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Investigation of The Role of The Quality of Servıces Offered at Fitness Centers on Customer Satısfactıon in Terms of Some Variables (Bayburt Example)

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Abstract

In this research, “The Analysis of the Role of Quality of Services Offered at Fitness Centers on Customer Satisfaction in Terms of Some Variables” is discussed. The intense pace of work in today's world has greatly worn people out physically and psychologically. This has led people to search for an environment where they can feel better socially, mentally, and physically. As a result, there has been an increase in the number of sports businesses and fitness centres, leading to competition among them. In this rapidly developing sector, service quality has become prominent, and the importance of customer satisfaction has been clearly demonstrated. Within this scope, the purpose of this thesis is to examine the role of service quality offered in fitness centers on customer satisfaction in terms of some variables. This research was carried out with volunteer participants who received service from fitness centers operating in the province of Bayburt. The study group consisted of a total of 304 people, including 166 men and 138 women. A personal information form and the "Perceived Service Quality Scale for Sports-Fitness Centers," developed by Uçan (2007), were used to collect the data. The scale consists of 31 items and 6 subscales. The obtained data and statistical analyses were evaluated using SPSS version 26 software. The pertinence of the variables to the normal distribution was examined using visual (histogram and probability graphs) and analytical methods. Descriptive analyses were submitted using the average and standard deviation. A one-way analysis of variance(ANOVA) test was used to compare the change in the process of time in the data with the normal distribution of the variables. The statistical significance level was accepted as $p<0.05$. In conclusion, service quality offered in fitness centers has a significant impact on customer satisfaction. Therefore, fitness centers should strive to provide quality service to increase customer satisfaction.

Keywords: Fitness center, service quality, customer satisfaction

**This study is derived from the master's thesis titled "Investigation of The Role of The Quality of Services Offered at Fitness Centers on Customer Satisfaction in Terms of Some Variables (Bayburt Example)" conducted under the supervision of the first author by the second author.*

Introduction

Sports is a biological, pedagogical, and social phenomenon that enhances an individual's physiological and psychological well-being, regulates their social behaviours, and elevates their mental and motor skills to a certain level. Sports are regular and structured activities that help individuals or groups improve themselves through physical activity, exercise, or participation in competitions for competition, enjoyment, or health (Yetim at.all, 2015). Sports offer numerous benefits, including physical fitness, health, social connections, and competition. They are moreover, engaging in sports fosters personal qualities such as discipline, self-confidence, leadership, teamwork, and endurance.

Sports are physical activities that help individuals lead a healthy life through physical activity, exercise, and sporting activities. Sports are suitable for people of all ages and can be a lifelong sustainable activity. Engaging in sports can contribute to maintaining a healthy lifestyle, reducing stress, boosting self-confidence, and improving the quality of life. Fitness centres are a service provided for those interested in exercising. These facilities offer a variety of exercise equipment, and professional trainers assist customers in their exercise routines. There are many benefits to both sports and fitness centres. Throughout history, sports have played a significant role in various cultures. In ancient Greece, sports events like the Olympic Games were organized, while in the modern world, professional athletes attracted millions of fans.

In today's fast-paced life, individuals are often physically and mentally exhausted. As a result, there is a growing need for activities such as sports and joining various sports clubs to fulfil social needs. In this way, fitness clubs contribute to bringing their members closer together, helping them create a healthy, peaceful, and prosperous community. Additionally, the sports culture provides significant contributions to individuals in terms of connecting with their surroundings (McPherson et al., 1989). This situation, which has been prevalent since the days of nomadic lifestyles, gained popularity in the fitness industry with Dr. Ken H. Cooper's concept in 1968 emphasizing the importance of regular exercise and fitness in preventing chronic diseases (Alam, 2012).

