# **Measuring Service Quality in Higher Education: A Study of Post-Graduate Students in Northern Cyprus**

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#### **ABSTRACT**

Main purpose of this research is to test conceptual model that investigates the satisfaction level with service quality from perspective of post-graduate students. Specifically, research aimed on identifying relationship between service quality dimensions and overall student's satisfaction. HEdPERF model specifically designed for measuring service quality in Higher Education. This thesis tests the relationships among the study variables and satisfaction. The study variables used are "academic aspects", "reputation", "non-academic aspects", "access", "program issues" which are correlated with students overall satisfaction. Eastern Mediterranean University of Northern Cyprus was taken as a case study, specifically; sample was drawn from two faculties, Business Administration and Tourism where managerial subjects are taught. The relationships were tested using SPSS Statistics 20. The obtained results suggested that service quality variables have significant relationships with the overall satisfaction of post-graduate students of Eastern Mediterranean University of Northern Cyprus. These relationships were examined by distribution of questionnaires to Master and PhD post-graduate students of two faculties of the university.

Study tested conceptual model that examined customer satisfaction with service quality. Research was conducted among post-graduate students. The results of this study demonstrated that all five determinants of service quality have correlation with satisfaction. Thesis provides implications for managers and information about limitations of study. Thesis also provides recommendations for future studies.

**Keywords:** Service Quality; Satisfaction; Post-graduate students; Eastern Mediterranean University; Higher Education.

## ÖZ

Bu çalışmanın amacı, lisansüstü öğrencilerinin bakış açısıyla hizmet kalitesi ile memnuniyet düzeyini inceleyen kavramsal bir modeli test etmektir. Özellikle, bu araştırma hizmet kalitesi boyutları ve genel öğrenci memnuniyeti arasındaki ilişkiyi belirlemeyi amaçlamaktadır. Yükseköğrenimdeki servis kalitesini ölçmek için özellikle HEdPERF modeli tasarlanmıştır. Bu tez eğitim değişkenleri ile memnuniyet arasındaki ilişkiyi test etmektedir. Öğrencilerin genel memnuniyetleri, kullanılan eğitim değişkenleri olan akademik dışı yönler, akademik yönler, itibar, ulaşım ve bölüm konularıyla bağlantılıdır.Kuzey Kıbrıs'taki Doğu Akdeniz Üniversitesi durum çalışması olarak alınmış, özellikle, yönetimsel konuların öğretildiği iki fakülte olan "İşletme ve Ekonomi Fakültesi" ve "Turizm Fakültesi" örneklemi kurmak için kullanılmıştır. Buradaki ilişkiler "SPSS Statistics 20" adlı program kullanılarak test edilmiştir.

Elde edilen sonuçlar, Kuzey Kıbrıs Doğu Akdeniz Üniversitesi lisansüstü öğrencilerin genel memnuniyeti ile hizmet kalitesi değişkenleri arasında anlamlı ilişkiler kurduğunu ileri sürmektedir. Söz konusu ilişkiler anket dağıtımı ile DAÜ'deki iki fakültede, yüksek lisans ve doktora öğrencilerinden elde edilen veriler ile test edilmiştir. Bu çalışma hizmet kalitesi ile müşteri memnuniyetini inceleyen kavramsal bir modeli test etmektedir. Bu araştırma hizmet kalitesi değişkenleri olan akademik yönler, üniversite ve bölüm konularının itibarını lisansüstü öğrencilerininalgısı daha yüksek olanlar arasında yapılmıştır. Bu çalışmanın sonuçları, hizmet kalitesinin her beş belirleyicisiyle memnuniyet arasında ilişki olduğunu göstermiştir.

Ayrıca, bu çalışmada sunulan sonuçlar ışığında yöneticilere tavsiyeler, kısıtlamalar hakkında bilgiler ve buna ek olarak, ilerideki araştırmalar için öneriler bu tezde sunulmuştur.

**Anahtar Kelimeler:** Hizmet Kalitesi; Memnuniyet; Lisansüstü Öğrenciler; Doğu Akdeniz Üniversitesi; Yükseköğrenim

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# Chapter 1

#### INTRODUCTION

The proposed work is about service quality which has attracted attention of many scholars for moreover than two decades. According to Parasuraman (1985), customers often perceive SERVQUAL the way they perceive the organization that provides it to them (Parasuraman, 1985). Abdullah (2006a) argued that despite the fact that SERVQUAL attracted much attention in educational sector, still there is a need in identification of its determinants from students' perspective (Abdullah, 2006a).

Service quality is often considered as a strong competitive tool that not only service companies, but Higher Education Institutions tend to apply all over the world to raise their competitiveness in the tertiary sector. Last decades more universities have been set to give necessary feedback in reply to demand for HE and there are also huge number of students that want to obtain education abroad (Moshe, 2013). Academicians and practitioners examine service quality so to understand better the main core of it and succeed in gaining competitive advantage along with customer loyalty (Abdullah, 2006b). Service quality concept has been adopted in many sectors including tourism, health, transportation, and Higher Education. Wan Edura Wan (2009) argued that service quality becomes the most critical consumer issue in health care setting. (Wan Edura Wan & Hj. Kamaruzaman, 2009). According to Abdullah (2006b), one of the most unresolved and important task in

service quality is a debate about which scale to use for SERVQUAL examining (Abdullah, 2006b). The increasing competition among higher education institutions to attract students toward achieving high academic profiles is forcing them to pay more attention to service quality issues (Green, 2014). While goods can be measured with objectivity, SERVQUAL is evasive and hard to examine (Karatepe, Yavas, & Babakus, 2005). Therefore, there is no better way to evaluate SERVQUAL that according to customers perception. It is understood that service quality is expressed in customers delighted. In the case of Higher Education Institutions, customers are students obtaining their education within the HE Institution.

The higher education sector in Turkish Republic of Northern Cyprus (TRNC) has been growing fast since the establishment of Eastern Mediterranean University (EMU) in 1979 ( Altinay & Ezel, 2011). Service quality in higher education is very important topic particularly for country where higher education sector is essential, as in the case of TRNC. With number of universities operating countrywide, the higher education sector of TRNC is growing rapidly. Nowadays, there are several higher education institutions in TRNC scattered around the whole country and the total number of students are around 45 thousand. In Northern Cyprus, universities play crucial role in the economy. The development of this area correlates with the level of satisfaction students get from higher education services (educational and non-educational) provided by the universities.

### 1.1 Research Gap

A detailed literature review (Abdullah, 2006a, 2006b; Al-Rahimy & S, 2013; M. Altinay & Ezel, 2011; Green, 2014; Prakash & Mohanty, 2012; Randheer, 2015; Sheeja, Krishnaraj, & Harindranath, 2014; Sohail & Shaikh, 2004; Yen, 2013; Yusof

& Ghouri, 2013) has shown that although number of studies had been carried out about SERVQUAL in HE sector, there was no research about customers of HE conducted in TRNC where tertiary education sector is highly developed. In this research, customers are students who can be regarded as educational tourists currently obtaining their degrees in the university (e.g., the ones who are registered in a HE Institution).

In his research, Abdullah (2005) conducted study in Malaysia, recommended, that future studies should be applied in other countries with different types of institutions. (Abdullah, 2005). However, no research has been carried about measuring service quality, specifically in tourism education in TRNC. That is the point of this research conduction.

#### **1.2 Problem Statement**

The preliminary study showed that students face some issues that either make them feel dissatisfied or drop out of the program. This is indication that some students are not happy with services provided. Higher education sector is an important economic activity and also very competitive. According to Tan and Kek (2004), tertiary educational quality can be accessed through students' satisfaction by determining the point where students' expectations and needs are met. (Tan & Kek, 2004). Students or educational tourists are essential factor in economic activity development of the whole country. Therefore, universities cannot afford to lose students.

#### 1.3 Aims and Objectives of the Research

The purpose of this research is to investigate the relationship between SERVQUAL variables and satisfaction of post-graduate students in Eastern Mediterranean University.

The goal of this research is to examine the factors contributing to post-graduate student's satisfaction with service quality. Research adopts HEdPERF model and measures service quality according to five variables of the measurement tool (Abdullah, 2005).

