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YÜKSEÖĞRETİMDE HİZMET KALİTESİNİN ÖLÇÜLMESİ: NAZİLLİ MESLEK YÜKSEKOKULU ÖRNEĞİ

THE MEASUREMENT OF SERVICE QUALITY IN HIGHER EDUCATION: AN EXAMPLE OF NAZILLI VOCATIONAL SCHOOL

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ÖZET

Bu çalışmanın amacı yükseköğretim kurumlarının sunduğu hizmet kalitesinin etkisini incelemek ve hizmet kalitesi algısının cinsiyet, öğrenci öğretim durumu, annelerinin ve babalarının eğitim durumu bazında önemli bir fark gösterip göstermediğini araştırmaktır. Bu araştırmanın sonuçları Adnan Menderes Üniversitesi, Nazilli Meslek Yüksekokulu örneği bazında yükseköğretim kurumlarında hizmet kalitesinin iyileştirilmesini, öğrencilere iyi bir öğrenme ortamının sağlanmasını, okudukları programlarda başarılı olabilmelerini sağlayacaktır ve aynı zamanda şirketlere yetenekli çalışanlar kazandıracaktır, yükseköğretim kurumları yoğun rekabet ortamında farklılıklarını sergileyebilecek ve böylece şikâyet oranlarını düşük tutup müşterilerin sadakatını elde edeceklerdir. Araştırmanın sonuçları aynı zamanda öğrenci cinsiyetinin, öğrencilerin öğretim durumlarının, annelerinin ve babalarının eğitim durumlarının öğrencilerin hizmet kalitesi aigılarını etkilediğini belirtmektedir. Mevcut hizmet kalitesi durumu, 28 sorusu ile HEdPERF ölçeğini kullanarak test edilip, değerlendirilmiş ve önemli farklar bulunmuştur. Adnan Menderes Üniversitesi Nazilli Meslek Yüksekokulunda okuyan 2400 öğrenci arasından rasgele 320 öğrenci seçilmiş ve veriler SPSS 21 ile analiz edilmiştir.

Anahtar kelimeler: Hizmet Kalitesi, HEdPERF, Yükseköğretim

ABSTRACT

The purpose of this paper is to examine the influence of service quality provided of higher education institutions and to research whether there are significant differences in the perception of service quality between genders, education status of students and their parents' education status. The outcome of this research with the example of Adnan Menderes University, Nazilli Vocational School in Aydın/Turkey has provided the higher education institutions with solutions to improve service quality to ensure students a decent learning environment which has an impact on their success to reach program goals, to provide businesses with skilled people and to differentiate itself from competition and therefore achieve reduction of complaints and customer loyalty. Research results also indicate that the gender of students, their education status and their parents' education status have an impact on their perception of service quality.

The service quality has been tested and evaluated using HEdPERF scale to expose and improve the current state with its 28 questions and significant differences have been found. The data was collected among 320 randomly picked students out of 2400 students stydying at Adnan Menderes University Vocational School and was analyzed with SPSS 21.

Keywords: Service Quality, HEdPERF, Higher Education

1. INTRODUCTION

Few would argue with the fact that in todays business world, service quality has become a crucial measurement tool of business performance and continues to focus the attention of consultants/users and

academics towards customer satisfaction. Being able to offer a high service quality helps businesses to differentiate themselves from competition and therefore achieve reduction of complaints and customer loyalty with the outcome to recommend products or services of the company (Karatepe et al., 2005).

The quality of manufactured goods is more obvious and understandable whereas it is harder to evaluate the quality of service. The service quality of diverse higher education institutions has been foci in recent years to evaluate the level of service quality and ensure the service provided responds to the requirements of students. According to Zeithaml et al. (2009), if correctly implemented, service quality is able to conceive positive customer experiences which leads to a higher organizational performance, cost reduction and increased market shares.

In order to obtain the aforementioned, the attempt of this study is to evaluate empirically the relationship between the given service quality and customer satisfaction of students of the Adnan Menderes University, Vocational School in Nazilli/ Aydın, Turkey.

Many models have been generated with various dimensions and scales to measure service quality. There are two widely used measurement tools by scholars and businesses which are HEDPERF. Nevertheless, present results propose that HEdPERF is a more convenient model for the evaluation of service quality in higher education institutions (Abdullah, 2005).

2. LITERATURE REVIEW

2.1. Total Quality Management

Organizations are facing substantial competitive pressure due to global competition and customers' increasing product and service requirements. Companies are forced to alter and optimize their operations due to increasing costs. Being able to keep up, the quality of manufactured goods and given services are the driving force to be successful in this competing environment (Sahoo & Yaday, 2018). There are many definitions of quality which have been given by diverse quality gurus, one is "Quality indicates the capability of all components of an entity to satisfy the stated and implied needs that aquality item will perform satisfactorily in service, and is suitable for its intended purpose" (Kiran, 2017). Along with the quality movement Total Quality Management (TQM) has emerged. When TQM became famous in the 1980's due to powerful progress in electronics and the auto industry of Japanese firms in this area, American companies were alarmed and confident that this strive towards Quality Management could influence company's competitiveness positively (Carter, 2015). Companies strive to reach zero defects while doing their operations by applying process control and manufacturing innovative products and offering excellent services. Therefore, many institutions have been using TQM for many years to stay ahead in business (Sahoo & Yadav, 2018) and also to achieve continuous improvement of goods and services through the correction of all functions and processes of an organization. The aim is to satisfy customers wants and needs (Ross, 2017) as well as to minimize costs. TQM does not only deal with the quality of the finished products but with the operations of the entire organization (Carter, 2015).

