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The Views of the Prospective Teachers on the Quality Processes of the Faculties in Education (Sakarya University Case)

Arif Saklı[1], Osman Titrek[2]

[1]*Master's Student, Sakarya University, Faculty of Education, Department of Education Sciences,*

ORCID ID: 0000-0001-6340-5089

[2] *Prof. Dr., Sakarya University, Faculty of Education, Department of Education Sciences,*

ORCID ID: 0000-0001-8176-4958

Email: arifsakli@hotmail.com, otitrek@sakarya.edu.tr

Abstract

The main aim of this study is the opinions of prospective academicians about the quality processes of the faculties. Based on this aim, we were investigated on 360 students who are studying in different faculties at Sakarya University. Service performance (Sevice Performance - SERVPERF) and service quality (Service Quality - SERVQUAL) were used as measuring instruments. In the analysis of the data, it was seen that all of the data were distributed normally under the specified conditions. In the second research problem, independent groups' t-test and one-way variance analysis (ANOVA) were used in the other problems of the study. Post-hoc tests were used to find out the differences between the groups. The reliability coefficient for the whole scale was 0.965 and it can be seen that scale has a high-reliability level. As a result of the research; university students' quality of service related to the university they are studying, satisfaction, image, advice, loyalty variables in terms of satisfaction with the views of the place of birth shows a meaningful, as the income level of the student, the level of education and physical aspects of the father's level of significance in terms of the whole size and bottom The average of the views of the students of the Faculty of Theology was higher than the students of other faculties, the average of the views of the students studying in the 2nd education in the dimensions of satisfaction, image and recommendation was found to be higher than the average of the opinions of the students studying in the 1st education. The faculties at Sakarya University. Service performance (SERVPERF) and service quality (SERVQUAL - SERVQUAL) in the analysis.

Key words: Higher education, quality, pre-service teacher.

Introduction

The concept of quality is becoming increasingly prominent in the world of continuous change and development. The quality concept, which was previously included in production, service and management boundaries, is seen as a thought and philosophy that integrates with all concepts in life such as education, health, and security. Every area where quality understanding is settled is developing faster. The cornerstone of quality-related determinants is based on man. Qualified manpower is the most important element to produce quality products and services. Therefore, in order to be able to talk about quality in production and consumed activities, human values should be given (Tosun, 2012).

Parallel to the technological and scientific developments, the knowledge of the production of knowledge and the paradigms of knowledge have changed greatly since the beginning of the 21st century. According to this new paradigm; the information is interpreted as unexplored, it is defended by a person or institution that does not appear suddenly. According to the last century paradigm, knowledge is subjective. Because information; it is formed as a result of experience, observation, and experience of the person (Özden, 2005). The new assumptions about the acquisition and use of knowledge have changed and the perceptions of the concepts of teaching and learning have changed. Therefore, this situation has brought different approaches to the concepts of learning, teaching, education, and training. In education, instead of teaching, learning has come to the forefront, and a constructive approach has emerged, which is the main subject of learning (Sherman and Kurshan, 2005).

With the end of the accreditation and quality studies in the education faculties, it is planned that the quality of national education will increase to the international level, all the negativities in the education will be removed and the students will prove themselves by getting a certain place in the international

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academic community (Süngü and Bayrakçı, 2010). Educational institutions play a role as a producer sub-system in maintaining the existence of a society. There are universities that train people on the basis of educational institutions that establish a close relationship between humans and life. It is the sole responsibility of the universities to discover and develop their talents and to guide each individual to a job within the ability of society (Somaratna and Peiris, 2011). The ability of universities to renew themselves by leading the society depends only on their relationship with society and their ability to use knowledge. The fact that the students are the only customers of the universities and provide the satisfaction of students by increasing the quality in accordance with the needs and desires constitute the basis of modern knowledge (Dilşeker, 2011; Anderson and Ingram, 1989).

The quality expectations of the students for the institution they are studying are basically multidimensional. The data obtained in this study are similar to the dimensions selected in the study of Taş (2015), the physical environment and the physical spaces supporting the learning, the support services to meet the needs of the students, the evaluations about the academic staff, the evaluations about the administrative staff, satisfaction, image, advice and loyalty-related different dimensions. It is thought that these dimensions will provide a high level of service quality and satisfaction by the researchers.

