (Zeithaml .et al,1996) show that Loyalty can be manifested in more than one way; for example, via way of means of expressing a desire for a corporation over others, via way of means of persevering with to buy from it, or via way of means of growing commercial enterprise with it in the future, while (Oliver,1999) argue that loyalty a deeply held dedication to rebuy or re patronize a desired product/carrier continuously with inside the future, this results in H4.

**H4: Student satisfaction has a positive effect on student loyalty.**

**1.11 Research Methodologies**

**1.11.1 Method of analysis**

Regarding the kind of statistical analysis that is suitable for the research, The Structural Equation Modeling will be more suitable in the research as it used to measure and analyze the relationships of observed and latent variables , and using Multi Regression Analysis, Correlation as part of structural equation modeling test,



also using Factor Analysis and Cronbach alpha to see which factor will have the big impact, As Cronbach alpha and correlation analysis is used for check reliability and validity of the questionnaire, also check the test of the difference between variables.

### **1.11.2 Measures and questionnaire design**

Measures of functional and technical service quality (1=very low and 5=very high) in Higher education was developed in an earlier phase of this study (Teeroovengadam et al., 2019). Items used to operationalize student satisfaction were adapted from (Brady et al. (2002) and were measured on a five-point Likert scale where 1 = “strongly disagree” and 5 = “strongly agree.” Perceived value was measured using items borrowed from Ryu et al. (2008). These items were measured using a five-point Likert scale, where 1 represented “very poor” and 5 represented “excellent.” Image was measured using five indicators adopted from (Lai et al. (2009)). Loyalty was measured using items on a scale where 1 = “very unlikely” and 5 = “very likely.” This scale was adopted from Zeithaml et al. (1996).

### **1.11.3 Sample’s Definition**

Having described the pupil because the maximum important consumer of the training service, so as to check the proposed model, it was essential to choose a pattern of college students in better training from both public universities & private universities in Turkey.

### **1.11.4 Method of Data Obtainment**

Given the supposed targets anticipated to be reached with this research, a survey the usage of questionnaires can be the chosen manner for collecting data. And information can be gathered using a suitable sampling method to check a theory comprising courting amongst variables, instead of making generalization (Balaji et al., 2016) Questionnaire will administer to college students of diverse higher education institutions. The next step after gets the sample is doing the pilot study from the sample, then test the reliability using Cronbach alpha and validity using correlation analysis.

### 1.12 The Research Scope:

Refers to the parameters under which the research will cover and it closely connected to the framing of the problem, here our problem is evaluating the Private University strategy to determine whether it meets the required satisfaction from the students. So, the scope of the research will include the high graduate students in Turkey. I can reasonably say that there are micro and macro factors that affect competition among higher-education institutions. Education, which can be seen as one of these factors, has a great impact on the competition among universities (Kaldirimci, 2003, p.119). Increasing the number of students is only feasible with correct strategies and implementations within the services of education. In order to get competitive advantage and to implement these sorts of strategies, the current state of the institutions needs to be examined throughout the world, education has had social and economic outcomes (Fried et al., 2006, p. 6).

The positive contributions of education, particularly in the fields of higher education, are recognized as being economically and socially necessary all over the world. However, it is critical that I place an emphasis on the contextual framework of education itself before I can mention the importance of education in higher education Institutions.

### 1.14 Research Work Plan

Table 1: Research Work Plan

	Summer	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Background reading	-----										
Proposal/initial meetings		-----									
Literature review		-----									
Research methods planning			-----								
Data collection					-----						
Check on progress / Data analysis						-----		-----			
Submit some draft work		-----			-----						
Discuss conclusions						-----		-----			
Further drafts						-----					
Final meeting								-----			
Final draft									-----		

## **CHAPTER TWO**

### **SERVICE QUALITY CONCEPT**

#### **2.1 Introduction**

The big challenge facing service institutions today is the increase in competition, as institutions and companies no longer only care about local competition, they have to be aware of the danger of global competition, and Institutions will be able to keep up with the global developments through Consolidate the quality of its products and services. Service institutions in the competitive market cannot produce and continue if they are unable to attracts the attention of customers to it, maintains them, and addresses the complaints they raise Universities and higher institutes are classified as service institutions, so they need to show interest especially for students who are its real clients, and it tries to provide a good level of service quality for their satisfaction.

The quality measurement in higher education has increasing importance with its stakeholders, as every one of them has specific own view of quality e.g. (owner, students, government, professionals) because every one of them has a particular needs and requirements. The service quality in the higher education has a great consideration from different researchers Because of its importance and consequence. (Annamdevula and Bellamkonda, (2016) p.447-448), Service quality in higher education can be define as “the difference between what a student expects to receive and his/her perceptions of real received”. (O’Neill and Palmer (2004) pp. 39-52.)

#### **2.2 Service Concept**

The service concept has been defined in a lot of different ways. Heskett (1986) defines it as the way in which the “organization would like to have its services perceived by its customers, employees, shareholders and lenders”, It has also been defined as the elements of the service combination, or what Collier (1994) calls the “customer benefit package”. The service concept plays a vital role in service design and development, but while the term is used commonly in the service design and new service development, unexpectedly little has been written about the service concept itself and its important role in service design and development.

It is known that services are distinguished by many advantages that distinguish them from goods, which makes their marketing activities more complex, and among these advantages is that services are intangible products, cannot be moved, cannot be

stored, and cannot be separated from the provider, they disappear as soon as they are used, and they are not typical, and these features have made the management process of their marketing different in many aspects from the marketing of tangible goods.

Clark et al. (2000), and Johnston (2001) further define the service concept as:

1. Service operation: the way in which the service is transfer;
2. Service experience: the customer's direct experience of the service;
3. Service result: the advantage and results of the service for the customer and
4. Value of the service: the benefits the customer.

Edvardsson and Olsson (1996) refer to the service concept as the first model for service and define it as the "detailed description of what is to be done for the customer (what needs and wishes are to be satisfied) and how this is to be achieved".

### **2.3 Service section**

(Zeithaml. et al,1985) divided the services into four divisions, High education as an example to illustrate:

1. Service :

It is the intangible thing that a service organization provides to its customers.  
Its example is: intellectual knowledge provided by universities to their clients.

2. Service planning:

Designer part Educational programs by determining the plans and placement of study plans.

3. Service environment:

It is the physical field surrounding the service, such as: the university campus, the educational halls.

4. Service delivery:

It is how to provide the service, for example the administrative and academic staff of the university dealt with the students.

### **2.4 Service quality concept:**

Researcher have spoken massively about Service Quality, and it has become an established concept because of the effective requirement of business globally. Service quality is defined as "a means by which to measure the match between the level of service performance and the customer's expectations" (Parasuraman, A., et al, 1985,

pp. 41–50), Because of the importance and consequences of the Service Quality in the educational sector it is considered by many researchers, as Service Quality in higher education is complex, multipart concept and quality measurement is rebelling with increased importance on education responsibility to its partner. Every partner in higher education (e.g., students, government, employees, professionals) has own view of quality because of his specific needs. Students considered as primary consumers or customers in higher education as they are obtain and use training and education offered by higher education, Service Quality in higher education can be consider as “the difference between what students expects to get and his/her perception of real delivery” O’Neil and Palmer (2004), The Service quality can be divided into two main parts (Gronroos, Christian (1978))

1. Technical service quality: It refers to the quantitative aspects of service, in other words, those aspects that can be expressed quantitatively.
2. Functional quality of service: it refers to the manner in which the service is performed, in other words, the method by which it is performed or transfer of service to the customer.

### **2.5 The attributes of Services comparing to products**

The service evaluation system consists of: comparing the outputs and the technique of performance, and as a result, it's far divided Service quality can fall into primary types:

1. Quality of technical service: It consists of the final result that the purchaser has received.
2. Quality of practical service: It consists of the manner of handing over the service to the consumer (Gronroos, 1978).

While Parasuraman (1988, et al) indicated that the quality of services is greater complex than product assessment. Because while a consumer purchases a product, the physical method that may be used in evaluating the service are much less than Used in evaluating the product, and as a result, the consumer makes use of different tools to assess the quality of service.

As I have 3 dimensions of service quality:

1. Physical quality: consists of buildings, gadgets and equipment.

2. Institutional Quality: It consists of the mental picture of the service institution, whether or not it's far negative or Positive.
3. Interactive quality: which consists of: Personal verbal exchange among the worker and the client.

The researcher believes that the distinction among services and products is summarized within side the following points, Evaluating services is greater hard than comparing products, as it relies upon on non-material method which includes prices and How to carry out the service, when a consumer evaluates a product, he relies upon on one factor, and this is the final advantages that meet an unhappy need, however while he's comparing a service, it's far primarily based totally on fundamental factors,,: Final outcome, Method of acting the service, and Process transport

### **2.6 Dimensions of service quality:**

Concerning the dimensions of service quality, (Parasuraman, Al et. 1988) provide five dimensions were used as criteria to judge service quality, namely:

a) Tangibles:

It includes material means, tools, and outward appearance of people, in other words anything It affects its perception as the quality of service.

b) Reliability:

It consists of the capacity to offer the consumer with an accurate, correct, and dependable service, and for example this is within side the area of better schooling services, Lecturer's dedication to lecture times.

c) Responsiveness:

It consists of the preference of the executive group to help the client, and to offer services quickly.

d) Empathy:

It shows the degree of consumer care and interest especially and interest to his issues and work on Finding answers to it in sophisticated humane ways

e) e. Assurance:

It consists of the quantity of information that personnel have, and their education to make the consumer experience confident and security.

### **2.7 Dimensions of service quality in higher education institutions:**

Many studies have discussed the dimensions of service quality in the field of higher education based on main metrics (Parasuraman et al 1988). I can indicate that the dimensions of quality are as follows:

The physical environment and the teaching aids, the fair evaluation of the student by his teachers, the extent of his understanding Administration for student needs, curriculum contents, Services provided by the administrative body to students, physical equipment, especially with regard to with information technology, academic support by university professors, the appearance of the campus, Library, classrooms, curriculum contents. In addition, the relationship between the university professor and the students is the most important dimension of the quality of educational service, The lecturer's response to students' questions, either directly through receiving them in the library, or otherwise direct via e-mail, his understanding of the special needs of students, and his commitment to timetables.

### **2.8 The relationship between service quality and profit:**

Educational institutions, especially those that do not receive government support, need to be strengthened its efforts to maintain its financial stability and achieve financial abundance in order to expand its business. In order to achieve this goal, the concept of service quality must be strengthened. Evidence has emerged Strong on the relationship of quality to profit summarized by (Zeithaml et al. 1996).

The effects of implementing quality improvement programs on increasing profits are summarized as follows:

- a) Reduction in cost as a result of increased operating efficiency, and economic savings.
- b) Attracting new clients, as a result of positive feedback from satisfied clients.
- c) The ability to raise the prices of services, because they are good and worthy from the customer's point of view.
- d) Retaining the current customer for the largest possible time, and the longer the customer stays, the greater the profitability.

### **2.9 Conclusions:**

In this chapter, the concept of service quality has been studied, as perceived service quality represents the difference between customer perception and their expectations, and it is represented in five main dimensions: (Tangible, Assurance, Empathy, Responsiveness, Reliability), The role of perceived service quality in achieving customer satisfaction and achieving profits was also discussed.

## **CHAPTER THREE**

### **DETERMINANTS OF CUSTOMER SATISFACTION**

#### **3.1 Introduction:**

The issue of customer satisfaction has come to be one of the maximum essential subjects in present day marketing thought, And consumer behavior research, and in general it could be observed that if there's customer satisfaction with the product After a particular service, or service after use, they're much more likely to inform others approximately their experience, and so on They take part in talking positively approximately the service, and in return, the customers dissatisfaction is evident, main to Diversion from the service issuer and negative participation in talking approximately the service.

#### **3.2 The Concept of Customer Satisfaction**

(Parasuraman et al. 1988,) Defined the customer's satisfaction that it is a judgment or towards a general result from different levels of service quality, while being satisfied the customer is a reaction that comes after the purchase decision is made, which summarizes the customer's love or hatred for the product, or the service.

(Oliver, R. L. 1980), divided Satisfaction into three basic elements:

- a) Expectation: is beliefs or predictions about characteristics that the customer wants to be in the product.
- b) Perception: It is the level of performance that the customer perceives when the commodity is used or obtained the service.
- c) Negative or positive match: Correspondence occurs when actual performance is equal to what is expected.

As for the mismatch, it occurs when the performance of the product deviates from the expectations of the customer, and it becomes a deviation Positive if the product's performance is greater than the customer's expectations, and it will be negative if the product is smaller than the customer's expectations.



### **3.3 Customer Satisfaction Indicators**

Companies have shown a shift in their goals in the past few years, and this is due to the intensity of competition increased, and the dynamic development in most sectors.

Bringing in new customers in the past, these days marketing strategies are focusing on protecting and improving customer loyalty. The reason for this is a good focus on awareness of economic risks caused by customer satisfaction and loyalty, the main product of customer satisfaction is their loyalty, and that companies with a larger share of loyal customers profit from increased repurchase rates, willing to pay higher prices. (Bruhn, M. and Grund, M. (2000).

### **3.4 Determinants of customer satisfaction**

Most researchers agreed that the determinants of customer satisfaction can be summarized in the following dimensions:

#### **3.4.1 Perceived quality of service**

Controversy still exists among researchers about the nature of the relationship between satisfaction and perceived quality of service, and about whether the satisfaction is a determinant of the quality of service, or a result of the results of service quality.

While (Fornell, al. 1996) considered that perceived quality of service is one of the most important determinants of American Customer Satisfaction, (Parasuraman, al. 1988) defined quality of service as the conflict between the customer's perceptions of the quality of service he has received, and his expectations in terms of its ultimate benefits, and a method it is performed.

The researcher believes that the relationship between perceived quality and customer satisfaction is a direct one, a higher level of perceived quality of service leads to higher rates of service satisfaction.

#### **3.4.2 The mental image**

The researchers disagreed about the extent of the congruence between the two concepts of image of dignity and fame. they considered that the golden picture and fame were two sides of the same coin, while others considered that, the mental image is what builds fame.

(Fombrun, C. J. and Van Riel, C. B. M. 1997) He defined 6 views of the organization fame:

- a) From an accounting point of view: goodwill is an intangible asset that can give a monetary value.
- b) From an economic point of view: it is a group of characteristics that constitute public perceptions the internal and external of the organization.
- c) From a marketing point of view: How does the end user or customer view the organization.
- d) From an institutional point of view: How do employees perceive the organization in which they work.
- e) From a social point of view: viewed as an evaluation of overall performance in relation to expectations the audience of the organization.
- f) From a strategic point of view: a group of assets that are difficult to manage because they are based on perception.

The researcher believes that the image is one of the most important determinants of customer satisfaction a strong mindset maintains a high level of worker satisfaction, even if the quality of services is not acceptable.

### **3.4.3. Perceived value**

(Zeithaml, 1988) defined it as the trade-off between a consumer's evaluation of the benefits obtained as a result of his use of the service, he indicated the costs that he has made, and indicated that the perceived value has great impact on customer satisfaction.

### **3.4.4 Expectation**

Knowing the level of customers' expectations is the reason behind the different levels of service that have been made provided by two organizations operating in the same industry.

(Zeithaml, al et. 1996) modified form for customer expectation specifiers in which they indicated that the service expected consists of two parts:

**A-** Desired service: It is the level of performance that the customer wants to obtain from the product, its determinants are summarized by personal needs, previous

experience, the transmitted word, the price, physical elements, marketing communications.

**B-** An acceptable service: the minimum expectations that the customer accepts to be fulfilled, and its determinants are summarized perceived alternatives, predicted service, and ambient conditions.

A separate area between the desired service and the acceptable service is the area called the forgiveness area, tolerance of zone broadens and narrows according to the relative importance of each dimension of service quality.

### **3.4.5 Price**

(Fornell, 1992) Define customer satisfaction as: The relationship between anticipating the pre-purchase process. And perceived performance after the procurement process, and that price and quality play a major role in determining satisfaction of the Client.

### **3.5 The Relationship Between Customer Satisfaction and Loyalty**

Fornell (Fornell Al et. 1996) concluded that increasing customer satisfaction leads to lesser his protest, customer complaints and increased loyalty. The researcher believes that the quality of service can directly affect customer loyalty, indirectly via customer satisfaction.

### **3.6 The relationship between service quality and customer loyalty**

A study (Zeithaml, AL. 1996) found a significant relationship between quality levels of the service and the behavioral direction of the customer, so that the customer's perception of better service quality leads loyalty increase.

### **3.7 Conclusions**

In this chapter, I dealt with the concept of customer satisfaction and its determinants, as it represents customer satisfaction, the customer usually feels bad or disappointed as a result of comparing the perceived performance of the service with expectations, the determinants of customer satisfaction were also addressed, which

were summarized in perceived service quality and value perception, mental image, expectation, price. Also, the relationship between service quality and customer satisfaction, on the one hand, and customer loyalty, on the one hand, was addressed, another aspect is that the quality of service and customer satisfaction are among the determinants of customer loyalty.



## CHAPTER FOUR

### METHODOLOGY

#### 4.1 Introduction

This chapter deals with the field study, hypothesis testing, analysis and discussion of the results. The data collected via survey on university students were analyzed using SPSS program and AMOS program 26.0 statistics package program to test the hypothesis in this study. A number of statistical methods have been used that are consistent with the research objectives and hypotheses:

**Reliability and Validity of Scale:** the researcher used SPSS program to do the test to ensure consistency and internal consistency of the terms used in the research criteria, using Cronbach alpha.

**Descriptive analysis:** The researcher used relied on frequency tables, percentages, averages, standard deviations, and he described the research sample based on the variable's demographic, after which the researcher tests the hypotheses using appropriate statistical methods simple regression test, multiple regression, and an analysis of variance and T-test.

**Factor analysis:** The researcher used factor analysis in order to ascertain the extent of a match between the dimensions of service quality in the current study with the dimensions of service quality.

#### 4.2 The Model

The model to be tested (Figure 1) results from the hypothesis established and illustrate the antecedents (of main variables) which are Student Satisfaction, Service Quality, The university Image, Perceived Value, and the Student Loyalty as the main consequences (latent variable) of student satisfaction(mediation).

**Research Variables**

**Independent Variable:**

University image

Service quality

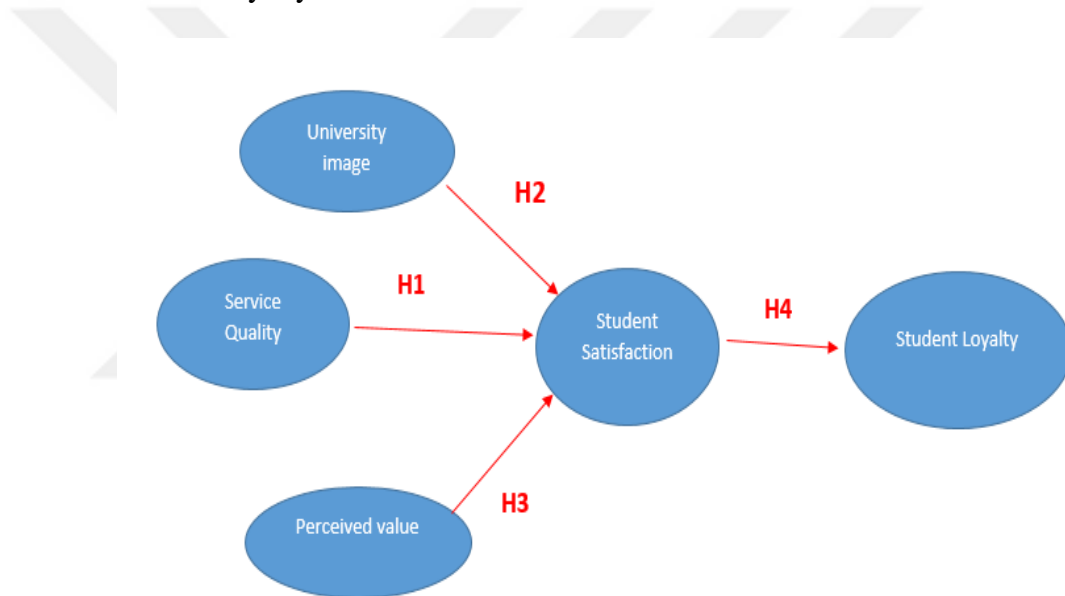
Perceived Value

**Mediation:**

Student Satisfaction

**Dependent variables:**

Student loyalty



**Figure 1:** Conceptual Research model

**4.3 Sample design and data collecting techniques:**

Given the intended objectives expected to be reached with this study, as the key concept of this study are service satisfaction and service loyalty.

A survey using questionnaires was the convenience sampling strategy, as it is considering a suitable strategy to test a theory regarding to the comparison relationship between variables rather than making generalization (Balaji et al .2016), Having defined the student as the most important customer of the education service and in

order to test the conceptual research model, it was necessary to select a sample of students in higher education. The questionnaire was administered to students' bachelor, master students, and PhD students in higher institute of Gelisim University and Istanbul University. The students were briefed about the study and the questionnaires were distributed and were self-completed. The research worked with a finite population and used Yamane formula (Yamane, Taro. 1967) for determining the sample size is given by:

$$n = \frac{N}{1 + N * (e)^2}$$

n - the sample size

N - the population size

e - the acceptable sampling error

The research it considers  $e = 0.07$ , as an acceptable margin of error used by most survey researchers typically falls between 4% and 8% at the 95% confidence level. Lind, Douglas A., Marchal, William G., Wathen, Samuel Adam (2018), as it is affected by sample size, population size, and percentage, In light of recommendation provided in the extent literature, a sample of 205 respondent was targeted and a total of 205 questionnaires were distributed to bachelor, master and PhD students.