Quality expert J.M. Juran said: "Total Quality Management (TQM) is the set of management processes and systems that create delighted customers through empowered employees, leading to higher and lower cost" (Ross, 2017). There are many attempts which are being used to achieve zero defects, a reduction in variation and new procedures and processes in manufacturing and organizations with service focus (Tennant, 2001). Therefore, organizations need to shift their focus from product quality to process quality (Kiran, 2017). The greatest challenge for TQM can be found in non-manufacturing companies. Service organizations are in a big need of TQM simply because offered services reach the customer directly without being able to call given service back (Tennant, 2001). A big service sector is Higher Education. There are several studies about the evaluation of service quality in higher education like: Service Quality in Higher Education (Quinn at al., 2009), Service Quality in Higher Education (Khodayari & Khodayari, 2011), Comparing alternative instruments to measure service quality in higher education (Brochado, 2009) or Managing Service Quality in Higher Education: The Role of the Student as Primary Consumer (Hill, 1995).

pp:4672-4685

2.2. Service, Quality, Service Quality and Measurement of Service Quality

2.2.1. Service

There isn't a common term for service in the academic field but it can be said that at the beginning service was defined as an activity with no financial return and later it was characterized as a set of non productional activities which add a benefit to the goods until the definition of service became all economic: Activities which add abstract value like non physical output and the consumption of such as soon as it is produced, providing the users with comfort, entertainment, fitness of use and health (Bektas & Akman, 2013). The quality of manufactured goods are more obvious and understandable whereas it is harder to evaluate the quality of service. The most evident attribute of service is without question intangibility which provides customers' wants and needs without ending in a tangible ownership of something. The intangibility of service results in both the difficulty of evaluation of the given service by the customer and the quality of service which need to be given by the service provider. Although now the evaluation of service quality is all over taken as a subjective perception by customers. Thus, service should get measured against the overall attitude (Pheng & Rui, 2016).

2.2.2. Quality

There is no general definition of quality although it is widely used by academics and other practitioners. Therefore different definitions can be found in literature. These are some of the most common quality definitions of well known quality gurus and organiations:

- Quality means..."investment of the best skill and effort possible to produce the finest and most admirable results possible....You do it well or you do it half-well....Quality is achieving or reaching for the highest standard as against being satisfied with the sloppy or fraudulent....It does not allow compromise with the second-rat" (Tuchman, 1980).
- "Quality is based on the presence or absence of a particular attribute. If an attribute is desirable, greater amounts of that attribute, under this definition, would label that product or service as one of a higher quality" (Leffler, 1982).
- "Quality is defined as conformance to specifications. Quality of conformance relates to the degree to which a product meets certain design standards" (Shewart (1931) and Levitt (1972).
- "Fitness for use. The extent to which a product successfully serves the purposes of the user" (Juran & Godfrey, 1999).
- Quality is "best for certain customer conditions. Quality under this definition consists of a product or a service to a customer with certain characteristics at an expectable cost or price" (Feigenbaum, 1951).
- "The total features and characteristics of a product or a service made or performed according to specifications to satisfy customers at the time of purchase and during use" (American Society for Quality Control, 2004).

(Munich Personal RePEc Archive, 2012)

For a variety of reasons there is no generally approved definition of quality. Therefore, defining quality as meeting customer expectations is considered the most complex definition of quality.

2.2.3. Service Quality

In todays business world, service quality has become a crucial measurement tool of business performance and continues to focus the attention of consultants/users and academics towards customer satisfaction. Offering a high service quality helps businesses to differentiate themselves from competition and therefore achieve reduction of complaints and customer loyalty with the outcome to recommend products or services of the company (Karatepe et al., 2005). If the provided service quality does not accord to the requirements, companies need to reckon with changes. Service quality is usually measured by parameters which accentuate customers' feelings and the needs are revealed in a nontechnical language. The quality of goods can be measured with objectivity, whereas service quality is abstract and sometimes hard to define. "The unique features of services such as inseparability of production and consumption, intangibility, and heterogeneity make measurement of quality a very complex issue" (Parasurman et al., 1988).

2.2.4. Measurement of Service Quality

Many models have been generated with various dimensions and scales to measure service quality. There are two widely used measurement tools by scholars and businesses which are SERVQUAL (Service Quality) and SERVPERF (Service Performance). The SERVQUAL model is the gap between customers' service expectations and their perceptions of the performed service. Expectation has been specified as a customer's foreseen service performance and perception of the actually experienced service (Pheng & Rui, 2016). There was a original SERVQUAL scale which contained ten dimensions, which after testing has been reduced to five dimensions by (Parasurman et al., 1988).