Research is focused on below mentioned aims and objectives:

- 1. To review SERVQUAL in HE emphasizing on tourism education
- 2. To examine SERVQUAL of HE from postgraduate students' point of view
- 3. To formulate a policy guideline for the decision makers
- 4. To estimate the usefulness of HEDPERF method in terms of delivery high service quality in universities of TRNC.

Basically, this thesis aims to analyze service quality satisfaction in the Eastern Mediterranean University, so to understand perception of SERVQUAL from post-graduate students' perspective.

#### 1.4 Research Context

In today's rapidly changing environment, Higher Education Institutions face different challenges. Another fact is that standards of service industry change rapidly and what was considered an outstanding service yesterday may count as average today. This is valid for all service industries, including sector of Higher Education. There are many factors that affect HE Institutions development, such as technological progress, globalization, changing environment and many others. Nowadays, higher education also faces significant changes in the competitive market. Competitive advantage creates opportunities for students' demands and expectations towards Higher Education Institutions to increase. Obtaining Higher

Education degree is gradually becoming an important concern for young people nowadays. While selecting a university, students pay attention not only to academic matters but also to such aspects as equal treatment of students within university, infrastructure of the institution, facilities of dormitory provided by university and etc. Awareness of standards for the tertiary institutions and requirements for their service quality level grows accordingly. Young people nowadays double check professional image of institution, its rankings, positioning, accreditation lists, joint degrees offered and other relative aspects before making their final choice of where to study.

Since foundation of Eastern Mediterranean University that was named Higher Technological Institute in 1979, higher education in Northern Cyprus started new era. (M. Altinay & Ezel, 2011). To survive and stay competitive in highly competitive tertiary market, the educational institution must have clear picture of its internal strength and weakness along with external opportunities and threats. HE Institutions have to ensure that they meet expectations of all students. Level of dormitories offered, infrastructure and facilities, registration procedure, presence of helpful administrative staff, level of language of instructors, educated academic staff, positive attitude towards students, well provided communication between administration and students, professional image of the institution, in-time feedback from institution, equal treatment of all students, health services as well as appropriate service delivery procedures, provision of students activities, employment opportunities after graduation are factors that the institution should provide today to gain competitive advantage in educational market.

Due to increasing role of higher education in the world it is essential for university to work on development of HE infrastructure and provision of high SERVQUAL level. Today in students environment Northern Cyprus is widely known for its tertiary education sector and particularly, for Eastern Mediterranean University. The university is ranked 1-st among 20 universities throughout Cyprus and 968-th throughout the world.(EMU, 2015).

#### 1.4.1 The Importance of HE for Northern Cyprus

Northern Cyprus is recognized by Turkey only and has embargoes put by UN. (Arasli, 2005). TRNC is a small island and has limited approach to export. Under these circumstances, education is the industry that brings benefits to the whole country.

Development of EMU helped authorities to understand the importance of higher education that can compensate non recognized state economic benefits, which cannot be provided by tourism and agricultural sectors only (M. Altinay & Ezel, 2011).

Successful development of HE in TRNC could not leave without attention of Turkey, that is how in 2002 Middle East Technical University built a campus in Morphou region of Northern Cyprus. (M. Altinay & Ezel, 2011). Also, insufficient supply of institutions of HE in Turkey, encouraged Turkish students to search opportunities in other countries. As a fact, more than 8000 students nowadays obtain their degrees in EMU. The EMU have multicultural environment where students come from all over the world having various cultural backgrounds. Accordingly, their understanding and expectations of SERVQUAL is different as well. Diversified group of students made life in Cyprus different from what it was before. Students that study in Cyprus have

contributed into the country a lot, which positively impacts tourism sector development.

Students satisfaction plays decisive role for the HE institutions and universities must use all opportunities to provide high level of service quality for students. Thousands of students coming to Northern Cyprus, bring enormous financial input into the development of TRNC. With these contributions, country can develop other areas for example, agriculture or tourism sectors. Therefore, it is crucially important to keep level of service quality in university highly competitive.

#### 1.5 Outline of the Thesis

From six chapters in this thesis, the first chapter contains information regarding concept of service quality and in terms of this concept refers to previous literature review. Further, chapter is followed by information about service quality in tertiary market and finally importance of high level of SERVQUAL in Higher Education for Northern Cyprus.

The second chapter consists of discussion about service quality and provides literature review on this topic from perspective of various researchers. Chapter briefly describes different models for measuring SERVQUAL in Higher Education. Chapter presents information on empirical researches in Higher Education.

The third chapter provides conceptual model. Chapter contains five hypotheses that are followed by brief explanations. The forth chapter includes information about sampling, detailed data collection process, preparation of questionnaire. The information about data analysis is provided. Chapter five describes results of the

empirical studies. It also contains results of Respondents' profile, descriptive statistics and correlation analysis.

In chapter six discussions regarding results of the study are developed. This chapter presents managerial implication and discusses limitation of study and directions for the future researches. Further, in chapter seven conclusion of the thesis is presented. Sample of questionnaire is attached in the "Appendix" section.

# Chapter 2

#### LITERATURE REVIEW

The purpose of literature review chapter is to briefly present different scales, identify and elaborate on the most suitable scale for the topic of inquiry which is measuring SERVQUAL in HE. The literature review will be comprised of four main sections. In the first section, SERVQUAL will be explained. This will be followed by the brief presentation and discussion of different service quality models. The third section will provide an overview of SERVQUAL in HE. In the final section, the justification of using HEDPERF scale will be presented.

#### 2.1 Service Quality

Unlike goods, service is a type of activity that is elusive and intangible and not acceptable by all people in the same way. Despite that scientists from different academic areas put efforts to formulation of service quality concept, still there is much conceptual work on the quality of service that can be conducted. According to Ueno (2010), SERVQUAL and customer satisfaction are important topics for the academic world as well as for the researches in the field of marketing. (Ueno, 2010).

SERVQUAL area is a sensitive area and it implicates clear understanding of customers need and wants. Quality of services has a strong impact on satisfaction of customers and, as a consequence - customer loyalty. Karatepe (2005) argued that offering customers high service quality in a competitive market, gives companies an opportunity to distinguish themselves (Karatepe et al., 2005). The global trade

changed crucially over last decades; so changed perceptions of standards for service sector from customer's point of view. Patric (1996) stated, that the need for service quality grows, when competition becomes more taught while. (Patrick, Karl, & John, 1996). Concepts of SERVQUAL have been formulated by different influences. One of important factors in affecting approaches of people towards service is globalization as well. The formation of global production and trade has changed dramatically over the last decades. It must be mentioned, that globalization had a huge impact on service sector categories, as today's service quality is a result of multiple combined impacts of social, economic, human factors. In their research, Prakash and Mohanty (2012) define four types of service categories:

**Type A:** that includes services with a low degree of complexity and the low participation of the client, such as mass transit, ATM, which are generally self-service (Prakash & Mohanty, 2012).

**Type B:** mostly this type if services are developed in each case and depend on the experience from your service provider client has little knowledge of the process and have a rather passive role It includes the services of a high degree of complexity and the low participation of the customer, plastic surgery, IT outsourcing services, life insurance, etc.(Prakash & Mohanty, 2012).

**Type C:** These are services with low degree of complexity and high level of involvement due to highly standardized and efficient processes. We can relate to this type call centers and fast food restaurants(Prakash & Mohanty, 2012).

**Type D:** It includes services with low complexity and high level of participation of the high standardized and efficient processes. A good example of this kind of service

is buying through the internet, consulting, and medical examination. They are normally services which give help or support to the customer (Prakash & Mohanty, 2012).

According to Sohail (2004), service organizations can differentiate themselves in a market by providing better quality that their competitors (Sohail & Shaikh, 2004). It is usually very difficult and challenging to maintain a good level of satisfactions of customers. The customer evaluates the service delivery of an organization's offerings through the personnel's interactions.

