

INVESTIGATION OF INTENDED SERVICE QUALITY LEVELS IN HEALTH-FITNESS CENTERS IN TURKEY

Aydoğan
SOYGÜDEN¹

Sabri KAYA²

Safa HOŞ³

ABSTRACT

In this study, assessments of the levels of service perceived and expected by the customers under four different dimensions (staff, programme, locker rooms and facility) were carried out in order to identify the levels of fitness centers in terms of service quality. The replies provided by 219 members of fitness center who filled out the scale form voluntarily and without skipping any parts were evaluated. In order to measure the service quality of fitness in the study, Service Quality Assessment Scale (SQAS), which was developed by Lam et al. (2005) and whose Turkish adaptation was done by Gürbüz et al. (2005), was used. The SQAS was composed of 4 dimensions (staff, programme, locker rooms and facility) and 34 items. In assessing the service quality, Gap Model (Parasuraman, Zeithaml and Berry, 1988) was used; though this method, the gaps were identified by subtracting perception scores from expectation scores. In order to find the differences between the groups, "Paired-Samples "t" test", "Independent Samples "t" test" and "One way ANOVA" were utilized. When the results obtained and the differences between perception and expectation scores were assessed in terms of dimensions, it was observed that all dimensions had a negative difference. In terms of statistics, it was discovered that there was a meaningful difference in all of staff, programme, locker rooms and facility. Among those, the lowest level of quality was observed to belong to "programme" dimension with the unit of -0.564. Later, with the -0.509-unit difference "locker rooms" dimension, with the -0.487-unit difference "staff" dimension and with the -0.481-unit difference "facility" dimension follow respectively. When it was evaluated according to demographic aspect in the study, it was found that the average of unit for female customers was higher compared with that of male ones according to the gender. According to age status, the average of staff and programme scores of those participating in the survey who are between 15 and 20 was lower than that of the people who are between 31 and 35. According to education status, it was understood that the customers with high school degree and over have more expectations in all of 4 dimensions.

Key Words: Health-Fitness Club, Service Quality, Perception-Expectation

TÜRKİYE'DE Kİ FITNESS MERKEZLERİNİN HİZMET KALİTESİNE YÖNELİK DÜZEYLERİNİN İNCELENMESİ

ÖZET

Bu çalışmada; fitness merkezlerinin hizmet kalitesine yönelik düzeylerini belirlemek amacıyla, müşteriler tarafından algılanan ve beklenen hizmet kalite seviyelerine 4 farklı boyut (personel, program, soyunma odaları ve tesis) altında değerlendirmeler yapılmıştır. Ölçek formunu gönüllü ve eksiksiz dolduran 219 fitness merkezi üyeleri değerlendirilmeye alınmıştır. Çalışmada fitness hizmet kalitesini ölçmek için Lam ve diğ. (2005) tarafından geliştirilen ve Türkçe uyarlaması Gürbüz ve diğ. (2005) tarafından yapılan Hizmet Kalitesi Değerlendirme Ölçeği (SQAS) kullanılmıştır. Hizmet Kalitesi Değerlendirme Ölçeği 4 boyut (Personel, Program, Soyunma Odaları, Tesis) ve 34 maddeden oluşmaktadır. Hizmet kalitesini değerlendirmede Gap Model (Parasuraman, Zeithaml ve Berry, 1988) kullanıldı, bu yöntemle algılama skorları beklenti skorlarından çıkarılarak arasındaki boşluklar tespit edildi. Gruplar arası farklılıkları bulmak için "Paired-Samples "t" test", "Independent Samples "t" test" ve "One way ANOVA" kullanıldı. Elde edilen sonuçlar; algılama ve beklenti skorları arasındaki farklar boyutlar açısından değerlendirildiğinde, tüm boyutların negatif yönde bir farka sahip olduğu tespit edilmiştir. İstatistiksel açıdan ise, personel, program, soyunma odaları ve tesis boyutlarının tamamında anlamlı bir farklılığa rastlanmıştır. Bunlar içerisinde en düşük kalite düzeyine sahip olan boyutun -0,564 birim ile "program" boyutu olduğu görülmüştür. Daha sonra sırasıyla, -0,509 birimlik fark ile "soyunma odası" boyutu, -0,487 birimlik fark ile "personel" boyutu, -0,481 birimlik fark ile "tesis" boyutu gelmektedir. Çalışmada demografik bakımdan değerlendirildiğinde, cinsiyete göre kadın müşterilerin algı ve beklenti birim ortalamaları erkek müşterilere göre daha yüksek bulunmuştur. Yaş durumuna göre 15-20 yaş arasında çalışmaya katılanların personel ve program skor ortalamaları 31-35 yaş arası çalışmaya katılanların skor ortalamalarına göre daha düşüktür. Eğitim durumuna göre lise ve üzeri eğitim durumuna sahip müşterilerin 4 boyutun hepsinde yüksek beklentiye sahip oldukları görülmüştür.