#### **4.4 Measures questionnaire design:**

A questionnaire subdivided in 6 parts: sample characterization, service quality, university image, perceived value, student satisfaction, and student loyalty.

##### **4.4.1 Service Quality:**

Measures of functional and technical service quality in higher education were developed in this study (Teeroovengadum et al.,2019), questionnaire consisting of 9 terms:

**SQ1** Attitude and behavior of administrative staffs

**SQ2** Administrative processes

**SQ3** Learning setting

**SQ4** General Infrastructure

**SQ5** Attitude and behavior of academics

**SQ6** Curriculum

**SQ7** Pedagogy

**SQ8** Competence of academics

**SQ9** Support facilities

These items were measured using a five – point Likert scale, where 1 represented “very low “and 5 represented “very high”.

#### **4.4.2 University Image:**

Image was measured using five indicators adapted from Lai et al. (2009).

For these items, respondents were asked to rate their level of agreement on a five – point Likert scale where 1 represented “strongly disagree” and 5 represented “strong agree”, which these items are:

**UI 1.** My University has a good academic reputation.

**UI 2.** Compared to other universities my university has a good image.

**UI 3.** Research output from my university is highly rated.

**UI 4.** Qualification gained from my university is externally perceived as being value.

**UI 5.** My University is a prestigious university.

#### **4.4.3 Perceived Value:**

Perceived value was measured using items borrowed from Ryu et al. (2008), questionnaire consisting of three terms:

**PV1.** Reasonableness of university overall cost.



**PV2.** Overall value you get from your university for your effort.

**PV3.** Overall value you get from your university for your money .  
These items were measured using a five – point Likert scale, where 1 represented “very poor “and 5 represented “excellent”.

#### **4.4.4 Student Satisfaction:**

Items used to enlist student satisfaction were adapted from (Brady et al .2002), and were measured on a five-point Likert scale where 1= “strongly disagree” and 5= “strongly agree”, which they are:

**SS 1.** My choice to enroll at my university was a wise one

**SS 2.** This University is exactly what is needed for higher education studies

**SS 3.** I did the right thing by choosing my university

**SS 4.** I am pleased to be enrolled as a student at my university

**SS 5.** I am enjoying studying at my university

**SS 6.** I am happy with my experience as a student at my university

#### **4.4.5 Student Loyalty:**

loyalty scale was adapted from Zeithaml et al. (1996), and was measured using 4 items on a scale where 1 = “very unlikely “and 5 = “very likely “, which are:

**L 1.** Recommend your university to friends and relatives.

**L 2.** Say favorable things about your university to others.

**L 3.** Choose the same university again if you could start all over.

**L 4.** Attend the same university if you follow another course in future.

#### **4.5 Checking the reliability and validity of the questionnaire used in the research:**

The researcher did the pilot test on 30 sample in order to test the validity and the reliability of the questionnaire before distributed it to the main sample of the research.

Reliability and validity are characteristics of a good scale, they express consistency in performance from item to item, the researcher use Cronbach's alpha factor as a measure of internal consistency for each measure used in the study with the aim of testing the reliability and validity of these measures, it can range from 00.0 (if no variance is consistent) to 1.00 (if all variance is consistent). With all values between 00.0 and 1.00 also being possible.

#### 4.5.1 The reliability coefficient for study scales:

The following tables showing the reliability coefficient for study scales:

**Table 2:** Service quality scale reliability coefficient by Cronbach alpha method

#### Scale: service quality

##### Case Processing Summary

		N	%
Cases	Valid	26	83.9
	Excluded <sup>a</sup>	5	16.1
	Total	31	100.0

a. Listwise deletion based on all variables in the procedure.

##### Reliability Statistics

Cronbac h's Alpha	N of Items
.920	9

The alpha coefficient for the 9 items is 0.920, suggesting that the items have relatively high internal consistency.

(Note that a reliability coefficient of 0.70 or higher is considered "acceptable" in most social science research situation).

**Table 3:** University image scale reliability coefficient by Cronbach alpha method

**Scale: image**

**Case Processing Summary**

		N	%
Cases	Valid	28	90.3
	Excluded <sup>a</sup>	3	9.7
	Total	31	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.898	5

The alpha coefficient for the 5 items is 0.898, suggesting that the items have relatively high internal consistency.

**Table 4:** Perceived value scale reliability coefficient by Cronbach alpha method

**Scale: percived value**

**Case Processing Summary**

		N	%
Cases	Valid	28	90.3
	Excluded <sup>a</sup>	3	9.7
	Total	31	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.844	3

The alpha coefficient for the 3 items is 0.844, suggesting that the items have relatively high internal consistency.

**Table 5:** Customer satisfaction scale reliability coefficient by Cronbach alpha method

**Case Processing Summary**

		N	%
Cases	Valid	28	90.3
	Excluded <sup>a</sup>	3	9.7
	Total	31	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.906	5

The alpha coefficient for the 5 items is 0.906, suggesting that the items have relatively high internal consistency.

**Table 6:** Customer loyalty scale reliability coefficient by Cronbach alpha method

**Scale: loyalty**

**Case Processing Summary**

		N	%
Cases	Valid	26	83.9
	Excluded <sup>a</sup>	5	16.1
	Total	31	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.902	4

The alpha coefficient for the 4 items is 0.902, suggesting that the items have relatively high internal consistency.

#### 4.5.2 The validity coefficient for study scales:

The following tables showing the validity coefficient for study scales:

**Table 7:** Service quality validity test using correlation analysis

		Correlations									
		Attitude and behavior of administrative staffs	Administrative processes	Learning setting	General infrastructure	Attitude and behavior of academics	Curriculum	Pedagogy	Competence of academics	Support facilities	Service quality
Attitude and behavior of administrative staffs	Pearson Correlation	1	.433*	.550**	.671**	.814**	.664**	.560**	.650**	.595**	.861**
	Sig. (2-tailed)		.021	.002	<.001	<.001	<.001	.002	<.001	.001	<.001
	N	28	28	28	28	28	28	27	27	27	26
Administrative processes	Pearson Correlation	.433*	1	.544**	.269	.364	.430*	.500**	.358	.253	.655**
	Sig. (2-tailed)	.021		.003	.166	.057	.022	.008	.067	.203	<.001
	N	28	28	28	28	28	28	27	27	27	26
Learning setting	Pearson Correlation	.550**	.544**	1	.490**	.490**	.630**	.434*	.697**	.526**	.783**
	Sig. (2-tailed)	.002	.003		.008	.008	<.001	.024	<.001	.005	<.001
	N	28	28	28	28	28	28	27	27	27	26
General infrastructure	Pearson Correlation	.671**	.269	.490**	1	.499**	.706**	.676**	.387*	.529**	.722**
	Sig. (2-tailed)	<.001	.166	.008		.007	<.001	<.001	.046	.005	<.001
	N	28	28	28	28	28	28	27	27	27	26
Attitude and behavior of academics	Pearson Correlation	.814**	.364	.490**	.499**	1	.688**	.494**	.748**	.563**	.851**
	Sig. (2-tailed)	<.001	.057	.008	.007		<.001	.009	<.001	.002	<.001
	N	28	28	28	28	28	28	27	27	27	26
Curriculum	Pearson Correlation	.664**	.430*	.630**	.706**	.688**	1	.747**	.737**	.604**	.878**
	Sig. (2-tailed)	<.001	.022	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
	N	28	28	28	28	28	28	27	27	27	26
Pedagogy	Pearson Correlation	.560**	.500**	.434*	.676**	.494**	.747**	1	.568**	.558**	.784**
	Sig. (2-tailed)	.002	.008	.024	<.001	.009	<.001		.002	.002	<.001
	N	27	27	27	27	27	27	27	26	27	26
Competence of academics	Pearson Correlation	.650**	.358	.697**	.387*	.748**	.737**	.568**	1	.803**	.858**
	Sig. (2-tailed)	<.001	.067	<.001	.046	<.001	<.001	.002		<.001	<.001
	N	27	27	27	27	27	27	26	27	26	26
Support facilities	Pearson Correlation	.595**	.253	.526**	.529**	.563**	.604**	.558**	.803**	1	.809**
	Sig. (2-tailed)	.001	.203	.005	.005	.002	<.001	.002	<.001		<.001
	N	27	27	27	27	27	27	27	26	27	26
Service quality	Pearson Correlation	.861**	.655**	.783**	.722**	.851**	.878**	.784**	.858**	.809**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	
	N	26	26	26	26	26	26	26	26	26	26

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

\*\*. Correlation is significant at the 0.01 level (2-tailed).

This table showing that there is significant correlation between the main variables and items because the P. value is less than 0.05. And the Person Correlation between the statement of (Attitude and behavior of administrative staffs) and the Service Quality is 0.861 which is significant. The Person Correlation between the statement of (administrative processes) and Service quality is 0.655 which is significant. The Person Correlation between the statement of (learning setting) and Service quality is 0.783 which is significant. The Person Correlation between the

statement of (general infrastructure) and Service quality is 0.722 which is significant. The Person Correlation between the statement of (attitude and behavior of academics) and Service quality is 0.851 which is significant. The Person Correlation between the statement of (curriculum) and Service quality is 0.878 which is significant. The Person Correlation between the statement of (pedagogy) and Service quality is 0.784 which is significant. The Person Correlation between the statement of (competence of academics) and Service quality is 0.858 which is significant. The Person Correlation between the statement of (support facilities) and Service quality is 0.809 which is significant.

**Table 8:** University Image validity test using correlation analysis

		Correlations					
		My university has a good academic reputation	Compared to other universities my university has a good image	Research output from my university is highly rated	Qualification gained from my university is externally perceived as being of value	My university is a prestigious university	university image
My university has a good academic reputation	Pearson Correlation Sig. (2-tailed) N	1 .587** 28	.587** .001 28	.499** .007 28	.576** .001 28	.340 .077 28	.689** <.001 28
Compared to other universities my university has a good image	Pearson Correlation Sig. (2-tailed) N	.587** .001 28	1 .828** 28	.828** <.001 28	.691** <.001 28	.841** <.001 28	.944** <.001 28
Research output from my university is highly rated	Pearson Correlation Sig. (2-tailed) N	.499** .007 28	.828** <.001 28	1 .814** 28	.814** <.001 28	.762** <.001 28	.911** <.001 28
Qualification gained from my university is externally perceived as being of value	Pearson Correlation Sig. (2-tailed) N	.576** .001 28	.691** <.001 28	.814** <.001 28	1 .609** 28	.609** <.001 28	.847** <.001 28
My university is a prestigious university	Pearson Correlation Sig. (2-tailed) N	.340 .077 28	.841** <.001 28	.762** <.001 28	.609** <.001 28	1 .856** 28	.856** <.001 28
university image	Pearson Correlation Sig. (2-tailed) N	.689** <.001 28	.944** <.001 28	.911** <.001 28	.847** <.001 28	.856** <.001 28	1 28

\*\* . Correlation is significant at the 0.01 level (2-tailed).

This table showing that there is significant correlation between the main variables and items because the P. value is less than 0.05. And the Person Correlation between statement of (My university has a good academic reputation) and the University Image is 0.689 which is significant. And the Person Correlation between statement of (Compared to other universities my university has a good image) and the University Image is 0.944 which is significant. And the Person Correlation between statement of (Research output from my university is highly related) and the University Image is 0.911 which is significant. And the Person Correlation between statement of (Qualification gained from my university is externally perceived as being of value) and the University Image is 0.847 which is significant. And the Person Correlation between statement of (My university is prestigious university) and the University Image is 0.856 which is significant.

**Table 9:** Perceived value validity test using correlation analysis

		<b>Correlations</b>			
		Reasonableness of university overall cost	Overall value you get from your university for your effort	Overall value you get from your university for your money	perceived value
Reasonableness of university overall cost	Pearson Correlation	1	.625**	.616**	.821**
	Sig. (2-tailed)		<.001	<.001	<.001
	N	28	28	28	28
Overall value you get from your university for your effort	Pearson Correlation	.625**	1	.723**	.911**
	Sig. (2-tailed)	<.001		<.001	<.001
	N	28	28	28	28
Overall value you get from your university for your money	Pearson Correlation	.616**	.723**	1	.896**
	Sig. (2-tailed)	<.001	<.001		<.001
	N	28	28	28	28
perceived value	Pearson Correlation	.821**	.911**	.896**	1
	Sig. (2-tailed)	<.001	<.001	<.001	
	N	28	28	28	28

\*\* . Correlation is significant at the 0.01 level (2-tailed).

This table showing that there is significant correlation between the main variables and items because the P. value is less than 0.05. And the Person Correlation between statement of (Reasonableness of university overall cost) and the Perceived Value is 0.821 which is significant, the Person Correlation between statement of (Overall value you get from your university for your effort) and the Perceived Value is 0.911 which is significant, the Person Correlation between statement of (Overall value you get from your university for your money) and the Perceived Value is 0.896 which is significant.

**Table 10:** Student loyalty validity test using correlation analysis

		<b>Correlations</b>				
		Recomm end your university to friends and relatives	Say favorable things about your university to others	Choose the same university again if you could start all over	Attend the same university if you follow another course in future	student loyalty
Recommend your university to friends and relatives	Pearson Correlation	1	.738**	.696**	.618**	.832**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001
	N	28	28	28	26	26
Say favorable things about your university to others	Pearson Correlation	.738**	1	.817**	.769**	.936**
	Sig. (2-tailed)	<.001		<.001	<.001	<.001
	N	28	28	28	26	26
Choose the same university again if you could start all over	Pearson Correlation	.696**	.817**	1	.698**	.883**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001
	N	28	28	28	26	26
Attend the same university if you follow another course in future	Pearson Correlation	.618**	.769**	.698**	1	.888**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001
	N	26	26	26	26	26
student loyalty	Pearson Correlation	.832**	.936**	.883**	.888**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	
	N	26	26	26	26	26

\*\* . Correlation is significant at the 0.01 level (2-tailed).

This table showing that there is significant correlation between the main variables and items because the P. value is less than 0.05. And the Person Correlation between statement of (Recommend your university to friends and relatives) and the



Student loyalty is 0.832 which is significant, the Person Correlation between statement of (Say favorable things about your university to other) and the Student loyalty is 0.936 which is significant, the Person Correlation between statement of (Choose the same university again if you could start all over) and the Student loyalty is 0.883 which is significant, the Person Correlation between statement of (Attend the same university if you follow another course in future) and the Student loyalty is 0.888 which is significant.

**Table 11:** Customer Satisfaction validity test using correlation analysis

		<b>Correlations</b>					
		My choice to enroll at my university was a wise one	This university is exactly what is needed for higher education studies	I did the right thing by choosing my university	I am pleased to be enrolled as a student at my university	I am happy with my experience as a student at my university	customer satisfaction
My choice to enroll at my university was a wise one	Pearson Correlation	1	.687**	.616**	.672**	.690**	.855**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001
	N	28	28	28	28	28	28
This university is exactly what is needed for higher education studies	Pearson Correlation	.687**	1	.610**	.575**	.654**	.841**
	Sig. (2-tailed)	<.001		<.001	.001	<.001	<.001
	N	28	28	28	28	28	28
I did the right thing by choosing my university	Pearson Correlation	.616**	.610**	1	.803**	.818**	.885**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001	<.001
	N	28	28	28	28	28	28
I am pleased to be enrolled as a student at my university	Pearson Correlation	.672**	.575**	.803**	1	.608**	.833**
	Sig. (2-tailed)	<.001	.001	<.001		<.001	<.001
	N	28	28	28	28	28	28
I am happy with my experience as a student at my university	Pearson Correlation	.690**	.654**	.818**	.608**	1	.879**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001		<.001
	N	28	28	28	28	28	28
customer satisfaction	Pearson Correlation	.855**	.841**	.885**	.833**	.879**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	
	N	28	28	28	28	28	28

\*\* . Correlation is significant at the 0.01 level (2-tailed).

This table showing that there is significant correlation between the main variables and items because the P. value is less than 0.05. And the Person Correlation between statement of (My choice to enroll at my university was a wise one) and the Customer Satisfaction is 0.855 which is significant, the Person Correlation between statement of (This university is exactly what is needed for higher education studies) and the Customer Satisfaction is 0.841 which is significant, the Person Correlation between statement of (I did the right thing by choosing my university ) and the Customer Satisfaction is 0.885 which is significant, the Person Correlation between statement of(I am pleased to be enrolled as a student at my university) and the Customer Satisfaction is 0.833 which is significant, the Person Correlation between statement of(I am happy with my experiences as a student at my university) and the Customer Satisfaction is 0.879 which is significant.

# CHAPTER FIVE

## ANALYSIS AND RESULT

### 5.1 Descriptive Analysis

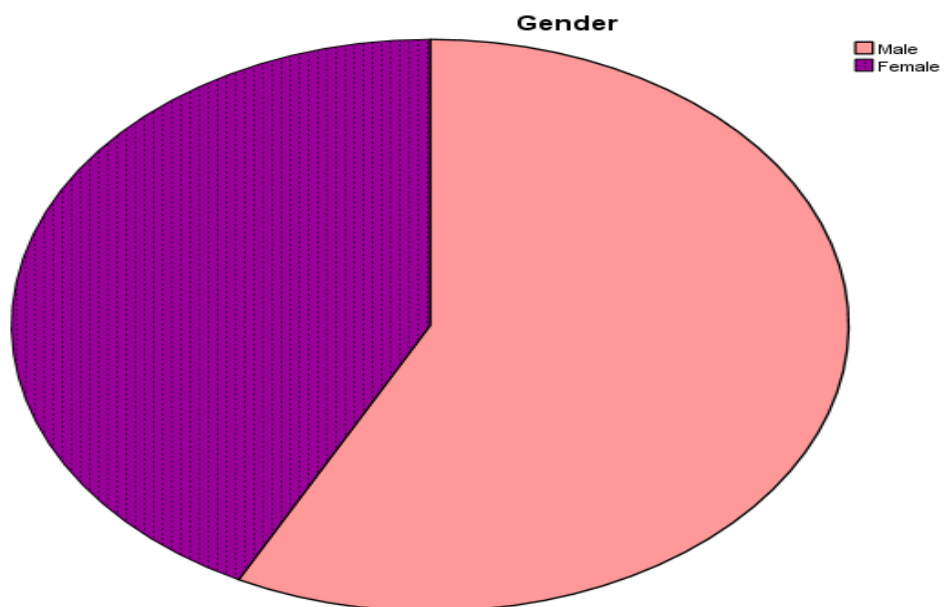
The descriptive analysis includes the followings:

#### 5.1.1 Sample Description

According to the gender, the sample was divided into (57.6%) males and (42.4%) females.

**Table 12:** Gender Frequency Table

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	118	57.6	57.6	57.6
	Female	87	42.4	42.4	100.0
	Total	205	100.0	100.0	

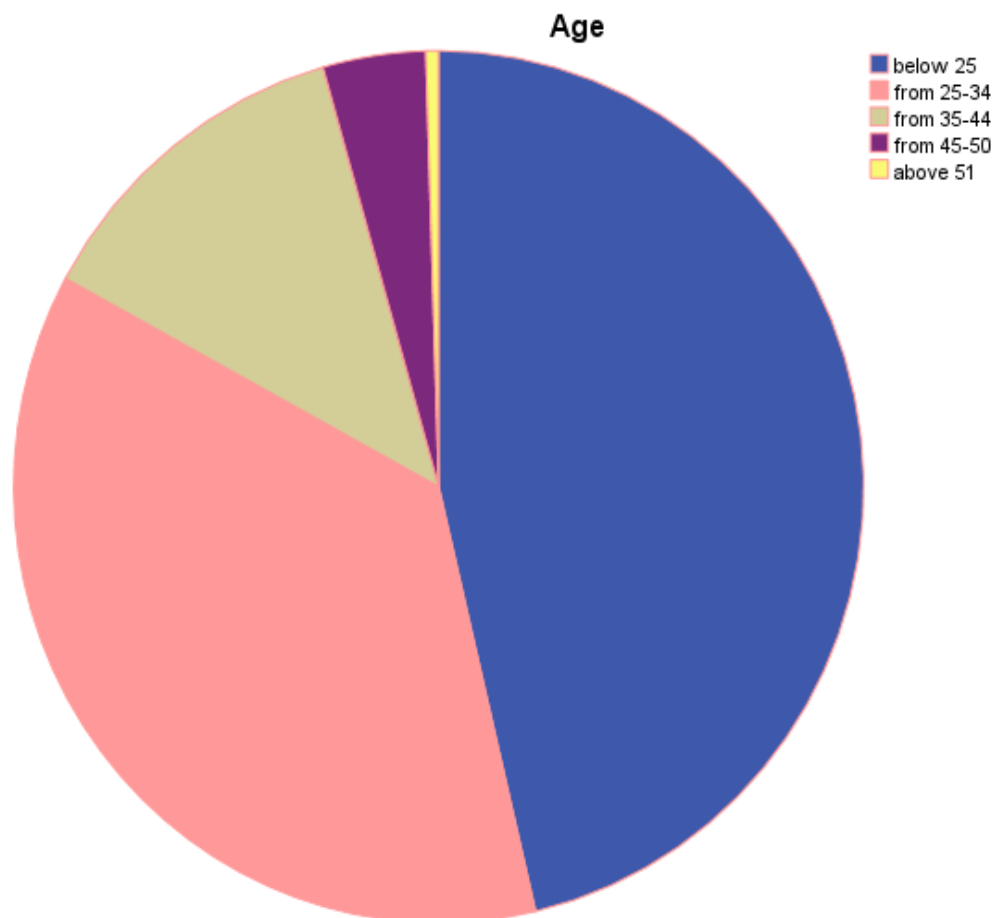


**Graph 1:** Gender pie chart

According to the age, the sample was divided into below 25 year (47.3%), from 25-34 year (36.6%), from 35-44 year (12.7%), from 45-50 year (3.9%) and above 51 year (0.5%).