The concept of the modern quality can be related to 20 years of 20 century (Garvin, 1988). Walter A. Shewhart author of Economic Control of Manufactured concentrated on management processes of not only how to create high-quality products, but also to the processes that create these products. (Andrea, 2011). Later, quality of products expanded to the quality in all areas of the organizations. That can be considered as the start of Total Quality Control. Dr. Armand V. Feigenbaum, author of TQM is known as a founder for quality control. He is recognized as the father of Total Quality Management. In general. TQM is based on a point of view of customers. Around the turn of the 20th century, a great number of standardization organizations were founded, including organizations that are nowadays known IEC, the International Electro technical Commission, AHAM, The Association of Home Appliance Manufacturers ,AIHA, American Industrial Hygiene the British Standards Institution, ANSI, American National Association, BSI, Standards Institute, TCIA, Tree Care Industry Association, IAPMO, The International Association of Plumbing and Mechanical Officials and etc.

#### 2.2 Service Quality Models

Service quality is area that attracted attention of many researchers, particularly academicians and industry practitioners. To add more, SERVQUAL is a concept that draws attention of many marketing researchers and professionals due to its importance (Yen, 2013). Until now, various researchers have developed different scales to measure service quality. So far, service quality measurement scales were examined in different industries. As a fact, various models have been designed to measure SERVQUAL. In his research paper, Ekiz (2008) listed models widely used for measuring service quality (Ekiz & Bavik, 2008).

Table 1: Various models designed for measuring service quality.

Scale	Researcher	Industry
SERVQUAL	Parasuraman, et., al 1985.1988	General service quality
		measurement
SERVPERF	Cronin and Taylor,1992.1994	Hotels, clubs, travel
		agencies
DINESERV	Stevens, Knutson and Patton,1995	Food and beverage
		establishments
LONGSERV	Knutson, et.al.,1990	Hotels
SERVERVAL	Petrick,2002	Airlines
SYSTRA-SQ	Aldalaigan and Buttle,2002	Bank services
SITEQUAL	Yoo and Donthu,2001	Internet shopping
E-SQUAL	Parasuraman et.al.,2005	Electronic services
HEdPERF	Abdullah, 2006	Higher education sector
SELEB	Toncar et.al.,2006	<b>Education Services</b>

Parasuraman, Zeithaml and Malhorta, 2005

During last three decades, many researchers have worked on service quality measurement. Knowing customers perceptions of SERVQUAL and being able to measure it provides huge benefits to service organizations. A number of models for measuring service quality have been designed so far. Below, is a table with nineteen models used for examining the level of SERVQUAL (Seth, Deshmukh, & Vrat, 2005).

# Table 1.1: Service quality models (Seth et al., 2005). SQ1. Technical and functional quality model (Gronroos, 1984) SQ2: GAP model (Parasuraman et al., 1985) SQ3. Attribute service quality model (Haywood-Farmer, 1988) SQ4. Synthesised model of service quality (Brogowicz et al., 1990) SQ5. Performance only model (Cronin and Taylor, 1992) SQ6. Ideal value model of service quality (Mattsson, 1992) SQ7. Evaluated performance and normed quality model (Teas, 1993) SQ8. IT alignment model (Berkley and Gupta, 1994) SQ9. Attribute and overall affect model (Dabholkar, 1996) SQ10. Model of perceived service quality and satisfaction (Spreng and Mackoy, 1996) SQ11. PCP attribute model (Philip and Hazlett, 1997) SQ12. Retail service quality and perceived value model (Sweeney et al., 1997) SQ13. Service quality, customer value and customer satisfaction model (Oh, 1999)

SQ14. Antecedents and mediator model (Dabholkar et al., 2000)

SQ15. Internal service quality model (Frost and Kumar, 2000)

SQ16. Internal service quality DEA model (Soteriou and Stavrinides, 2000)

SQ17. Internet banking model (Broderick and Vachirapornpuk, 2002)

SQ18. IT-based model (Zhu et al., 2002)

SQ19. Model of e-service quality (Santos, 2003)

Among these models, Service Quality model of Parasuraman (1985) served as a framework for research in service industry for more two decades. In other words, service quality model of Parasuraman has been the most popular model among researchers. This model has been used by numerous researchers due to its easy application and detached simple theory. As mentioned in previous section, results obtained can help to identify the direction organization should move and items managers should include in company's strategy. Model can be worked out both by quantitative or qualitative method. Despite SERVQUAL model is the most applied one, it is still being criticized by researchers. Managers should know that the model is general one and its factors specific to an industry need attention. While balance level between the elements of service quality can differ industry by industry their relations of elements must stay the same. The model is based on gaps between the actual performance and expectations of customers (Parasuraman et al., 1985; Curry, 1999; Luk and Layton, 2002):

Gap 1: "Discrepancy between customers' expectations and managers' perceptions of those expectations" (Parasuraman, 1985).

- Gap 2: "Discrepancy between management perceptions of consumer's experience" (Parasuraman, 1985).
- Gap3: "Discrepancy between service quality specifications and service itself" (Parasuraman, 1985).
- Gap 4: "Discrepancy between delivery of service and the communications to consumers about service delivery" (Parasuraman, 1985).
- Gap 5: Discrepancy between consumer's expectation and actual perceived service.

"Customer Gap" is the most important one as it identifies the gap between expectations and actual perception of service quality. Firstly there were 10 gaps proposed for measuring, but by the early 1990s, the authors, Parasuraman and Zeithaml had converted the model to five factors:

- 1. "Reliability: the ability to perform the promised service dependably and accurately" (Berry, Zeithaml, & Parasuraman, 1990).
- 2. "Assurance: the knowledge and courtesy of employees and their ability to convey trust and confidence" (Berry et al., 1990).
- 3. "Tangibles: the appearance of physical facilities, equipment, personnel and communication materials" (Berry et al., 1990).
- 4. "Empathy: including communication, understanding, caring and individualized attention that the firm provides to its customers" (Berry et al., 1990).
- 5. "Responsiveness: the willingness to help customers and to provide prompt service" (Berry et al., 1990).

#### 2.3 Service Quality in Higher Education

The monitoring of SERVQUAL is crucial for all organizations, including HE. Quality in higher education is a concern of all institutions across the world (Sohail & Shaikh, 2004). Since the early 1980-s the higher education and research sector has been facing accelerated rationalization. Service quality is concerned with the physical, institutional and psychological aspects of Higher Education (Sheeja et al., 2014).

As Paul Green (2014) stated, nowadays competition among universities is very tough, therefore to attract students university should offer them higher level in service quality (Green, 2014).

#### 2.4 HEdPERF

The HEdPERF (Higher Education Performance only) was developed by Firdaus Abdullah specifically to measure SERVQUAL in Higher Education sector (Abdullah, 2006a). It evolves strengths and weaknesses of service quality dimensions and can serve for HE Institutions as a tool for allocation its resources correctly.

Abdullah (2006a) proposed 41 item measurement tool based on six determinants, namely "academic aspects", "reputation", "non-academic aspects", "access", "programme issues" and "clear understanding" (Abdullah, 2006a). The measurement scales assess the level of service quality and explore how different dimensions effect on service quality. Later, sixth dimension "understanding" was discarded. HEdPERF model is a measurement scale of service quality specifically designed for higher education sector using both qualitative and quantitative measures. In particular, the study attempts to determine critical factors of service quality from student's point of

view. This model ideally fits to the proposed research framework namely, Higher Education area.

#### 2.5 Empirical Research on Service Quality in Higher Education

Higher Education plays global role in the development of each student as a personality. There were numerous researches being conducted on investigating SERVQUAL in HE.

In his research, Ana (2009) compared instruments for measuring service quality in Higher Education and concluded that SERVPERF and HEdPERF present the best measurement scales for examining SERVQUAL in tertiary education area (Ana, 2009).

Zaharia (2014) conducted a study in one of the biggest cities in Malaysia to examine the quality of services provided to public. The purpose of research was to measure SERVQUAL in terms of LA by developing FM-SERVQUAL built on SERVQUAL model of Parasuraman. (Zaharia, Dogaru, & Boaja, 2014). Research results showed that five variables of technology and six variables of property were less the requirements. Rest of variables displayed minimum quality level.

Yen (2013) carried out a research in Vietnam to measure SERVQUAL in HE sector so to comprehend clearly the perception of SERVQUAL in higher education from Vietnamese students' perspective. In this study, SERVQUAL and SERVPERF scales were both employed to measure the service quality. The research findings showed that Vietnamese students are mostly interested in the dimensions of responsiveness, tangible elements, and assurance (Yen, 2013).