Anahtar Kelimeler: Sağlık-Fitness Kulübü, Hizmet Kalitesi, Algı-Beklenti

¹ Hitit University, School of Physical Education and Sport, Çorum, Turkey

² Kırıkkale University, Faculty of Sport Sciences, Kırıkkale, Turkey

³ Hitit University, Faculty of Economics and Administrative Sciences, Çorum, Turkey

INTRODUCTION

In recent years, the demand for health-fitness centers continues to increase day by day. Therefore, the increase in the rate of utilizing this kind of centers has appeared. Along with this increase, it is known that the customers inquiry about the service quality. The health-fitness clubs sector is growing quickly (Tawse and Keogh, 1998), and more emphasis is being placed on the quality of services in this sector (Papadimitriou and Karteroliotis, 2000). Previous research findings have indicated that service quality is a key factor affecting customer satisfactions and future consumption behaviors in the recreation and leisure industry (Lam, 2000). Upon becoming a competitive industry, this field has dramatically increased the power of consumers. So the managers of fitness centers have started to focus on customer services so as to meet the high expectations of customers (Robinson, 1998). With the serious demand for fitness centers, it has been observed that the number of them has seriously increased too. According to the annual surveys conducted by the International Health, Racquet, and Sportsclub Association (IHRSA), there has been a significant increase in the number of health clubs, gyms, and other fitness centers. The statistic shows the total number of health and fitness clubs worldwide from 2009 to 2013. In 2010, there were more than 133,000 fitness and health clubs worldwide. In 2013, there were over 165,000 health clubs worldwide, a significant increase from the 128,500 in 2009 (Ablondi, 2013). And also, according to annual surveys conducted by Deloitte which the European Health & Fitness Market report also reveals that sports participation in health and fitness centers across Europe has increased from 2009 to 2013. In 2013, there were over 165,000 health clubs worldwide, a significant

increase from the 128,500 in 2009. The region with the most health clubs is Europe, where there are almost 50,000 centers. The number of people playing sports regularly at fitness centers went from 11 to 15 percent, while the number of people with memberships at health and fitness centers increased from 9 percent in 2009 to 11 percent in 2013. The fitness penetration in Europe continued to grow strongly in 2014. This is one of the main findings of the new comprehensive European Health & Fitness Market Report published by Deloitte. According to the study, there were 50.1 million members in European health and fitness clubs at the end of 2014, an increase of 9% compared to the previous year. In terms of revenues, the top 10 European fitness club operators continued their growth as well, increasing their overall revenues by 3% to 2.8 billion euro in 2014. They account for 10.4% of the European market, which grew by 4% to more than 26.8 billion euro in 2014 (Salzberg and Almond, 2014). The increases seen in the number of members and the income are supposed to ascend extremely the competition among fitness centers. For these kinds of competitive service industries to be successful and maintain to run, providing a perfect and quality service has become a prerequisite (Parasuraman et al., 1985).

In literature, by various authors, service quality is defined as an attitude or a global judge about the excellence of a service (Robinson (1999), the perception of how a service meets or exceeds the expectation of a customer (Pride and Ferrel, 1997), the degree of the perfection considered in meeting the needs of a customer and the control of the variances in reaching that perfection (Wyckoff and Lovelock, 1988). However, Parasuraman et al. (1985) defines service quality as the degree of how well a

service provided corresponds to the expectation of customers. Again, Parasuraman, Zeithalm and Berry (1988) state that the service quality perceived is the outcome of a comparison between the expectations before the customer get the service (service expected) and the actual service they experience (service perceived) and the quality is the degree and the direction of the difference between the expectations of the customer and the performance perceived.

According to Parasuraman et al. (1985) and Zeithaml and Bitner (1996), it is stated that the main characteristics of the service are abstraction that is defined, the state of unambiguity, heterogeneity (those that have difference between), simultaneous production-consumption and perishability. According to common recognition of many researchers, it is stated that consumers determine the perception of quality by comparing the previous service performance with the next service performance (Gronroos, 1984; Parasuraman et al., 1985, 1988). For an organization to be successful, to retain their customers and to gain an advantage of competition, the expectations, satisfaction and the needs of the customers are one of the most important elements (Fornell and Wernerfelt, 1987; Parasuraman et al., 1988). The customers who are happy with the service tend to go on having that service generally. In addition, they lead others to buy that service by telling them about it positively (Howat et. al., 1999). The sports services, which are one of the important sectors of the economy and are offered in a broad range in both profit-oriented and non-profit organizations, directly affect people physically, psychologically, sociologically and economically (Yildiz, 2008).

The service quality of sport product is attributed to the subjective perception of the

service offered to the customer himself. Especially in the labor-intensive services, the quality is emerging when the service is being offered (Seraslan and Kepoğlu, 2005). The quality as a strategically key should be accepted for operational productivity and business performance development (Anderson and Zeithaml, 1984; Babakus and Boller, 1992; Garvin, 1983; Phillips, Chang and Buzzell, 1983). In the circle of management, the quality has become an important password. The differences between the services explain how it is produced, consumed and evaluated in favorable production conditions (Chelladurai and Chang, 2000). As it was noticed in the previous studies regarding traditional retailing, it has been stated that the service quality has a positive effect on the satisfaction of the customers (Cronin et al., 2000, Johnson and Fornell, 1991 and Kristensen et al., 1999). According to the reports of Reidheld and Sasser (1990), it was suggested that customer loyalty could increase the production profit from 25 percent up to 85 percent. Rosenberg and Czepiel (1983), in their report, explain that "Attracting new customers is six times more difficult than keeping the current customers."