These five dimensions are identified as follows:

- Reliability refers to the ability to perform the promised service dependably and accurately.
- Responsiveness refers to the willingness to help customers and to provide prompt service.
- Assurance refers to the knowledge, courtesy of employees and ability to convey trust and confidence in the customer towards the service provider.
- Empathy refers to the provision of caring, individualized attention provided to customers.
- Tangibles refers to the appearance of physical facilities, equipment, personnel and communication materials (Yousapronpaiboon, 2014).

Despite the fact that SERVQUAL has been used and empirically examined, it has to deal with citicism in terms of conceptuality and operationality in the Perception-Minus-Expectation measurement (Trivellas & Dargenidou, 2009). Therefore, a performance-only measurement known as SERVPERF has been developed by Cronin and Taylor using the same dimensions and attributes as SERVOUAL, SERVPERF is cutting down the number of attributes in the questionnaire from 44 to 22 to only measure SERVQUALS perception components. Thus, SERVPERF is being argued to be more efficient. Some researchers and school of thought believe in the superiority of SERVPERF in terms of reliability and convergent validity whereas some argue that the difference between expectations and perceptions are the key determinant of overall service quality and thus critical for improving such (service quality) and therefore measuring perception alone is not enough (Pheng & Rui, 2016).

Considering both measurement methods companies have to design new strategies and work on their strengths and weaknesses.

2.3. Service Quality in Higher Education

The main scopes of higher education institutions contain the activities such as doing research and publication, education and providing service to society. Due to a high amount of higher education institutions, approx. 868 in Turkey (Yükseköğretim Kurulu Başkanlığı, 2018), quality of education is being affected enormously. Therefore, higher education institutions need to take into account that provison of a decent learning environment with its facilities, student skills, education counsellors and education services all have an impact on students' success to reach given program goals. For this reason, service quality is substantial in reaching objectives and providing the business environment with skilled people (Cheng et al., 2016).

In order to influence the perception of service quality of students positively higher education institutions have to ensure students basic needs like classrooms, instructors, faculty members, civil servants, heating, accommodation, security and social activities (Yavuz & Gülmez, 2016).

It is well known that the evaluation of service quality is more difficult than the evaluation of product quality. Thus, the given service quality is being compared with consumers' expectation of service quality (Yavuz & Gülmez, 2016). The service quality of diverse higher education institutions have been foci in recent years to evaluate the level of service quality and ensure that the service provided responds to the requirements of students. Students preception of service quality can differ due to individual customer wants and needs. Therefore, higher education institutions should try to reach the inevitable expectations of their customers which can be found down below to satisfy them and to reach market quality standards (Quinn et al., 2009).

Table 1: Commonly Recognized Customers of a Higher Education Institution

Group	Customer Attributes
Students	Pay for service, receive educational instruction (service), utilise administrative functions, purchase auxiliary service (lodging, food, etc.)
Parents	Select (or assist in selection of) service provider, pay for service, can be primary points of contact during some service interactions.
Research Sponsors	Provide funds in exchange for information, service, or activities. Often have contractual arrangement.
State and Federal Governments	Provide funds for university to engage in service. Exercise some influence over service/ product design.
Society	Benefit from the services provided, pay (through taxes) for portions of the service.
Future Emplyers of Students	'Purchase' the end product of the service process, sometimes provide funding and advise in service design.
Disciplinary Academic Communities	Benefit from scholarly activity of faculty members.
Accreditation Bodies	Exercise control over product/ service design.
Staff/ Faculty Members	Control some of product/ service design, consume some services.

All in all higher education istitutions are responsible for the quality of education (Abdullah, 2006).

2.4. HEdPERF Scale, a Service Quality Measurement Tool for Higher Education **Institutions**

There are two commonly used methods to measure service quality in higher education SERVPERF or HEdPERF (Higher Education Performance) which was developed by Firdaus in 2005 for higher education institutions only. One cannot say which method is the best to measure service quality in higher education (Camgoz-Akdag & Zaim, 2012) but both techniques are dependable measurement tools (Rahman et al., 2016). Nevertheless present results propose that HEdPERF is more convenient for higher education services (Abdullah, 2005), because it is a more comprehensive performance-based measuring scale than SERVPERF and HEdPERF tries to take in the genuine determinants of service quality within higher education (Abdullah, 2005). HEdPERF measurement tool consists of 41 items which grew out of 13 items of SERVPERF and the rest is made out of qulitative pilot studies, expert and focus group interviews as well as literature analysis (Bektaş & Akman, 2013). HEdPERF is made out of the following six dimensions (Mang'unyi & Govender, 2014).