Multiple research papers investigated different models for measuring service quality in HE. Most general accepted scale for measuring service quality is definitely Parasuraman's SERVQUAL or Gap model due to numerous researchers that validated this model. Many researchers investigated and tested this model among them I reviewed most recent surveys (Rasli et.al., 2012, Yen,2013, Dursun et.al.,2013, Randheer,2014, Dirske, 2014).

Another study was conducted in Serbia; aim of it was assessing service quality during the Bologna process at one of universities. SERVPERF was used as instrument for examining SERVQUAL. Findings of study revealed that management students considered Reliability and Assurance along with Empathy and Responsiveness as most important dimensions. The students perceptions of dimension Responsiveness was the different across gender (Kontic, 2014). Factors that had strong impact on students' perception of quality were seniority as well as gender. Study also showed that students were not satisfied with their treatment.

Another research was conducted investigating the five dimensions of SERVQUAL instrumentation in terms of higher education in Thailand (Yousapronpaiboon, 2014). Around 350 students from private university of Thailand took part in the research. Findings showed that HE in Thailand does not meet expectations of students. The gap analysis between service perceptions and expectations showed that all scores for perceptions were lower than their expectations scores. As a recommendation for meeting expectation of students in a better way, facilities and equipment improvement of university should be improved.

In another research, HEdPERF was compared with SERVPERF and HEdPERF-SERPERF combined measurement instrument. It was found that HEdPERF showed a fair fitness proving right representation of population approximation (Randheer, 2015).

Dennis (2013) assessed SERPERF and HEdPERF instruments for the appropriateness of them to measure service quality in the context of Hong Kong postgraduate education. The values of the HEDPERF scales are found to be higher than those of the SERVPERF scales, indicating a superiority of specific instruments over generic instrument, however the reliability of SERPERF can be accepted for employment in the response context (Dennis, 2013).

The purpose of literature review was to help us to understand different aspects of measuring service quality in higher education. Various studies and numerous discussions were carried out in this area recently. Many researches were conducted in universities by applying different measurement instruments such as SERVQUAL, SERPERF and HEdPERF. Literature review showed that more researches and testing are needed to measure quality of service provided by various HE. Empirical studies have provided support for carrying out research in sphere of service quality within universities. As it followed from literature review there is gap in meeting students expectations as well as perception of quality from students point of view sometimes does not correlate service provided. A number of reasons may exist behind these gaps. Therefore, quality of level in service quality is not satisfactory in some universities. Consequently, it is important to conduct more studies on measuring SERVQUAL in Higher Education.

# Chapter 3

## **RESEARCH HYPOTHESES**

This chapter provides conceptual model of the study along with development of hypotheses. As it was discussed in the literature review part, this study adopts HEdPERF instrument of measuring service quality. That is, this chapter presents information on relationships between correlations of research variables with satisfaction.

#### 3.1 Conceptual Model

In Figure 1 conceptual model of the research is displayed. According to the conceptual model, there are 5 determinants of SERVQUAL in HE sector (Abdullah, 2005).

- 1. "Non-academic aspects: Aspects related to administrative staff to show respect, provide equal treatment, along with confidentiality of information" (Abdullah, 2005).
- 2. "Academic aspects: Aspects related to academicians, the responsibilities of academics. It highlights key points like having positive attitude, having educated and experienced academic staff" (Abdullah, 2005).
- 3. "Reputation: items in terms of their importance to HE Institutions, professional image of the insitution" (Abdullah, 2005).

- 4. "Access: ease of contact, approachability, availability and convenience of academic and non-academic staffs" (Abdullah, 2005).
- 5. "Program issues: Issues related to offering wide range of programs or specialization, counselling service and different quality programs" (Abdullah, 2005).

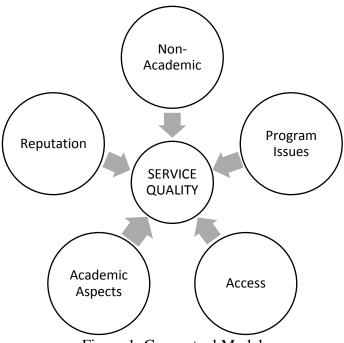


Figure 1: Conceptual Model

#### 3.2 Hypotheses Development

As demonstrated in the conceptual model of HEdPERF, the author defined five dimensions of the service quality concept. There are various researchers that examined the performance in the Higher Education. Abdullah (2006a) reported that researchers mainly focus on academic aspects like quality of academics while insufficient attention is being paid to the non-academic aspects of the education (Abdullah, 2006a).

#### 3.2.1 Non-Academic aspects and Students Satisfaction

In his research, Ana (2009) indicated that five variables of HEdPERF had high correlation with satisfaction of students and their future visits to university. Moreover, this went along with intentions to recommend university to their friends (Ana, 2009). In his dissertation, Kayastha (2011) examined satisfaction with service quality of graduate students in Higher Education of Thailand and found out that non-academic aspects are positively related to students satisfaction (Kayastha, 2011). Therefore, the study comes out with hypothesis:

Hypothesis 1: Non-academic Aspects of SERVQUAL are positively related to overall students' satisfaction.

#### 3.2.2 Academic aspects Dimension of Service Quality and Students Satisfaction

The conceptual model proposes that academic aspects lead to overall student's satisfaction. In the research conducted in Malaysian universities, physical aspects of the HE Institutions showed less importance to students. Meanwhile, the most important factors for them were identified as academic aspects (Ibrahim, Rahman, & Yasin, 2012). Accordingly, the next hypothesis is proposed:

Hypothesis 2: Academic Aspects of SERVQUAL are positively related to overall students' satisfaction.

#### 3.2.3 Program issues Dimension of Service Quality and Students Satisfaction

According to Randheer (2015) Program Issues are service issues related to courses, programs, structures and health services (Randheer, 2015). As per Abdullah (2006a), quality improvement programmes should be applied to the various aspects related to the educational experience and advisory services offered by the institutions (Abdullah, 2006a). Program Issues dimension is very important from students' perspective, therefore, the next hypothesis will be as follows:

Hypothesis 3: Program Issues of SERVQUAL are positively related to overall students' satisfaction.

#### 3.2.4 Access Dimension of Service Quality and Students Satisfaction

Another research measuring the service quality in Pharmacy education was conducted in India (Sheeja et al., 2014). According to research evaluating Higher Education Performance scale in Indian Pharmacy education, it was found out that there are four factors which serve as factors for service quality, namely NA; AA, AC and RT (Sheeja et al., 2014). According to Abdullah (2006a) students perceived access is the most determining factor and it is more important than other dimensions in determining SERVQUAL (Abdullah, 2006a) . Therefore, the next hypothesis will be as follows:

Hypothesis 4: Access aspect of SERVQUAL is positively related to overall students' satisfaction.

#### 3.2.5 Reputation Dimension of SERVQUAL and Students Satisfaction

Abdullah (2005) defined reputation variable as decisive factor for students, that is responsible for creating professional image of the institution (Abdullah, 2005). According to research conducted in Saudi Arabia University, tangibility aspect of "Reputation" creates an instant image of the institution in the eyes of parents and students (Randheer, 2015). Dennis (2013) in his research, conducted the factor analysis of the HEdPERF items and reported that Reputation, Academic Aspects and Non-academic Aspects are saliently exhibit intended dimensions of the HEdPERF model (Dennis, 2013). Therefore, the following hypothesis is proposed: Hypothesis 5: Reputation dimension of SERVQUAL is positively related to overall students' satisfaction.

### Chapter 4

#### **METHODOLOGY**

Main purpose of this chapter is to give light to methodology of study conducted, core philosophy of the research, survey instrument design process, population, sampling and whole survey process. In other word, this chapter gives light to processes faced during before, while and after data collection. Character of the research is descriptive and it is based on the method of obtaining the considered data. This chapter presented methodology of empirical studies carried out during the research.