In the areas where there are a number of fitness centers, customer competition takes place between fitness centers. Sawyer and Smith (1999) explained in their report that the fitness centers located in the USA lose the 40 percent of their customer potential every year. As a result of increasing competition atmosphere and the expectations of the customers, service quality is defined as the most important factor to develop competitive advantage (Alexandris et al., 2001).

The majority of research in service quality has been built around the SERVQUAL (Parasuraman, et al., 1988) methodology,

which is based on the gap model. According to the SERVQUAL model, service quality can be measured by identifying the gaps between customers' expectations and perceptions about the performance of the service. Service quality also has a strong effect on purchase intentions and customer satisfaction. For example, satisfied customers are more likely to become involved more frequently, to take part in other services offered by the organization, to pay for the benefits that they receive, and to be more tolerant of price increases (McAlexander, Kaldenberg & Koenig, 1994; Reichheld & Sasser, 1990). For fitness centers; however, Lam et al. (2005) have developed SQAS (Service quality assessment Scale). According to Lam et al. (2005), service quality measurement models developed previously are the ones which

were applied to many different service industries or very specific models that were prepared for a particular field of service industry. Lam et al. (2005) have produced a model for measuring the service quality perceived in health and fitness clubs. This model measures the quality of service perceived totally in accordance with 6 dimensions that club members encounter. These 6 dimensions are staff, programme, child care service, dressing rooms, physical facility and training facility. These six dimensions can be classified into three as staff, programme and facility.

In this study, the goal is the comparison of health-fitness center members' perception and expectations as regard service quality according to demographic characteristics by applying them service quality scale

MATERIAL AND METHODS

Research Universe and Sample: The data in the research comes from the members of two different private health-fitness centers one of which operates in a commercial status in a medium-sized city that located in Central Anatolia Region in Turkey. After necessary permission was obtained from the manager of fitness center, the members were informed of the scale form. 219 members of fitness center who filled voluntarily in the scale form completely were assessed.

Data Collection Tool: In the collection of data, a personal information form and Service Quality Assessment Scale (SQAS), which was developed by Lam et al. (2005) and whose Turkish adaptation was done by Gürbüz et al. (2005) to measure fitness service quality were used. SQAS is composed of 6 dimensions of staff, programme, dressing rooms, physical facility,

training facility and child care service and 40 items. Because the fitness center, taken as the subject of the research, is not a child care service, the measurement of this dimension and the related items was not conducted. However, physical facility and training facility was combined under the name "facility". For this reason, a Service Quality Assessment Scale made up of 4 dimensions and 34 items was used. The expressions in the scale were assessed by 7-point Likert type rating.

Collection of Data: In this research conducted for the purpose of evaluating the service quality in fitness centers, the data was collected through the use of convenience sampling. Personal information form for the members of the fitness center and Service Quality Assessment Scale were implemented in two different fitness centers that constitute the sampling. The implementation was carried out in October,

2014 after the members were informed by the researcher and the manager of the center.

Data Analysis Techniques: In the assessment of the data collected, SPSS (16) statistics software was used and the level of significance was considered to be ($p < 0.05$). In the assessment of service quality, Gap

Model (Parasuraman, Zeithaml and Berry, 1988) was used and via this method, by subtracting perception scores from expectation scores, the gaps between them were identified. In order to discover the differences between groups, "Paired-Samples "t" test", "Independent Samples "t" test" and "One way ANOVA" were used.

RESULTS

Table 1: Distributions of members according to demographic characteristics

Gender	Frequency (f)	Percent (%)
Male	164	74.9
Female	55	25.1
Total	219	100
Educational Status	Frequency (f)	Percent (%)
Primary School Graduate	23	10.5
Middle School Graduate	33	15.1
High School Student	22	10.0
High School Graduate	38	17.4
University Student	76	34.7
University Graduate	27	12.3
Total	219	100
Age	Frequency (f)	Percent (%)
15-20 years old	93	42.5
21-25 years old	79	36.1
26-30 years old	19	8.7
31-35 years old	15	6.8
36-40 years old	8	3.7
40 years old and over	5	2.3
Total	219	100

The 74 percent of the members participating in the survey were males and 164 people. In addition, in terms of education status of the participants, the largest part belongs to university students with 34 percent. As a result of the analysis conducted regarding

the ages of the participants of the survey, 93 people at the age of 15 to 20 account for the majority with 42.5 percent while 79 of them at the age of 21 to 25 rank as the second with 36.1 percent.

Table 2. Distributions belonging to Average Periods of Using the Facility weekly

Periods	Frequency (f)	Percent (%)
1-2 times per week	37	16.9
3-4 times per week	129	58.9
5-6 times per week	38	17.4
7 times or more per week	10	4.6
Other	5	2.3
Total	219	100

While 58.9 percent of the participants stated that they use the facilities 3 or 4 times a week, the percentage of those who use them once or twice is 16.9 percent. The percentage of

the people using the facilities 5 or 6 times a week is 17.4 and that of those using them 7 or more times is 4.6.

Table 3. Distributions belonging to Average Duration of Transportation to Fitness Center

Transporting Times	Frequency (f)	Percent (%)
Less than 10 min.	52	23.7
10-15 min.	80	36.5
16-20 min.	22	10.0
21-25 min.	24	11.0
26-30 min.	22	10.0
More than 30 min.	19	8.7
Total	219	100

219 people who took part in the study, 23.7 percent told that they arrive at the club in less than 10 minutes, 36.5 of them between 10 and 15 minutes and 10 percent of them

arrive between 16 and 20 minutes at the club. The percentage of those who arrive at the club in more than 30 minutes is 8.7.