Non-academic aspects Academic aspects Reputation University Customer Service Quality Satisfaction Access Program issues Understanding

Table 2: HEdPERF Dimensions

3. ANALYSIS OF SERVICE QUALITY IN A HIGHER EDUCATION INSTITUTION IN TURKEY

3.1. Aim and Methodology of the Study

The purpose of this study is to evaluate service quality in higher education from Turkish students point of view who study in diverse social science classes at the Adnan Menderes University, Nazilli Vocational School. This study was done by using the HEdPERF scale to expose and improve the current state. The data collected was analyzed among 320 radomly picked students out of 2400 students studying at Adnan Menderes University, Nazilli Vocational School. Research material was used from the study Bektaş & Akman (2013). The scale consists of the following six main dimensions:

- performance of administrative staff in higher education institutions
- academical performance of lecturers in the institution
- image of the institution
- accessibility of lecturers in the institution
- diploma programmers which are presented by the institution
- physical facilities of the institution

With a total of 28 questions, there are several questions for each dimension which were measured with a five level likert-type scale: 1= Strongly Disagree, 2= Disagree, 3= Neither, 4= Agree, 5= Strongly Agree. Literature review and the methodology of the study was researched by using diverse databases, like academic articles and books. It is supposed that the students who have attended the research have knowledge about service quality and that the outcomes can be generalized for all higher education institutions. For this study SPSS (Statistical Package For Social Sciences) has been used. It is also supposed that the data used is compatible to the normal distribution therefore frequency test, t-test and ANOVA have been utilized for the statistical analysis.

This paper focuses on finding answers to the following questions:

- Is there a difference in the evaluation/perception of service quality between genders?
- Is there a difference in the evaluation/perception of service quality when putting the father's education status of the student into account?
- Is there a difference in the evaluation/perception of service quality when putting the mother's education status of the student into account?
- Is there a difference in the evaluation/perception of service quality when putting the student's education status into account?

3.2 Analysis and Outcomes of Data

3.2.1 Finding and Evaluation of Cronbach's Alpha Coefficiency

The obtained Cronbach's Alpha coefficiency rate concerning the statistical attitude scale is the accepted indicator of the homogenic measurement tool. When the calculated Cronbach's Alpha Coefficiency rate approaches one, the measurement tool can be thought to be one dimensional. The measurement values of the reliability coefficiency are as follows:

 $0.00 < \partial < 0.40$ the scale is not reliable.

 $0.41 < \partial < 0.60$ the scale is of low reliability.

 $0.61 < \partial < 0.80$ the scale is of moderate reliability.

 $0.81 < \partial < 1.00$ the scale is highly reliable (Yaşar, 2014)

In this study Cronbach's Alpha coefficiency rate has been taken into account and first evaluation is 0,920 as can be seen in table 3 which shows the attitude scale of Cronbach's Alpha regarding quality service. This outcome shows that the scale is highly reliable.

Table 3: Cronbach's Alpha Coefficiency

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,915	,920	28

Table 4: The Cronbach's Alpha of all six Dimensions

Variables	Cronbach's Alpha
Performance of administrative staff in the institution	0,889
Academical performance of lecturers in the institutution	0,912
Image of the institution	0,768
Accessibility of lecturers in the institution	0,841
Diploma programmes of institution	0,882
Physical facilities of the institution	0,883

3.2.2 Findings and Evaluations of Demographics

Table 5: Demographic Variables of Gender

		Frequency	Percent
Valid	Female	182	56,9
	Male	138	43,1
	Total	320	100,0

When analyzing the demographic characteristics of gender it can be seen that in this study %56,9, that means 182 female and %43,1 which means 138 male students have taken part.

Table 6: Demographic Variables of Education of Students' Mothers

		Frequency	Percent
Valid	Primary school	211	65,9
	Middle school	109	34,1
	Total	320	100,0

When analyzing the demographic characteristics of education of all mothers it can be seen that %65,9 of all mothers graduated from primary school and only %34,1 have a middle school degree.

Table 7: Demographic Variables of Education of Students' Fathers

		Frequency	Percent
Valid	Primary school	170	53,1
	Middle school	87	27,2
	High school	45	14,1
	University	18	5,6
	Total	320	100,0

When analyzing the demographic characteristics of education of all fathers it can be seen that %53,1 of all fathers graduated from primary school, %27,2 graduated from middle school, %14,1 graduated from high school and only %5,6 have a university diploma.

 Table 8: Demographic Variables of Education of Students

		Frequency	Percent
Valid	Primary education	210	65,6
	Secondary education	110	34,4
	Total	320	100,0

When analyzing the demographic characteristics of education of students it can be seen that in this study %65,6, that means 210 of the students are studying in primary education and %34,4 which means 110 students are studying in secondary education.

3.2.3 T-Test Results about Findings and Evaluations based on Variables

Before having made the hypotheses tests the variables' skewness and kurtosis values have been tested to see whether they are appropriate for normal distribution. The skewness and kurtosis values for each variable lying between +1.5 and -1.5 show that data is distributed normally. Looking at normality test results it can be seen that the total of the scale and each factor of it is providing the conditions and therefore data is distributed normally. The variables which are going to be analyzed are shown below.

Variables	Skewness	Kurtosis
Performance of administrative staff in the institution	0,456	-0,052
Academical performance of lecturers in the institution	0,910	0,586
Image of the institution	0,354	-0,309
Accessibility of lecturers in the institution	0,609	0,057
Diploma programmes of institution	0,545	-0,044
Physical facilities of the institution	0,815	0,386

Table 9: Values of Service Quality Scales of Students in Higher Education

Variables	Number of Students	Arithmetic Mean
Performance of administrative staff in the institution	320	2,87
Academical performance of lecturers in the institution	320	3,35
Image of the institution	320	2,31
Accessibility of lecturers in the institution	320	2,61
Diploma programmes of institution	320	2,30
Physical facilities of the institution	320	2,03

When evaluating the outcomes of the questionnaire the following arithmetic means can be found: performance of administrative staff in higher education institutions 2,87, academical performance of lecturers in the institution 3,35, image of the institution 2,81, accessibility of lecturers in the institution 2,61, diploma programmes which are being presented by the institution 2,30, physical facilities of the institution 2,03. Due to these outcomes one can say that students are quite satisfied with the academical performance of lectureres in the institution with the highest arithmetic mean of 3,35 and outcomes also reveal that the physical facilities of the institution are not perceived as sufficient, because this variable has the lowest arithmetic mean with 2,03.