The fitness industry, like other sectors, operates in a highly competitive environment. Businesses offering services in this sector are required to develop customer-focused strategies to sustain their existence. Successful businesses thrive in competition, while unsuccessful ones may be forced to withdraw from the market. This situation emphasizes the impact of customer satisfaction and service quality on customers (Yıldız & Tüfekçi, 2010). In the realm of sports, service quality refers to the provision of all types of sports-related services, such as sports facilities, sports clubs, coaches, sports events, sports equipment, and other sports services, in a manner that meets customer satisfaction and expectations (Asubonteng & McCleary, 1996). Quality products or services should meet or exceed customer expectations and be durable, cost-effective, and efficient. Various methods and tools are used for measuring, continuously improving, and controlling quality (Yıldız, 2008).

Fitness clubs are centres that individuals visit to engage in physical activities. Sports businesses, on the other hand, are institutions that operate to provide services to meet the social needs of the community. These institutions are established not only to generate revenue but also to fulfil the physical activity requirements of individuals (Ekenci & İmamoğlu, 2002). In today's world, fitness centres have made significant contributions to the economy

regarding revenue, the number of employees, and national affiliations as people have become more conscious about physical fitness (Alam & Hossain, 2012).

Research has focused not only on the tendency to engage in regular exercise but also on developing the habit of consistent exercise. To make lifestyle change programs more effective, customers need guidance to break their old habits and make positive changes. Fitness centres and fitness experts should specialize in creating manageable and achievable programs. Approximately 50% of individuals who start exercising abandon their exercise habits within six months (Dishman & Steinhardt, 1988). Therefore, services in the service sector and the businesses within it play a significant role, and this is crucial for service sector businesses.

Sports have played a significant role in various cultures throughout history. In ancient Greece, sports events like the Olympic Games were organized, while in the modern world, professional athletes attracted millions of fans. However, sports activities are not only prevalent at the professional level but also at the amateur or recreational level.

Sports are an essential component of a healthy lifestyle, and engaging in regular physical activity can provide numerous benefits, including physical fitness, endurance, mental health, and social connections. Especially in recent years, many people have embraced a healthy lifestyle by engaging in regular sports activities. Therefore, it is important to investigate the role of service quality in fitness centres on customer satisfaction.

Materyal ve Metod

This section of the research provides information about the research model, study participants, data collection methods and tools used in the research process, and data analysis conducted as a result of the collected data.

Research Model

This study, which aims to examine the role of service quality in fitness centres on customer satisfaction in terms of various variables, is conducted within the framework of the correlational survey model. Correlational research models are studies that aim to determine whether two or more variables change together and to what extent this change occurs (Karasar, 2020).

Study Group

The study group consists of a total of 304 participants, including 166 males and 138 females, who are active in the province of Bayburt.

Data Collection Method and Tools.

In this study, a personal information form prepared by the researcher was used to obtain information about the participants' socio-demographic characteristics, including questions about gender, marital status, smoking status, income level, duration of attendance at the facility, educational status, reasons for engaging in sports, and whether they continued to use the same facility after their membership expired, etc. Additionally, to determine the participants' subjective well-being levels, the "Perceived Service Quality Scale of Sports and Fitness Centers," consisting of 31 items developed by Uçan (2022) and validated for validity and reliability, was used. This Likert-type scale used in the research ranges from 1 to 5 for

scoring each item. There is no reverse coding in the scale. The scale is of 5-point Likert type, and the responses are scored as follows: 1=Strongly Disagree and 5=Strongly Agree. As the scores obtained from the scale increase, the level of knowledge, attitude, and awareness regarding the perceived service quality in fitness centres also increases.

Data Analysis

Data obtained from the individuals participating in the research were analyzed using the SPSS 26 statistical software package. Frequency and percentage calculations were performed to determine the demographic characteristics of the participants. Subsequently, the distribution of the data set was examined for the comparison of the participant's scores on the "Perceived Service Quality of Sports and Fitness Centers." Descriptive statistical methods (count, percentage, mean, standard deviation) were used for data evaluation. According to the results obtained, it was determined that the data showed a normal distribution. For the comparison of quantitative continuous data between two independent groups, the t-test was used, and for the comparison of quantitative continuous data among more than two independent groups, one-way ANOVA was employed. After ANOVA, a complementary post-hoc analysis was conducted to determine differences between groups. The findings were analyzed at a 95% confidence level and a 5% significance level. Therefore, the independent t-test was used to compare the means of two different groups, and the Schaffer test in pairwise groups was used to identify groups showing significant differences when comparing the means of more than two groups along with one-way ANOVA. A significance level of .05 was adopted.