Based on this information, the aim of the research is to determine how the teacher candidates affect the perceptions of some variables which are effective in quality preferences. In order to achieve this goal, the following sub-problems were investigated. What are the university students' views on the quality of service related to the university they are studying, satisfaction, image, recommendation, and loyalty? The answer to the research problem is sought. In this direction, the findings will be examined in the following sub-dimensions.

a) What is the distribution level of university students' opinions quality of service, satisfaction, image, recommendation, and loyalty related to the university they are studying?

b) Are there any significant differences among the opinions of university students regarding the quality of service, satisfaction, image, recommendation, loyalty related to the university they are studying based on;

1. birthplace, 2. family income status, 3. father's education level,
4. faculty, 5. type of education (1st and 2nd teaching),
6. mother's education level, 7. gender, 8. receiving scholarship status,
9. type of scholarship

Quality

Quality as a word by many people; It is thought to be synonymous with concepts such as expensive, luxurious, difficult-to-find, high-specific (Oğlakçıoğlu, 2013). It is difficult to explain the quality examined by many researchers in a single definition (Bayrak, 2007). For this reason, quality cannot be treated as a single element (Özdemir, 2002).

Quality in general; The sum of the characteristics of a good or service that can meet the customer's requirements, the ability to meet the needs identified or to be able to meet the needs, can be defined as the minimum damage caused by the goods after being put on the market and the degree to which they are suitable for use. (UluğAkça, 2007).

"The American Quality Control Association (ASQC) is the quality that represents the ability to meet a certain requirement of a good or service. The Turkish Standards Institute (TSE) is the sum of the characteristics of a product or service that is determined or capable of meeting the needs that can be identified, makes a quality definition (Güvercin, 2009). To explain quality as used by the public can be defined as superiority and goodness. Having good features of the subject product or service is the most important indicator of defining the product or service as high quality (Şimşek, 1998).

Quality in Education

The concept of quality, formed by the interaction of many variables, has been formed together with many variables in education that regulates or affects the whole life of individuals (Kalfa, 2007). It can be defined as the continuous improvement of the studies that will improve the social, scientific and ethical values of quality in education that will increase the commitment of students to current and future schools and society (Baykara, 1999). According to Numanoğlu (2001), quality is defined as "the way and function of education, or the way and degree of accomplishing it".

When the quality education and training institutions are mentioned, it can be defined as the institutions where the education is given by using the facilities in the best way, to teach the students to learn and to produce knowledge and to have the ability to be successful in the international environment in their fields. (Garvin, 1996). As in all sectors, improving and improving quality is the most important problem of education services (Kelesbayev, 2014).

The enrichment of knowledge production and enrichment of students' equipment cannot be learned without experiencing quality in education. This makes the evaluation of educational services difficult. Quality for training may vary in terms of marketing in different situations (Cubillo, JM, Sanches, J., and Cervino, J., 2006);

- Year to year,
- From education to education,
- From class to class,
- From student to student,
- From country to country.

For this reason, quality in education services has a different meaning for each client (student-parent). Customers of the training service should be present at the time of service at the place where the service is located. Satisfaction of students and gladness change by; (Özçalık, 2007);

- Interaction with the teaching staff,
- Educational services and the time and environment,
- The way which they receive this service.

Adaptation of Quality Dimensions to Educational Services

It is possible to interpret quality indicators in education by adapting the dimensions of service quality to educational services. Because we can say that the quality of service provides all the dimensions. The provision of training services such as reliability, sensitivity, competence, accessibility, courtesy, communication, credibility, security, intelligibility, and physical assets in education services is proof of the quality of the educational services. Duygun (2007) described the dimensions of service quality to be adapted to educational services as described below;

- Reliability: In the light of the curriculum, the courses should be done in a timely manner, all the records kept by the students are error-free, the staff working in the educational institutions is willing to solve the problems of the students.
- Sensitivity: Eagerness of the staff to serve to work in educational institutions to the students, the courses start on time, the information about the time of the courses are shared with the students, the staff working in the educational institutions can devote time to the students.
- Competence: Adequate knowledge and skills of staff working in educational institutions,
- Accessibility: The availability of educational institutions,
- Courtesy: Providing the necessary care and respect to the students of the educational institution, the staff working in the educational institutions with the whole sincerity of the students,
- Communication: Taking into account the wishes and complaints of the students, informing the students about the disruptions and special situations occurring in education,
- Honesty: The competence of the teachers in the field, the sufficiency and actuality of the examples given by the teachers in their courses, the skills of the teachers in the lessons, the competence of teacher-student communication, the trust of the students in the education they receive,
- Security: Education institutions care about the confidentiality of students' personal data,
- Understandability (Understanding the Student): The proper processing of the courses to the level of the students, the dry training of the training staff to understand the special requests and needs of the students,
- Concrete Aspects of the Service (Physical Assets): The physical environment of the educational institution to look modern, the physical structure of educational institutions to appeal to the eye, the educational institutions to be clean and tidy, the classroom environment to be suitable for the courses processed, the external appearance and maintenance of staff working in the educational institutions, used during the course sufficiency of materials.