The service quality scale with its six variables performance of administrative staff in the institutions, academical performance of lecturers in the institution, image of the institution, accessibility of lecturers in the institution, diploma programmes which are presented by the institution and physical facilities of the institution which has been applied on students, has been analyzed and the following data in the upcoming tables has been found.

3.2.4. T-Test Results about Findings and Evaluations based on Gender

Table 10: Image of the Institution

	Gender	N	Mean	Std. Deviation	Sig. (2-tailed)
If I could, I would select Nazilli MYO again.	Female	180	2,0111	1,11860	,041*
ii i could, i would select Nazilii Wi i O agaili.	Male	138	2,2826	1,23802	,044
My university has fully satisfied my service	Female	182	2,2802	1,08914	,042*
expectations.	Male	138	2,5435	1,20291	,044

*P>0,05

The image of the institution which is one of the values that evaluates service quality shows the following results of both genders: The image of the institution variable shows: A significant difference has been found for the questions "If I could, I would select Nazilli MYO again" and "My university has fully satisfied my service expectations". Sig. (2 tailed) value has been found lower than 0,05. The outcomes of the image show that females' rates are lower than the ones of males. Thus, females in comparison to males do not have a high opinion of the image which is represented by the institution.

Table 11: Diploma Programmes which are Presented by the Institution

	Gender	N	Mean	Std. Deviation	Sig. (2-tailed)
A great number of specilization		182	2,2253	1,11683	,038*
programmes are offered by my university.	Male	138	2,5072	1,29708	,042
Respectable diploma		182	2,1209	1,07029	,003*
programmes are offered by my university.	Male	138	2,5145	1,25701	,003

*P>0,05

The diploma programmes which are presented by the institution shows: A significant difference has been found for the questions "A great number of specilization programmes are offered by my university" and "Respectable diploma programmes are offered by my university". Sig. (2 tailed) value has been found lower than 0,05. The outcomes of the diploma programmes which are being presented by the institution show that females' rates are lower than the ones of males. Thus, females in comparison to males are not satisfied with the diploma programmes which are being presented by the institution.

Table 12: Physical Facilities of the Institution

	Gender	N	Mean	Std. Deviation	Sig. (2-tailed)
My university has sufficient dormitory facility options.	Female	182	2,0659	1,05435	,030*
	Male	138	2,3551	1,31138	,035
Social facilities offered by university		182	1,8187	,98893	,008*
are appropriate and sufficient for students' use.	Male	138	2,1594	1,28578	,010
Academic facilities of my university		182	1,8297	1,07642	,029*
(classrooms, laboratory, auditorium) are sufficient.	Male	138	2,1304	1,37138	,034

*P>0,05

Physical facilities of the institution variable shows: A significant difference has been found for the questions "My university has sufficient dormitory facility options", "Social facilities offered by university are appropriate and sufficient for students' use" and "Academic facilities of my university (classrooms, laboratory, auditorium) are sufficient". Sig. (2 tailed) value has been found lower than 0,05. The outcomes of the physical facilities of the institution show that females' rates are lower than the ones of males. Thus, females in comparison to males think that physical facilities of the institution are not sufficient.

3.2.5. T-Test Results about Findings and Evaluations based on Student's Education Status

Table 13: Image of the Institution

	PE SE	N	Mean	Std. Deviation	Sig. (2-tailed)
If I could I would select Nazilli MYO again.	Primary Education	208	1,9183	1,09370	,000*
	Secondary Education	110	2,5273	1,23191	,000
I can recommend my university to others.	Primary Education	210	2,2810	1,49389	,019*
	Secondary Education	110	2,6818	1,34049	,015
My university has fully satisfied my	Primary Education	210	2,3000	1,12836	,043*
service expectations.	Secondary Education	110	2,5727	1,16098	,045

*P>0.05

The image of the institution variable shows: A significant difference has been found for the questions "If I could, I would select Nazilli MYO again", "I can recommend my university to others" and "My university has fully satisfied my service expectations". Sig. (2 tailed) value has been found lower than 0,05. The outcomes of the image show that students of primary education, that means students who attend classes during day are of lower rate than students of secondary education that means students who attend classes in the evenings. Thus, students of primary education in comparison to students of secondary education are not satisfied with the image which is represented by the institution.