Tablo 1. “Perceived Service Quality of Sports and Fitness Centers - PSQSFCC" Scale and the Normality Distribution Test of Subdimensions and Total Score (Skewness-Kurtosis).

Scale / Dimensions	N	$\bar{X}$	SD	Skewness	Std.	Kurtosis	Std.
PSQSFCC	304	3,83	0,695	-0,058	0,14	-0,348	0,279
Quality of Interaction	304	3,73	1,049	-0,512	0,14	-0,655	0,279
Output Quality	304	3,5	1,049	-0,052	0,14	-1,122	0,279
Physical Environment Quality	304	3,64	0,842	-0,159	0,14	-0,653	0,279
Exercise Equipment and Gear	304	2,66	1,127	-0,362	0,14	-0,742	0,279
Program Quality	304	3,03	1,159	-0,026	0,14	-0,867	0,279
Environmental Conditions Quality	304	3,67	1,114	-0,518	0,14	-0,647	0,279

The Purpose of the Research

This study aims to examine the role of service quality provided in fitness centres in Bayburt on customer satisfaction according to variables such as gender, marital status, smoking status, income level, duration of attendance at the facility, educational status, reasons for engaging in sports, and whether they continued to use the same facility after their membership expired.

Significance of the Study

Examining the role of service quality in customer satisfaction in fitness centres is of significant importance in this research. In this context, our study is crucial as it can serve as a basis for future research.

Limitations of the Study

Our research has been limited to participants engaged in fitness sports in the province of Bayburt during the years 2022-2023.

Our research has been restricted to individuals engaged in fitness sports to whom the Perceived Service Quality Scale of Sports and Fitness Centers was administered.

Findings

Statistical analyses, the conformity of variables to a normal distribution, and the results obtained using visual and analytical methods are provided in the following tables.

Tablo 2. Demographic Information.

Variables	Groups	n	f
Gender	Male	166	54,6
	Female	138	45,4
	Total	304	
Marital Status	Single	125	41,1
	Married	179	58,9
	Total	304	
Do you smoke?	No	161	53
	Yes	143	47
	Total	304	
What is your income level?	Good	62	32,6
	Middle	143	47
	Weak	99	20,4
	Total	304	
How long have you been attending the gym?	1-6 Months	93	30,6
	7-12 Months	147	48,4
	12 + Months	64	21,1
	Total	304	
Educational Status	Primary Education	109	35,9
	High School	84	27,6
	Undergraduate Education	88	28,9
	Postgraduate Education	23	7,6
What is your reason for exercising?	Losing Weight	46	15,1
	Shaping the Body	25	8,2
	Gaining Weight	54	17,8
	Socializing	82	27
	For Health Purposes	73	24
	Proximity to home	14	4,6
	Other	10	3,3
Do you renew your gym membership when it expires?	No	176	57,9
	Yes	128	42,1

Table 2 presents demographic information about the participants. A total of 304 volunteers participated in the research, with 166 (54.6%) male and 138 (45.4%) female. Based on the marital status variable, 125 (41.1%) were single, and 179 (58.9%) were married. Regarding the smoking status variable, 161 (53%) participants answered "no," while 143 (47%) answered "yes." In terms of the economic status variable, 62 (32.6%) reported their status as good, 143 (47%) as moderate, and 99 (20.4%) as weak. As for the duration of attendance at the facility, 93 (30.6%) continued for 1-6 months, 147 (48.4%) for 7-12 months, and 64 (21%) for 12 months or more. Regarding the educational status variable, 109 (35.9%) had completed primary education, 84 (27.6%) had completed high school, 88 (28.9%) had completed undergraduate education, and 23 (7.6%) had postgraduate education. Based on the reason for engaging in sports variable, 46 (15.1%) participated to lose weight, 25 (8.2%) to

shape their bodies, 54 (17.8%) to gain weight, 82 (27%) for socializing, 73 (24%) for health purposes, 14 (4.6%) due to proximity to home, and 10 (3.3%) for other reasons.