Quality Indicators in Education

Education is an area that carries the abstract characteristics of the service sector. Educational institutions for quality in education endeavors to meet the expectations and needs of their students. Education services, by their very nature, are quite different from other service businesses and involve many different types of personal communication and much different confusion. In general, all services have special features that require a specific marketing strategy application. The services are not touched, tested and possessed by their specifications. In addition, heterogeneous, easily degradable simultaneous production and consumption are needed. Customers face a high degree of immunity, which impedes communication with customers. As a result, the decision process of customers is directly affected by the service evaluation process. Customers analyze many features such as brand image, proximity to the center

of the organization. Services are provided as a kind of service pack. So the image of the service provider, etc., are evaluated by customers (Cubillo, JM, Sanches, J., and Cervino, J., 2006; Fındıklı, 2010).

In order to ensure the satisfaction of the students who receive the education service, it is necessary to use attractive lectures or narrative materials together with the abstract educational activity. For an educational service that can be perceived as quality, the combination of abstract and concrete elements is a compulsory necessity. In most of the universities, the lack of many materials due to lack of resources leads to a decrease in the level of satisfaction provided by the education service provided and the dissatisfaction of the students. In addition, the establishment of new universities with inadequate resources increases the severity of this negative situation without eliminating these shortcomings of the existing university units (Özçalık, 2007).

Customers of the training service should be present at the time of service at the place where the service is located. Satisfaction of students and gladness change by (Özçalık, 2007);

- Interaction with the teaching staff,
- Educational services and the time and environment
- The way in which they receive this service.

Quality Work and the Importance of Higher Education Institutions in Turkey

In our country, firstly in the 1900s, studies on quality management started in the education sector. The universities where Çukurova University Foreign Languages Education Center (ÇU YADIM), Başkent University Biomedical Equipment Teams Vocational School (BÜ BCTMYO), Anadolu University Faculty of Communication Sciences Cinema and Television Department of Business Administration (AUİBFSTB) All of these produce graduates who have the targeted competencies, students and determining the expectations they create for the community's educational institutions and in the process have agreed on the issues to make improvement's offer. (Sakarya, 2006).

These steps are important because they are the first in the field of higher education. Also Marmara, DokuzEylül, Istanbul, Aegean, Mediterranean, Middle East Technical University and Istanbul Technical University in which many of the various methods in various fields with the level of quality upgrading work is carried out midweek. In addition, universities in our country are increasing rapidly working towards quality and results orientation of the Council of Higher Education in the quality of many universities have started programs had made progress in different ranges. (Sakarya, 2006).

Located on the top step of the higher education system in Turkey, the education system could summarize as follows: (Sarvan and Anafarta, 2005):

- There are difficulties to establish the new universities, new departments, and new fields.
- There is a gap in the higher education system, which is increasing day by day and where the available resources are difficult to meet.
- The understanding of digital production started to dominate higher education.
- The university administration is responsible for the development of many factors such as faculties, departments, programs, and the number of students in higher education.
- Although quality control practices are mainly managed by YÖK, Students, instructors, programs and departments are included in the quality control system as an input value.

Method

Research Model

The research model is a survey model because it examines the views of university students regarding service quality, satisfaction, image, and recommendation and loyalty variables related to the university they are studying in the scope of Sakarya University. Survey model research aims to describe and explain the characteristics of a small group that is part of this group by a large group (Frankel, Wallen and Hyun, 2012; Karasar, 2012).

Research Sample

The research population consists of 18322 students studying at the Faculty of Political Sciences, Faculty of Arts and Sciences, Faculty of Theology, Faculty of Sport Sciences, Conservatory, Faculty of Fine Arts and Faculty of Health Sciences. In accordance with the universe of the research, the sample of the study is being studied in the Faculty of Political Sciences, Faculty of Management, Faculty of Science and Letters, Faculty of Theology, Faculty of Sport Sciences, Conservatory, Faculty of Fine Arts and Faculty of Health Sciences. Sample selection in the study was carried out by means of an appropriate sampling method in line with the principles of easy accessibility, economy and effective use of time. Appropriate sampling

method; It is an easy way to determine the sample by selecting the appropriate units in the sample in order to use the resources like money, time and labor force in the most efficient way (Gravetter and Forzano, 2012).

Data Collection Tool

In order to evaluate university students' perceptions about the university they are studying and to examine the positive and negative factors indicating this level, the survey was used as a data collection tool. The measurement tool aims to measure the views of service quality, satisfaction, image, recommendation; loyalty based on service performance (Sevice Performance - SERVPERF) and service quality (SERVQUAL) methods. Permission has been granted from Mr. Hüseyin TAŞ to use "The University Students' Satisfaction Scale" in the research. "The University Students' Satisfaction Scale" consists of two parts, the introductory part of the satisfaction scale where the demographic information is included and the scales part of the scale items.