Table 4. Distributions belonging to Expected Service Quality

Parameter	A. Mean	Standard Deviation
Staff	6.4759	.58989
Program	6.3979	.60817
Locker Room	6.4639	.63703
Facility	6.4194	.57616
General Expected Service	6.4393	.54163

While the highest expectation level of the participants came out for personnel, the lowest expectation in evaluation came out for program. The fact that the averages are

close to each other and 7 has revealed that the participants of the survey are at a high expectation.

Table 5. Comparison of Expected Service Quality according to participants' ages (ANOVA)

	Staff		Program		Locker Room		Facility	
	\bar{X}	S.D	\bar{X}	S.D	\bar{X}	S.D	\bar{X}	S.D
15-20 years old	6.33	.61	6.29	.61	6.35	.66	6.34	.57
21-25 years old	6.47	.60	6.39	.65	6.45	.67	6.39	.62
26-30 years old	6.77	.34	6.60	.49	6.68	.43	6.57	.52
31-35 years old	6.80	.42	6.74	.33	6.73	.40	6.69	.42
36-40 years old	6.55	.50	6.32	.41	6.60	.53	6.49	.29
40 years old and over	6.73	.43	6.71	.44	6.80	.44	6.72	.43
F	3.369		2.321		1.933		1.605	
P	0.0066*		0.044*		0.090		0.160	

*P<0.05

In the comparison of the expected service quality according to the ages of the participants of the study, a significant difference has been discovered between the averages of personnel and program from the services expected according to the ages.

In the event of a significant difference emerging as a result of One Way Anova test, in order to compare these differences, the

homogeneity of variances has to be tested. The fact that "p" value that comes out following the Test of "Homogeneity of Variances" is more than 0,05 shows that the variances are homogenous. It is observed which items are different from each other by looking into the test results of "Tamhane" test if the variances are not homogenous, or into the "Tukey" test if the variances are homogenous (Buyukozturk, 2003).

Table 6. Homogeneity of Variances Test in Comparison of Expected Service Quality according to participants' ages

Test of Homogeneity of Variances

Material	Sig.
Staff	.007*
Program	.045*
Locker Room	.023*
Facility	.035*

*P<0.05

When the findings above are studied, it is understood that the variances are not

homogenous and "tamhane" test should be examined. According to Tamhane test result;

Table 7. Differences of Expected Service Quality between the Groups according to age groups

Material	Age groups showing difference		Mean Difference
Staff	15-20 years old	26-30 years old	-.44086
		31-35 years old	-.47049
Program	15-20 years old	31-35 years old	-.45100

According to the results of this analysis, the differences shown by the service quality expected for personnel and program according to the ages were discovered. For both of them, the average scores of personnel and program for the participants who are between 15 and 20 years old are

lower compared to those of the participants between the age of 31 and 35. It can be said that the expectation is less for the group between the age of 15 and 20 who participated in the survey. So upon this result, it is considered that the expectation will increase as the average of age increases.

Table 8. Comparison of Expected Service Quality according to participants' education level (ANOVA)

	Staff		Program		Locker Room		Facility	
	\bar{X}	S.D	\bar{X}	S.D	\bar{X}	S.D	\bar{X}	S.D
Primary School Graduate	6.25	.53	6.16	.53	6.19	.55	6.14	.60
Middle School Graduate	6.18	.46	6.18	.45	6.09	.49	6.15	.49
High School Student	6.54	.57	6.66	.55	6.71	.55	6.62	.52
High School Graduate	6.57	.46	6.61	.43	6.60	.50	6.58	.41
University Student	6.52	.67	6.30	.74	6.47	.75	6.42	.65
University Graduate	6.67	.55	6.59	.45	6.71	.46	6.56	.47
F	3.406		4.555		5.451		4.294	
p	0.006*		0.001*		0.000*		0.001*	

*P<0.05

In the comparison of Expected Service Quality according to participants' education level, a significant difference has been found

between the averages of personnel, program, locker rooms and the facility.

Table 9. Homogeneity of Variances Test in Comparison of Expected Service Quality according to participants' education level

Test of Homogeneity of Variances

Material	Sig.
Staff	.217
Program	.001*
Locker Room	.002*
Facility	.018*

*P<0.05

According to the table above, it is acknowledged that variance for personnel is homogenous and “tukey” test is used in order to make comparison. Since it is $p < 0.05$

for the other items, the variances are not homogenous and “tamhane” test is conducted.

Table 10. Differences of Expected Service Quality between the Groups according to Education Level

Material	Education Groups show in difference		Mean Difference
Staff	Middle School Gra.	University Graduate	-.49046
		High School Graduate	-.44508
Program	Primary School Gra.	High School Student	-.48701
		High School Graduate	-.43096
	Middle school Gra.	University Graduate	-.41077
Locker Room	Primary School Gra.	High School Student	-.52688
		University Graduate	-.52721
		High School Student	-.62121
	Middle school Gra.	High School Graduate	-.50303
		University Student	-.37671
Facility	Middle school Gra.	University Graduate	-.62155
		High School Student	-.46970
		High School Graduate	-.43087
	University Graduate	-.40508	

According to this analysis, the differences which service quality expected for personnel, program, locker rooms and facility shows according to the education levels have been found. There is a significant difference between the graduates of middle school and those of university in terms of personnel item. The graduates of middle school have lower expectation that those of university. In terms of program dimension, middle school graduates have lower expectation compared

to high school and university graduates. In terms of locker rooms dimension, middle school graduates have lower expectation compared to high school graduates, university students and university graduates. It is also observed that in terms of locker rooms dimension, the graduates of middle school have lower expectation compared to high school students and graduates, and university graduates.