Table 14: Accessibility of Lecturers in the Institution

	PE SE	N	Mean	Std. Deviation	Sig. (2-tailed)
Lecturers are able to take enough time to conduct students.	Primary Education	210	2,3619	1,22278	,018*
	Secondary Education	110	2,8182	2,20584	,046
Lecturers show a sincere attitude	Primary Education	210	2,3333	1,19942	,000*
when solving my problems.	Secondary Education	110	3,0364	1,20341	,000

*P>0,05

Accessibility of lecturers in the institution shows: A significant difference has been found in the questions "Lecturers are able to take enough time to conduct students" and "Lecturers show a sincere attitude when solving my problems". Sig. (2 tailed) value has been found lower than 0,05. The outcomes of the accessibility of lecturers in the institution shows that students of primary education, that means students who attend classes during day are of lower rate than students of secondary education, that means students who attend classes in the evenings. Thus, students of primary education in comparison to students of secondary education are less satisfied with the accessibility of lecturers in the institution.

Table 15: Diploma Programmes which are Presented by the Institution

	PE SE	N	Mean	Std. Deviation	Sig. (2-tailed)
	Primary Education	208	2,1250	1,15627	,000*
specilization programmes are offered by my university.	Secondary Education	110	2,6091	1,15015	,000
Programmes with a flexible	Primary Education	210	2,1667	1,16399	,000*
curriculum are offered by my university.	Secondary Education	110	2,6909	1,20964	,000
Respectable diploma		210	2,1000	1,13850	,000*
programmes are offered by my university.	Secondary Education	110	2,6545	1,14488	,000

*P>0.05

The diploma programmes which are presented by the institution show: A significant difference has been found for the questions "A great number of specilization programmes are offered by my university", "Programmes with a flexible curriculum are offered by my university" and "Respectable diploma programmes are offered by my university". Sig. (2 tailed) value has been found lower than 0,05. The outcomes of the diploma programmes which are being presented by the institution show that students of primary education, that means students who attend classes during day are of lower rate than students of secondary education, that means students who attend classes in the evenings. Thus, students of primary education in comparison to students of secondary education are not satisfied with the diploma programmes which are being presented by the institution.

Table 16: Physical Facilities of the Institution

	PE SE	N	Mean	Std. Deviation	Sig. (2-tailed)
, ,	Primary Education	_	2,0238	1,10865	,000*
sufficient dormitory facility options.	Secondary Education	110	2,5091	1,24698	,001

*P>0,05

Physical facilities of the institution variable shows: A significant difference has been found for the question "My university has sufficient dormitory facility options". Sig. (2 tailed) value has been found lower than 0,05. The outcomes of the physical facilities of the institution show that students of primary education, that means students who attend classes during day are of lower rate than students of secondary education that means students who attend classes in the evenings. Thus, students of primary education in comparison to students of secondary education are less satisfied with the physical facilities of the institution.

3.2.6. T-Test Results about Findings and Evaluations based on Mother's Education Status

Table 17: Image of the Institution

	Mother's education status	N	Mean	Std. Deviation	Sig. (2-tailed)
If I could, I would select Nazilli MYO again.	Primary school	209	1,9187	1,09109	,000*
	Middle school	109	2,5321	1,23655	,000
I can recommend my university to others.	Primary school	211	2,2844	1,49115	,021*
	Middle school	109	2,6789	1,34633	,017

*P>0,05

The image of the institution variable shows: A significant difference has been found for the questions "If I could, I would select Nazilli MYO again" and "I can recommend my university to others". Sig. (2 tailed) value has been found lower than 0,05. The outcomes of the image show that students whose mother has a primary school education are of lower rate than of students whose mother has a middle school education. Thus, students whose mother has a primary school education are less satisfied with the image of the institution.

Table 18: Accessibility of Lecturers in the Institution

	Mother's education status	N	Mean	Std. Deviation	Sig. (2-tailed)
Lecturers are able to take enough time to conduct students.	Primary school	211	2,3697	1,22507	,023*
	Middle school	109	2,8073	2,21308	,057
Lecturers show a sincere attitude when solving my problems.	Primary school	211	2,3412	1,20204	,000*
	Middle school	109	3,0275	1,20538	,000

*P>0,05

Accessibility of lecturers in the institution shows: A significant difference has been found for the questions "Lecturers are able to take enough time to conduct students" and "Lecturers show a sincere attitude when solving my problems". Sig. (2 tailed) value has been found lower than 0,05. The outcomes of the accessibility of lecturers in the institution shows that students whose mother has a primary school education are of lower rate than of students whose mother has a middle school education. Thus, students whose mother has a primary school education are less satisfied with the accessibility of lecturers in the institution.

 Table 19: Diploma Programmes which are Presented by the Institution

	Mother's education status	N	Mean	Std. Deviation	Sig. (2-tailed)
A great number of specilization		209	2,1340	1,16075	,001*
programmes are offered by my university.	Middle school	109	2,5963	1,14762	,001
Programmes with a flexible curriculum are offered by my university.	Primary school	211	2,1659	1,16127	,000*
	Middle school	109	2,6972	1,21339	,000
Respectable diploma	Primary school	211	2,0948	1,13830	,000*
programmes are offered by my university.	Middle school	109	2,6697	1,13900	,000

*P>0,05

The diploma programmes which are presented by the institution show: A significant difference has been found for the questions "A great number of specilization programmes are offered by my university", "Programmes with a flexible curriculum are offered by my university" and "Respectable diploma programmes are offered by my university". Sig. (2 tailed) value has been found lower than 0,05. The outcomes of the diploma programmes which are presented by the institution show that students whose mother has a primary school education are of lower rate than of students whose mother has a middle school education. Thus, students whose mother has a primary school education are less satisfied with the diploma programmes which are presented by the institution.