**Table 13:** Age Frequency Table

		<b>Age</b>			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	below 25	95	46.3	46.3	46.3
	from 25-34	75	36.6	36.6	82.9
	from 35-44	26	12.7	12.7	95.6
	from 45-50	8	3.9	3.9	99.5
	above 51	1	.5	.5	100.0
	Total	205	100.0	100.0	

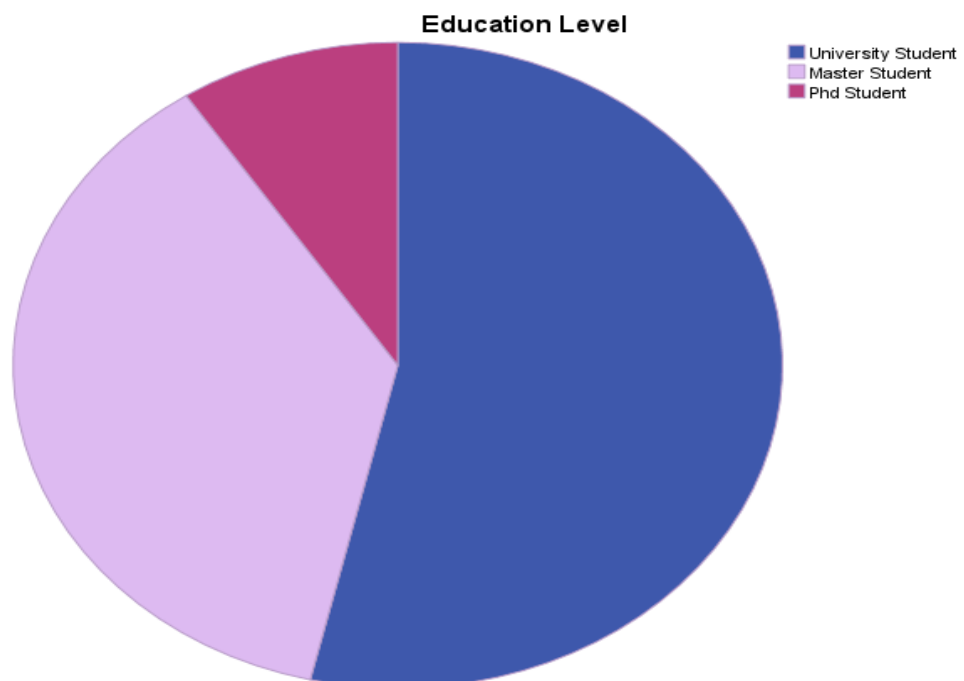


**Graph 2:** Age pie chart

According to the Education level, the sample was divided University Students (53.7%), Master Students (37.1%), and PhD Students (9.3%).

**Table 14:** Education level Frequency Table

		Education Level			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	University Student	110	53.7	53.7	53.7
	Master Student	76	37.1	37.1	90.7
	Phd Student	19	9.3	9.3	100.0
	Total	205	100.0	100.0	



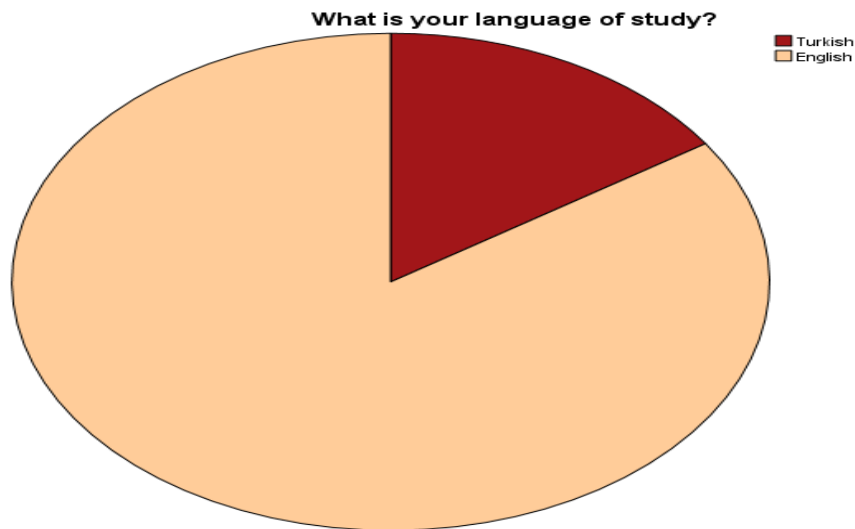
**Graph 3:** Education level pie chart

According to the Language of Study, the sample was divided into Turkish language study (15.6%), and English language study (84.4%).

**Table 15:** Language of study Frequency Table

**What is your language of study?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Turkish	32	15.6	15.6	15.6
	English	173	84.4	84.4	100.0
	Total	205	100.0	100.0	



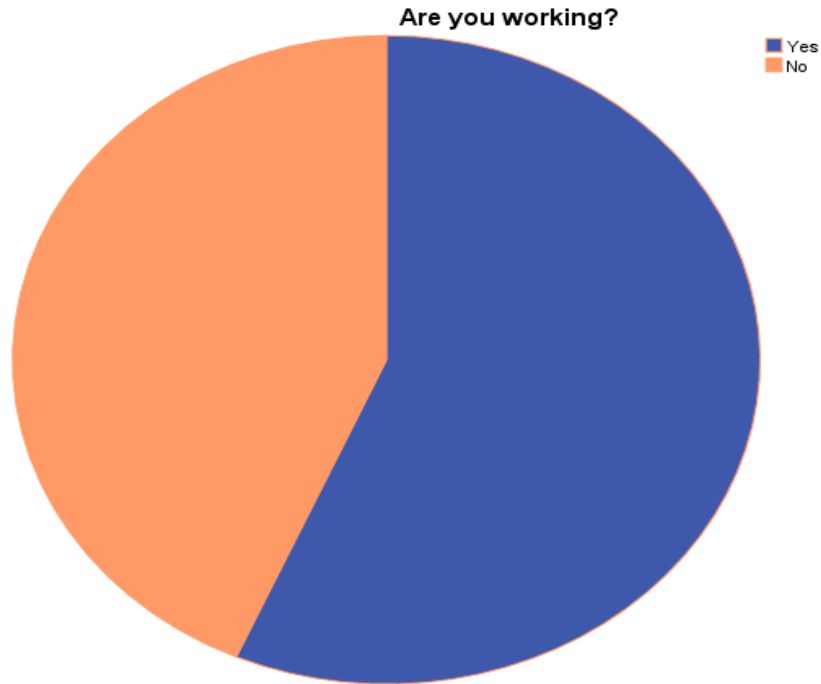
**Graph 4:** Language of study pie chart

According to the working question (Are you Working?), the sample was divided into two answers, Yes (56.6%), and No (43.4%).

**Table 16: Working Frequency Table**

**Are you working?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	116	56.6	56.6	56.6
	No	89	43.4	43.4	100.0
	Total	205	100.0	100.0	



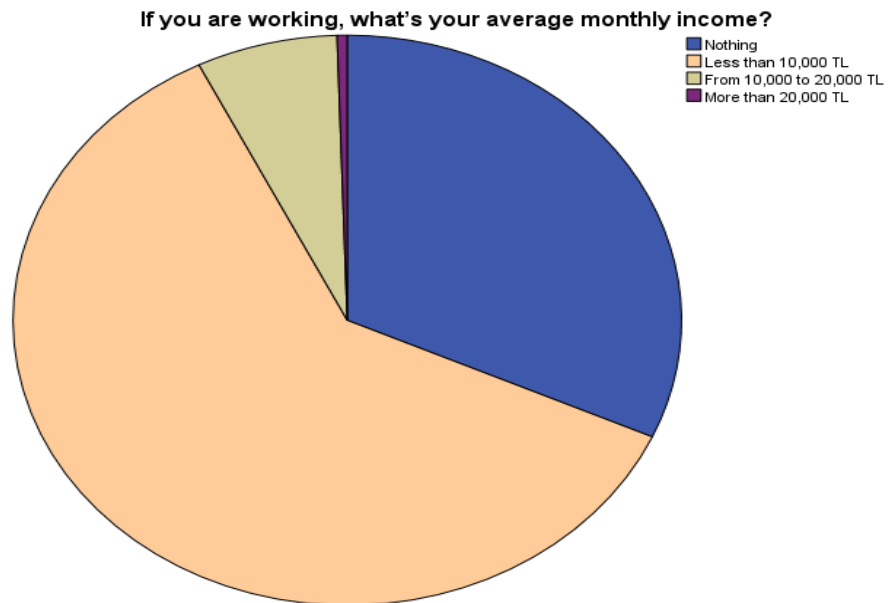
**Graph 5: Language of study pie chart**

Regarding to the monthly income question (If you are working. What's your average monthly income?), the sample income question was divided into four answers, nothing (31.7%) which mean that they are not working, Less than 10,000 TL (61.0%), From 10,000 to 20,000 TL (6.8%), and More than 20,000 TL (0.5%).

**Table 17: Monthly income Frequency Table**

**If you are working, what's your average monthly income?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Nothing	65	31.7	31.7	31.7
Less than 10,000 TL	125	61.0	61.0	92.7
From 10,000 to 20,000 TL	14	6.8	6.8	99.5
More than 20,000 TL	1	.5	.5	100.0
Total	205	100.0	100.0	



**Graph 6: Monthly income pie chart**

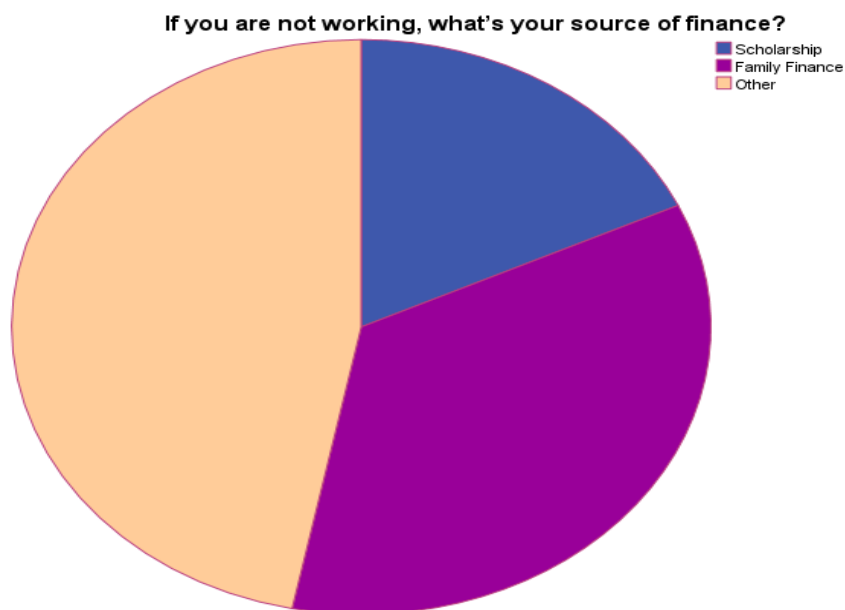
Regarding to the other source of income question (If you are not working. What's your source of finance?), the sample answers were as the following, Scholarship (18.0%), Family Finance (35.1%), and Other (46.8%).



**Table 18: Source of finance Frequency Table**

**If you are not working, what's your source of finance?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Scholarship	37	18.0	18.0	18.0
Family Finance	72	35.1	35.1	53.2
Other	96	46.8	46.8	100.0
Total	205	100.0	100.0	



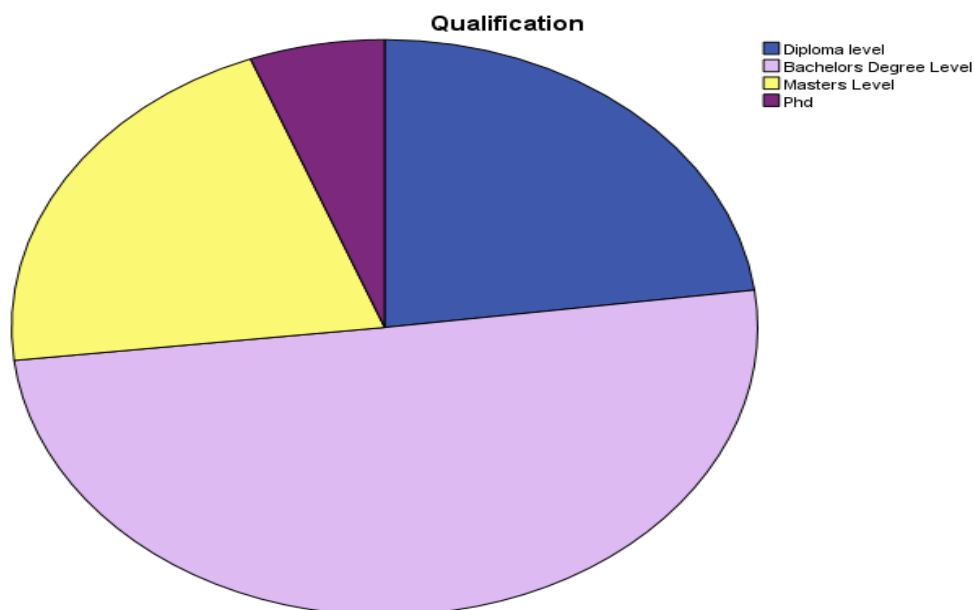
**Graph 7: Source of finance pie chart**

Regarding to the Qualification the sample was as the following, Diploma Level (22.9%), Bachelor's Degree (50.2%), Master Level (21.0%), And PhD (5.9%).

**Table 19: Qualification Frequency Table**

**Qualification**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Diploma level	47	22.9	22.9	22.9
Bachelor's Degree Level	103	50.2	50.2	73.2
Masters Level	43	21.0	21.0	94.1
Phd	12	5.9	5.9	100.0
Total	205	100.0	100.0	



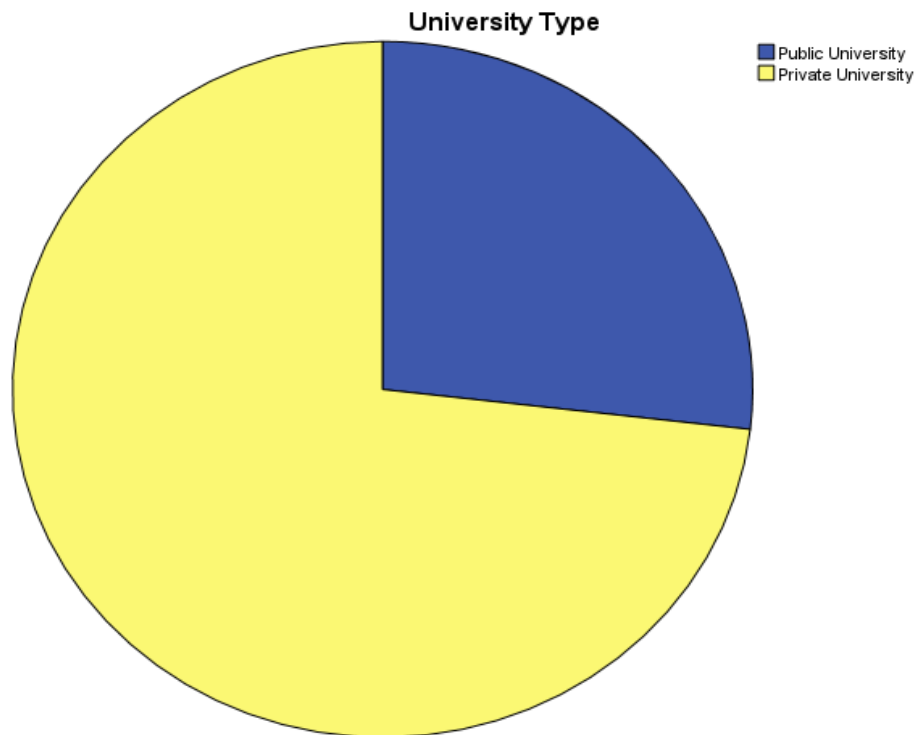
**Graph 8: Qualification pie chart**

Regarding to the University Type the sample was as divided into the following, Public University (26.8%), And Private University (73.2%).

**Table 20: University image Frequency Table**

**University Type**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Public University	55	26.8	26.8	26.8
Private University	150	73.2	73.2	100.0
Total	205	100.0	100.0	



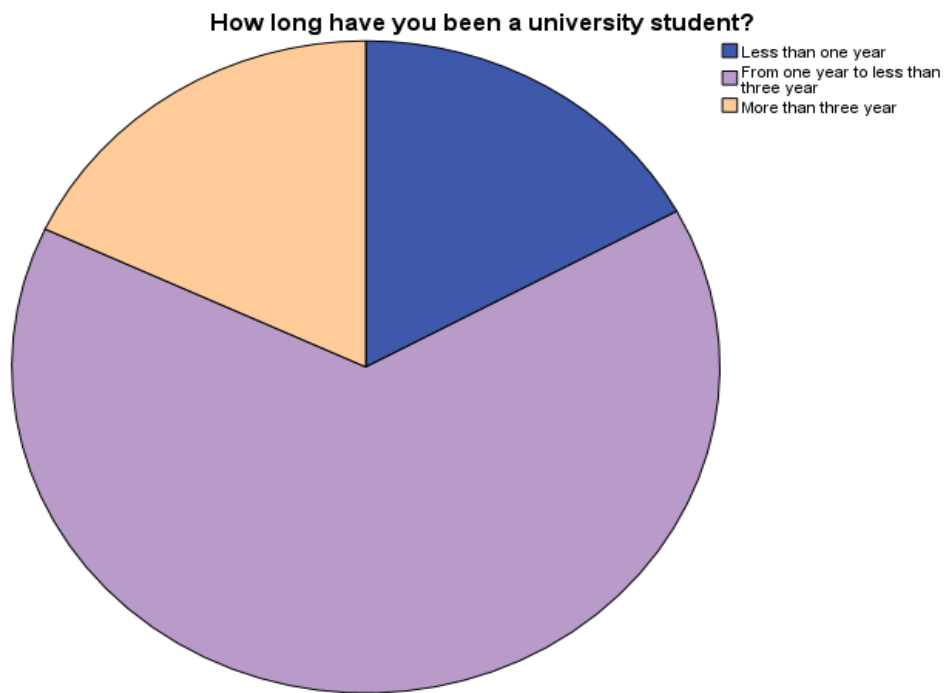
**Graph 9: University image pie chart**

Regarding to the question (How long have you been a university student?), the sample answers was as the following, Less than one year (17.1%), From one year to less than three year (64.9%), And More than three year (18.0%).

**Table 21: University Study Period Frequency Table**

**How long have you been a university student?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than one year	35	17.1	17.1	17.1
From one year to less than three year	133	64.9	64.9	82.0
More than three year	37	18.0	18.0	100.0
Total	205	100.0	100.0	



**Graph 10: University Study period pie chart**

### 5.1.2 Mean and Standard Deviations:

The following tables shows the Mean and Standard Deviations of the research variables:

**Table 22: Customer Satisfaction, Quality of services, University image and Perceived value Mean & Std. Deviation**

<b>Descriptive Statistics</b>			
	Mean	Std. Deviation	N
customer satisfaction	3.6849	.81410	205
quality of service	3.1518	.56856	205
university image	3.6254	.76141	205
perceived value	3.7122	.87266	205

Table No. (22) Shows the weighted averages of the responses of the sample variables on Customer satisfaction, Perceived Value, University Image, and Quality of service statements, which can be arranged in descending order:

Perceived Value mean 3.7122 & Std. Deviation 0.87266

Customer Satisfaction mean 3.6849 & std. Deviation 0.81410

University Image mean 3.6254 & std. Deviation 0.76141

Quality of Service mean 3.1518 & std. Deviation 0.56856

**Table 23: Customer Satisfaction and Customer loyalty Mean & Std. Deviation**

<b>Descriptive Statistics</b>			
	Mean	Std. Deviation	N
customer loyalty	3.7756	.89505	205
customer satisfaction	3.6849	.81410	205

Table No. (23) Shows the weighted averages of the responses of the sample variables on Customer satisfaction statements, and Customer loyalty which can be arranged in descending order:

Customer Loyalty mean 3.7756 & Std. Deviation 0.89505

Customer Satisfaction mean 3.6849 & std. Deviation 0.81410

### 5.2 Hypothesis Test:

The structural equation model was analyzed to test the study hypotheses showed that the result was within acceptable range, ( $\chi^2=23.665$ ,  $df = 3$ ,  $P= 0.000$ ,  $GFI = 0.958$ ,  $NFI = 0.978$ ,  $IFI = 0.981$ ,  $CFI = 0.980$ , and  $RMR = 0.22$ ), that shows in (Table 24: RMR and GFI) and

(Table 25: Baseline Comparison) indicating the supporting of the goodness of fit of the structural model used in the study. Whereas RMSEA and SRMR seemed to be unsatisfactory, Kenny et al. (2014) pointed out that with samples  $<500$ , and small degrees of freedom both indexes might incorrectly suggest that models do not fit with, as in this case, the RMSEA too often falsely indicates a poor fitting model, for this reason I did not reject the model as the remaining fit indicates are good (Figure 2: Shows hypotheses testing result).