Table 11. Values of Perception and Expectation for Service Quality

Material	Perception		Expectation		A-B	t	P
	\bar{X}	S.S	\bar{X}	S.S			
Personnel	5.98	.98	6.47	.58	-0.48	-8.48	.000
1. Possession of required knowledge/skills	5.91	1.15	6.48	.84	-0.57	-7.22	.000
2. Neatness and dress	6.03	1.08	6.48	.80	-0.45	-6.66	.000
3. Willingness to help	6.02	1.12	6.53	.73	-0.50	-7.35	.000
4. Patience	5.97	1.15	6.45	.74	-0.47	-6.55	.000
5. Communication with members	5.93	1.22	6.42	.84	-0.49	-7.22	.000
6. Responsiveness to complaints	5.89	1.32	6.36	.69	-0.46	-4.99	.000
7. Courtesy	6.05	1.11	6.50	.85	-0.44	-5.62	.000
8. Instructors provide individuals attention	6.06	1.16	6.52	.91	-0.46	-6.35	.000
9. Provision of consistency	5.99	1.11	6.49	.68	-0.50	-8.48	.000
Program	5.83	.97	6.39	.60	-0.56	-9.75	.000
1. Variety of program	5.83	1.15	6.39	.79	-0.56	-8.02	.000
2. Availability of programs at appropriate level	5.88	1.16	6.38	.80	-0.49	-6.70	.000
3. Convenience of program time/schedule	5.91	1.08	6.41	.75	-0.49	-7.87	.000
4. Quality/Content of programs	5.91	1.10	6.48	.67	-0.56	-7.58	.000
5. Appropriateness of class size	5.72	1.29	6.37	.79	-0.64	-7.38	.000
6. Background music (if any)	5.74	1.38	6.30	.90	-0.55	-5.67	.000
7. Adequacy of space	5.80	1.21	6.42	.75	-0.62	-7.45	.000
Locker Room	5.92	1.00	6.46	0.63	-0.50	-9.37	.000
1. Availability of lockers	5.93	1.15	6.48	.84	-0.57	-7.22	.000
2. Overall maintenance	6.03	1.08	6.48	.80	-0.45	-6.66	.000
3. Shower cleanliness	6.02	1.12	6.53	.73	-0.50	-7.35	.000
4. Accessibility	5.97	1.15	6.45	.74	-0.47	-6.55	.000

5. Safety	5.93	1.22	6.42	.84	-0.49	-6.13	.00 0
Facility	5.93	.94	6.41	.57	-0.48	-8.26	.00 0
1. Convenience of location	6.17	3.55	6.43	.79	-0.25	-1.06	.28 9
2. Hours of operation	6.06	1.06	6.52	.67	-0.46	-7.08	.00 0
3. Availability of parking	5.72	1.38	6.27	.94	-0.55	-5.70	.00 0
4. Accessibility to building	5.93	1.21	6.29	.99	-0.36	-4.47	.00 0
5. Parking lot safety	5.92	1.34	6.31	.87	-0.59	-6.45	.00 0
6. Temperature control	5.71	1.11	6.42	.74	-0.47	-6.50	.00 0
7. Lighting control	5.95	.99	6.44	.75	-0.32	-4.97	.00 0
8. Pleasantness of environment	6.11	1.18	6.36	.77	-0.48	-6.09	.00 0
9. Modern looking equipment's	5.87	1.19	6.45	.73	-0.52	-6.93	.00 0
10. Adequacy of signs and directions	5.84	1.27	6.36	.79	-0.52	-6.40	.00 0
11. Variety of equipment	5.95	1.19	6.47	.76	-0.52	-7.58	.00 0
12. Availability of workout facility/equipment	5.99	1.10	6.54	.63	-0.55	-7.82	.00 0
13. Overall maintenance	5.93	1.16	6.52	.76	-0.58	-7.93	.00 0

In this study, the differences between perceived services scores and expected service scores were calculated in order to determine the quality of service as a whole. To calculate these differences, the "Paired samples T" test which is used for two referenced test was used. As a result of this test, the significance levels of the differences between the service qualities were tested. In case that the p value obtained as a result of the test was found to be smaller than 0.05, the difference between them was considered significant.

When the differences between the perceived and expected service qualities were assessed in terms of Items, no differences were found between the services perceived

and expected in the Item "Layout Suitability" in terms of the facility size ($p=0.289>0.05$). A significant difference was observed between score averages of the expected service and those of the perceived service for all other items ($p=0.00<0.05$). Expected service scores were found to have a higher average compared to the perceived service scores.