Table 20: Physical Facilities of the Institution

	Mother's education status	N	Mean	Std. Deviation	Sig. (2-tailed)
My university has sufficient dormitory facility options.	Primary school	211	2,0190	1,10825	*000
	Middle school	109	2,5229	1,24422	,000

*P>0,05

Physical facilities of the institution variable shows: A significant difference has been found for the question "My university has sufficient dormitory facility options". Sig. (2 tailed) value has been found lower than 0,05. The outcomes of the physical facilities of the institution show that students whose mother has a primary school education are of lower rate than of students whose mother has a middle school education. Thus, students whose mother has a primary school education are less satisfied with the physical facilities of the institution.

3.2.7. Anova Test Results based on Father's Education Status

Table 21: Anova for Father's Education Status

GROUPS	N	Mean	Std. Deviation
G1Primary Schooll	170	2,3765	1,17142
G2 Middle School	87	2,5977	1,16599
G3 High School	45	2,7333	1,30384
G4 University	18	3,1111	1,45072
Total	320	2,5281	1,21607

		Sum of Squares	Df	Mean Square	F	Sig.	Significance
	Between Groups		3	4,115	2,830	,039	G1-G4
feedback about my performance	Within Groups	459,403	316	1,454			
(knowledge and skills).	Total	471,747	319				

Considering father's education a one way variance analysis/ANOVA which is a statistical parameter technique has been used to evaluate whether there is a significant difference of the participants based on the questions. The outcome of variance analysis F(3,319)=2,830 P<0,05 has calculated a ststistical significant difference. To identify the source of difference, Tukey test which is a Post Hoc test has been used. According to this test, a significant difference has been found among primary school graduates and university graduates concerning the 21st question "Lecturers are giving me feedback about my performance (knowledge and skills)". Students whose father has a primary school degree are of lower rate regarding the question "Lecturers are giving me feedback about my performance (knowledge and skills)" and therefore are inclined to be dissatisfied. Students whose father has a university degree are of higher rate regarding the same question and therefore are inclined to be more satisfied.

4. RESULTS AND SUGGESTIONS

It is well known that the share of service sector is rising rapidly in world economy. Universities as service giving units have to attach importance to service quality. The quality of a higher education school with the example of the Adnan Menderes Vocational School has been tested and evaluated using the HEdPERF scale with its 28 questions and significant differences have been found to answer the questions: Is there a difference in the evaluation of service quality between genders? Is there a difference in the evaluation of service quality when putting the father's education of the student into account? Is there a difference in the evaluation of service quality when putting the mother's education of the student into account? Is there a difference in the evaluation of service quality when putting the student's education status into account?

In this study, performance of administrative staff in the institution 2,87, image of the institution 2,31, accessibility of lecturers in the institution 2,61, diploma programmes which are presented by the institution 2,31 and physical facilities of the institution 2,03 show that their means are rate wise quite low. This case shows that the institution is not able to meet students wants and needs in an administrative and physical way. The academical performance of lecturers in the institution with a mean of 3,35 is of

a higher rate than the other dimensions. The higher rate could be a result of students being able to come in contact with their lecturers, being able to interact and lecturers academical support. A significant difference has not been found among female and male students considering their demographic variables in performance of administrative staff in the institution, academical performance of lecturers in the institution and accessibility of lecturers in the institution. It has been identified that female students compared to male students have a lower mean in image of the institution, diploma programmes which are being presented by the institution and physical facilities of the institution which shows that in this concern they are not as satisfied as male students. Considering the education status of students it has been identified that the performance of administrative staff in the institution and accessibility of lecturers in the institution do not have a significant mean. A pregnant difference has been found in the academical performance of lecturers in the institution, diploma programmes which are presented by the institution and physical facilities of the institution. It has been identified that students of primary education compared with students of secondary education are of lower opinion. Considering the education of the mothers, survey has been made about administrative staff in the institution and academical performance of lecturers in the institution and no significant difference has been found. A significant difference has been found in the image of the institution, accessibility of lecturers in the institution, diploma programmes which are presented by the institution and physical facilities of the institution. Thus, students whose mother has a primary school education are less satisfied with the named variables than students whose mother has a middle school education. Considering father's education, ANOVA test has been applied because there was more than one variable which needed to be tested. The outcome of the test shows a significant difference for the question "Lecturers are giving me feedback about my performance (knowledge and skills)". Students whose father has a primary school degree are of lower rate compared to students whose father has a university degree. Thus, students whose father has a university degree are inclined to be more satisfied.

Being able to ensure students a decent learning environment has an impact on their success to reach program goals and to provide businesses with skilled people, recommendations have been made to authorized people of the higher education institution to improve service quality. With the application it is hoped to improve students' satisfaction grade and the quality of higher education institutions and along with that their competitiveness to differentiate themselves from competition and therefore achieve reduction of complaints and customer loyalty.