In the introduction of the university students' satisfaction scale, students are asked about gender, place of birth, family income status, mother education level, father's education level, and faculty, type of education (1st and 2nd education), scholarship and scholarship type. In the second part; service quality, satisfaction, image, recommendation, loyalty includes the items that measure the dimensions. The service quality dimension includes four sub-dimensions: physical characteristics, support services, academic staff, and administrative staff. The number of items in the scale is shown in Table 10 and in the second part, there are 47 items. These items are arranged on a 5-point Likert scale (1 = Strongly disagree; 2 = Disagree, 3 = Undecided; 4 = Agree; 5 = Totally Agree). The dimension of service of the scale is sub-dimension of "Facilities are visually attractive and comfortable", Facilities are visually attractive and comfortable, security is provided in the campus, sub-dimension of the support services sub-dimension. They serve as a model for students in terms of manners, culture, and similar elements "and administrative staff sub-dimension u problems of sincerity to solve problems can be given as examples. Similarly, I have fulfilled my expectations from the university, "I think this university has a good image in my student's university, I recommend this university to others and I feel connected to my university, are examples of satisfaction, image, advice, and loyalty dimensions respectively.

When the reliability of the university students' satisfaction scale was examined, it was seen that the Cronbach-Alpha coefficient was reported in a study conducted by Taş (2015). When examined on the basis of dimensions, it was found that the reliability was the lowest 0,822 and the highest 0,943. In this study, the Cronbach alpha coefficient was calculated because the scale consisted of items with Likert type reliability (Büyüköztürk, Çakmak, Akgün, Karedeniz, &Demirel, 2009).

When examined on the basis of dimensions, the lowest reliability coefficient (0.913) is satisfied. The reliability coefficient for the whole scale was 0.965. Özdamar (1999) reported that the reliability coefficient was moderate between 0,61 and 0,80 and high reliability between 0,80 and 1,00. Table 1 shows that the reliability of the scale is high and it is sufficient for the study.

Data Collection and Analysis

The data of the study were collected according to the appropriate sampling method as stated in the universe and sample section. The data were collected by the researcher himself from 18-19 March 2018 in Sakarya University Faculty of Education. However, the data were collected from the students on the basis of volunteerism. The data were transferred to a statistical package program in a controlled format. In this process, it was seen that a total of five candidates did not respond to the majority of the items on the scale and did not respond properly. Therefore, data from these five students were excluded from the analysis.

The data were entered into the SPSS 22 statistical program and descriptive statistics on the dimensions and sub-dimensions of the scale were presented within the scope of the first research problem. Then, these data were examined according to the demographic information by normal methods and all of the data were found to be normally distributed under the specified conditions. Since the second research problem of the study was questioned whether the averages of the dependent variables of the two samples unrelated in the a, b, g and h sub-research problems were differentiated, independent groups t-test was used in these research problems (Büyüköztürk, 2005). For the remaining c, d, e, f and i sub-research problems of the study, the difference of the mean of the dependent variable was investigated. Post-hoc tests were used to find out the differences between the groups.

Findings

In this section, the findings of the question are what the distribution of opinions of university students about service quality, satisfaction, image, recommendation and loyalty related to the university is. In this context, the distribution of the students' thoughts according to the dimensions and sub-dimensions in the measurement tool was examined with descriptive statistics. Table 1 presents the results obtained according to descriptive statistics.

Table 1. Descriptive Statistics of Dimensions

Dimensions	N	Minimum	Maximum	$\bar{X}$	SS
Physical Self.	360	7,00	35,00	3,27	5,79
Support	360	8,00	40,00	3,16	6,77
Academic P.	360	10,00	50,00	3,40	9,57
Administrative P.	360	9,00	45,00	3,23	8,59
Satisfaction	360	4,00	20,00	3,11	3,90
Image	360	3,00	15,00	3,24	3,27
Advice	360	3,00	15,00	3,41	3,43
Loyalty	360	3,00	15,00	3,29	3,52
Quality Feeling (Total)	360	47,00	235,00	3,27	33,71

When Table 1 is examined, it is seen that the arithmetic average of all dimensions is greater than 3 and the arithmetic average of quality perception is 3.27. When the dimensions are examined, the highest-to-lowest recommendation of the arithmetic mean (3,41), academic staff (3,40), loyalty (3,29), physical characteristics (3,27), image (3,24), administrative staff (3, 23), support services (3,16) and satisfaction (3,11).

Sub Problem 1: In this section, there are findings of the Does university student's opinions about service quality, satisfaction, image, recommendation and loyalty variables related to the university they study show a significant difference according to the birthplace? In this context, the differentiation of Sakarya and other student's opinions was examined with the t-test. Table 2 presents the results obtained according to the t-test.