It was found that, in terms of the differences between perception and expectation values, the lowest quality was found to be in the item "to have necessary knowledge and skills" at a unit difference of -0.57 and in the items "to be willing to help" and "to be consistent in the service provided" at a unit difference of -0.50 and that there was a significant difference at a level of $p<0.05$. In terms of the program

size, the lowest quality was found to be in the item "appropriateness of class size" at a unit difference of -0.64, the item "space adequacy" at a unit difference of -0.62 and the items "program diversity" and "quality and content of the programs" at a unit difference of -0.56, and they were found to show a significant difference at a level of $p < 0.05$. In terms of the Locker Room size, the lowest quality was found to be in the "availability of lockers" at a unit difference of

-0.57 and the "cleanliness of the shower" at a unit difference of -0.49, and they were found to show a significant difference at a level of $p < 0.05$. In terms of the facility size, the lowest quality was found to be in the "general maintenance of equipment" at a unit difference of -0.58 and the "parking facilities" at a unit difference of -0.55, and they were found to show a significant difference at a level of $p < 0.05$.

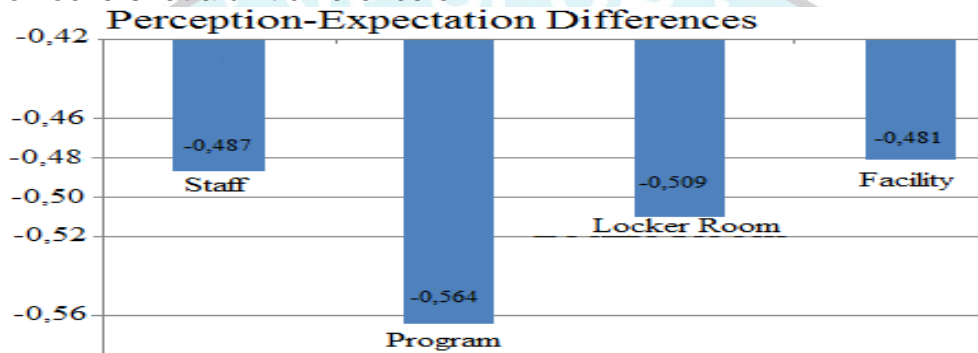


Figure 1. Quality of Service Dimensions

As the difference between perception and expectation scores were assessed in terms of sizes, all sizes were found to have a difference in the negative direction. In statistical terms, a significant difference at a level of $p < 0.05$ was found in all of the staff, program, locker room and facility sizes. Among them, the size having the lowest quality level was found to be the "program" size by -0.564 units. The "program" size was

followed by, respectively, the "locker room" size at a unit difference of -0.509, the "staff" at a unit difference of -0.487 and the "facility" size at a unit difference of -0.481 (Figure.1). In terms of the overall service quality, it was found that there was a negative difference at a unit difference of -0.510 and a statistically significant difference at a level of $p < 0.05$ between perception and expectation (Table.9).

Table 12. Comparison of Service Quality Expected According to Participants' Genders (Independent T test)

	Male(164)		Female(55)		t	P
	\bar{X}	S.S	\bar{X}	S.S		
Staff	6.37	.61	6.77	.40	-4.48	.000*
Program	6.30	.62	6.66	.44	-3.84	.000*
Locker Room	6.37	.65	6.72	.49	-3.58	.000*
Facility	6.33	.59	6.68	.41	-4.09	.000*

* $P < 0.05$

On the other hand; in the assessment based on the genders of the participants in the

study, the group averages were observed to be different from each other. The general expectation averages of female customers with a unit difference of 6.70 were found to be higher than those of the male customers

with a unit difference of 6.34. This difference arises due to the fact that female customers have more expectations than the male customers.

Table 13. Comparison of Perception Service by Gender (Independent T test)

	Male(164)		Female(55)		t	P
	\bar{X}	S.S	\bar{X}	S. S		
Staff	5.82	1.01	6.48	.69	-4.46	.000*
Program	5.69	.96	6.24	.90	-3.75	.000*
Locker Room	5.78	1.00	6.34	.89	-3.66	.000*
Facility	5.81	.95	6.29	.83	-3.35	.001*

*P<0.05

When perception expectations were analyzed based on the gender, a significant difference ($p < 0.05$) was found between the averages obtained for staff, program, locker room and facility. The general perception averages of female customers with a unit

DISCUSSION AND CONCLUSIONS

In this study, the perception and expectation sizes were evaluated based on the demographic characteristics of the participants in order to investigate the level of service quality of the fitness centers.

Considering the participation by gender of the members of two different fitness center participated in the study, it is seen that 75% of the participants are male whereas 25% of them are female (Table 1). Yıldız and Tüfekci (2010) have found, in a similar study conducted by them, that 48% of members of the fitness center were female. Given the educational status, 47% of the fitness center members were found to be university students or university graduates. In their study, Yıldız and Tufekci (2010) stated that 76% of the members had a higher education level. In addition, 78% of the fitness center members participated in the study was found

difference of 6.33 were found to be higher than those of the male customers with a unit difference of 5.77. This difference arises due to the fact that female customers have more perception than the male customers.

to be in the age range of 15-25. Afthinos et al. (2005) found, in their study, that 67% of the members who are subscribed to private centers were in the age range of 19 and below as well as 20-29. In the "staff" and "program" sizes, the score averages of the members in the 31-35 age groups were found to be higher than the younger age groups. In the study conducted by Gurbuz et al (2012), the members in the 26-35 age group received higher scores than all other age groups in terms of the "staff" and "locker room" sizes.