As it was already mentioned, methodology of this chapter is focuses on three main topics:

- Research Philosophy and Methods
- Instruments of data collection
- Data collection process

In science, research is the diligent systematic enquiry into nature and society to validate and refine existing knowledge and to generate new knowledge (Naidoo, 2011). As stated by Altinay and Paraskevas (2008) tourism and hospitality researchers who are interested in finding explanation in attitudes or behaviour of group of respondents specified, often choose survey strategy in their researches (L Altinay & Paraskevas, 2008). Term "survey" is used when researcher gathers data from specific sample of the population (Robson, 1993). In survey research,

researcher chooses sample of respondents and prepares a standard questionnaire for distribution (L. Altinay & Paraskevas, 2008).

#### 4.1 The Research Approach

There are two general research approaches, deductive and inductive (L. Altinay & Paraskevas, 2008). Evaluators have different opinions about deductive and inductive methods of collecting data. It is very important to define and justify which method is more appropriate to use in dissertation. "Ensuring the effectiveness of information search is an extremely challenging task which incessantly raises new research questions" (Liangzhi, 2015, p.810).

While using inductive approach, researcher collects data that is relative to their research. While and after detailed review, researcher tries to come out with theory that could explain data patterns. Researcher moves from data to theory (Strauss, 1990). Deductive method of research is based on developing the hypotheses and then testing it via collected data. This research adopted deductive method of research.

When talking about research philosophy, two main approaches positivism and phenomenology must be mentioned. Positivism follows quantitative data and is objective approach, while phenomenology implies subjective approach, concentrating on meanings.

Whereas quantitative methodologies test theory deductively from existing knowledge, through developing hypothesized relationships and proposed outcomes for study, qualitative researchers are guided by certain ideas, perspectives or hunches regarding the subject to be investigated (Cormack, 1991). While aim of qualitative

research is to understand respondents opinions, quantitative research stays for prediction and generalizability (Tewksbury, 1999).

There are several ways of conducting a research in service quality topic. Different methodological approaches can be employed and depending on the nature of the research, researchers can choose one methodology as well as mixture of methodologies to use in their studies. Among the most popular methodological approaches, different forms such as experiment, case study, or survey can be chosen. The research can be purely quantitative or qualitative or in some cases a mixture of both. There are arguments about dominance of qualitative and quantitative research types above each other. Each type of research has its advantages and disadvantages, so the research type is chosen according to the aim of research. The main aim of this research is to measure service quality in Higher Education sector by collecting numerical data from respondents. Taking into consideration aims and objectives of my research, detailed literature review and previous studies quantitative methodology approach was found more appropriate than a qualitative one. Considering the limitations such as financial resources and time, the research was carried out by selecting a number of students of Faculty of Tourism and Faculty of Business Administration. All necessary measures were taken to select a representative sample which will allow the generalization of the findings. More specifically, to achieve the aim of the research a desk-study research (articles, books, reports, internet sources, statistics, etc.) will be carried out initially.

#### **4.2 Sample and Data Collection**

Population of Eastern Mediterranean University is diversified in terms of nationality.

University hosts students from 93 countries. According to information taken from

"Student Nationality 2015-2016" total students population group in Eastern Mediterranean University at the moment of study equaled 19112 students from 96 different countries. The majority of students included Turkey (8844) out of which 594 were students of preparatory school, 8084 obtained their associate degree, 123 were undergraduate students and 43 were PHD students. TRNC (3077) ranked second, based on the total number of students; out of which 96 students included preparatory school, 2598 were obtaining their associate degree, 261 are undergraduate students and 122 are PHD students.

Numbers of Students from Nigeria equals to 2327. Out of this number, 1 is a student of preparatory school, 2087 obtain their associate degree, 208 are undergraduate students and 29 are PHD students.

Questionnaires were translated into Turkish language that is native language for Turkish and TRNC students and Persian, for Iranian respondents. Questionnaires were translated using back translation method (McGorry, 2000). Following the backtranslation procedure, back-translated transcripts were compared with the original transcripts. It took about 2 months to finalize all translations.

The survey adopted one of non-probability sampling techniques, called judgmental sampling. According to Black (2010) judgmental sampling is a non-probability sampling method and it occurs when "elements selected for the sample are chosen by the judgment of the researcher. Researchers often believe that they can obtain a representative sample by using a sound judgment, which will result in saving time and money" (Black, 2010, p.225).

41 questions were evaluated according to Seven-point Likert-type scale that varied from strongly disagree to strongly agree.

Cover letter, explaining purpose of the research and its relevance was attached to questionnaire. Pilot study with 10 students was conducted to ensure full understanding and clearness of questions. During this time researcher was observing the process and no misunderstanding of questions related to translation was identified. Main research instrument of survey questionnaire was printed out. Two letters asking permission for research conduction were prepared. Each letter contained short description of research core along with its aims and goals. One of them was sent to vice rector of academic affairs of EMU, while second one was submitted to Dean of Tourism Faculty. After confirmation from both sides was received, data collection process started.

Firstly, time-table of Master and PHD courses was obtained through secretary of Tourism Faculty. Next step was visiting instructors in their offices according to schedule provided. All instructors were given information about the research and gave their permission to enter their classes for distribution of questionnaires. Process of data collection took four weeks. There was no time lag between two faculties. According to time table, researcher was entering classes, giving brief information about the research topic and asked to fill in questionnaires. Students were given choice of selecting language (English, Turkish, and Persian). Majority of students preferred English, i.e. original version of questionnaires (Abdullah, 2006a). There were no precise time limits for filling in questionnaires. Some students asked to give questionnaires back after the class or next day, because they needed more time to answer questions. Others were quite fast and filled it in within 10-15 minutes. As per

agreement, instructors were coming to lectures later for 15-20 minutes. In case some questionnaires were not filled in by respondents, researcher was waiting till the end of the class or came to collect them during the break time. Students demonstrated high interest in research. Some students needed more time and returned questionnaires after 1-2 days. Others preferred to leave them with faculty secretaries. All questionnaires were distributed by the researcher.

At the end of second week in Faculty of Tourism, second department – Business Administration was visited. After time-table of lectures was provided, second stage of data collection started. Instructors were showing much assistance and almost all of them helped researcher in distributing questionnaires. After completion, questionnaires were left to the secretary of the department. All students demonstrated high interest in research. Data collection process in Business Department took around 10 days.

On fourth and fifth week of the research, questionnaires were sent to students via e-mail. The need for using e-mail was the reason that some of the students had completed their courses and had only their thesis left. Some recipients were ignoring messages, others were late in respond. Meanwhile, faculty of Tourism and BA were visited repeatedly to distribute questionnaires to students missing within previous weeks of data collection.

Research used SPSS 20 package for the analysis of data collected. As it was mentioned in literature review part, there are number of service quality models that can be applied as a tool for measuring service quality. In this research HEdPERF model, based on SERVQUAL model as the basis for the structured questionnaire was

applied. 250 copies of questionnaires were prepared for distribution to post-graduate students of Faculty of Tourism and Business Administration Department. Out of them 205 were valid and were used for the research.

### **4.3 Questionnaire Structure and Measures**

EMU is the oldest and largest university in Northern Cyprus (EMU, 2015). Therefore, feedbacks about this university in terms of academic aspects as well as non-academic aspects, reputation, access, programme issues and etc. should be investigated. As a huge university that hosts around 20 000 international students, university attracts much attention all over the world (EMU, 2015). Therefore, it is an interesting case for identification the level of satisfaction with SERVQUAL from students' perspective.

As discussed in literature review chapter, there are numbers of service quality measurement instruments. After detailed literature review, HedPERF (Higher Education PERFomance only) was chosen as an instrument for measuring level of service quality in tertiary education (Abdullah, 2006a).

A pilot study was carried out to identify if all items of questions are clear to the respondents. They included 10 students, 4 from Nigeria, 3 from Turkey and 3 from Iran. No misunderstanding was revealed about questions from students. Students did not have any difficulties in understanding translation of Persian and Turkish languages. Data were collected via structured questionnaire consisting from four Sections namely A, B, C, and D. In order to generate desired empirical data original of questionnaire was taken from Firdausi Abdullah. (Abdullah, 2006a) Order of Sections was slightly changed while content was left original. In section A, 41 item

extracted from the original HEdPERF (Abdullah, 2005) were proposed, a scale uniquely developed to embrace different aspects of a tertiary institution's service offering contained nine questions pertaining to student respondent profile. Respondents were asked to indicate, on a seven-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = disagree somewhat, 4 = undecided, 5 = agree somewhat, 6 = agree and 7 = strongly agree), the extent to which they believe an ideal university possesses the characteristics described in the statements. In addition to the main scale addressing individual items, respondents were asked in to provide an overall rating of the quality service, satisfaction level and future visit. (Abdullah, 2006a). Section C was asking general details of students such as gender, age, year of study, level of study. In addition to original questionnaire, questions about "source of funding" and "employment status" were added in this research.