Table 2. Test Results by Place of Birth

	Place of birth	N	$\bar{X}$	t	sd	p
Physical Self.	Sakarya	76	23,49	1.02	117.83	.308
	Other	284	22.72			
Support.	Sakarya	76	26.21	1.39	358	.165
	Other	284	25.00			
Academic P	Sakarya	76	33.97	-0.04	358	0,965
	Other	284	34.03			
Administrative P.	Sakarya	76	28.20	-0.97	358	.331
	Other	284	29.28			
Satisfaction	Sakarya	76	13.78	3.96	358	0,010 *
	Other	284	12.09			
Image	Sakarya	76	10.47	2.30	358	0,022 *
	Other	284	9.51			
Advice	Sakarya	76	10,75	1.52	358	0,130
	Other	284	10.08			
Loyalty	Sakarya	76	10.61	2.02	358	0,044
	Other	284	9.69			
Total	Sakarya	76	34.24	1.17	358	.243
	Other	284	33.55			

* There is a significant difference ($p < 0.05$)

According to Table 2 , the average of service quality dimension of physical characteristics and support services sub-dimensions of the students whose birthplace is Sakarya is higher than the average of the opinions of the students whose birth place is the other provinces. In the sub-dimensions of academic and administrative staff, arithmetic averages of students with other births are higher. According to T-test results; there is not a quite difference at physical examination (t (117.83) = 1.02; p> 0.05), support services (t (358) = 1.39; p> 0; 05), Academic Personnel (t(358) = -0,04; p > 0,05) Administrative Personnel (t(358) = -0,97; p > 0,05) advice (t(358) = 1,52; p > 0,05) and loyalty (t(358) = 2,02; p > 0,05) but there is a difference at satisfaction (t(358) = 3,96; p < 0, 05), Image(t(358) = 2,30; p < 0,05) As a result, no significant difference was found in terms of total score (t (358) = 1.17; p> 0.05).

Sub Problem 2: In this section, the findings of the question ait Do university students' opinions regarding the quality of service, quality, satisfaction, image, recommendation and loyalty related to the university they are studying differ significantly according to the family income situation? In this context, the ANOVA test was used to determine whether students' opinions differ according to their family income status. Table 18 presents the results obtained according to this test.

Table 3.ANOVA Test Results According to Family Income Status for Student Opinions

	Family Income D.	N	$\overline{X}$	sd	F	P	Difference
Physical Self.	1603-2999	181	23.99	3/356	5.665	0.001 *	1.603-2.999 with 3.000-4.999 1.603-2.999 to 5.000-7.999
	3000-4999	121	22.08				
	5000-7999	44	20,50				
	8000-board	14	22.93				
Support Speed.	1603-2999	181	26.15	3/356	3,101	0,027 *	1.603-2.999 with 3.000-4.999 1.603-2.999 to 5.000-7.999
	3000-4999	121	24.24				
	5000-7999	44	23,75				
	8000-board	14	27.14				
Academic P	1603-2999	181	35.29	3/356	2,839	0,038 *	1.603-2.999 to 3.000-4.999
	3000-4999	121	32.54				
	5000-7999	44	32.18				
	8000-board	14	36.14				
Administrative P.	1603-2999	181	29.48	3/356	1,979	0,117	-
	3000-4999	121	28.39				
	5000-7999	44	27.70				
	8000-board	14	33.43				
Satisfaction	1603-2999	181	12.66	3/356	1,228	.299	-
	3000-4999	121	12,17				
	5000-7999	44	11.91				
	8000-board	14	13,79				
Image	1603-2999	181	10,01	3/356	2,386	0,069	-
	3000-4999	121	9.22				
	5000-7999	44	9.39				
	8000-board	14	11.07				
Advice	1603-2999	181	10,53	3/356	1,940	.123	-
	3000-4999	121	9.69				
	5000-7999	44	10.05				
	8000-board	14	11.29				
Loyalty	1603-2999	181	10,16	3/356	1,515	.210	-
	3000-4999	121	9.60				
	5000-7999	44	9.23				

	8000-board	14	10.86				
Total	1603-2999	181	158.27	3/356	4.123	0,007 *	1.603-2.999 to 3.000-4.999,
	3000-4999	121	147.93				
	5000-7999	44	144.70				
	8000-board	14	166.64				

* There is a significant difference (p <0.05)

When Table 3 is examined, it is seen that the average of the students' opinions decreases as the income level outside the 8,000-above category increases in all sizes except the image and recommendation dimensions. On the other hand, as the income level increases, the arithmetic average of the students' opinions increases, as opposed to other dimensions, in the image and recommendation dimensions, except for the income level of 1.603-2.999. According to the results of the ANOVA test, only the physical properties under the service quality dimension (F (3,356) = 5,665; p <0,05), support services (F (3,356) = 3,101; p <0,05) and academic staff (F (3,356) = 5,665; p <0,05). Apart from this, the size of the service quality is administrative staff sub-dimension (F (3,356) = 1,979 ; P (0.05) with satisfaction (F (3,356) = 1,228; p> 0,05), image (F (3,356) = 2,386; p> 0,05), recommendation (F (3,356) = 1,940; p> 0,05) and loyalty (F (3,356) = 1,515; p> 0,05). The difference in physical properties sub-dimension with significant difference was between 1.603-2.999 and 3.000-4.999 and between 1.603-2.999 and 5.000-7.999 in income categories. Similarly, the differences in support services sub-dimension are between 1.603-2.999 and 3.000-4.999 and 1.603-2.999 and 5.000-7.999 income categories. The difference in academic staff sub-dimension is 1.603-2.999 and 3.000-4.999 in income categories. Finally, there was a significant difference in terms of total score (F (3,356) = 4,123; p <0.05) and this difference is between 1.603-2.999 and 3.000-4.999 income categories.