**Table 24: RMR and GFI**

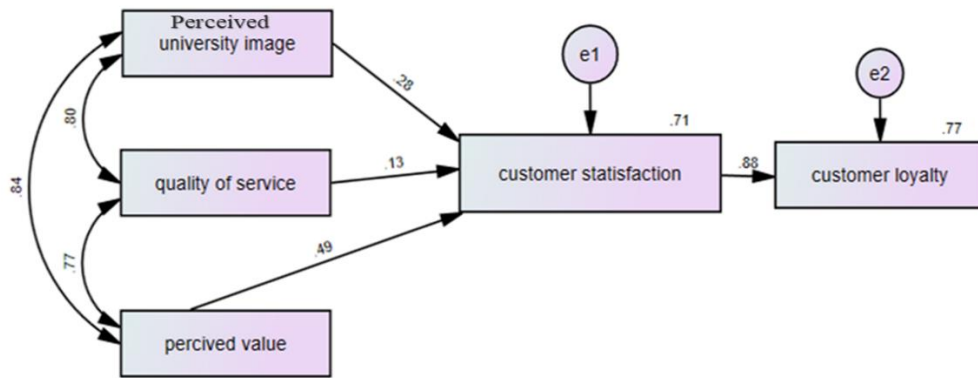
## RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.022	.958	.790	.192
Saturated model	.000	1.000		
Independence model	.404	.285	-.073	.190

**Table 25: Baseline Comparison**

## Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.978	.926	.981	.935	.980
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000



**Figure 2: Shows hypotheses testing result**

In order to do the Hypothesis, Test the researcher use Simple Regression Test & Multi Regression Test by Amos statistics program as the following:

**Table 26: Hypotheses Test**

	Estimate	S.E.	C.R.	P	Label
satisfaction <--- service	.182	.095	1.924	.054	par_1
satisfaction <--- image	.299	.083	3.586	***	par_3
satisfaction <--- value	.453	.068	6.622	***	par_4
loyalty <--- satisfaction	.967	.037	26.413	***	par_2

**H1: Service quality has a positive effect on student satisfaction**

I notice from the previous table that there is not significant effect of the quality of service on student satisfaction, as the P value is more than 0.05.

**H2: Perceived University image has a positive effect in student satisfaction**

I notice from the previous table that there a significant effect of the perceived university image on student satisfaction, as the P value is less than 0.05.

**H3: Perceived value has a positive effect on student satisfaction**

I notice from the previous table that there a significant effect of the Perceived value on student satisfaction, as the P value is less than 0.05.

**H4: student satisfaction has a positive effect on student loyalty**

I notice from the previous table that there a significant effect of the student satisfaction on student loyalty, as the P value is less than 0.05.

**5.3 Differences Test:**

These tests examine the extent to which there are fundamental differences between students regarding Quality of service, level of satisfaction, University image, Perceived Value and level of loyalty, depending on demographic variables.

**5.3.1 According to gender:**

**Table 27: One-Way ANOVA Gender Descriptive test**

**Descriptives**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	male	118	3.5122	.68878	.06341	3.3867	3.6378	1.44	4.56
	female	87	3.5837	.71271	.07641	3.4318	3.7356	1.56	4.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	male	118	3.6153	.77709	.07154	3.4736	3.7569	1.00	4.60
	female	87	3.7195	.79794	.08555	3.5495	3.8896	1.00	4.80
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	male	118	3.5791	.93718	.08627	3.4082	3.7500	1.00	5.00
	female	87	3.7586	.80002	.08577	3.5881	3.9291	1.67	5.00
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	male	118	3.7678	.82936	.07635	3.6166	3.9190	1.00	4.80
	female	87	3.7057	.91440	.09803	3.5109	3.9006	1.00	5.00
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	male	118	3.5869	.92009	.08470	3.4191	3.7546	1.00	4.75
	female	87	3.7184	.91165	.09774	3.5241	3.9127	1.00	5.00
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00



**Table 28: ANOVA Gender test**

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	.255	1	.255	.523	.471
	Within Groups	99.191	203	.489		
	Total	99.447	204			
University Image	Between Groups	.545	1	.545	.882	.349
	Within Groups	125.409	203	.618		
	Total	125.954	204			
Perceived Value	Between Groups	1.614	1	1.614	2.076	.151
	Within Groups	157.804	203	.777		
	Total	159.418	204			
Customer Satisfaction	Between Groups	.193	1	.193	.257	.613
	Within Groups	152.385	203	.751		
	Total	152.578	204			
Customer Loyalty	Between Groups	.866	1	.866	1.031	.311
	Within Groups	170.523	203	.840		
	Total	171.389	204			

I notice from the ANOVA table that there is no significant difference between the service quality, university image, perceived value, customer satisfaction and customer loyalty of the female students and male students as their significant value is more than 0.05, I notice from the Descriptive table that there is significant difference in the University Image, as the mean of female students = 3.7195 that more than the mean of male students = 3.6153, which mean that Female students affected by the University Image more than Male students.

And I notice that there is significant difference in the Perceived Value, as the mean of Female students = 3.7586, that more than the mean of Male students = 3.5791, which mean that the Female students affected by the Perceived Value more than Male students, Also, I notice that there is significant difference in the Customer Loyalty, as the mean of Female students = 3.7184, that more than the mean of Male students = 3.5869, which mean that the Female students had Customer Loyalty more than Male students.

### 5.3.2 According to age:

**Table 29: One-Way ANOVA Age Descriptive test**

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	below 25	95	3.5708	.71212	.07306	3.4257	3.7158	1.89	4.56
	from 25 to 34	75	3.5200	.71989	.08313	3.3544	3.6856	1.44	4.56
	from 35 to 44	26	3.4957	.70148	.13757	3.2124	3.7791	1.56	4.56
	from 45-50	8	3.5694	.36821	.13018	3.2616	3.8773	3.11	4.11
	above51	1	3.5556	.	.	.	.	3.56	3.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	below 25	95	3.6337	.79394	.08146	3.4720	3.7954	1.60	4.60
	from 25 to 34	75	3.7067	.78934	.09115	3.5251	3.8883	1.00	4.80
	from 35 to 44	26	3.5462	.86451	.16955	3.1970	3.8953	1.00	4.60
	from 45-50	8	3.8500	.36645	.12956	3.5436	4.1564	3.60	4.60
	above51	1	4.0000	.	.	.	.	4.00	4.00
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	below 25	95	3.6035	.93310	.09573	3.4134	3.7936	1.00	5.00
	from 25 to 34	75	3.6311	.89472	.10331	3.4253	3.8370	1.33	5.00
	from 35 to 44	26	3.7821	.74799	.14669	3.4799	4.0842	1.67	5.00
	from 45-50	8	3.9583	.51755	.18298	3.5257	4.3910	3.33	4.67
	above51	1	4.6667	.	.	.	.	4.67	4.67
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	below 25	95	3.6737	.88344	.09064	3.4937	3.8537	1.00	4.60
	from 25 to 34	75	3.8320	.79664	.09199	3.6487	4.0153	1.40	5.00
	from 35 to 44	26	3.6385	1.07036	.20991	3.2061	4.0708	1.00	4.80
	from 45-50	8	3.9750	.48329	.17087	3.5710	4.3790	3.20	4.60
	above51	1	4.2000	.	.	.	.	4.20	4.20
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	below 25	95	3.5763	.98531	.10109	3.3756	3.7770	1.00	4.75
	from 25 to 34	75	3.6467	.88062	.10169	3.4441	3.8493	1.25	5.00
	from 35 to 44	26	3.6827	.84427	.16557	3.3417	4.0237	1.50	5.00
	from 45-50	8	4.1250	.44320	.15670	3.7545	4.4955	3.50	4.50
	above51	1	4.7500	.	.	.	.	4.75	4.75
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**Table 30: ANOVA Age test**

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	.177	4	.044	.089	.986
	Within Groups	99.270	200	.496		
	Total	99.447	204			
University Image	Between Groups	.970	4	.243	.388	.817
	Within Groups	124.983	200	.625		
	Total	125.954	204			
Perceived Value	Between Groups	2.474	4	.618	.788	.534
	Within Groups	156.944	200	.785		
	Total	159.418	204			
Customer Satisfaction	Between Groups	1.974	4	.493	.655	.624
	Within Groups	150.604	200	.753		
	Total	152.578	204			
Customer Loyalty	Between Groups	3.548	4	.887	1.057	.379
	Within Groups	167.841	200	.839		
	Total	171.389	204			

I notice from the ANOVA table that there is no significant difference between the service quality, university image, perceived value, customer satisfaction and customer loyalty of students according to the age levels as their significant value is more than 0.05, I notice from the Descriptive table that there is significant difference in the University Image, as the mean of students age (from 45-50) = 3.8500 that more than the mean of students age (from 35-44) = 3.5462, which mean that students aged (from 45-50) affected by the University Image more than students aged (35-44).

And I notice that there is significant difference in the Perceived Value, as the mean of students aged from (45-50) = 3.9583, that more than the mean of students aged (below 25) = 3.6035, which mean that the students aged (45-50) affected by the Perceived Value more than students aged below 25, Also, I notice that there is significant difference in the Customer Satisfaction, as the mean of students aged from (45-50) = 3.9750, that more than the mean of students aged (below 25) = 3.6737, which mean that the students aged (45-50) affected by the Customer Satisfaction more than students aged below 25, And I notice that there is significant difference in the Customer Loyalty, as the mean of students aged from (45-50) = 4.1250, that more than the mean of students aged (below 25) = 3.5763, which mean that the students aged (45-50) affected by the Customer Satisfaction more than students aged below 25.

### 5.3.3 According to the education level:

**Table 31: One-Way ANOVA Education level Descriptive test**

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	university student	110	3.5687	.73959	.07052	3.4289	3.7085	1.56	4.56
	master student	76	3.4576	.68155	.07818	3.3019	3.6133	1.44	4.56
	phd student	19	3.7310	.45257	.10383	3.5129	3.9491	3.11	4.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	university student	110	3.6036	.82172	.07835	3.4484	3.7589	1.00	4.60
	master student	76	3.6658	.79558	.09126	3.4840	3.8476	1.00	4.80
	phd student	19	3.9579	.39765	.09123	3.7662	4.1496	3.40	4.60
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	university student	110	3.5576	.95794	.09134	3.3766	3.7386	1.00	5.00
	master student	76	3.7061	.83616	.09591	3.5151	3.8972	1.33	5.00
	phd student	19	4.0175	.42271	.09698	3.8138	4.2213	3.33	4.67
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	university student	110	3.6673	.91562	.08730	3.4942	3.8403	1.00	4.60
	master student	76	3.7421	.84400	.09681	3.5492	3.9350	1.40	5.00
	phd student	19	4.1684	.45345	.10403	3.9499	4.3870	3.20	4.80
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	university student	110	3.5818	.95729	.09127	3.4009	3.7627	1.00	5.00
	master student	76	3.6053	.91402	.10485	3.3964	3.8141	1.00	5.00
	phd student	19	4.1447	.44344	.10173	3.9310	4.3585	3.25	4.75
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**Table 32: ANOVA Education level test**

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	1.298	2	.649	1.336	.265
	Within Groups	98.149	202	.486		
	Total	99.447	204			
University Image	Between Groups	2.038	2	1.019	1.661	.193
	Within Groups	123.916	202	.613		
	Total	125.954	204			
Perceived Value	Between Groups	3.740	2	1.870	2.427	.091
	Within Groups	155.678	202	.771		
	Total	159.418	204			
Customer Satisfaction	Between Groups	4.069	2	2.035	2.767	.065
	Within Groups	148.508	202	.735		
	Total	152.578	204			
Customer Loyalty	Between Groups	5.303	2	2.652	3.225	.042
	Within Groups	166.086	202	.822		
	Total	171.389	204			

I notice from the ANOVA table that there is no significant difference between the service quality, university image, perceived value and customer satisfaction of students according to the education level as their significant value is more than 0.05. But there are significant differences at customer loyalty of students according to the education levels as it equal to 0.042, I notice from the Descriptive table that there is significant difference in the Service Quality, as the mean of PhD students = 3.7310 that more than the mean of Master students = 3.4576, which mean that PhD students affected by the Service Quality more than Master Students.

And I notice that there is significant difference in the University Image, as the mean of PhD students = 3.9579, that more than the mean of University students = 3.6036, which mean that the PhD students affected by the University Image more than University Students, Also, I notice that there is significant difference in the Perceived Value, as the mean of PhD students =4.0175, that more than the mean of University students = 3.5576, which mean that the PhD students affected by the Perceived Value more than University Students, And I notice that there is significant difference in the Customer Satisfaction, as the mean of PhD students =4.1684, that more than the mean of University students = 3.6673, which mean that the PhD students affected by the Customer Satisfaction more than University Students, Also I notice that there is significant difference in the Customer Loyalty, as the mean of PhD students =4.1447,

that more than the mean of University students = 3.5818, which mean that the PhD students affected by the Customer Loyalty more than University Students.

### 5.3.4 According to the study language:

**Table 33: One-Way ANOVA Study Language Descriptive test**

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	Turkish	32	3.3472	.68595	.12126	3.0999	3.5945	1.89	4.44
	English	173	3.5787	.69639	.05295	3.4742	3.6832	1.44	4.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	Turkish	32	3.4312	.68554	.12119	3.1841	3.6784	1.80	4.60
	English	173	3.7017	.79756	.06064	3.5820	3.8214	1.00	4.80
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	Turkish	32	3.4167	.79424	.14040	3.1303	3.7030	2.00	4.67
	English	173	3.6994	.89476	.06803	3.5651	3.8337	1.00	5.00
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	Turkish	32	3.6062	.70296	.12427	3.3528	3.8597	2.20	4.60
	English	173	3.7665	.89106	.06775	3.6328	3.9002	1.00	5.00
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	Turkish	32	3.6328	.70134	.12398	3.3800	3.8857	2.00	4.50
	English	173	3.6445	.95277	.07244	3.5015	3.7875	1.00	5.00
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**Table 34: ANOVA Study Language test**

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	1.447	1	1.447	2.997	.085
	Within Groups	98.000	203	.483		
	Total	99.447	204			
University Image	Between Groups	1.976	1	1.976	3.235	.074
	Within Groups	123.978	203	.611		
	Total	125.954	204			
Perceived Value	Between Groups	2.159	1	2.159	2.787	.097
	Within Groups	157.259	203	.775		
	Total	159.418	204			
Customer Satisfaction	Between Groups	.693	1	.693	.927	.337
	Within Groups	151.884	203	.748		
	Total	152.578	204			
Customer Loyalty	Between Groups	.004	1	.004	.004	.947
	Within Groups	171.385	203	.844		
	Total	171.389	204			

I notice from the ANOVA table that there is no significant difference between the service quality, university image, perceived value, customer satisfaction and customer loyalty of students according to the Study Language as their significant value is more than 0.05.

I notice from the Descriptive table that there is significant difference in the Service Quality, as the mean students' study by English language = 3.5787 that more than the mean of students' study by Turkish language = 3.3472, which mean that student's study by English language affected by the Service Quality more than students' study by Turkish language, Also, I notice from the Descriptive table that there is significant difference in the University Image, as the mean students' study by English language = 3.7017 that more than the mean of students' study by Turkish language = 3.4312, which mean that student's study by English language affected by the University Image more than students' study by Turkish language.

Also, I notice that there is significant difference in the Perceived Value, as the mean of students' study by English language =3.6994, that more than the mean of students' study by Turkish language = 3.4167, which mean that student's study by English language affected by the Perceived Value more than students study by Turkish language, And I notice that there is significant difference in the Customer Satisfaction, as the mean of student's study by English language =3.7665, that more than the mean of student's study by Turkish language = 3.6062, which mean that student's study by English language affected by the Customer Satisfaction more than students' study by Turkish language.

### 5.3.5 According to the working statuses:

**Table 35: One-Way ANOVA Working statuses Descriptive test**

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	Yes	116	3.6102	.64564	.05995	3.4914	3.7289	1.44	4.56
	NO	89	3.4544	.75594	.08013	3.2952	3.6137	1.78	4.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	Yes	116	3.7466	.71377	.06627	3.6153	3.8778	1.00	4.60
	NO	89	3.5461	.86169	.09134	3.3646	3.7276	1.00	4.80
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	Yes	116	3.7098	.85525	.07941	3.5525	3.8671	1.00	5.00
	NO	89	3.5843	.92015	.09754	3.3904	3.7781	1.00	5.00
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	Yes	116	3.8224	.76795	.07130	3.6812	3.9637	1.00	4.80
	NO	89	3.6360	.97120	.10295	3.4314	3.8405	1.00	5.00
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	Yes	116	3.7220	.82605	.07670	3.5701	3.8739	1.00	4.75
	NO	89	3.5393	1.01823	.10793	3.3248	3.7538	1.00	5.00
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**Table 36: ANOVA Working statuses test**

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	1.221	1	1.221	2.524	.114
	Within Groups	98.226	203	.484		
	Total	99.447	204			
University Image	Between Groups	2.024	1	2.024	3.316	.070
	Within Groups	123.930	203	.610		
	Total	125.954	204			
Perceived Value	Between Groups	.793	1	.793	1.015	.315
	Within Groups	158.625	203	.781		
	Total	159.418	204			
Customer Satisfaction	Between Groups	1.751	1	1.751	2.357	.126
	Within Groups	150.827	203	.743		
	Total	152.578	204			
Customer Loyalty	Between Groups	1.680	1	1.680	2.010	.158
	Within Groups	169.709	203	.836		
	Total	171.389	204			

I notice from the ANOVA table that there is no significant difference between the service quality, university image, perceived value, customer satisfaction and customer loyalty of students according to the Working Statues as their significant value is more than 0.05.

I notice from the Descriptive table that there is significant difference in the Service Quality, as the mean of students which they are working = 3.6102, that more than the mean of students which they are not working = 3.4544, which mean that working students affected by the Service Quality more than not working students.

And I notice that there is significant difference in the Customer Satisfaction, as the mean of student's which they are working =3.8224, that more than the mean of student's which they are not working = 3.6360, which mean that working students affected by the Customer Satisfaction more than not working students.

Also I notice that there is significant difference in the University image, as the mean of student's which they are working =3.7466, that more than the mean of student's which they are not working = 3.5461, which mean that working students affected by the University image more than not working students.

Also I notice that there is significant difference in the Perceived value, as the mean of student's which they are working =3.7098, that more than the mean of student's which they are not working = 3.5843, which mean that working students affected by the Perceived value more than not working students.

And I notice that there is significant difference in the Customer loyalty, as the mean of student's which they are working =3.7220, that more than the mean of student's which they are not working = 3.5393, which mean that working students affected by the Customer loyalty more than not working students.



### 5.3.6 According to the average monthly income if the student is working:

**Table 37: One-Way ANOVA student income from Working Descriptive test**

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	Nothing	65	3.4188	.81502	.10109	3.2169	3.6208	1.78	4.56
	Less than 10,000 TL	125	3.6302	.62165	.05560	3.5202	3.7403	1.44	4.56
	from 10,000 to 20,000	14	3.3571	.70567	.18860	2.9497	3.7646	1.89	4.33
	more than 20,000	1	3.2222	.	.	.	.	3.22	3.22
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	Nothing	65	3.4800	.91910	.11400	3.2523	3.7077	1.00	4.80
	Less than 10,000 TL	125	3.7744	.67153	.06006	3.6555	3.8933	1.40	4.60
	from 10,000 to 20,000	14	3.4571	.94602	.25283	2.9109	4.0034	1.00	4.60
	more than 20,000	1	3.8000	.	.	.	.	3.80	3.80
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	Nothing	65	3.6000	1.00035	.12408	3.3521	3.8479	1.00	5.00
	Less than 10,000 TL	125	3.6773	.83380	.07458	3.5297	3.8249	1.00	5.00
	from 10,000 to 20,000	14	3.7143	.82542	.22060	3.2377	4.1909	2.00	4.67
	more than 20,000	1	3.6667	.	.	.	.	3.67	3.67
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	Nothing	65	3.6031	1.04373	.12946	3.3445	3.8617	1.00	5.00
	Less than 10,000 TL	125	3.8448	.73127	.06541	3.7153	3.9743	1.00	4.80
	from 10,000 to 20,000	14	3.4857	.99758	.26661	2.9097	4.0617	1.60	4.60
	more than 20,000	1	3.4000	.	.	.	.	3.40	3.40
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	Nothing	65	3.5385	1.12520	.13956	3.2597	3.8173	1.00	5.00
	Less than 10,000 TL	125	3.7060	.78292	.07003	3.5674	3.8446	1.00	4.75
	from 10,000 to 20,000	14	3.5714	1.00206	.26781	2.9929	4.1500	1.75	4.75
	more than 20,000	1	3.5000	.	.	.	.	3.50	3.50
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**Table 38:** ANOVA student income from working test

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	2.540	3	.847	1.756	.157
	Within Groups	96.907	201	.482		
	Total	99.447	204			
University Image	Between Groups	4.338	3	1.446	2.390	.070
	Within Groups	121.616	201	.605		
	Total	125.954	204			
Perceived Value	Between Groups	.308	3	.103	.130	.942
	Within Groups	159.110	201	.792		
	Total	159.418	204			
Customer Satisfaction	Between Groups	3.612	3	1.204	1.625	.185
	Within Groups	148.966	201	.741		
	Total	152.578	204			
Customer Loyalty	Between Groups	1.299	3	.433	.512	.675
	Within Groups	170.090	201	.846		
	Total	171.389	204			

I notice from the ANOVA table that there is no significant difference between the service quality, university image, perceived value, customer satisfaction and customer loyalty of students according to their working income Statues as their significant value is more than 0.05.

I notice from the Descriptive table that there is significant difference in the Service Quality, as the mean of students' income less than 10,000 TL = 3.6302, that more than the mean of students' income from 10,000 to 20,000 TL = 3.3571, which mean that working students with income less than 10,000 TL affected by the Service Quality more than working students with income from 10,000 to 20,000 TL, Also, I notice from the Descriptive table that there is significant difference in the University Image, as the mean of students' income less than 10,000 TL = 3.7744 that more than the mean of students' income from 10,000 to 20,000 TL = 3.4571, which mean that students which their income less than 10,000 TL affected by the University Image more than student's monthly income from 10,000 to 20,000 TL, Also, I notice from the Descriptive table that there is significant difference in the Perceived Value, as the mean of students' income less than 10,000 TL = 3.6773 that less than the mean of students' income from 10,000 to 20,000 TL = 3.7143, which mean that students which their income less than 10,000 TL affected by the Perceived Value less than student's monthly income from 10,000 to 20,000 TL, Also, I notice from the Descriptive table

that there is significant difference in the Customer loyalty, as the mean of students' income less than 10,000 TL = 3.7060 that more than the mean of students' income from 10,000 to 20,000 TL = 3.5714, which mean that students which their income less than 10,000 TL affected by the Customer loyalty more than student's monthly income from 10,000 to 20,000 TL.