## 4.4 Data Analysis

Research followed HEdPERF model, based on SERVQUAL model as the basis for the structured questionnaire. As it was already mentioned, SPSS 20 package was used for the analysis of collected data. The internal consistency reliability was assessed using the cut-off level of 0.70. Frequencies were used to present the results about respondent's profile (to gender, age, educational status, and current year of study, source of funding and employment status).

# **Chapter 5**

# **RESULTS**

This chapter presents the results for empirical study. Specifically, chapter contains results about respondents' profile according to gender, age, educational status, current year of study, source of funding and employment status. The analysis of reliability and correlation are provided and followed by results of hypotheses.

# **5.1 Respondents Profile**

Table 3: Respondents' Profile. n = 205

Variables	Frequency	Percentage
Gender		
Male	115	43,9
Female	90	56,1
Total	205	100,0
Age		
19 years old and Below	4	4
20-24 years Old	56	56
25-29 years Old	73	73
30 years old and Above	72	35,1
Total	205	100,0
<b>Educational Status</b>		
Full Time	185	90,2
Part Time	20	9,8
Total	205	100,0
Level of study		
Bachelor Degree	4	2,0
Master Degree	154	75,1
PHD	47	22,9
Total	205	100,0
Current year of study		
1 year	69	33,7
2 year	78	38,0
3 year	26	12,7
4 year	12	5,9
5 year	11	5,4
more than 5 years	9	4,4

Source of funding		
Scholarship from EMU	56	27,3
Scholarship from country of arrival	14	6,8
Self-financed	52	25,4
Family support	65	31,7
Others	18	8,8
Total	205	100,0
<b>Employment status</b>		
Part time employed	39	19,0
Fully employed	38	18,5
Unemployed	100	48,8
Others	28	13,7
Total	205	100,0

As it shown in Figure 4, the majority of the respondents, 115 out of 205 (56,1%) were females, while 43,9 percentage, 90 of respondents were males.

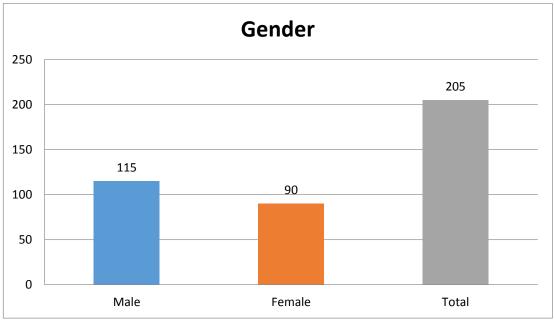


Figure 2: Distribution of sample according to Gender

Only 4 percentages of respondents were under the age of 19. 56 percent of students were between 20-24 years old, while 73 percentage of the population were between 25-29 years old. 35, 1 percentage of students' age was 30 and above. Students were

different according to educational status, so the majority of students were full time – 185 students, which came to 90, 2 percentage of respondents. Only twenty students, approximately 9,8 percentage of respondents were part-time students.

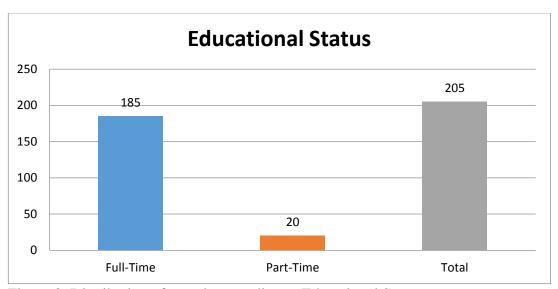


Figure 3: Distribution of sample according to Educational Status

Majority of students were Master Degree students – 154, which made 75,1 percent. Four students were Master students that were taking their deficiency courses from Master classes. Forty seven participants, i.e. 22, 9 percentages of respondents were obtaining their PHD degrees.

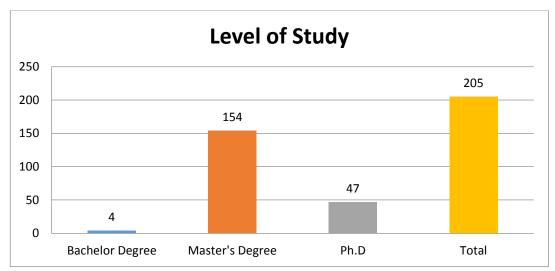


Figure 4: Distribution of Sample according to Level of Study

According to current year of study, 33,7 percentage of respondents were on their first year of study, that is 69 of students. 78 participants, around 38 percent were on their second year. 12,7 percentage of students were on their third year of study, i.e. 26 students. 5, 9 percentages of respondents were on fourth year of studies. 11 students, 5,4 percentage were getting their education on 5-th year. 4, 4 percentages were in EMU for more than 5 years.

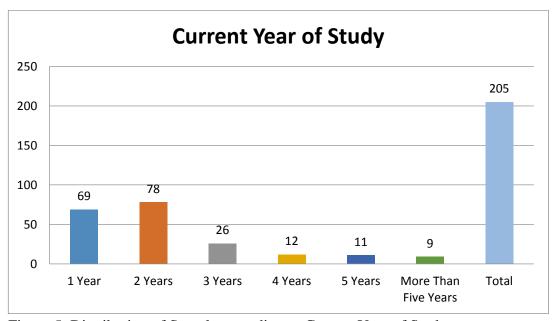


Figure 5: Distribution of Sample according to Current Year of Study

According to source of funding, 56 students had scholarship from EMU, which rated around 27, 3 percentage. 14 students had scholarships from country of arrival.

Group of self-financed students rated by 25.4 percent, i.e. 52 respondents were self-financed. The majority of the participants, 65 students had financial support from families, which came to 31, 7 percentage. Eighteen students, chosen "others" equalled to 8,8 percentage of respondents.

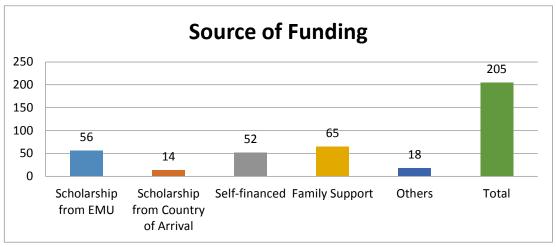


Figure 6: Distribution of sample according to Source of Funding

Out of 100 percent, majority of respondents were unemployed – 48, 8 percentage, that came to number of 100 students. 39 respondents were part time employed, 38 were fully employed and 28 respondents shown "others" for this question.

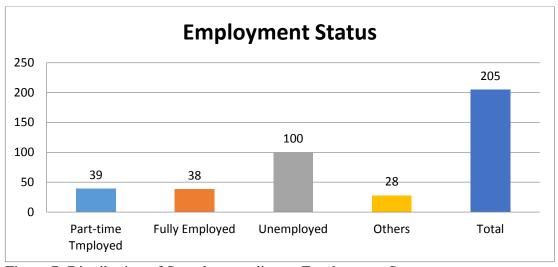


Figure 7: Distribution of Sample according to Employment Status

#### **5.2 Correlation Results**

Table 4: Scale Reliabilities, Means, Standard Deviations, & Correlations of Study Variables

Variables Mean SD Alpha 1 2 3 4 5	Variables	Mean SD	Alpha 1	2	3	4	5	6
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Academic Aspects	5.12	1.01	.90	1.000					
Reputation	4.89		.87	.67**	1.000				
Program Issues				.54**		1.000			
Non-Academic	4.77	1.16	.93	.63**	.63**	.51**	1.000		
Aspects									
Access	4.68	1.10	.89	.53**	.63**	.52**	.74**	1000	
Satisfaction		1.12	.78	.51**	.51**	.46**	.55**	.51**	1000

Note. All correlations are significant at the .05 (two-tailed test). SD: Standard deviation.