Sub-Problem 3: In this section, the findings of the question are; Is the student's family income effective on their idea of the quality of service, satisfaction, image, recommendation and loyalty about their university?

In this context, the ANOVA test was used to determine whether students' opinions differ according to their father's education level. This category is not included in the analysis because the number of people in the category of illiterate is only 2. Table 4 shows the results obtained according to the ANOVA test.

Table 4. According to the level of education of the father for students' opinions ANOVA Test Results

	Father Education.	N	$\bar{X}$	Sd	F	p	Difference
Physical O.	Literate	18	23.72	4/353	3,036	0,018 *	Elementary-High School High school-university and upp.
	Primary school	117	23,06				
	Middle School	86	23,06				
	High school	95	21.44				
	University and sad.	42	24.98				
Support H.	Literate	18	22.89	4/353	1,323	.261	-
	Primary school	117	27,00				
	Middle School	86	25,85				
	High school	95	24.98				
	University and sad.	42	24.16				
Academic P.	Literate	18	26.02	4/353	2,169	0,072	-
	Primary school	117	25,27				
	Middle School	86	36,39				
	High school	95	34.26				
	University and sad.	42	34.55				
Administrative P.	Literate	18	31.83	4/353	1,781	.132	-
	Primary school	117	36.21				
	Middle School	86	34.02				
	High school	95	33.78				
	University and	42	28.97				

	sad.						
Satisfaction	Literate Primary school Middle School High school University and sad.	18 117 86 95 42	29.34 27.97 29.29 29.07 12.72	4/353	1,539	0,190	-
Image	Literate Primary school Middle School High school University and sad.	18 117 86 95 42	12.31 12.23 12,16 13.81 12.45	4/353	2,671	0,032 *	Elementary-High School Secondary-university and upp. High school-university and upp .
Advice	Literate Primary school Middle School High school University and sad.	18 117 86 95 42	9.44 10,11 9.52 9.02 10.74	4/353	2,301	0,058	-
Loyalty	Literate Primary school Middle School High school University and sad.	18 117 86 95 42	9.72 10,11 10.48 10,13 9.51	4/353	1,144	0,336	-
Total	Literate Primary school Middle School High school University and sad.	18 117 86 95 42	162.17 155.04 153.72 145.57 163.02	4/353	2,546	0,039 *	High School-University

* There is a significant difference (p <0.05)

When Table 4 is examined, it is seen that the arithmetic average of the students' opinions decreases as the level of education increases in the categories other than the literate category in the support services and administrative personnel sub-dimensions included in the service quality dimension. In all dimensions and sub-dimensions, no trend was observed due to the level of father education. According to the ANOVA test, a significant difference was found in the physical characteristics (F (4,353) = 3,036; p <0,05) and image (F (4,353) = 2,671; p <0,05). Apart from these, support services (F (4,353) = 1,323; p> 0,05), academic staff (F (4,353) = 2,169 ; p> 0,05) and administrative staff (F (4,353) = 1,781 ; (f (4,353) = 1,539 ; p> 0,05), recommendation (F (4,353) = 2,301; p> 0,05) and loyalty (F (4,353) = 1,144; p> 0.05).

The reason for the difference in the physical properties sub-dimension which has a significant difference is the difference between primary-high school and high school-university and higher education levels. The differentiation in the image size is in primary, high-school, secondary-university and above, and high school-university and higher education levels. Lastly, there was a significant difference in terms of the total score (F (4,353) = 2,546; p <0,05), and this difference is between those with high school education and those with higher education.

Sub Problem 4: In this section, "Is the opinion of the university students regarding the quality of service, quality, image, recommendation and loyalty related to the university they are studying differed significantly according to the faculty? In this context, ANOVA has examined whether the opinions of the students differed. In Table 5 ANOVA results are presented obtained by the test.