### 5.3.7 According to the source of finance if the student is not working:

**Table 39:** One-Way ANOVA student source of income if he isn't working  
Descriptive test

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	scholarship	37	3.5435	.49190	.08087	3.3795	3.7076	2.56	4.56
	family finance	72	3.4429	.73549	.08668	3.2701	3.6157	1.78	4.56
	other	96	3.6169	.73329	.07484	3.4683	3.7655	1.44	4.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	scholarship	37	3.5892	.58299	.09584	3.3948	3.7836	1.60	4.60
	family finance	72	3.5194	.83626	.09855	3.3229	3.7160	1.00	4.80
	other	96	3.7917	.79996	.08165	3.6296	3.9538	1.00	4.60
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	scholarship	37	3.5856	.69124	.11364	3.3551	3.8161	1.33	4.67
	family finance	72	3.5741	.91111	.10738	3.3600	3.7882	1.00	5.00
	other	96	3.7431	.92841	.09476	3.5549	3.9312	1.00	5.00
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	scholarship	37	3.7135	.68725	.11298	3.4844	3.9427	1.40	5.00
	family finance	72	3.5972	.93236	.10988	3.3781	3.8163	1.00	5.00
	other	96	3.8604	.86432	.08821	3.6853	4.0355	1.00	4.80
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	scholarship	37	3.6149	.74906	.12314	3.3651	3.8646	1.25	5.00
	family finance	72	3.4896	1.01870	.12005	3.2502	3.7290	1.00	5.00
	other	96	3.7682	.88425	.09025	3.5891	3.9474	1.00	4.75
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**Table 40:** ANOVA student source of income if he isn't working test

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	1.246	2	.623	1.281	.280
	Within Groups	98.201	202	.486		
	Total	99.447	204			
University Image	Between Groups	3.272	2	1.636	2.694	.070
	Within Groups	122.682	202	.607		
	Total	125.954	204			
Perceived Value	Between Groups	1.394	2	.697	.891	.412
	Within Groups	158.024	202	.782		
	Total	159.418	204			
Customer Satisfaction	Between Groups	2.885	2	1.443	1.947	.145
	Within Groups	149.692	202	.741		
	Total	152.578	204			
Customer Loyalty	Between Groups	3.229	2	1.615	1.940	.146
	Within Groups	168.160	202	.832		
	Total	171.389	204			

I notice from the ANOVA table that there is no significant difference between the service quality, university image, perceived value, customer satisfaction and customer loyalty of students according to their source of finance if they are not working as their significant value is more than 0.05, I notice from the Descriptive table that there is significant difference in the Service Quality, as the mean of students' other source of income = 3.6169, that more than the mean of students' source income from family finance = 3.4429, which mean that not working students with other source of income affected by the Service Quality more than not working students with income from family finance.

Also, I notice from the Descriptive table that there is significant difference in the University Image, as the mean of students' other source of income = 3.7917, that more than the mean of students' source income from family finance = 3.5194, which mean that not working students with other source of income affected by the University Image more than not working students with income from family finance, Also, I notice from the Descriptive table that there is significant difference in the Perceived Value, as the mean of students' other source of income = 3.7431, that more than the mean of students' source income from family finance = 3.5741, which mean that not working students with other source of income affected by the Perceived Value more than not working students with income from family finance.

Also, I notice from the Descriptive table that there is significant difference in the Customer Satisfaction, as the mean of students' other source of income = 3.8604, that more than the mean of students' source income from family finance = 3.5972, which mean that not working students with other source of income affected by the Customer Satisfaction more than not working students with income from family finance, And, I notice from the Descriptive table that there is significant difference in the Customer loyalty, as the mean of students' other source of income = 3.7682, that more than the mean of students' source income from family finance = 3.4896, which mean that not working students with other source of income affected by the Customer loyalty more than not working students with income from family finance.



### 5.3.8 According to the qualification of students:

**Table 41: One-Way ANOVA of student qualification Descriptive test**

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	Diploma level	47	3.5083	.59644	.08700	3.3332	3.6834	2.00	4.56
	bachelors degree level	103	3.6063	.70148	.06912	3.4692	3.7434	1.89	4.56
	master level	43	3.3798	.83544	.12740	3.1227	3.6370	1.44	4.56
	phd	12	3.7130	.38332	.11065	3.4694	3.9565	3.11	4.33
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	Diploma level	47	3.5574	.71983	.10500	3.3461	3.7688	1.60	4.60
	bachelors degree level	103	3.6990	.77047	.07592	3.5484	3.8496	1.00	4.60
	master level	43	3.6047	.95567	.14574	3.3105	3.8988	1.00	4.80
	phd	12	3.9167	.38573	.11135	3.6716	4.1617	3.60	4.60
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	Diploma level	47	3.5603	.82270	.12000	3.3187	3.8018	1.33	5.00
	bachelors degree level	103	3.6214	.89668	.08835	3.4461	3.7966	1.00	5.00
	master level	43	3.7364	.99618	.15192	3.4299	4.0430	1.33	5.00
	phd	12	4.0278	.43712	.12619	3.7500	4.3055	3.33	4.67
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	Diploma level	47	3.6426	.85662	.12495	3.3910	3.8941	1.00	4.60
	bachelors degree level	103	3.7631	.83019	.08180	3.6009	3.9254	1.00	5.00
	master level	43	3.6605	1.01469	.15474	3.3482	3.9727	1.20	5.00
	phd	12	4.2333	.37979	.10964	3.9920	4.4746	3.60	4.60
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	Diploma level	47	3.5851	.90631	.13220	3.3190	3.8512	1.25	5.00
	bachelors degree level	103	3.6117	.92800	.09144	3.4303	3.7930	1.00	5.00
	master level	43	3.5930	.95279	.14530	3.2998	3.8862	1.00	4.50
	phd	12	4.3125	.41458	.11968	4.0491	4.5759	3.50	4.75
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**Table 42:** ANOVA of student qualification test

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	1.960	3	.653	1.347	.260
	Within Groups	97.487	201	.485		
	Total	99.447	204			
University Image	Between Groups	1.573	3	.524	.848	.469
	Within Groups	124.381	201	.619		
	Total	125.954	204			
Perceived Value	Between Groups	2.491	3	.830	1.063	.366
	Within Groups	156.927	201	.781		
	Total	159.418	204			
Customer Satisfaction	Between Groups	3.693	3	1.231	1.662	.176
	Within Groups	148.884	201	.741		
	Total	152.578	204			
Customer Loyalty	Between Groups	5.745	3	1.915	2.324	.076
	Within Groups	165.644	201	.824		
	Total	171.389	204			

I notice from the ANOVA table that there is no significant difference between the service quality, university image, perceived value, customer satisfaction and customer loyalty of students according to their qualification as their significant value is more than 0.05, I notice from the Descriptive table that there is significant difference in the Service Quality in respect to the student qualification, as the mean of PhD students = 3.7130, that more than the mean of Master level students = 3.3798, which mean that PhD students affected by the Service Quality more than Master level students, Also I notice from the Descriptive table that there is significant difference in the University Image in respect to the student qualification, as the mean of PhD students = 3.9167, that more than the mean of Diploma level students = 3.5574, which mean that PhD students affected by the University Image more than Diploma level students.

Also, I notice from the Descriptive table that there is significant difference in the Perceived Value in respect to the student qualification, as the mean of PhD students = 4.0278, that more than the mean of Diploma level students = 3.5603, which mean that PhD students affected by the Perceived Value more than Diploma level students., Also I notice from the Descriptive table that there is significant difference in the Customer Satisfaction in respect to the student qualification, as the mean of PhD students = 4.2333, that more than the mean of Diploma level students = 3.6462, which mean that PhD students affected by the Customer Satisfaction more than Diploma level students,

And, I notice from the Descriptive table that there is significant difference in the Student Loyalty in respect to the student qualification, as the mean of PhD students = 4.3125, that more than the mean of Diploma level students = 3.5851, which mean that PhD students affected by the Student Loyalty more than Diploma level students.

### 5.3.9 According to the University Type:

**Table 43:** One-Way ANOVA University Type Descriptive test

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	Public University	55	3.3131	.59147	.07975	3.1532	3.4730	1.89	4.33
	Private University	150	3.6267	.71700	.05854	3.5110	3.7423	1.44	4.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	Public University	55	3.4545	.71124	.09590	3.2623	3.6468	1.00	4.40
	Private University	150	3.7347	.80050	.06536	3.6055	3.8638	1.00	4.80
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	Public University	55	3.4970	.78796	.10625	3.2840	3.7100	1.33	4.67
	Private University	150	3.7133	.91228	.07449	3.5661	3.8605	1.00	5.00
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	Public University	55	3.6218	.75882	.10232	3.4167	3.8270	1.40	5.00
	Private University	150	3.7853	.89895	.07340	3.6403	3.9304	1.00	5.00
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	Public University	55	3.6091	.79461	.10714	3.3943	3.8239	1.25	5.00
	Private University	150	3.6550	.95962	.07835	3.5002	3.8098	1.00	5.00
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**Table 44:** ANOVA University Type test

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	3.956	1	3.956	8.410	.004
	Within Groups	95.491	203	.470		
	Total	99.447	204			
University Image	Between Groups	3.158	1	3.158	5.220	.023
	Within Groups	122.796	203	.605		
	Total	125.954	204			
Perceived Value	Between Groups	1.884	1	1.884	2.428	.121
	Within Groups	157.534	203	.776		
	Total	159.418	204			
Customer Satisfaction	Between Groups	1.076	1	1.076	1.442	.231
	Within Groups	151.502	203	.746		
	Total	152.578	204			
Customer Loyalty	Between Groups	.085	1	.085	.101	.752
	Within Groups	171.304	203	.844		
	Total	171.389	204			

I notice from the ANOVA table that there is no significant difference between the perceived value, customer satisfaction and customer loyalty of students according to the University Type as their significant value is more than 0.05.



But I found significant differences regarding the service quality = 0.004 and significant differences regarding the university image = 0.023, I notice from the Descriptive table that there is significant difference in the Service Quality in respect to the University type, as the mean of private university students = 3.6267, that more than the mean of Public university students = 3.3131, which mean that Private university students affected by the Service Quality more than Public university students, Also I notice from the Descriptive table that there is significant difference in the University Image in respect to the University type, as the mean of private university students = 3.7347, that more than the mean of Public university students = 3.4545, which mean that Private university students affected by the University Image more than Public university students.

Also, I notice from the Descriptive table that there is significant difference in the Perceived Value in respect to the University type, as the mean of private university students = 3.7133, that more than the mean of Public university students = 3.4970, which mean that Private university students affected by the Perceived Value more than Public university students, Also I notice from the Descriptive table that there is significant difference in the Customer Satisfaction in respect to the University type, as the mean of private university students = 3.7853, that more than the mean of Public university students = 3.6218, which mean that Private university students affected by the Customer Satisfaction more than Public university students, And I notice from the Descriptive table that there is significant difference in the Customer loyalty in respect to the University type, as the mean of private university students = 3.6550, that more than the mean of Public university students = 3.6091, which mean that Private university students affected by the Customer loyalty more than Public university students.

### 5.3.10 According to the duration of study as a university student:

**Table45:** One-Way ANOVA of Duration of study Descriptive test

**Descriptives**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	less than one year	35	3.2159	.70528	.11921	2.9736	3.4581	1.78	4.44
	from one year to less than one year	170	3.6098	.67950	.05212	3.5069	3.7127	1.44	4.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	less than one year	35	3.3314	.81593	.13792	3.0511	3.6117	1.60	4.80
	from one year to less than one year	170	3.7271	.76451	.05863	3.6113	3.8428	1.00	4.60
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	less than one year	35	3.2000	.96406	.16296	2.8688	3.5312	1.00	5.00
	from one year to less than one year	170	3.7490	.83938	.06438	3.6219	3.8761	1.00	5.00
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	less than one year	35	3.4286	.91798	.15517	3.1132	3.7439	1.40	5.00
	from one year to less than one year	170	3.8059	.84193	.06457	3.6784	3.9334	1.00	4.80
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	less than one year	35	3.2071	.93637	.15828	2.8855	3.5288	1.00	5.00
	from one year to less than one year	170	3.7324	.88903	.06819	3.5977	3.8670	1.00	5.00
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**Table 46:** ANOVA of Duration of study test

**ANOVA**

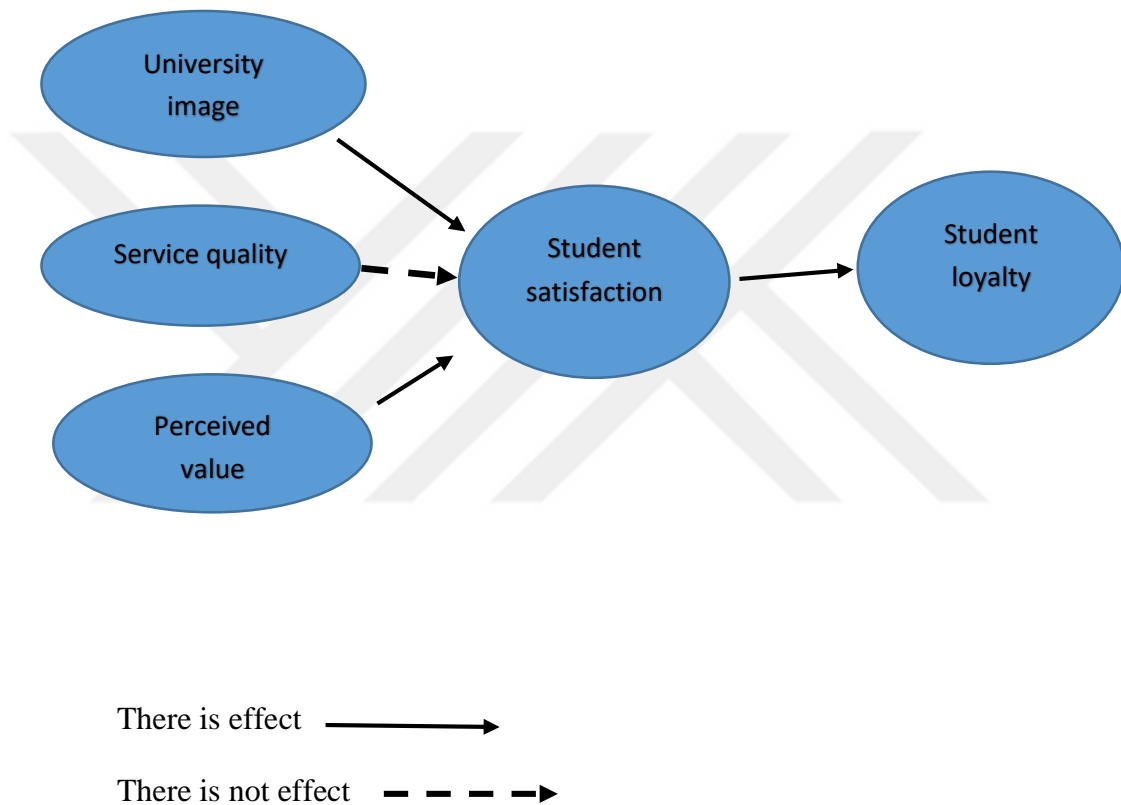
		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	4.504	1	4.504	9.630	.002
	Within Groups	94.943	203	.468		
	Total	99.447	204			
University Image	Between Groups	4.543	1	4.543	7.596	.006
	Within Groups	121.411	203	.598		
	Total	125.954	204			
Perceived Value	Between Groups	8.749	1	8.749	11.787	.001
	Within Groups	150.669	203	.742		
	Total	159.418	204			
Customer Satisfaction	Between Groups	4.132	1	4.132	5.651	.018
	Within Groups	148.446	203	.731		
	Total	152.578	204			
Customer Loyalty	Between Groups	8.006	1	8.006	9.948	.002
	Within Groups	163.383	203	.805		
	Total	171.389	204			

I notice from the ANOVA table that there is a significant difference regarding the service quality = 0.002 , and there is a significant difference regarding the university image = 0.006, and there is a significant difference regarding the perceived value = 0.001 , and there is a significant difference regarding the customer satisfaction = 0.018 , and there is a significant difference regarding the Customer loyalty = 0.002 , according to the study period as their significant value is less than 0.05, I notice from the Descriptive table that there is significant difference in the Service Quality in respect to the study periods, as the mean of students' study duration from 1 year to less than 1 year = 3.6098, that more than the mean of students' study duration less than 1 year = 3.2159, which means that students study duration from 1 year to less than 1 year affected by the Service Quality more than students study duration less than 1 year, Also, I notice from the Descriptive table that there is significant difference in the University image in respect to the study periods, as the mean of students' study duration from 1 year to less than 1 year = 3.7271, that more than the mean of students' study duration less than 1 year = 3.3314, which means that students study duration from 1 year to less than 1 year affected by the University image more than students study duration less than 1 year.

Also, I notice from the Descriptive table that there is significant difference in the Perceived Value in respect to the study periods, as the mean of students' study duration from 1 year to less than 1 year = 3.7490, that more than the mean of students' study duration less than 1 year = 3.2000, which means that students study duration from 1 year to less than 1 year affected by the Perceived Value more than students study duration less than 1 year, Also I notice from the Descriptive table that there is significant difference in the Customer satisfaction in respect to the study periods, as the mean of students' study duration from 1 year to less than 1 year = 3.8059, that more than the mean of students' study duration less than 1 year = 3.4286, which means that students study duration from 1 year to less than 1 year affected by the Customer satisfaction more than students study duration less than 1 year, And I notice from the Descriptive table that there is significant difference in the Customer loyalty in respect to the study periods, as the mean of students' study duration from 1 year to less than 1 year = 3.7324, that more than the mean of students' study duration less than 1 year = 3.2071, which means that students study duration from 1 year to less than 1 year affected by the Customer loyalty more than students study duration less than 1 year.

#### 5.4 Research model after testing the hypotheses:

After completing the hypothesis test, the researcher was able to develop the research model that represents relationships between research variables after testing them.



**Figure 3:** Research model after testing hypotheses

## CHAPTER SIX

### CONCLUSION AND RECOMMENDATIONS

#### 6.1 The Results of the Research

##### 6.1.1 Hypotheses test results:

There is no positive significant effect of service quality on student satisfaction in higher educational institutions, there is a positive significant effect of university image on student satisfaction in higher educational institutions, there is a positive significant effect of the perceived value on student satisfaction in higher educational institutions, and There is a positive significant effect of student satisfaction on student loyalty in higher educational institutions.

##### 6.1.2 General Research Results:

Under the effort of the higher education institution in Turkey to provide the best educational services , and the competitive environment in the higher education sector in Turkey, it noticed that the level of perceived service quality is good but under the level of students expectations, So I recommend the necessity of paying attention to the element of service quality and improving them as they need more concentration and interest and should be at the improvement priorities, There is no significant difference between the service quality, university image, perceived value, customer satisfaction and customer loyalty of the female students and male students, but I notice that, Female students affected by the University Image, Perceived Value and Customer Loyalty more than Male students, There is no significant difference between the service quality, university image, perceived value, customer satisfaction and customer loyalty of students according to the age levels, but I notice that, Students aged (from 45-50) affected by the University Image more than students aged (35-44), Students aged (45-50) affected by the Perceived Value more than students aged below 25, Students aged (45-50) affected by the Customer Satisfaction more than students aged below 25, and Students aged (45-50) affected by the Customer Satisfaction more than students aged below 25.

There is no significant difference between the service quality, university image, perceived value and customer satisfaction of students according to the education level,

but there are significant differences at customer loyalty of students according to the education levels, also I notice that, PhD students affected by the Service Quality more than Master Students, PhD students affected by the University Image more than University Students, PhD students affected by the Perceived Value more than University Students, PhD students affected by the Customer Satisfaction more than University Students, and PhD students affected by the Customer Loyalty more than University Students, There is no significant difference between the service quality, university image, perceived value, customer satisfaction and customer loyalty of students according to the Study Language but I notice that, Students' study by English language affected by the Service Quality more than students' study by Turkish language, Students study by English language affected by the University Image more than students' study by Turkish language, Students' study by English language affected by the Perceived Value more than students' study by Turkish language, Students' study by English language affected by the Customer Satisfaction more than students' study by Turkish language.

There is no significant difference between the service quality, university image, perceived value, customer satisfaction and customer loyalty of students according to the Working Statues, but I notice that, working students affected by the Service Quality more than not working students, There is no significant difference between the service quality, university image, perceived value, customer satisfaction and customer loyalty of students according to their working income Statues, but I notice that, working students with income less than 10,000 TL affected by the Service Quality, University Image, Perceived Value and Customer loyalty more than working students with income from 10,000 to 20,000 TL.

There is no significant difference between the service quality, university image, perceived value, customer satisfaction and customer loyalty of students according to their source of finance if they are not working, but I notice that, Not working students with other source of income affected by the Service Quality, university image, perceived value, and customer loyalty more than not working students with income from family finance, There is no significant difference between the service quality, university image, perceived value, customer satisfaction and customer loyalty of students according to their qualification, but I notice that, PhD students affected by the Service Quality more than Master level students, PhD students affected by the

University Image more than Diploma level students, PhD students affected by the Perceived Value more than Diploma level students ,PhD students affected by the Customer Satisfaction more than Diploma level students, and PhD students affected by the Student Loyalty more than Diploma level students.