In this study; considering the frequency of use, 59% of the members reported that they use the fitness center 3-4 times a week. In the study conducted by Afthinos et al. (2005), it is seen that 47% of the members use the center 4-7 times a week. However, it was found, in the study conducted by Gurbuz et al (2012), that a great majority of the members use the fitness center 3-4 times a

week. Since the proximity to the fitness center will be more convenient in terms of transportation, this constitutes one of the most important reasons for preferring such center. In the study, 71% of fitness center members reported that their transportation to the center took 20 minutes or less (Table 3).

When the service quality was analyzed as a whole, a negative difference at a unit difference of -0.51 were found between perception and expectation. In their study, Yildiz and Tüfekci (2010) found a -0.24-unit gap between the perceived service and the expected service. In the study, all sizes were to have a negative difference when the differences between perception and expectation scores were analyzed in terms of the sizes. Among them, it was seen that the lowest quality level was shown by the "program" size at a unit difference of -0,564 and the "locker room" size at a unit difference of -0.509. The minimum gap at a unit difference of -0.48 was found to be in the "facility" and "staff" sizes. In the study conducted by Yildiz and Tufekci (2010), it was seen that the "staff" size had the minimum gap with a unit difference of -0.06 and that the "locker room" size had the lowest quality level and the maximum gap with a unit difference of -0.47. Aslan and Kocak (2011) found, in their study, that the locker room size had the highest expectation whereas the minimum expectation was attributable to the facility size. It is observed that the results obtained are similar to those of our study.

In the comparison of the expected service quality by gender, it was observed that female customers had higher expectation averages than the male customers. Similarly, in the comparison of the perceived service quality by gender, the female customers were found to have higher perception

averages than the male customer. Yildiz and Tüfekçi (2010) found, in their study, that the service quality expectations of female customers were higher than those of the male customers. Gurbuz et al., (2012), on the other hand, found that the expectations of female customers regarding the locker rooms were higher than those of the male customers.

Consequently, in this study, a negative difference at a unit difference of -0.51 was found between overall perception and expectation. When the differences between perception and expectation scores obtained in the study were analyzed in terms of sizes, the size with the lowest level of quality among them was found to be the "program" size and the "locker room" size. The minimum gap was found to be in the facility and staff sizes. Considering the differences between the perception and expectation values, the items "to have necessary knowledge and skills", "to be willing to help" and "to be consistent in the services provided" were found to have the lowest quality. In terms of the "program" size, the items "appropriateness of class size", "space adequacy" and "program diversity" and "quality and content of the programs" were found to have the lowest quality. In terms of the locker room size, the items "availability of lockers" and cleanliness of the showers" were found to have the lowest quality. In terms of the facility size, it was found that the items "general maintenance of equipment" and "parking facilities" had the lowest quality and there was a significant difference at a level of $p < 0.05$. In terms of the locker room size, the item "cleanliness of the showers" was found to have a low quality. In their study, Kim and Kim (1995) stated that the cleanliness and hygiene were the expectations which were most liked by the customers.

With respect to the gender, perception and expectation averages of the female customers were found to be higher than those of the male members. This is thought to result from the fact that female members are more sensitive to the service quality. Based on the educational status, the members who are high school graduates, college students and/or university graduates were found to have higher expectations in terms of the program, locker rooms and

facility sizes. We can conclude from this result that the higher the level of education, the higher the service quality expectation would be. Regarding the age groups, the age groups 26-30 and 31-35 were found to have more expectations in terms of the staff and program sizes compared to the age group 15-20. Based on this result, we can draw the conclusion that the higher the average age, the higher the service quality expectation would be.