Table 5. ANOVA Test Results by Faculty for Students' Opinions

	Faculty	N	$\overline{X}$	sd	F	P	Difference
Physical O.	Fac. of Eco&Adm.	8	22.63	6/353	.837	.542	-
	Fac. Of Sci&Lit	253	22.64				
	Theology	17	25.06				
	Sports	26	24,00				
	Conservatory	15	24,13				
	Arts	18	21.94				
	Fac. Of Health	23	22,65				
Support Serv.	Fac. of Eco&Adm.	8	23.88	6/353	1.240	.285	-
	Fac. Of Sci&Lit	253	25.03				
	Theology	17	29.06				
	Sports	26	25,85				
	Conservatory	15	26,33				
	Arts	18	25,33				
	Fac. Of Health	23	23,96				
Academic P	Fac. of Eco&Adm.	8	33,13	6/353	.646	.693	-
	Fac. Of Sci&Lit	253	33.77				
	Theology	17	38,35				
	Sports	26	33.38				
	Conservatory	15	33.87				
	Arts	18	34.28				
	Fac. of Eco&Adm.	23	34,43				
Administrative P.	Fac. of Eco&Adm.	8	27.50	6/353	1,705	.119	-
	Fac. Of Sci&Lit	253	28,60				
	Theology	17	34.59				
	Sports	26	29.96				
	Conservatory	15	31,40				
	Arts	18	29.39				
	Fac. of Health	23	27.61				
Satisfaction	Fac. of Eco&Adm.	8	12,75	6/353	2,276	0,036	Theology - Fac. Of Sci&Lit Theology - Sports Theology - Conservatory Theology - Health
	Fac. Of Sci&Lit	253	12,24				
	Theology	17	15.24				
	Sports	26	11.85				
	Conservatory	15	12.33				
	Arts	18	14.06				
	Fac. of Health	23	12.09				
Image	Fac. of Eco&Adm.	8	9.25	6/353	1,672	0,127	-
	Fac. Of Sci&Lit	253	9.67				
	Theology	17	11.88				
	Sports	26	8.96				
	Conservatory	15	9.33				
	Arts	18	10,22				
	Fac. of Health	23	9.39				

	Fac. of Eco&Adm.	8	9.50				-
	Fac. Of Sci&Lit	253	10,17				
	Theology	17	12,12				
Advice	Sports	26	10,31	6/353	1,320	.247	
	Conservatory	15	10,53				
	Arts	18	10,33				
	Fac. of Health	23	9.17				
	Fac. of Eco&Adm.	8	9.38				-
	Fac. Of Sci&Lit	253	10.02				
	Theology	17	11,41				
Loyalty	Sports	26	9.50	6/353	1,203	.304	
	Conservatory	15	9.40				
	Arts	18	9.00				
	Fac. of Health	23	8.91				
	Fac. of Eco&Adm.	8	148.00				
	Fac. Of Sci&Lit	253	152.14				
	Theology	17	177.71				
Total	Sports	26	153.81	6/353	1,715	0,116	
	Conservatory	15	157.33				
	Arts	18	154.56				
	Fac. of Health	23	148.22				

* There is a significant difference (p <0.05)

It is seen that the average of the opinions of the students of theology faculties in all dimensions and sub-dimensions are higher than those of the other faculties. In all dimensions and sub-dimensions, there was no trend compared to the faculty. According to the ANOVA test, only satisfaction (F (6,353) = 2,276 ; p <0,05) showed a significant difference in the size of the physical properties (F (6,353) = 0.837; p> 0,05), support services (F (6,353) = 1,240 (p> 0,05), academic staff (F (6,353) = 0,646 ; p> 0,05) and administrative staff (F (6,353) = 1,705 ; p> 0,05) sub-dimensions and image (F (6,353) = 1.672; p <0.05), recommendation (F (6.353) = 1.320 ; p> 0.05) and loyalty (F (6.353) = 1.203 ; p> 0.05). The reason of the difference in the satisfaction dimension, which has a significant difference, is due to the divergence of the faculty of theology and the Faculty of Science and Literature, the Faculty of Theology and the students of Physical education and sports, the Faculty of Theology and the State Conservatory, the Faculty of Theology and the Faculties of Health Sciences. Lastly, there was no significant difference in terms of total score (F (6,353) = 1,715; p> 0,05).

Sub Problem 5: In this section, there are findings of the question Does the views of university students regarding the quality of service, quality, image, recommendation and loyalty related to the university they study show a significant difference according to the type of education? In this context, it has been examined whether the opinions of the students studying in the 1st and 2nd schools differ. Table 6 obtained by the test results presented:

Table 6. T-Test Results for Students' Opinions

	Education	N	$\bar{X}$	t	sd	p
Physical Self.	1. teaching	239	22.59	-1.32	358	.188
	2. Teaching	121	23.45			
Support Speed.	1. teaching	239	24,73	-2.07	358	0,039 *
	2. Teaching	121	26.29			
Academic P	1. teaching	239	29.44	1.31	247.19	.192
	2. Teaching	121	28,29			

Administrative P.	1. teaching	239	12.36	1.20	358	.232
	2. Teaching	121	12.62			
Satisfaction	1. teaching	239	9.56	-0.60	238.51	.552
	2. Teaching	121	10,01			
Image	1. teaching	239	10,15	-1.23	240.12	.221
	2. Teaching	121	10.36			
Advice	1. teaching	239	9.82	-0.57	358	.572
	2. Teaching	121	10.02			
Loyalty	1. teaching	239	34.48	-0.51	358	.610
	2. Teaching	121	33.10			
Total	1. teaching	239	153.12	-0.27	358	.789
	2. Teaching	121	154.13			