The results in Table 2 indicates that all variables had a coefficient alpha greater than 0.70. That is, the reliability for each variable are as follows: Academic Aspects = 0.90, Reputation = 0.87 Program Issues = 0.83, Non-Academic Aspects = 0.93, Access = 0.89

Moreover, results in Table 2 show that there is significant correlation between Academic aspect of Service Quality and Satisfaction (r= .51). Therefore, quality in academic aspects positively influences student satisfaction. Hypothesis 1 is supported.

The results demonstrate that reputation aspect has significant effect on students satisfaction with service quality (r = .51). As it was mentioned above, it can be concluded that good reputation of the university also increase students' satisfaction. Therefore, there is empirical support for Hypothesis 2.

Program issues aspect is positively associated with service quality. There is a positive and significant correlation between Program issues aspect of service quality and satisfaction (r = .46). So, it can be concluded that PI influence student satisfaction in some way. Accordingly, the increasing in the quality of program issues will lead to higher level of satisfaction with the quality .Therefore, Hypothesis 3 is also supported.

The correlation between non-academic aspects and students satisfaction with service quality provided, is positive (r= .55). Therefore, service quality in non-academic aspects can lead to the increase in student satisfaction. Hence, Hypotheses 4 is supported.

The correlation between access dimension of HedPERF and overall student satisfaction also has significant correlation of 0.51. Such finding provides empirical support for Hypothesis 5. The results indicate that easy contact with both academic

and non-academic staff has positive effect on students' satisfaction with service quality.

# Chapter 6

#### **DISCUSSION**

#### **6.1 Contribution of this Thesis**

This thesis contributes to the service quality literature in the following way. Students of Eastern Mediterranean University, so-called "educational tourists" have an impact on the tourism sector of the Northern Cyprus. EMU is the oldest university of Northern Cyprus with around 20 000 of students. In university, students are the main customers that evaluate service quality of the HI. Study focuses on post-graduate students that are more mature and can provide better evaluation in terms of service quality.

Study applied original HEdPERF service quality measurement tool of Firdaus Abdulla (Abdullah, 2006a) and tested conceptual model to examine customers satisfaction with service quality. The financial contribution to universities for research by the North Cyprus government is limited (L. Altinay & Paraskevas, 2008). That is why investigating service quality in service sector is very important.

The results of the study can serve as a guideline for managers of the university because they can improve service standards in the university and retain a pool of students, namely customers in educational market.

#### **6.2** Assessment of Findings

This study tested conceptual model of Firdaus Abdullah for measuring service quality in Higher Education. (Abdullah, 2006a). After the analysis of the research, it can be concluded that variables of service quality (academic aspects, reputation, program issues, non-academic aspects, access) have significant relationship with the overall students' satisfaction obtaining their post-graduate degrees in Eastern Mediterranean University. There is significant correlation between 41 variables of the service quality and students satisfaction. Therefore, there is still need for continuous improvement.

There are two important contributions of this study to the service quality literature. First, service quality variables as program issues have the lowest score which means that this area should be improved. Second, this study assesses these relationships based on data collected from post-graduate students of Eastern Mediterranean University of Northern Cyprus, specifically sample is drawn from two faculties, Business Administration and Tourism where managerial subjects are taught. It seems there is a positive correlation between service quality and students overall satisfaction.

Based on the results of this research, "program issues" variable of SERVQUAL is satisfactory but needs further improvement. As this research was conducted among post-graduate students, it should be taken into consideration that they might have higher expectations of SERVQUAL such as reputation, access or program issues. That is, more efforts should be put into provision of variety of consulting services related to education, and maybe university can offer more flexible options for rolling

the students into variety of specialized programs. It can also strengthen its collaboration with international universities, create more joint degrees and exchange programs to stay competitive in the market.

As per Altinay (2008), nowadays, North Cyprus universities face serious challenges such as decrease of student population or financial problems. (L. Altinay & Paraskevas, 2008). The results reported in this research suggest that post-graduate students are satisfied with the service quality in Eastern Mediterranean University. But University should focus more on program issues aspects to strengthen student attrition. The university should also pay attention to other variables like non-academic aspects, reputation and access, because these are essential factors for increasing the level of satisfaction.

#### **6.3 Limitations of Study and Future Research Directions**

This research adopted questionnaire consisting from 41 questions, 3 questions about feeling of satisfaction and demographic variables, two of them (source of funding and employment status) were added by research team.

First, this research is conducted in Eastern Mediterranean University; future researches can be conducted in other higher education institutions of Northern Cyprus.

Second, study was specific and was conducted in two faculties; future studies can examine other departments and faculties of Eastern Mediterranean University.

Third, study is focused on post-graduate students. Future research may choose another sample population, for example, undergraduate students. Future research can mix both samples or to compare them and examine if findings will be different from results of this research.

Fourth, in future research, other variables of SERVQUAL that might impact on student satisfaction can be added. This research is focused on investigation service quality satisfaction from graduate students' point of view.

Also, the future research may be conducted in other cities of TRNC or outside the country and investigate if findings will be the same. For future studies, academicians can increase sample size and expand their researches.

Questionnaires were prepared in English, Turkish and Persian languages, therefore future researchers can also conduct their survey in other languages that might provide higher level of understanding from respondents and better measurement equivalency.

## **6.4 Implications for Practitioners**

The results suggest that all hypothesized relationships receive support from the empirical data. After the analysis of the survey, it can be concluded that variables of HEdPERF measurement tool have significant correlation with satisfaction feelings with SERVQUAL of Master and PhD students in Eastern Mediterranean University of Northern Cyprus.

As managerial implications, the university should focus more on "program issues" service quality variable. In the research, mentioned variable had the lowest score. Accordingly, need for improvement in terms of this dimension is required. Such

factors as "wide range of programmes with various specialisations", "flexible syllabus and structure", "quality counselling services" should be improved (Abdullah, 2005). These are points where the university should focus to raise the level of students' satisfaction. More efforts should be put into career and education direction structure. Without doubts, further employment opportunity is the most important issue for all students. University can try to provide number of counselling services about education, career as well as further employment opportunities for students. "Although the universities do no publicly announce the total number of drop-out students, the expert panel members all agreed that the numbers are high and a comprehensive policy is urgently needed to identify the reasons for student attrition and develop programs to curb down number of drop-out students" (L. Altinay & Paraskevas, 2008). University can also provide more programs with flexible structure that might lessen intentions of students to drop from the programs.

Apart from that, aspects as non-academic and access are also very important for students. Therefore, university management should consider that presence of supportive administrative and non-administrative stuff availability. Approachability of friendly contact with personnel of HE, easy access to both academic and non-academic staff will positively influence students' perception of SERVQUAL. Accordingly, satisfaction with service quality will be higher.

# Chapter 7

# **CONCLUSION**

This thesis examined a conceptual model of Abdullah Firdausi for measuring service quality and test the relationship between the five dimensions of HEdPERF model and satisfaction of students. Data was collected from Master and PhD students of Eastern Mediterranean University. Specifically, sample was drawn from two faculties, Business Administration and Tourism, where managerial subjects are taught.

The results suggest that there is a significant correlation between all five variables used in the study, namely non-academic aspects, academic aspects, reputation, access, program issues and overall student's satisfaction.

The results also suggest that all variables are positively associated with service quality; however, "program issues" variable had the lowest score. It can be interpreted as program issues influence students satisfaction in some way. Therefore, there is need for continuous improvement in this area.

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# **APPENDIX**

# Appendix A: Questionnaire

# A FIELD STUDY ON SERVICE QUALITY IN HIGHER EDUCATION IN NORTHERN CYPRUS.

#### Dear Respondent!

The aim of this research is to measure service quality at higher education institutions from international students perspective. Research will be conducted in Eastern Mediterranean University, which is the largest and most developed university in Northern Cyprus.

There is no right or wrong replies in this questionnaire. Any sort of information collected during this research will be kept confidential. Participation in this survey is voluntary but encouraged. We really appreciate your time and participation.