There is no significant difference between the perceived value, customer satisfaction and customer loyalty of students according to the University Type, but I notice that ,Private university students affected by the Service Quality more than Public university students, Private university students affected by the University Image more than Public university students, Private university students affected by the Perceived Value more than Public university students, Private university students affected by the Customer Satisfaction more than Public university students, and Private university students affected by the Customer loyalty more than Public university students.

There is significant difference between the service quality, university image, perceived value, customer satisfaction and customer loyalty of students according to the study period, and I notice that, Student's study duration from 1 year to less than 1 year affected by the Service Quality more than students study duration less than 1 year, Student's study duration from 1 year to less than 1 year affected by the University image more than students study duration less than 1 year, Student's study duration from 1 year to less than 1 year affected by the Perceived Value more than students study duration less than 1 year, Student's study duration from 1 year to less than 1 year affected by the Customer satisfaction more than students study duration less than 1 year, and Student's study duration from 1 year to less than 1 year affected by the Customer loyalty more than students study duration less than 1 year.

## **6.2 Recommendation:**

1. Under the attempt of the Higher education Institution to provide better academic services, and the competitive situation with inside the Turkish universities; it may be observed that the extent of best of the perceptible provider is ideal however below the stage of college students' expectations. Therefore, I suggest the need of focusing on all obstacles of the service high-satisfactory and enhancing them.

2. The important of taking into account the scholars' expectancies and aspirations at the same time as providing services.
3. Supporting the intellectual picture of the Higher education Institution thru announcement campaigns and the campaigns of public relations.
4. The necessity of paying interest that there are factors of the scale of service quality which want extra attention and interest, for that reason they need to be amongst the priorities of improvement.
5. Activating the advertising control with inside the Higher education Institution.
6. Students assume an excessive degree of feeling of self-assurance and feasible material capabilities. Thus, awareness needs to be on those factors.

### **6.3 Future Research:**

1. The effect of University image, quality of service, perceived value on the customer satisfaction and customer complaint at the higher education institutions.
2. The impact of the intellectual picture of Higher education Institution at the marketer's evaluation to the service quality
3. Analyzing the distance among the students' expectancies and the Higher education Institution notion of the one's expectancies withinside the surroundings of services.
4. The effect of applying indexes of the student's satisfaction on the profit of the service of Higher education Institution.



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## APPENDIX

### 1.1 Research Scale Appendix

Within the framework of the research master's program in (Business Administration, I study the level of quality of services at the Higher education and students' satisfaction with this quality, so please help to fill in the current questionnaire with all honesty and objectivity knowing that the results will only be used for scientific research purposes .... .

Thank you for your help and secretariat.

#### **First: Personal information:**

##### Demographic Information

##### **Gender**

Male  Female

##### **Age**

Below 25  25-34

35-44  45-50

Above 51

##### **Education Level:**

University student  Master student

PhD student

##### **What is your language of study?**

Turkish  English

##### **Are you working?**

Yes  No

**If you are working, what's your average monthly income?**

Nothing  Less than 10,000 TL

From 10,000 to 20,000 TL  More than 20,000 TL

**If you are not working, what's your source of finance?**

Scholarship  Family finance

Other

**Qualification:**

Diploma level  Bachelor's Degree Level

Masters Level  PhD

**University Type:**

Public university  Private University

**How long have you been a university student?**

Less than one year  from one year to less than three year

More than three year

**Second: Information related to the research**

**Section One:**

I would like to get your impression on the quality of services offered by the university as the following table:

Statement	Very Low	Low	Medium	High	Very High
Attitude and behavior of administrative staffs					
Administrative processes					
Learning setting					
General infrastructure					
Attitude and behavior of academics					
Curriculum					
Pedagogy					
Competence of academics					
Support facilities					

**Section Two:** Please give the relative importance to each of the following questions by marking  $\surd$  upon the corresponding opinion:

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My university has a good academic reputation					
Compared to other universities my university has a good Image					
Research output from my university is highly rated					
Qualification gained from my university is externally perceived as being of value					
My university is a prestigious university					

**Section Three:**

Please give the relative importance to each of the following questions by marking √ upon the corresponding opinion:

Statement	Very poor	Poor	Moderate	Good	Excellent
Reasonableness of university overall cost					
Overall value you get from your university for your effort					
Overall value you get from your university for your money					

**Section Four:**

Please give the relative importance to each of the following questions by marking √ upon the corresponding opinion:

Statement	Strongly Disagree	Disagree	Don't know	Agree	Strongly Agree
My choice to enroll at my university was a wise one					
This university is exactly what is needed for higher education studies					
I did the right thing by choosing my university					
I am pleased to be enrolled as a student at my university					
I am enjoying studying at my university					
I am happy with my experience as a student at my university					



**Section Five:**

Please give the relative importance to each of the following questions by marking  $\surd$  upon the corresponding opinion:

Statement	Very unlikely	Unlikely	Moderate	Likely	Very likely
Recommend your university to friends and relatives					
Say favorable things about your university to others					
Choose the same university again if you could start all over					
Attend the same university if you follow another course in Future					

Thanks a lot.....

## 1.2 Statistical Results Appendix: SPSS / AMOS

### 1.2.1 Validity and Reliability Hypothesis Test

Scale: service quality

#### Case Processing Summary

		N	%
Cases	Valid	26	83.9
	Excluded <sup>a</sup>	5	16.1
	Total	31	100.0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
.920	9

Scale: image

#### Case Processing Summary

		N	%
Cases	Valid	28	90.3
	Excluded <sup>a</sup>	3	9.7
	Total	31	100.0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
.898	5

Scale: perceived value

**Case Processing Summary**

		N	%
Cases	Valid	28	90.3
	Excluded <sup>a</sup>	3	9.7
	Total	31	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.844	3

Scale: perceived value

**Case Processing Summary**

		N	%
Cases	Valid	28	90.3
	Excluded <sup>a</sup>	3	9.7
	Total	31	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.906	5

## Scale: loyalty

### Case Processing Summary

		N	%
Cases	Valid	26	83.9
	Excluded <sup>a</sup>	5	16.1
	Total	31	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.902	4

## Correlations

### Correlations

		Attitude and behavior of administrative staffs	Administrative processes	Learning setting	General infrastructure	Attitude and behavior of academics	Curriculum	Pedagogy	Competence of academics	Support facilities	service quality
Attitude and behavior of administrative staffs	Pearson Correlation	1	.433 <sup>**</sup>	.550 <sup>**</sup>	.671 <sup>**</sup>	.814 <sup>**</sup>	.664 <sup>**</sup>	.560 <sup>**</sup>	.650 <sup>**</sup>	.595 <sup>**</sup>	.861 <sup>**</sup>
	Sig. (2-tailed)		.021	.002	.000	.000	.000	.002	.000	.001	.000
	N	28	28	28	28	28	28	27	27	27	26
Administrative processes	Pearson Correlation	.433 <sup>**</sup>	1	.544 <sup>**</sup>	.269	.364	.430 <sup>*</sup>	.500 <sup>**</sup>	.358	.253	.655 <sup>**</sup>
	Sig. (2-tailed)	.021		.003	.166	.057	.022	.008	.067	.203	.000
	N	28	28	28	28	28	28	27	27	27	26
Learning setting	Pearson Correlation	.550 <sup>**</sup>	.544 <sup>**</sup>	1	.490 <sup>**</sup>	.490 <sup>**</sup>	.630 <sup>**</sup>	.434 <sup>*</sup>	.697 <sup>**</sup>	.526 <sup>**</sup>	.783 <sup>**</sup>
	Sig. (2-tailed)	.002	.003		.008	.008	.000	.024	.000	.005	.000
	N	28	28	28	28	28	28	27	27	27	26
General infrastructure	Pearson Correlation	.671 <sup>**</sup>	.269	.490 <sup>**</sup>	1	.499 <sup>**</sup>	.706 <sup>**</sup>	.676 <sup>**</sup>	.387 <sup>*</sup>	.529 <sup>**</sup>	.722 <sup>**</sup>
	Sig. (2-tailed)	.000	.166	.008		.007	.000	.000	.046	.005	.000
	N	28	28	28	28	28	28	27	27	27	26
Attitude and behavior of academics	Pearson Correlation	.814 <sup>**</sup>	.364	.490 <sup>**</sup>	.499 <sup>**</sup>	1	.688 <sup>**</sup>	.494 <sup>**</sup>	.748 <sup>**</sup>	.563 <sup>**</sup>	.851 <sup>**</sup>
	Sig. (2-tailed)	.000	.057	.008	.007		.000	.009	.000	.002	.000
	N	28	28	28	28	28	28	27	27	27	26
Curriculum	Pearson Correlation	.664 <sup>**</sup>	.430 <sup>*</sup>	.630 <sup>**</sup>	.706 <sup>**</sup>	.688 <sup>**</sup>	1	.747 <sup>**</sup>	.737 <sup>**</sup>	.604 <sup>**</sup>	.878 <sup>**</sup>
	Sig. (2-tailed)	.000	.022	.000	.000	.000		.000	.000	.001	.000
	N	28	28	28	28	28	28	27	27	27	26
Pedagogy	Pearson Correlation	.560 <sup>**</sup>	.500 <sup>**</sup>	.434 <sup>*</sup>	.676 <sup>**</sup>	.494 <sup>**</sup>	.747 <sup>**</sup>	1	.568 <sup>**</sup>	.558 <sup>**</sup>	.784 <sup>**</sup>
	Sig. (2-tailed)	.002	.008	.024	.000	.009	.000		.002	.002	.000
	N	27	27	27	27	27	27	27	26	27	26
Competence of academics	Pearson Correlation	.650 <sup>**</sup>	.358	.697 <sup>**</sup>	.387 <sup>*</sup>	.748 <sup>**</sup>	.737 <sup>**</sup>	.568 <sup>**</sup>	1	.803 <sup>**</sup>	.858 <sup>**</sup>
	Sig. (2-tailed)	.000	.067	.000	.046	.000	.000	.002		.000	.000
	N	27	27	27	27	27	27	26	27	26	26
Support facilities	Pearson Correlation	.595 <sup>**</sup>	.253	.526 <sup>**</sup>	.529 <sup>**</sup>	.563 <sup>**</sup>	.604 <sup>**</sup>	.558 <sup>**</sup>	.803 <sup>**</sup>	1	.809 <sup>**</sup>
	Sig. (2-tailed)	.001	.203	.005	.005	.002	.001	.002	.000		.000
	N	27	27	27	27	27	27	27	26	27	26
service quality	Pearson Correlation	.861 <sup>**</sup>	.655 <sup>**</sup>	.783 <sup>**</sup>	.722 <sup>**</sup>	.851 <sup>**</sup>	.878 <sup>**</sup>	.784 <sup>**</sup>	.858 <sup>**</sup>	.809 <sup>**</sup>	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	26	26	26	26	26	26	26	26	26	26

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

\*\*. Correlation is significant at the 0.01 level (2-tailed).

**Correlations**

		My university has a good academic reputation	Compared to other universities my university has a good image	Research output from my university is highly rated	Qualification gained from my university is externally perceived as being of value	My university is a prestigious university	university image
My university has a good academic reputation	Pearson Correlation	1	.587**	.499**	.576**	.340	.689**
	Sig. (2-tailed)		.001	.007	.001	.077	.000
	N	28	28	28	28	28	28
Compared to other universities my university has a good image	Pearson Correlation	.587**	1	.828**	.691**	.841**	.944**
	Sig. (2-tailed)	.001		.000	.000	.000	.000
	N	28	28	28	28	28	28
Research output from my university is highly rated	Pearson Correlation	.499**	.828**	1	.814**	.762**	.911**
	Sig. (2-tailed)	.007	.000		.000	.000	.000
	N	28	28	28	28	28	28
Qualification gained from my university is externally perceived as being of value	Pearson Correlation	.576**	.691**	.814**	1	.609**	.847**
	Sig. (2-tailed)	.001	.000	.000		.001	.000
	N	28	28	28	28	28	28
My university is a prestigious university	Pearson Correlation	.340	.841**	.762**	.609**	1	.856**
	Sig. (2-tailed)	.077	.000	.000	.001		.000
	N	28	28	28	28	28	28
university image	Pearson Correlation	.689**	.944**	.911**	.847**	.856**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	28	28	28	28	28	28

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Correlations**

		Reasonableness of university overall cost	Overall value you get from your university for your effort	Overall value you get from your university for your money	perceived value
Reasonableness of university overall cost	Pearson Correlation	1	.625**	.616**	.821**
	Sig. (2-tailed)		.000	.000	.000
	N	28	28	28	28
Overall value you get from your university for your effort	Pearson Correlation	.625**	1	.723**	.911**
	Sig. (2-tailed)	.000		.000	.000
	N	28	28	28	28
Overall value you get from your university for your money	Pearson Correlation	.616**	.723**	1	.896**
	Sig. (2-tailed)	.000	.000		.000
	N	28	28	28	28
perceived value	Pearson Correlation	.821**	.911**	.896**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	28	28	28	28

\*\* Correlation is significant at the 0.01 level (2-tailed).

### Correlations

		Recommend your university to friends and relatives	Say favorable things about your university to others	Choose the same university again if you could start all over	Attend the same university if you follow another course in future	student loyalty
Recommend your university to friends and relatives	Pearson Correlation	1	.738**	.696**	.618**	.832**
	Sig. (2-tailed)		.000	.000	.001	.000
	N	28	28	28	26	26
Say favorable things about your university to others	Pearson Correlation	.738**	1	.817**	.769**	.936**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	28	28	28	26	26
Choose the same university again if you could start all over	Pearson Correlation	.696**	.817**	1	.698**	.883**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	28	28	28	26	26
Attend the same university if you follow another course in future	Pearson Correlation	.618**	.769**	.698**	1	.888**
	Sig. (2-tailed)	.001	.000	.000		.000
	N	26	26	26	26	26
student loyalty	Pearson Correlation	.832**	.936**	.883**	.888**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	26	26	26	26	26

\*\* Correlation is significant at the 0.01 level (2-tailed).

### 1.2.2 Differences Tests:

#### Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	Public University	55	3.3131	.59147	.07975	3.1532	3.4730	1.89	4.33
	Private University	150	3.6267	.71700	.05854	3.5110	3.7423	1.44	4.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	Public University	55	3.4545	.71124	.09590	3.2623	3.6468	1.00	4.40
	Private University	150	3.7347	.80050	.06536	3.6055	3.8638	1.00	4.80
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	Public University	55	3.4970	.78796	.10625	3.2840	3.7100	1.33	4.67
	Private University	150	3.7133	.91228	.07449	3.5661	3.8605	1.00	5.00
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	Public University	55	3.6218	.75882	.10232	3.4167	3.8270	1.40	5.00
	Private University	150	3.7853	.89895	.07340	3.6403	3.9304	1.00	5.00
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	Public University	55	3.6091	.79461	.10714	3.3943	3.8239	1.25	5.00
	Private University	150	3.6550	.95962	.07835	3.5002	3.8098	1.00	5.00
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

### ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	3.956	1	3.956	8.410	.004
	Within Groups	95.491	203	.470		
	Total	99.447	204			
University Image	Between Groups	3.158	1	3.158	5.220	.023
	Within Groups	122.796	203	.605		
	Total	125.954	204			
Perceived Value	Between Groups	1.884	1	1.884	2.428	.121
	Within Groups	157.534	203	.776		
	Total	159.418	204			
Customer Satisfaction	Between Groups	1.076	1	1.076	1.442	.231
	Within Groups	151.502	203	.746		
	Total	152.578	204			
Customer Loyalty	Between Groups	.085	1	.085	.101	.752
	Within Groups	171.304	203	.844		
	Total	171.389	204			

### Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
Service Quality	male	118	3.5122	.68878	.06341	3.3867	3.6378	1.44	4.56
	female	87	3.5837	.71271	.07641	3.4318	3.7356	1.56	4.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	male	118	3.6153	.77709	.07154	3.4736	3.7569	1.00	4.60
	female	87	3.7195	.79794	.08555	3.5495	3.8896	1.00	4.80
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	male	118	3.5791	.93718	.08627	3.4082	3.7500	1.00	5.00
	female	87	3.7586	.80002	.08577	3.5881	3.9291	1.67	5.00
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	male	118	3.7678	.82936	.07635	3.6166	3.9190	1.00	4.80
	female	87	3.7057	.91440	.09803	3.5109	3.9006	1.00	5.00
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	male	118	3.5869	.92009	.08470	3.4191	3.7546	1.00	4.75
	female	87	3.7184	.91165	.09774	3.5241	3.9127	1.00	5.00
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	.255	1	.255	.523	.471
	Within Groups	99.191	203	.489		
	Total	99.447	204			
University Image	Between Groups	.545	1	.545	.882	.349
	Within Groups	125.409	203	.618		
	Total	125.954	204			
Perceived Value	Between Groups	1.614	1	1.614	2.076	.151
	Within Groups	157.804	203	.777		
	Total	159.418	204			
Customer Satisfaction	Between Groups	.193	1	.193	.257	.613
	Within Groups	152.385	203	.751		
	Total	152.578	204			
Customer Loyalty	Between Groups	.866	1	.866	1.031	.311
	Within Groups	170.523	203	.840		
	Total	171.389	204			

**Descriptives**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	below 25	95	3.5708	.71212	.07306	3.4257	3.7158	1.89	4.56
	from 25 to 34	75	3.5200	.71989	.08313	3.3544	3.6856	1.44	4.56
	from 35 to 44	26	3.4957	.70148	.13757	3.2124	3.7791	1.56	4.56
	from 45-50	8	3.5694	.36821	.13018	3.2616	3.8773	3.11	4.11
	above51	1	3.5556	.	.	.	.	3.56	3.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	below 25	95	3.6337	.79394	.08146	3.4720	3.7954	1.60	4.60
	from 25 to 34	75	3.7067	.78934	.09115	3.5251	3.8883	1.00	4.80
	from 35 to 44	26	3.5462	.86451	.16955	3.1970	3.8953	1.00	4.60
	from 45-50	8	3.8500	.36645	.12956	3.5436	4.1564	3.60	4.60
	above51	1	4.0000	.	.	.	.	4.00	4.00
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	below 25	95	3.6035	.93310	.09573	3.4134	3.7936	1.00	5.00
	from 25 to 34	75	3.6311	.89472	.10331	3.4253	3.8370	1.33	5.00
	from 35 to 44	26	3.7821	.74799	.14669	3.4799	4.0842	1.67	5.00
	from 45-50	8	3.9583	.51755	.18298	3.5257	4.3910	3.33	4.67
	above51	1	4.6667	.	.	.	.	4.67	4.67
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	below 25	95	3.6737	.88344	.09064	3.4937	3.8537	1.00	4.60
	from 25 to 34	75	3.8320	.79664	.09199	3.6487	4.0153	1.40	5.00
	from 35 to 44	26	3.6385	1.07036	.20991	3.2061	4.0708	1.00	4.80
	from 45-50	8	3.9750	.48329	.17087	3.5710	4.3790	3.20	4.60
	above51	1	4.2000	.	.	.	.	4.20	4.20
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	below 25	95	3.5763	.98531	.10109	3.3756	3.7770	1.00	4.75
	from 25 to 34	75	3.6467	.88062	.10169	3.4441	3.8493	1.25	5.00
	from 35 to 44	26	3.6827	.84427	.16557	3.3417	4.0237	1.50	5.00
	from 45-50	8	4.1250	.44320	.15670	3.7545	4.4955	3.50	4.50
	above51	1	4.7500	.	.	.	.	4.75	4.75
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00



**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	.177	4	.044	.089	.986
	Within Groups	99.270	200	.496		
	Total	99.447	204			
University Image	Between Groups	.970	4	.243	.388	.817
	Within Groups	124.983	200	.625		
	Total	125.954	204			
Perceived Value	Between Groups	2.474	4	.618	.788	.534
	Within Groups	156.944	200	.785		
	Total	159.418	204			
Customer Satisfaction	Between Groups	1.974	4	.493	.655	.624
	Within Groups	150.604	200	.753		
	Total	152.578	204			
Customer Loyalty	Between Groups	3.548	4	.887	1.057	.379
	Within Groups	167.841	200	.839		
	Total	171.389	204			

**Descriptives**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	university student	110	3.5687	.73959	.07052	3.4289	3.7085	1.56	4.56
	master student	76	3.4576	.68155	.07818	3.3019	3.6133	1.44	4.56
	phd student	19	3.7310	.45257	.10383	3.5129	3.9491	3.11	4.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	university student	110	3.6036	.82172	.07835	3.4484	3.7589	1.00	4.60
	master student	76	3.6658	.79558	.09126	3.4840	3.8476	1.00	4.80
	phd student	19	3.9579	.39765	.09123	3.7662	4.1496	3.40	4.60
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	university student	110	3.5576	.95794	.09134	3.3766	3.7386	1.00	5.00
	master student	76	3.7061	.83616	.09591	3.5151	3.8972	1.33	5.00
	phd student	19	4.0175	.42271	.09698	3.8138	4.2213	3.33	4.67
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	university student	110	3.6673	.91562	.08730	3.4942	3.8403	1.00	4.60
	master student	76	3.7421	.84400	.09681	3.5492	3.9350	1.40	5.00
	phd student	19	4.1684	.45345	.10403	3.9499	4.3870	3.20	4.80
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	university student	110	3.5818	.95729	.09127	3.4009	3.7627	1.00	5.00
	master student	76	3.6053	.91402	.10485	3.3964	3.8141	1.00	5.00
	phd student	19	4.1447	.44344	.10173	3.9310	4.3585	3.25	4.75
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	1.298	2	.649	1.336	.265
	Within Groups	98.149	202	.486		
	Total	99.447	204			
University Image	Between Groups	2.038	2	1.019	1.661	.193
	Within Groups	123.916	202	.613		
	Total	125.954	204			
Perceived Value	Between Groups	3.740	2	1.870	2.427	.091
	Within Groups	155.678	202	.771		
	Total	159.418	204			
Customer Satisfaction	Between Groups	4.069	2	2.035	2.767	.065
	Within Groups	148.508	202	.735		
	Total	152.578	204			
Customer Loyalty	Between Groups	5.303	2	2.652	3.225	.042
	Within Groups	166.086	202	.822		
	Total	171.389	204			