In this study focus was put on students' service quality evaluation only but as was told earlier higher education institutions contain other customer groups which need to be satisfied as well. Therefore future studies can be applied on other internal and also external customers as alternative measurement instruments, as well as in other countries to test if obtained results are consistent throughout different samples. Also, comparing different measurement tools with each other could be a desireable research method.

REFERENCES

- Abdullah, F. (2005). HEdPERF versus SERVPERF: The quest for ideal measuring instrument of service quality in higher education sector. *Quality Assurance in education*, 13(4), 305-328, 306, 320-321
- Abdullah, F. (2006). The development of HEdPERF: a new measuring instrument of service quality for the higher education sector. *International Journal of Consumer Studies*, 30(6), 569-581., 569
- Bektaş, H., & Akman, S. U. (2013). Yükseköğretimde Hizmet Kalitesi Ölçeği: Güvenilirlik ve Geçerlilik Analizi. *Ekonometri ve İstatistik e-Dergisi*, (18), 116-133, 119-121, 124, 320-321
- Brochado, A. (2009). Comparing alternative instruments to measure service quality in higher education. *Quality Assurance in education*, 17(2), 174-190.
- Camgoz-Akdag, H., & Zaim, S. (2012). Education: a comparative structural equation modeling study. *Procedia-Social and Behavioral Sciences*, 47, 874-880., 875
- Carter, J. (2015). Overview and Analysis of Operations Management. Lean Operations, Quality Management and Inventory Management, (1. baskı), Almanya: Grin Verlag.
- Cheng, C. C., Tsai, M. C., & Lin, C. L. (2016). Quality education service: put your feet in their shoes. *Current Issues in Tourism*, 19(11), 1120-1135., 1120

- Hill, F. M. (1995). Managing service quality in higher education: the role of the student as primary consumer. *Quality assurance in education*, *3*(3), 10-21.
- Karatepe, O. M., Yavas, U., & Babakus, E. (2005). Measuring service quality of banks: Scale development and validation. *Journal of Retailing and Consumer Services*, 12(5), 373-383, 373
- Khodayari, F., & Khodayari, B. (2011). Service quality in higher education. *Interdisciplinary Journal of Research in Business*, *1*(9), 38-46.
- Kiran, D. R. (2017). Total quality management: Key concepts and case studies (1. baskı). United Kingdom: Butterworth-Heinemann. foreword
- Mang'unyi, E. E., & Govender, K. K. (2014). Perceived Service Quality (SQ) and Customer Satisfaction (CS): Students' Perceptions of Kenyan Private Universities. *Mediterranean Journal of Social Sciences*, 5(23), 2739, 2739, 2742
- Munich Personal RePEc Archive MPRA (Mayıs, 2012), What is the Meaning of Quality., Erişim 13. Ekim 2018, https://mpra.ub.uni-muenchen.de/57345/1/MPRA_paper_57345.pdf
- Rahman, N. A., Voon, B. H., & Firdaus, A. (2016). Identifying the Dimensions for Culture of Excellence in Higher Education. *Procedia-Social and Behavioral Sciences*, 224, 84-92., 86
- Parasuraman, A., Zeithaml, V., & Berry, L. (2002). SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Retailing: critical concepts*, 64(1), 140, 13
- Pheng, L. S., & Rui, Z. (2016). Service quality for facilities management in hospitals (1. baskı). Singapore: Springer Verlag. 25-27
- Quinn, A., Lemay, G., Larsen, P., & Johnson, D. M. (2009). Service quality in higher education. *Total Quality Management*, 20(2), 139-152., 140-141
- Ross, J. E. (2017). Total quality management: Text, cases, and readings (3. baskı). United States: CRC Press. 1
- Sahoo, S., & Yadav, S. (2018). Total Quality Management in Indian Manufacturing SMEs. *Procedia Manufacturing*, 21, 541-548.
- Tennant, G. (2001). Six Sigma: SPC and TQM in manufacturing and services (1. baskı). United States: Gower Publishing, 34-35
- Trivellas, P., & Dargenidou, D. (2009). Organisational culture, job satisfaction and higher education service quality: The case of Technological Educational Institute of Larissa. *The TQM Journal*, 21(4), 382-399., 383
- Yaşar, M. (2014). İstatistiğe yönelik tutum ölçeği: Geçerlilik ve güvenirlik çalışması. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 36(3), 59-75.
- Yavuz, M., & Gülmez, D. (2016). The Assessment of Service Quality Perception in Higher Education. *Egitim ve Bilim*, 41(184)., 252-253
- Yousapronpaiboon, K. (2014). SERVQUAL: Measuring higher education service quality in Thailand. *Procedia-Social and Behavioral Sciences*, 116, 1088-1095., 1089
- Yükseköğretim Kurulu Başkanlığı (3 Nisan 2018), MYO Koordinasyon Kurulunun ilk Toplantısı, Erişim 18 Temmuz 2018, http://www.yok.gov.tr/web/guest/myo-koordinasyon-kurulu-ilk-toplantisi,
- Zeithaml, B., & Bitner, M. J. Gremler. (2009). Services marketing: Integrating customer focus across the firm. *The McGraw-Hill Companies*, 529, 532.