If you have any questions, please do not hesitate to contact Narmina Vazirova through her email: vezirova-narmina@mail.ru

Thank you for your cooperation!

#### Research team:

Assoc. Prof. Dr. Turgay Avci

Narmina Vazirova

#### Address:

**Toursim Faculty** 

Eastern Mediterranean University

Famagusta, TRNC

Via Mersin10-Turkey

# Section A

		Str	(1) Strongl y Disagre e		ongl Disagre y e agre		Disa Son	3) agre e new at	(4) Undecid ed		Ag Son	(5) Agree Somew hat		6) ree	(7) Strong y Agre	
A 1	Academic staff have the knowledge to answer my questions relating to the course content	]	]	]	]	[	]	]	]	[	]	[	]	[	]	
A 2	Academic staff deal with me in a caring and courteous manner	[	]	[	]	[	]	[	]	[	]	[	]	[	]	
A 3	Academic staff are never too busy to respond to my request for assistance	[	]	]	]	[	]	[	]	[	]	[	]	[	]	
A 4	When I have a problem, academic staff show a sincere interest in solving it	[	]	]	]	[	]	[	]	[	]	[	]	[	]	
A 5	Academic staff show positive attitude towards students	[	]	]	]	]	]	]	]	]	]	]	]	[	]	
A 6	Academic staff communicate well in the classroom	[	]	[	]	[	]	[	]	[	]	[	]	[	]	
A 7	Academic staff provide feedback about my progress	[	]	]	]	[	]	[	]	[	]	[	]	[	]	
A 8	Academic staff allocate sufficient and convenient time for consultation	[	]	[	]	[	]	[	]	[	]	[	]	[	]	
A 9	The institution has a professional appearance/image	]	]	[	]	[	]	[	]	[	]	[	]	[	]	
A 10	The hostel facilities and equipment are adequate and necessary	[	]	]	]	[	]	]	]	[	]	[	]	[	]	
A 11	Academic facilities are adequate and necessary	]	]	]	]	]	]	]	]	]	]	]	]	[	]	
A 12	The institution runs excellent quality programs	[	]	[	]	[	]	[	]	[	]	[	]	[	]	
A 13	Recreational facilities are adequate and necessary	[	]	[	]	[	]	]	]	[	]	[	]	[	]	
A 14	Class sizes are kept to minimum to allow personal attention	[	]	[	]	[	]	[	]	[	]	[	]	[	]	

		(1) Strongl y Disagre e		(2) Disagre e		(3) Disagre e Somew hat		(4) Undecid ed		(5) Agree Somew hat		(6) Agree		Stro y Aş	
A 15	The institution offers a wide range of programmes with various specialisations	[	]	[	]	[	]	[	]	[	]	[	]	[	]
A 16	The institution offers programmes with flexible syllabus and structure	[	]	[	]	[	]	[	]	[	]	[	]	[	]
A 17	The institution has an ideal location with excellent campus layout and appearance	[	]	[	]	[	]	[	]	[	]	[	]	[	]
A 18	The institution offers highly reputable programs	[	]	[	]	[	]	[	]	[	]	[	]	[	]
A 19	Academic staff are highly educated and experience in their respective field	[	]	[	]	[	]	[	]	[	]	[	]	[	]
A 20	The institution's graduates are easily employable	[	]	[	]	[	]	[	]	[	]	[	]	[	]
A 21	When I have a problem, administrative staff show a sincere interest in solving it	[	]	[	]	[	]	[	]	[	]	[	]	[	]
A 22	Administrative staff provide caring and individual attention	]	]	[	]	[	]	]	]	[	]	[	]	[	]
A 23	Inquiries/complaints are dealt with efficiently and promptly	[	]	[	]	[	]	[	]	[	]	[	]	[	]
A 24	Administrative staff are never too busy to respond to a request for assistance	[	]	[	]	[	]	[	]	[	]	[	]	[	]
A 25	Administration offices keep accurate and retrievable records	[	]	[	]	[	]	[	]	[	]	[	]	[	]
A 26	When the staff promise to do something by a certain time, they do so	[	]	[	]	[	]	[	]	[	]	[	]	[	]
A 27	The opening hours of administrative offices are personally convenient for me	]	]	[	]	[	]	]	]	[	]	[	]	[	]
A 28	Administrative staff show positive work attitude towards students	[	]	[	]	[	]	]	]	[	]	[	]	[	]

		(1 Not a			2) Rarely		(3 Rare			(4) sionall	F	(5) reque		V	(6) Very	I	(7 Every	7) Tin
B 2	My feeling towards institution services is best described as	[	]	[	]		[	]	[	]		]	]	[	]		[	]
B 1	The quality of the institution's services is	[	]	[	]		[	]	Dissa [	atisfied		[	]	[	]		[	]
		(1 Extre Dissat	mely	V	2) ery tisfied		(3 Some Dissati	what	Ne Sat	(4) either isfied nor		(5) Somew Satisfi	hat	V	(6) ery isfied		Extre Satis	
A 41	The institution has a standardized and simple service delivery processing the service delivery deli		S	[	]	]	]	[	]	[	]	[	]	[	]	[	]	
A 40	The institution values feedback from student improve service perfo	ts to	nce	[	]	[	]	[	]	[	]	]	]	[	]	[	]	
A 39	The institution encour and promotes the setti of Student's Union			[	]	]	]	[	]	]	]	[	]	[	]	[	]	
A 38	Health services are ad and necessary	lequa	ite	]	]	]	]	[	]	]	]	[	]	[	]	[	]	
A 37	The institution operat excellent counseling s			[	]	]	]	[	]	[	]	[	]	[	]	[	]	
A 36	The staff ensure that easily contacted by te			]	]	[	]	]	]	[	]	[	]	[	]	[	]	
A 35	The staff respect my confidentiality when I disclosed information		nem	]	]	]	]	[	]	[	]	]	]	[	]	]	]	
A 34	Students are given fai amount of freedom	r		[	]	[	]	[	]	[	]	]	]	]	]	[	]	
A 33	frame Students are treated e and with respect by th	quall		[	]	]	]	[	]	]	]	]	]	[	]	[	]	
A 32	The institution provided services within reasonable/expected to			[	]	]	]	[	]	[	]	[	]	[	]	[	]	
A 31	I feel secure and confi my dealings with the institution	dent	in	[	]	[	]	[	]	[	]	[	]	[	]	[	]	
A 30	Administrative staff h good knowledge of th systems/procedures			]	]	]	]	[	]	[	]	]	]	[	]	[	]	
A 29	communicate well wit students	h		]	]	[	]	]	]	[	]	[	]	[	]	[	]	

B 3	My visit to the institution on future occasions will be	[	]	[	]	[	]	[	]	[	]	[	]	[	-	]
B 4	I would praise the institution for															
B 5	I would criticize the institution for															
B 6	If I were in charge of the institution, I															

would

		Section C
<b>C1</b>	(	Gender
C 1.1 C 1.2	Female [ ] Male [ ]	
<b>C2</b>	A	Age
C 2.1 C 2.2 C 2.3 C 2.4	19 years old and below [ ] 20-24 years old [ ] 25-29 years old [ ] 30 years old and above [ ]	
С3	(	Country of origin (Please state):
•••••		,
<b>C4</b>	S	Status
C 4.1	Full-time [ ]	
C 4.2	Part-time [ ]	
C 4.3	Distance learning [ ]	
C5 C 5.1 C 5.2 C 5.3 C 5.4	Associated degree [ ] Bachelor degree [ ] Master degree [ ] PhD [ ]	Level of study
<b>C6</b>	(	Current year of study
C 6.1 C 6.2 C 6.3 C 6.4 C 6.5 C 6.6	1 year [ ] 2 year [ ] 3 year [ ] 4 year [ ] 5 year [ ] More than 5 years [ ]	
C7		Source of funding
C 7.1 C 7.2	Scholarship from EMU Scholarship from country of arriv	l ] val [ ]
C 7.3	Self-financed	[ ]
C 7.4 C 7.5	Family support Others (please specify)	[ ]
C8 C 8.1 C 8.2	F Part-time employed Fully employed	Employment status
C 8.3	Unemployed	[ ]
C 8.4	Others (please specify)	[ ]