**Descriptives**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	Turkish	32	3.3472	.68595	.12126	3.0999	3.5945	1.89	4.44
	English	173	3.5787	.69639	.05295	3.4742	3.6832	1.44	4.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	Turkish	32	3.4312	.68554	.12119	3.1841	3.6784	1.80	4.60
	English	173	3.7017	.79756	.06064	3.5820	3.8214	1.00	4.80
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	Turkish	32	3.4167	.79424	.14040	3.1303	3.7030	2.00	4.67
	English	173	3.6994	.89476	.06803	3.5651	3.8337	1.00	5.00
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	Turkish	32	3.6062	.70296	.12427	3.3528	3.8597	2.20	4.60
	English	173	3.7665	.89106	.06775	3.6328	3.9002	1.00	5.00
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	Turkish	32	3.6328	.70134	.12398	3.3800	3.8857	2.00	4.50
	English	173	3.6445	.95277	.07244	3.5015	3.7875	1.00	5.00
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	1.447	1	1.447	2.997	.085
	Within Groups	98.000	203	.483		
	Total	99.447	204			
University Image	Between Groups	1.976	1	1.976	3.235	.074
	Within Groups	123.978	203	.611		
	Total	125.954	204			
Perceived Value	Between Groups	2.159	1	2.159	2.787	.097
	Within Groups	157.259	203	.775		
	Total	159.418	204			
Customer Satisfaction	Between Groups	.693	1	.693	.927	.337
	Within Groups	151.884	203	.748		
	Total	152.578	204			
Customer Loyalty	Between Groups	.004	1	.004	.004	.947
	Within Groups	171.385	203	.844		
	Total	171.389	204			

### Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	Yes	116	3.6102	.64564	.05995	3.4914	3.7289	1.44	4.56
	NO	89	3.4544	.75594	.08013	3.2952	3.6137	1.78	4.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	Yes	116	3.7466	.71377	.06627	3.6153	3.8778	1.00	4.60
	NO	89	3.5461	.86169	.09134	3.3646	3.7276	1.00	4.80
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	Yes	116	3.7098	.85525	.07941	3.5525	3.8671	1.00	5.00
	NO	89	3.5843	.92015	.09754	3.3904	3.7781	1.00	5.00
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	Yes	116	3.8224	.76795	.07130	3.6812	3.9637	1.00	4.80
	NO	89	3.6360	.97120	.10295	3.4314	3.8405	1.00	5.00
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	Yes	116	3.7220	.82605	.07670	3.5701	3.8739	1.00	4.75
	NO	89	3.5393	1.01823	.10793	3.3248	3.7538	1.00	5.00
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

### ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	1.221	1	1.221	2.524	.114
	Within Groups	98.226	203	.484		
	Total	99.447	204			
University Image	Between Groups	2.024	1	2.024	3.316	.070
	Within Groups	123.930	203	.610		
	Total	125.954	204			
Perceived Value	Between Groups	.793	1	.793	1.015	.315
	Within Groups	158.625	203	.781		
	Total	159.418	204			
Customer Satisfaction	Between Groups	1.751	1	1.751	2.357	.126
	Within Groups	150.827	203	.743		
	Total	152.578	204			
Customer Loyalty	Between Groups	1.680	1	1.680	2.010	.158
	Within Groups	169.709	203	.836		
	Total	171.389	204			

**Descriptives**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
						Service Quality	Nothing		
	Less than 10,000 TL	125	3.6302	.62165	.05560	3.5202	3.7403	1.44	4.56
	from 10,000 to 20,000	14	3.3571	.70567	.18860	2.9497	3.7646	1.89	4.33
	more than 20,000	1	3.2222	.	.	.	.	3.22	3.22
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	Nothing	65	3.4800	.91910	.11400	3.2523	3.7077	1.00	4.80
	Less than 10,000 TL	125	3.7744	.67153	.06006	3.6555	3.8933	1.40	4.60
	from 10,000 to 20,000	14	3.4571	.94602	.25283	2.9109	4.0034	1.00	4.60
	more than 20,000	1	3.8000	.	.	.	.	3.80	3.80
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	Nothing	65	3.6000	1.00035	.12408	3.3521	3.8479	1.00	5.00
	Less than 10,000 TL	125	3.6773	.83380	.07458	3.5297	3.8249	1.00	5.00
	from 10,000 to 20,000	14	3.7143	.82542	.22060	3.2377	4.1909	2.00	4.67
	more than 20,000	1	3.6667	.	.	.	.	3.67	3.67
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	Nothing	65	3.6031	1.04373	.12946	3.3445	3.8617	1.00	5.00
	Less than 10,000 TL	125	3.8448	.73127	.06541	3.7153	3.9743	1.00	4.80
	from 10,000 to 20,000	14	3.4857	.99758	.26661	2.9097	4.0617	1.60	4.60
	more than 20,000	1	3.4000	.	.	.	.	3.40	3.40
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	Nothing	65	3.5385	1.12520	.13956	3.2597	3.8173	1.00	5.00
	Less than 10,000 TL	125	3.7060	.78292	.07003	3.5674	3.8446	1.00	4.75
	from 10,000 to 20,000	14	3.5714	1.00206	.26781	2.9929	4.1500	1.75	4.75
	more than 20,000	1	3.5000	.	.	.	.	3.50	3.50
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	2.540	3	.847	1.756	.157
	Within Groups	96.907	201	.482		
	Total	99.447	204			
University Image	Between Groups	4.338	3	1.446	2.390	.070
	Within Groups	121.616	201	.605		
	Total	125.954	204			
Perceived Value	Between Groups	.308	3	.103	.130	.942
	Within Groups	159.110	201	.792		
	Total	159.418	204			
Customer Satisfaction	Between Groups	3.612	3	1.204	1.625	.185
	Within Groups	148.966	201	.741		
	Total	152.578	204			
Customer Loyalty	Between Groups	1.299	3	.433	.512	.675
	Within Groups	170.090	201	.846		
	Total	171.389	204			

**Descriptives**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	scholarship	37	3.5435	.49190	.08087	3.3795	3.7076	2.56	4.56
	family finance	72	3.4429	.73549	.08668	3.2701	3.6157	1.78	4.56
	other	96	3.6169	.73329	.07484	3.4683	3.7655	1.44	4.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	scholarship	37	3.5892	.58299	.09584	3.3948	3.7836	1.60	4.60
	family finance	72	3.5194	.83626	.09855	3.3229	3.7160	1.00	4.80
	other	96	3.7917	.79996	.08165	3.6296	3.9538	1.00	4.60
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	scholarship	37	3.5856	.69124	.11364	3.3551	3.8161	1.33	4.67
	family finance	72	3.5741	.91111	.10738	3.3600	3.7882	1.00	5.00
	other	96	3.7431	.92841	.09476	3.5549	3.9312	1.00	5.00
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	scholarship	37	3.7135	.68725	.11298	3.4844	3.9427	1.40	5.00
	family finance	72	3.5972	.93236	.10988	3.3781	3.8163	1.00	5.00
	other	96	3.8604	.86432	.08821	3.6853	4.0355	1.00	4.80
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	scholarship	37	3.6149	.74906	.12314	3.3651	3.8646	1.25	5.00
	family finance	72	3.4896	1.01870	.12005	3.2502	3.7290	1.00	5.00
	other	96	3.7682	.88425	.09025	3.5891	3.9474	1.00	4.75
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	1.246	2	.623	1.281	.280
	Within Groups	98.201	202	.486		
	Total	99.447	204			
University Image	Between Groups	3.272	2	1.636	2.694	.070
	Within Groups	122.682	202	.607		
	Total	125.954	204			
Perceived Value	Between Groups	1.394	2	.697	.891	.412
	Within Groups	158.024	202	.782		
	Total	159.418	204			
Customer Satisfaction	Between Groups	2.885	2	1.443	1.947	.145
	Within Groups	149.692	202	.741		
	Total	152.578	204			
Customer Loyalty	Between Groups	3.229	2	1.615	1.940	.146
	Within Groups	168.160	202	.832		
	Total	171.389	204			

**Descriptives**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	Diploma level	47	3.5083	.59644	.08700	3.3332	3.6834	2.00	4.56
	bachelors degree level	103	3.6063	.70148	.06912	3.4692	3.7434	1.89	4.56
	master level	43	3.3798	.83544	.12740	3.1227	3.6370	1.44	4.56
	phd	12	3.7130	.38332	.11065	3.4694	3.9565	3.11	4.33
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	Diploma level	47	3.5574	.71983	.10500	3.3461	3.7688	1.60	4.60
	bachelors degree level	103	3.6990	.77047	.07592	3.5484	3.8496	1.00	4.60
	master level	43	3.6047	.95567	.14574	3.3105	3.8988	1.00	4.80
	phd	12	3.9167	.38573	.11135	3.6716	4.1617	3.60	4.60
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	Diploma level	47	3.5603	.82270	.12000	3.3187	3.8018	1.33	5.00
	bachelors degree level	103	3.6214	.89668	.08835	3.4461	3.7966	1.00	5.00
	master level	43	3.7364	.99618	.15192	3.4299	4.0430	1.33	5.00
	phd	12	4.0278	.43712	.12619	3.7500	4.3055	3.33	4.67
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	Diploma level	47	3.6426	.85662	.12495	3.3910	3.8941	1.00	4.60
	bachelors degree level	103	3.7631	.83019	.08180	3.6009	3.9254	1.00	5.00
	master level	43	3.6605	1.01469	.15474	3.3482	3.9727	1.20	5.00
	phd	12	4.2333	.37979	.10964	3.9920	4.4746	3.60	4.60
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	Diploma level	47	3.5851	.90631	.13220	3.3190	3.8512	1.25	5.00
	bachelors degree level	103	3.6117	.92800	.09144	3.4303	3.7930	1.00	5.00
	master level	43	3.5930	.95279	.14530	3.2998	3.8862	1.00	4.50
	phd	12	4.3125	.41458	.11968	4.0491	4.5759	3.50	4.75
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	1.960	3	.653	1.347	.260
	Within Groups	97.487	201	.485		
	Total	99.447	204			
University Image	Between Groups	1.573	3	.524	.848	.469
	Within Groups	124.381	201	.619		
	Total	125.954	204			
Perceived Value	Between Groups	2.491	3	.830	1.063	.366
	Within Groups	156.927	201	.781		
	Total	159.418	204			
Customer Satisfaction	Between Groups	3.693	3	1.231	1.662	.176
	Within Groups	148.884	201	.741		
	Total	152.578	204			
Customer Loyalty	Between Groups	5.745	3	1.915	2.324	.076
	Within Groups	165.644	201	.824		
	Total	171.389	204			

**Descriptives**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	Public University	55	3.3131	.59147	.07975	3.1532	3.4730	1.89	4.33
	Private University	150	3.6267	.71700	.05854	3.5110	3.7423	1.44	4.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	Public University	55	3.4545	.71124	.09590	3.2623	3.6468	1.00	4.40
	Private University	150	3.7347	.80050	.06536	3.6055	3.8638	1.00	4.80
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	Public University	55	3.4970	.78796	.10625	3.2840	3.7100	1.33	4.67
	Private University	150	3.7133	.91228	.07449	3.5661	3.8605	1.00	5.00
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	Public University	55	3.6218	.75882	.10232	3.4167	3.8270	1.40	5.00
	Private University	150	3.7853	.89895	.07340	3.6403	3.9304	1.00	5.00
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	Public University	55	3.6091	.79461	.10714	3.3943	3.8239	1.25	5.00
	Private University	150	3.6550	.95962	.07835	3.5002	3.8098	1.00	5.00
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	3.956	1	3.956	8.410	.004
	Within Groups	95.491	203	.470		
	Total	99.447	204			
University Image	Between Groups	3.158	1	3.158	5.220	.023
	Within Groups	122.796	203	.605		
	Total	125.954	204			
Perceived Value	Between Groups	1.884	1	1.884	2.428	.121
	Within Groups	157.534	203	.776		
	Total	159.418	204			
Customer Satisfaction	Between Groups	1.076	1	1.076	1.442	.231
	Within Groups	151.502	203	.746		
	Total	152.578	204			
Customer Loyalty	Between Groups	.085	1	.085	.101	.752
	Within Groups	171.304	203	.844		
	Total	171.389	204			

**Descriptives**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Service Quality	less than one year	35	3.2159	.70528	.11921	2.9736	3.4581	1.78	4.44
	from one year to less than one year	170	3.6098	.67950	.05212	3.5069	3.7127	1.44	4.56
	Total	205	3.5425	.69820	.04876	3.4464	3.6387	1.44	4.56
University Image	less than one year	35	3.3314	.81593	.13792	3.0511	3.6117	1.60	4.80
	from one year to less than one year	170	3.7271	.76451	.05863	3.6113	3.8428	1.00	4.60
	Total	205	3.6595	.78576	.05488	3.5513	3.7677	1.00	4.80
Perceived Value	less than one year	35	3.2000	.96406	.16296	2.8688	3.5312	1.00	5.00
	from one year to less than one year	170	3.7490	.83938	.06438	3.6219	3.8761	1.00	5.00
	Total	205	3.6553	.88400	.06174	3.5336	3.7770	1.00	5.00
Customer Satisfaction	less than one year	35	3.4286	.91798	.15517	3.1132	3.7439	1.40	5.00
	from one year to less than one year	170	3.8059	.84193	.06457	3.6784	3.9334	1.00	4.80
	Total	205	3.7415	.86483	.06040	3.6224	3.8606	1.00	5.00
Customer Loyalty	less than one year	35	3.2071	.93637	.15828	2.8855	3.5288	1.00	5.00
	from one year to less than one year	170	3.7324	.88903	.06819	3.5977	3.8670	1.00	5.00
	Total	205	3.6427	.91659	.06402	3.5165	3.7689	1.00	5.00

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Service Quality	Between Groups	4.504	1	4.504	9.630	.002
	Within Groups	94.943	203	.468		
	Total	99.447	204			
University Image	Between Groups	4.543	1	4.543	7.596	.006
	Within Groups	121.411	203	.598		
	Total	125.954	204			
Perceived Value	Between Groups	8.749	1	8.749	11.787	.001
	Within Groups	150.669	203	.742		
	Total	159.418	204			
Customer Satisfaction	Between Groups	4.132	1	4.132	5.651	.018
	Within Groups	148.446	203	.731		
	Total	152.578	204			
Customer Loyalty	Between Groups	8.006	1	8.006	9.948	.002
	Within Groups	163.383	203	.805		
	Total	171.389	204			

**1.2.2.1 Descriptive analysis**

**Regression**

**Descriptive Statistics**

	Mean	Std. Deviation	N
customer satisfaction	3.6849	.81410	205
quality of service	3.1518	.56856	205
university image	3.6254	.76141	205
perceived value	3.7122	.87266	205



### Correlations

		customer satisfaction	quality of service	university image	perceived value
Pearson Correlation	customer satisfaction	1.000	.727	.791	.819
	quality of service	.727	1.000	.803	.773
	university image	.791	.803	1.000	.843
	perceived value	.819	.773	.843	1.000
Sig. (1-tailed)	customer satisfaction	.	.000	.000	.000
	quality of service	.000	.	.000	.000
	university image	.000	.000	.	.000
	perceived value	.000	.000	.000	.
N	customer satisfaction	205	205	205	205
	quality of service	205	205	205	205
	university image	205	205	205	205
	perceived value	205	205	205	205

### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	perceived value, quality of service, university image <sup>b</sup>	.	Enter

a. Dependent Variable: customer satisfaction

b. All requested variables entered.

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.843 <sup>a</sup>	.711	.707	.44071

a. Predictors: (Constant), perceived value, quality of service, university image

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	96.163	3	32.054	165.035	.000 <sup>b</sup>
	Residual	39.040	201	.194		
	Total	135.203	204			

a. Dependent Variable: customer satisfaction

b. Predictors: (Constant), perceived value, quality of service, university image

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.346	.175		1.976	.049
	quality of service	.182	.095	.127	1.909	.058
	university image	.299	.084	.280	3.559	.000
	perceived value	.453	.069	.485	6.574	.000

a. Dependent Variable: customer satisfaction

**Regression**

**Descriptive Statistics**

	Mean	Std. Deviation	N
customer loyalty	3.7756	.89505	205
customer satisfaction	3.6849	.81410	205

**Correlations**

		customer loyalty	customer satisfaction
Pearson Correlation	customer loyalty	1.000	.880
	customer satisfaction	.880	1.000
Sig. (1-tailed)	customer loyalty	.	.000
	customer satisfaction	.000	.
N	customer loyalty	205	205
	customer satisfaction	205	205

### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	customer satisfaction		Enter

a. Dependent Variable: customer loyalty

b. All requested variables entered.

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.880 <sup>a</sup>	.774	.773	.42679

a. Predictors: (Constant), customer satisfaction

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	126.452	1	126.452	694.228	.000 <sup>b</sup>
	Residual	36.976	203	.182		
	Total	163.428	204			

a. Dependent Variable: customer loyalty

b. Predictors: (Constant), customer satisfaction

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.212	.138		1.531	.127
	customer satisfaction	.967	.037	.880	26.348	.000

a. Dependent Variable: customer loyalty

## Frequencies, Frequency Table

### Statistics

		Gender	Age	Education level	What is your language of study	Are you working	If you are working, what's your average monthly income	Qualification:	University Type:	How long have you been a university student	If you are not working, what's your source of finance
N	Valid	205	205	205	205	205	205	205	205	205	205
	Missing	0	0	0	0	0	0	0	0	0	0

### Statistics

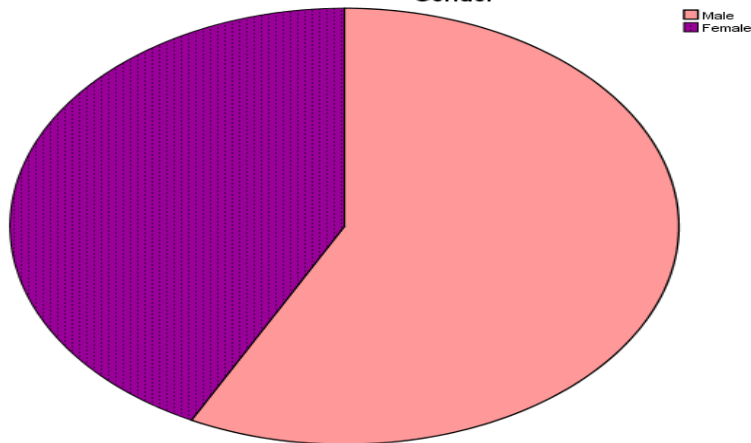
#### Gender

N	Valid	205
	Missing	0

#### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	118	57.6	57.6	57.6
	Female	87	42.4	42.4	100.0
	Total	205	100.0	100.0	

#### Gender



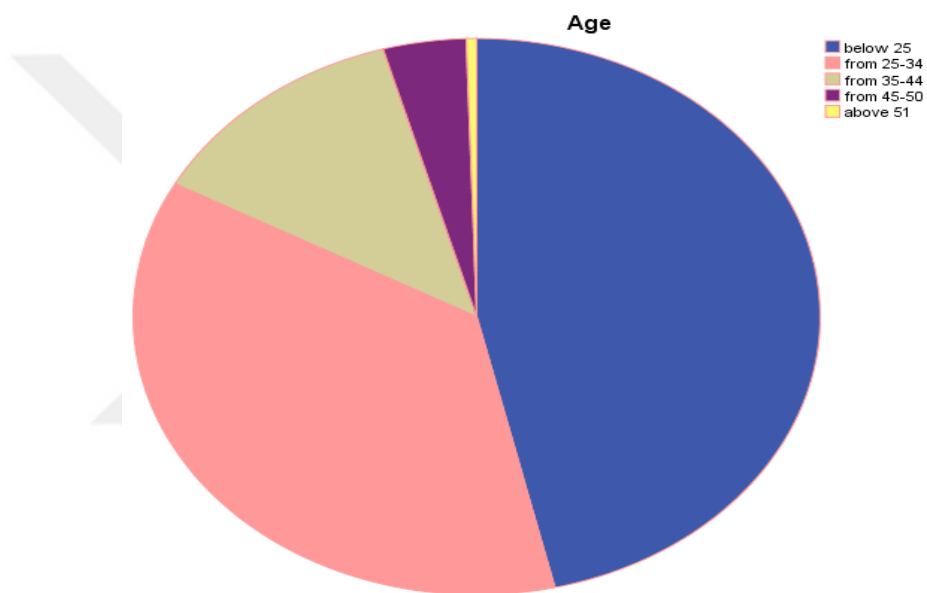
### Statistics

#### Age

N	Valid	205
	Missing	0

### Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid below 25	95	46.3	46.3	46.3
from 25-34	75	36.6	36.6	82.9
from 35-44	26	12.7	12.7	95.6
from 45-50	8	3.9	3.9	99.5
above 51	1	.5	.5	100.0
Total	205	100.0	100.0	



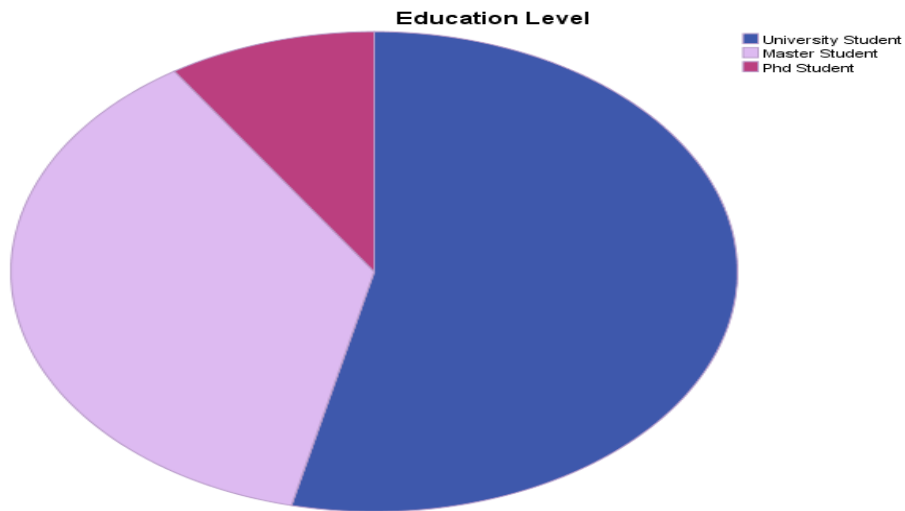
### Statistics

#### Education Level

N	Valid	205
	Missing	0

#### Education Level

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid University Student	110	53.7	53.7	53.7
Master Student	76	37.1	37.1	90.7
PhD Student	19	9.3	9.3	100.0
Total	205	100.0	100.0	



**Statistics**

What is your language of study?