* There is a significant difference (p <0.05)

The arithmetic average of the opinions of the students studying in the 2nd education in the dimension of service quality, physical characteristics and support services is higher than students studying in the 1st education. Table 27 shows that the academic and administrative staff sub-dimensions are valid. The average of the views of the students studying in 2nd education in the dimensions of satisfaction, image, and advice is higher than the average of the opinions of the students studying in the first education. In the loyalty dimension, the arithmetic averages of the students who are studying in the first education are higher. As a result of the t-test, the physical characteristics of the students in the first and second education (t (358) = -1,32; p> 0,05), academic staff (t (247,19)). = 1.31; p> 0.05) and administrative staff (t (358) = 1.20; p> 0.05) sub-dimensions and satisfaction (t (238.51) = -0.60; p> 0.05), image (t (240, 12) = -1.23; p> 0.05), recommendation (t (358) = -0.57; p> 0.05) and loyalty (t (358) = -0.51 While there was no significant difference in the dimensions of p> 0.05, there was a significant difference in the size of support services (t (358) = -2.07, p <0.05). Finally, there was no significant difference in terms of total score (t (358) = -0.27; p> 0.05).

Results, Conclusions and Recommendations

When the research findings were examined, the opinions of the students' in the study group regarding the service quality, satisfaction, image, recommendation and loyalty variables related to the university they were studying did not show a significant difference in terms of gender, class, maternal education status, getting scholarship, and type of scholarship. On the other hand, it is seen that there is a significant difference in the size of the birthplace, the education department, the education type, the education level of the father and the family income level.

Dilşeker (2011) 's study in the class size of the training services and physical properties of support in the variables; While there was a significant difference between the gender-based support services and the administrative personnel variables, it is seen that satisfaction and image variables of the university students' views about the university they are studying differed significantly. Similar to the results of the study by Petruzzelis (2006), it was found that the level of satisfaction of the students who were born in Sakarya and the level of image perception of the university where they were studying was found to be higher compared to the students who were not born Sakarya.

The findings of the study about family income levels showed similar results with Altan and Friends' research. (2003). As the family income increased, the average of the students' positive views decreased. Dilşeker (2011) and Seyfullayev (2015) showed no significant differences in the family income level.

While Dilşeker (2011) did not reach meaningful results in the level of father education level, it was found that the level of father education was significantly different in terms of physical characteristics and image. As the level of education of the father increases, the physical characteristics and image variables have positive opinions. The reason for this situation is that the students have higher education than their fathers, because they have high expectations from the students' themselves, and these levels of expectation are considered to be missing from the university they are studying.

Seyfullayev (2015), Dilşeker (2011) and Altan (2003) found no significant differences in the size of the department studied, whereas all dimensions and sub-dimensions of this study were similar to the study results of Douglas (2006). It is seen that Theology Students' results higher than the other students.

As the reason of this situation, it can be concluded that the students of theology faculty are convinced with religious and mystical attitudes; It is also possible to look at the changes that Sakarya University has undergone during the research period. In the period when this research was carried out, the students moved to a new modern building for the Faculty of Theology at the Esentepe Campus, the central campus of Sakarya University. In addition, in line with the decision of the Council of Higher Education, pedagogical formation certificate program training has been offered in their own faculties as of the next period.

In the dimensions of satisfaction, image, and advice, the average of the positive opinions of the students studying in secondary education was higher than the average of the positive views of the students studying in formal education. This result is thought to be more effective in relation to the physical characteristics and social facilities of the university, and the fact that the formal education daytime students are more in touch with the administrative and academic staff and their environment.

This study is distinguished from similar studies conducted in previous periods by scale and working group aspects and results. For example, in Seyfullayev (2015) and Dilşeker (2011), while the type of teaching was not included in the scale and the focus was on making comparisons between service and quality perception between foundation universities and state universities, this study focused on the quality perceptions of university-level students were studying in various dimensions. Similarly to our study, the study which evaluates the quality perception in formal education and secondary education dimensions is the study of Özçalık (2007).

Considering the findings of the research as a whole, the suggestions of the researchers that should be considered for the practitioners are presented below.

- In addition to western countries quality and accreditation practices in education, similar cultural can be examined and quality arrangements can be made in accordance with the realities of our society,
- Satisfaction surveys can be conducted in order to be able to detect and eliminate the shortcomings in the service process,
- A survey could be tracked and successful achievements could be awarded.
- Studies can be done to determine the perceived quality levels of university students studying at other Faculties and Schools of the university.
- Further qualitative and quantitative research can be carried out on the situations that reduce the quality perceptions and service satisfaction levels of university students.

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