REFERENCE

1. Ablondi, J.M. (2013). *The IHRSA European Health Club Report: Size and Scope of the Fitness Industry*. Boston, USA.
2. Afthinos, Y., Theodorakis, N.D. and Nassis, P. (2005). "Customers' expectations of service in. Greek fitness centers". *Managing Service Quality*, 15(3): 245-258.
3. Anderson, C and Zeithaml, C. P. (1984). "Stage of the Product Life Cycle, Business Strategy, and Business Performance," *Academy of Management Journal*, 27: 5-24.
4. Alexandris K, Dimitriadis N, Kasiara A. (2001). "The Behavioral Consequences of Perceived Service Quality: An Exploratory Study in the Context of Private Fitness Clubs in Greece". *European Sport Management Quarterly*, 1: 280-299
5. Aslan M, Koçak M.S. (2011). "Determination of The Service Quality Among Sport And Fitness Centers Of The Selected Universities". *International Journal of Human Science*, Volume: 8 (Issue: 2): 818-833.
6. Babakus, E and Boller, G. W. (1992). "An Empirical Assessment of the Servqual Scale". *Journal of Business Research*, 24(3): 253-68.
7. Büyüköztürk, S. (2003). *Sosyal Bilimler için Veri Analizi El Kitabı*. Ankara (3. Baskı) Pegem Yayıncılık, Ankara.[In Turkish]
8. Chelladurai P, Chang K, (2000). "Targets and Standards of Quality in Sport Services". *Sport Management Review*, 3: 1-22
9. Cronin J.J., Brady M.K., Hult G.T.M. (2000). "Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments". *Journal of Retailing*, 76 (2): 193-218
10. Fornell, C. and Wernerfelt, B. (1987), "Defensive marketing strategy by customer complaint management: a theoretical analysis". *Journal of Marketing Research*, 24: 337-46.
11. Garvin, D A (1983). "Quality on the Line,". *Harvard Business Review*, 61: 65-73.
12. Gronroos, C. (1984). "A service quality model and its marketing implications". *European Journal of Marketing*, 18 (4): 36-44.
13. Gürbüz, B., Kocak, S. and Lam, T.C.E. (2005). "The reliability and validity of the Turkish version of the service quality assessment scale". *Education and Science*, 30 (38): 70-77.
14. Gürbüz, B., Lam, E.T.C., Koçak, S., (2012), "Service Quality of Health-Fitness Clubs in Turkey". *International Journal of Sport Management*, 13: 1-22.
15. Howat, G., Murray, D. and Crilley, G. (1999), "The relationships between service quality, satisfaction, and behavioral intentions of Australian public sports and leisure center customers". *Journal of Park and Recreation Administration*, 17 (2): 42-64.
16. Johnson C, Fornell, C. (1991). "A framework for comparing customer satisfaction across individuals and product categories". *Journal of Economic Psychology*, 12 (2): 267-286
17. Kim D, Kim S.Y. (1995). "QUESOC: An Instrument for Assessing the Service Quality of Sport Centers in Korea". *Journal of Sport Management*, 9: 208-220.
18. Kristensen K, Martensen A, Gronholdt L. (1999). *Measuring the impact of buying behavior on customer satisfaction*. *Total Quality Management*, 10 (4/5): 602-614
19. Lam, E.T.C. (2000). "Service Quality Assessment Scale: An Instrument for Evaluating Service Quality Of Health Fitness Clubs". Unpublished Doctor of Philosophy Dissertation, University of Houston, USA. pp. 2 - 25.
20. Lam, E.T.C., Zhang, J.J., Jensen, B.E. (2005). "Service Quality Assessment Scale (SQAS): An Instrument for Evaluating Service Quality of Health-Fitness Clubs". *Measurement in Physical Education and Exercise Science*, 9 (2): 79-111.
21. McAlexander, Kaldenberg & Koenig (1994). Service quality measurement. *Journal of Health Care Marketing*, 14 (3): 34-40
22. Papadimitriou, D.A. and Karaterliotis, K. (2000), "The service quality expectations in private sport and fitness centers: a re-examination of the factor structure", *Sport*

- Marketing Quarterly, 9 (3): 157-164.
23. Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985). "A conceptual model of service quality and its implication for future research". , Journal of Marketing, 49: 41-50.
 24. Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988). "SERVQUAL: a multiple item scale for measuring consumer perceptions of service quality". Journal of Retailing, 64(1): 13-40.
 25. Phillips, L W, Chang, D.R. and Buzzell, R.D. (1983). "Product Quality, Cost Position and Business Performance: A Test of Some Key Hypothesis". Journal of Marketing, 47: 26-43.
 26. Pride, W.M. and Ferrel, O.C. (1997). "Marketing", Boston: Houghton Mifflin Company.
 27. Robinson, L. (1998). "Following the quality strategy: the reasons for the use of quality management in the UK public leisure services", Proceedings of the 6th Congress of the European Association for Sport Management, Madeira, 30 September-4 October.
 28. Robinson, S. (1999). "Measuring Service Quality: Current Thinking and Future Requirements"., Marketing Intelligence & Planning, 17(1): 21-32.
 29. Rosenberg, L., & Czepiel, J. (1983). A marketing approach for consumer retention. Journal of Consumer Marketing, 1: 45-51.
 30. Reichheld, F., & Sasser, W. (1990). Zero defections -- quality comes to services. Harvard Business Review, 68: 105-111.
 31. Salzber, B., and Almond, S. (2014). 2014 Global Report: Making an impact that matters. Deloitte Touché Tohmatsu Limited (DTTL), UK.
 32. Sawyer, S., & Smith, O. (1999). The Management of Clubs, Recreation and Sport: Concepts and Applications. Champaign, IL: Sagamore.
 33. Serarslan, M.Z. & Kepoğlu, A. (2005). "Spor Örgütlerinde Toplam Kalite Yönetimi". Morpa Kültür Yayınları, İstanbul. [In Turkish]
 34. Tawse, E.L. and Keogh, W. (1998). "Quality in the leisure industry: an investigation", Total Quality Management, Vol. 9 (4/5): 219-23.
 35. Wyckoff, D.D. (1988). "New Tools of Achieving Service Quality". Lovelock, C.H. "Managing Services". London, Prentice-Hall Inc.: 226-242.
 36. Yıldız, S.M. (2008). The models and measuring instruments of service quality for assessing the quality of sports services. Gazi University Journal of Physical Education and Sports Sciences, 13 (3): 38-48.[In Turkish]
 37. Yıldız S. M. & Tüfekçi, Ö. Ö. (2010). Fitness Merkezi Müşterilerinin Hizmet Kalitesine Yönelik Beklenti ve Algılarının Değerlendirilmesi, Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 13 (24): 1-11.[In Turkish]
 38. Zeithaml, V.A. and Bitner, M.J. (1996). Service Marketing. The McGraw-Hill Companies, New York.