N	Valid	205
	Missing	0

**What is your language of study?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Turkish	32	15.6	15.6	15.6
English	173	84.4	84.4	100.0
Total	205	100.0	100.0	



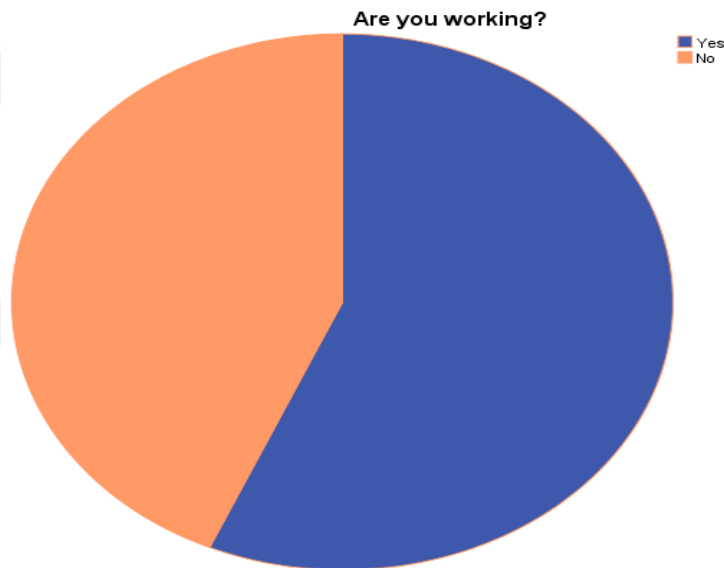
### Statistics

Are you working?

N	Valid	205
	Missing	0

### Are you working?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	116	56.6	56.6	56.6
No	89	43.4	43.4	100.0
Total	205	100.0	100.0	



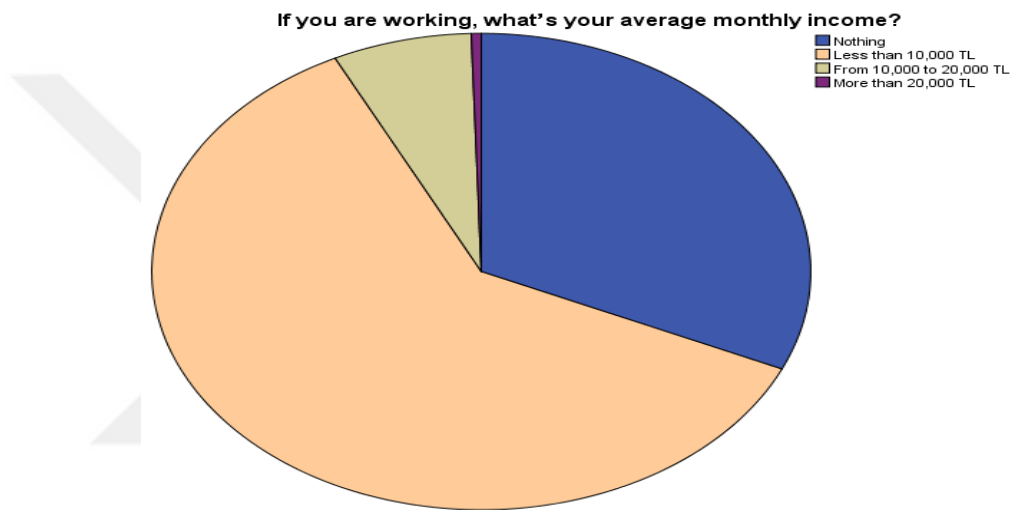
### Statistics

If you are working, what's your average monthly income?

N	Valid	205
	Missing	0

**If you are working, what's your average monthly income?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Nothing	65	31.7	31.7	31.7
Less than 10,000 TL	125	61.0	61.0	92.7
From 10,000 to 20,000 TL	14	6.8	6.8	99.5
More than 20,000 TL	1	.5	.5	100.0
Total	205	100.0	100.0	



**Statistics**

If you are not working, what's your source of finance?

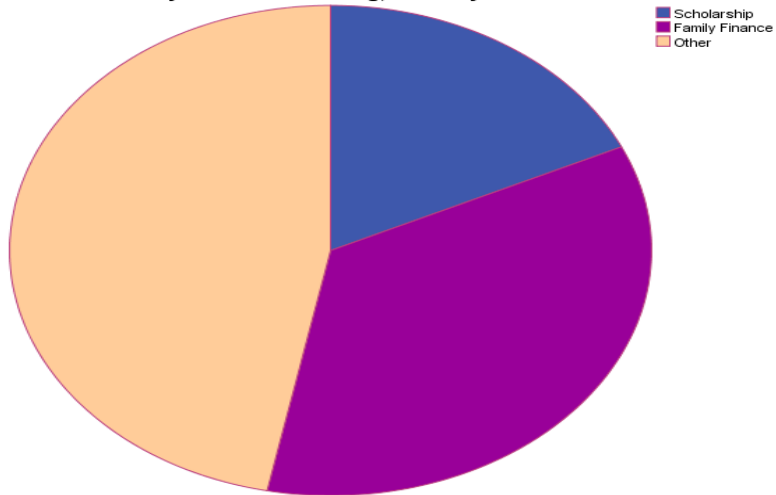
N	Valid	205
	Missing	0

**If you are not working, what's your source of finance?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Scholarship	37	18.0	18.0	18.0
Family Finance	72	35.1	35.1	53.2
Other	96	46.8	46.8	100.0
Total	205	100.0	100.0	



If you are not working, what's your source of finance?



**Statistics**

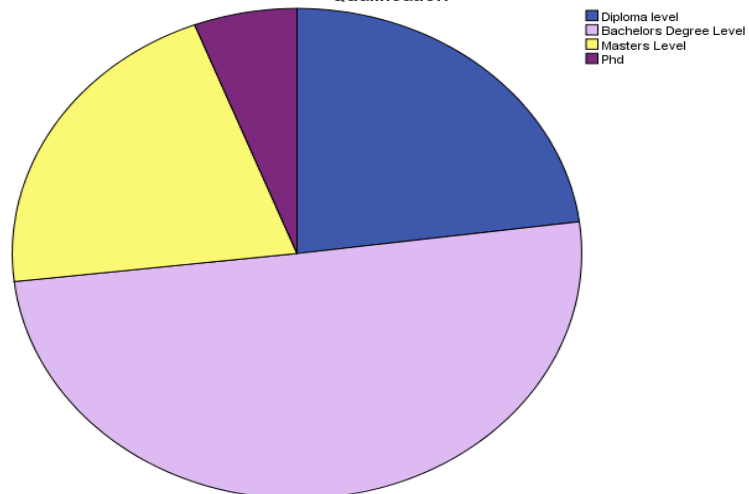
Qualification

N	Valid	205
	Missing	0

**Qualification**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Diploma level	47	22.9	22.9	22.9
Bachelor's Degree Level	103	50.2	50.2	73.2
Masters Level	43	21.0	21.0	94.1
Phd	12	5.9	5.9	100.0
Total	205	100.0	100.0	

**Qualification**



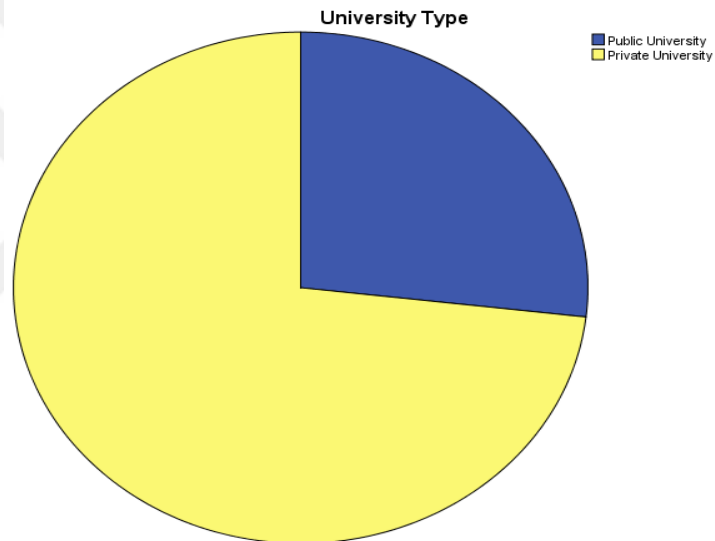
**Statistics**

University Type

N	Valid	205
	Missing	0

**University Type**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Public University	55	26.8	26.8	26.8
Private University	150	73.2	73.2	100.0
Total	205	100.0	100.0	



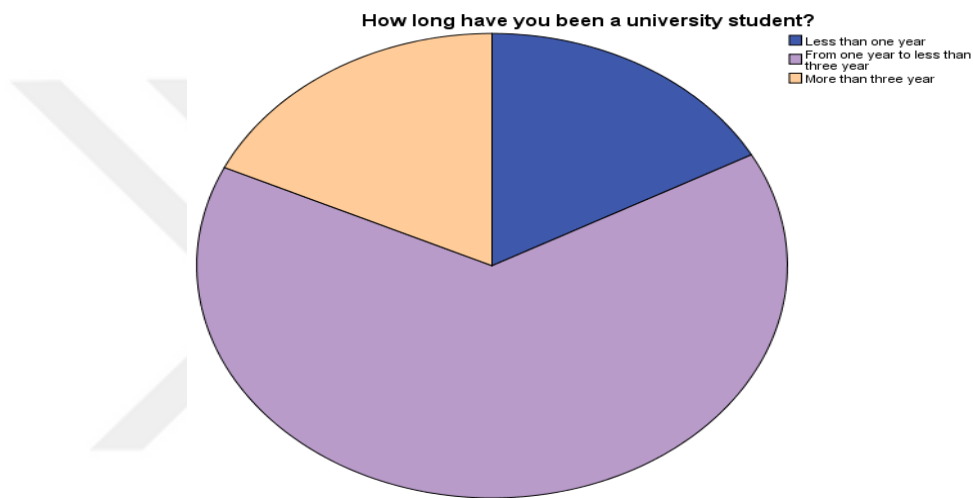
**Statistics**

How long have you been a university student?

N	Valid	205
	Missing	0

### How long have you been a university student?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than one year	35	17.1	17.1	17.1
From one year to less than three year	133	64.9	64.9	82.0
More than three year	37	18.0	18.0	100.0
Total	205	100.0	100.0	



### 1.2.2.2 Regression and correlation analysis

	Weights	Covariances	Variances	Means	Intercepts	Total
<b>Fixed</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>Labeled</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Unlabeled</b>	<b>4</b>	<b>3</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>12</b>
<b>Total</b>	<b>6</b>	<b>3</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>14</b>

	value	image	service	satisfaction	loyalty
<b>value</b>	<b>.758</b>				
<b>image</b>	<b>.557</b>	<b>.577</b>			
<b>service</b>	<b>.382</b>	<b>.346</b>	<b>.322</b>		

	value	image	service	satisfaction	loyalty
satisfaction	.579	.488	.335	.660	
loyalty	.612	.535	.352	.638	.797

	value	image	service	satisfaction	loyalty
value	1.000				
image	.843	1.000			
service	.773	.803	1.000		
satisfaction	.819	.791	.727	1.000	
loyalty	.788	.789	.696	.880	1.000

Description	r	t	p
loyalty $\perp$ image   satisfaction	.320	4.803	.000
loyalty $\perp$ service   satisfaction	.173	2.498	.013
loyalty $\perp$ value   satisfaction	.246	3.602	.000
loyalty $\perp$ service   image, satisfaction	-.001	-.012	.990
loyalty $\perp$ value   image, satisfaction	.086	1.228	.221
loyalty $\perp$ image   service, satisfaction	.273	4.030	.000
loyalty $\perp$ value   service, satisfaction	.191	2.754	.006
loyalty $\perp$ value   image, service, satisfaction	.088	1.256	.210
loyalty $\perp$ image   value, satisfaction	.228	3.319	.001
loyalty $\perp$ service   value, satisfaction	.072	1.024	.307
loyalty $\perp$ service   image, value, satisfaction	-.020	-.281	.779
loyalty $\perp$ image   service, value, satisfaction	.218	3.154	.002

			Estimate	S.E.	C.R.	P	Label
satisfaction	<---	service	.182	.095	1.924	.054	par_1
satisfaction	<---	image	.299	.083	3.586	***	par_3
satisfaction	<---	value	.453	.068	6.622	***	par_4
loyalty	<---	satisfaction	.967	.037	26.413	***	par_2

			Estimate
satisfaction	<---	service	.127
satisfaction	<---	image	.280
satisfaction	<---	value	.485
loyalty	<---	satisfaction	.880

			Estimate	S.E.	C.R.	P	Label
service	<-->	image	.346	.039	8.943	***	par_5
image	<-->	value	.557	.061	9.204	***	par_6
service	<-->	value	.382	.044	8.736	***	par_7

			Estimate
service	<-->	image	.803
image	<-->	value	.843
service	<-->	value	.773

	Estimate	S.E.	C.R.	P	Label
service	.322	.032	10.100	***	par_8
image	.577	.057	10.100	***	par_9
value	.758	.075	10.100	***	par_10
e1	.190	.019	10.100	***	par_11
e2	.180	.018	10.100	***	par_12

	Estimate
satisfaction	.711
loyalty	.774

	value	image	service	satisfaction
satisfaction	.453	.299	.182	.000
loyalty	.438	.289	.176	.967

	value	image	service	satisfaction
satisfaction	.485	.280	.127	.000
loyalty	.427	.246	.112	.880

	value	image	service	satisfaction
satisfaction	.453	.299	.182	.000
loyalty	.000	.000	.000	.967

	value	image	service	satisfaction
satisfaction	.485	.280	.127	.000
loyalty	.000	.000	.000	.880

	value	image	service	satisfaction
satisfaction	.000	.000	.000	.000
loyalty	.438	.289	.176	.000

	value	image	service	satisfaction
satisfaction	.000	.000	.000	.000
loyalty	.427	.246	.112	.000

			M.I.	Par Change
e2	<-->	image	4.735	.024
e2	<-->	e1	13.510	-.048

			M.I.	Par Change
loyalty	<---	value	4.048	.069
loyalty	<---	image	7.833	.110

Iteration		Negative eigenvalues	Condition #	Smallest eigenvalue	Diameter	F	NTries	Ratio
0	e	5		-.500	9999.000	950.187	0	9999.000

Iteration		Negative eigenvalues	Condition #	Smallest eigenvalue	Diameter	F	NTries	Ratio
1	e*	2		-.304	1.092	305.687	18	1.039
2	e	1		-.302	.314	192.699	6	.738
3	e	0	126.368		.423	60.981	5	.923
4	e	0	150.037		.416	33.095	1	.900
5	e	0	227.387		.282	24.367	1	1.154
6	e	0	289.699		.118	23.672	1	1.066
7	e	0	293.030		.016	23.665	1	1.009
8	e	0	290.016		.000	23.665	1	1.000



	par_1	par_2	par_3	par_4	par_5	par_6	par_7	par_8	par_9	par_10	par_11	par_12
par_1	.009											
par_2	.000	.001										
par_3	-.004	.000	.007									
par_4	-.002	.000	-.003	.005								
par_5	.000	.000	.000	.000	.001							
par_6	.000	.000	.000	.000	.002	.004						
par_7	.000	.000	.000	.000	.002	.002	.002					
par_8	.000	.000	.000	.000	.001	.001	.001	.001				
par_9	.000	.000	.000	.000	.002	.003	.002	.001	.003			
par_10	.000	.000	.000	.000	.002	.004	.003	.001	.003	.006		
par_11	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
par_12	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

	par_1	par_2	par_3	par_4	par_5	par_6	par_7	par_8	par_9	par_10	par_11	par_12
par_1	1.000											
par_2	.000	1.000										
par_3	-.444	.000	1.000									
par_4	-.300	.000	-.587	1.000								
par_5	.000	.000	.000	.000	1.000							
par_6	.000	.000	.000	.000	.864	1.000						
par_7	.000	.000	.000	.000	.903	.880	1.000					
par_8	.000	.000	.000	.000	.886	.671	.865	1.000				
par_9	.000	.000	.000	.000	.886	.911	.757	.645	1.000			

	par_1	par_2	par_3	par_4	par_5	par_6	par_7	par_8	par_9	par_10	par_11	par_12
par_10	.000	.000	.000	.000	.718	.911	.865	.598	.710	1.000		
par_11	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.000	
par_12	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.000

	par_1	par_2	par_3	par_4	par_5	par_6	par_7	par_8	par_9	par_10	par_11	par_12
par_1	.000											
par_2	7.724	.000										
par_3	.770	-7.336	.000									
par_4	2.041	-6.635	1.135	.000								
par_5	1.599	-11.661	.511	-1.358	.000							
par_6	3.334	-5.793	2.506	1.145	6.333	.000						
par_7	1.911	-10.269	.878	-.874	1.901	-5.790	.000					
par_8	1.394	-13.299	.254	-1.737	-1.339	-5.152	-2.642	.000				
par_9	3.566	-5.751	2.749	1.395	7.941	.788	5.231	5.809	.000			
par_10	4.761	-2.507	4.090	3.007	7.575	6.295	8.703	7.086	3.416	.000		
par_11	.084	-18.858	-1.270	-3.698	-3.614	-5.784	-4.019	-3.546	-6.425	-7.334	.000	
par_12	-.020	-19.312	-1.391	-3.854	-3.886	-5.970	-4.265	-3.870	-6.626	-7.487	-.388	.000

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	12	23.665	3	.000	7.888
Saturated model	15	.000	0		
Independence model	5	1063.401	10	.000	106.340

Model	RMR	GFI	AGFI	PGFI
Default model	.022	.958	.790	.192
Saturated model	.000	1.000		
Independence model	.404	.285	-.073	.190

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.978	.926	.981	.935	.980
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000



Model	PRATIO	PNFI	PCFI
Default model	.300	.293	.294
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

Model	NCP	LO 90	HI 90
Default model	20.665	8.738	40.053
Saturated model	.000	.000	.000
Independence model	1053.401	950.031	1164.157

Model	FMIN	F0	LO 90	HI 90
Default model	.116	.101	.043	.196
Saturated model	.000	.000	.000	.000
Independence model	5.213	5.164	4.657	5.707

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.184	.119	.256	.001
Independence model	.719	.682	.755	.000

Model	AIC	BCC	BIC	CAIC
Default model	47.665	48.392	87.541	99.541
Saturated model	30.000	30.909	79.845	94.845
Independence model	1073.401	1073.704	1090.016	1095.016

Model	ECVI	LO 90	HI 90	MECVI
Default model	.234	.175	.329	.237
Saturated model	.147	.147	.147	.152
Independence model	5.262	4.755	5.805	5.263

Model	HOELTER	HOELTER
	.05	.01
Default model	68	98
Independence model	4	5

Correlations

		My choice to enroll at my university was a wise one	This university is exactly what is needed for higher education studies	I did the right thing by choosing my university	I am pleased to be enrolled as a student at my university	I am happy with my experience as a student at my university	customer satisfaction
My choice to enroll at my university was a wise one	Pearson Correlation	1	.687**	.616**	.672**	.690**	.855**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	28	28	28	28	28	28
This university is exactly what is needed for higher education studies	Pearson Correlation	.687**	1	.610**	.575**	.654**	.841**
	Sig. (2-tailed)	.000		.001	.001	.000	.000
	N	28	28	28	28	28	28
I did the right thing by choosing my university	Pearson Correlation	.616**	.610**	1	.803**	.818**	.885**
	Sig. (2-tailed)	.000	.001		.000	.000	.000
	N	28	28	28	28	28	28
I am pleased to be enrolled as a student at my university	Pearson Correlation	.672**	.575**	.803**	1	.608**	.833**
	Sig. (2-tailed)	.000	.001	.000		.001	.000
	N	28	28	28	28	28	28
I am happy with my experience as a student at my university	Pearson Correlation	.690**	.654**	.818**	.608**	1	.879**
	Sig. (2-tailed)	.000	.000	.000	.001		.000
	N	28	28	28	28	28	28
customer satisfaction	Pearson Correlation	.855**	.841**	.885**	.833**	.879**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	28	28	28	28	28	28

\*\* . Correlation is significant at the 0.01 level (2-tailed).