Tablo 3. Independent group t-tests were conducted on the scores of the Perceived Service Quality Scale of fitness centers and its subdimensions based on the gender variable.

Scale / Dimensions	**Groups**	**N**	**X**	**Ss**	**t-test**		
					t	**sd**	P
PSQSFCC	Male	166	3,81	0,651	-0,679	273,899	**0,498**
	Female	138	3,86	0,747			
Quality of Interaction	Male	166	3,61	1,047	-2,444	302,000	**0,015 ***
	Female	138	3,90	1,034			
Output Quality	Male	166	3,54	1,019	0,475	284,061	**0,635**
	Female	138	3,48	1,089			
Physical Environment Quality	Male	166	3,64	0,797	-0,140	302,000	**0,889**
	Female	138	3,65	0,897			
Exercise Equipment and Gear	Male	166	2,52	1,110	-2,456	290,177	**0,015 ***
	Female	138	2,84	1,129			
Program Quality	Male	166	2,98	1,170	-0,941	293,836	**0,347**
	Female	138	3,10	1,148			
Environmental Conditions Quality	Male	166	3,58	1,063	-1,591	280,235	**0,113**
	Female	138	3,79	1,168			

When examining Table 3, no statistically significant differences were found in the overall scores of the "Perceived Service Quality Scale of Sports and Fitness Centers" for participants based on the gender variable. However, statistically significant differences in favour of women were found in the subdimension scores of Interaction Quality and Exercise Equipment, with women having higher satisfaction averages than men ($p<0.05$).

Tablo 4. Independent group t-test analysis results for the scale scores and sub-dimension scores based on the marital status variable.

Scale / Dimensions	**Groups**	**N**	**X**	**Ss**	**t test**		
					t	**sd**	**P**
PSQSFCC	Single	125	3,77	0,709	-1,348	302,000	**0,179**
	Married	179	3,88	0,684			
Quality of Interaction	Single	125	3,72	1,034	-0,257	271,485	**0,797**
	Married	179	3,75	1,063			
Output Quality	Single	125	3,50	1,082	-0,081	258,380	**0,936**
	Married	179	3,51	1,030			
Physical Environment Quality	Single	125	3,55	0,843	-1,678	302,000	**0,034***
	Married	179	3,71	0,838			
Exercise Equipment and Gear	Single	125	2,63	1,133	-0,461	266,129	**0,645**
	Married	179	2,69	1,127			
Program Quality	Single	125	2,98	1,160	-0,714	267,114	**0,476**
	Married	179	3,07	1,161			
Environmental Conditions Quality	Single	125	3,47	1,097	-2,721	268,578	**0,007 ***
	Married	179	3,82	1,107			

When examining Table 4, no statistically significant differences were found in the overall scores of the "Perceived Service Quality Scale of Sports and Fitness Centers" for participants based on the marital status variable. However, a statistically significant difference in favour of married individuals was found in the subdimension scores of "Physical Environment Quality" and "Environmental Conditions Quality," with married individuals having higher satisfaction averages than single participants (p<0.05).

Tablo 5. Independent group t-test analysis results for the scale scores and sub-dimension scores based on the smoking status variable.

Scale / Dimensions	Groups	N	X	Ss	t testi		
					t	sd	P
PSQSFCC	No	161	3,96	0,798	3,538	302,000	0,000 *
	Yes	143	3,69	0,523			
Quality of Interaction	No	161	3,93	1,034	3,409	298,017	0,001*
	Yes	143	3,52	1,030			
Output Quality	No	161	3,52	1,079	0,100	300,807	0,920
	Yes	143	3,50	1,020			
Physical Environment Quality	No	161	3,75	0,884	2,381	301,982	0,018*
	Yes	143	3,52	0,779			
Exercise Equipment and Gear	No	161	2,73	1,100	1,066	293,470	0,287
	Yes	143	2,59	1,158			
Program Quality	No	161	3,05	1,264	0,267	302,000	0,789
	Yes	143	3,01	1,035			
Environmental Conditions Quality	No	161	3,78	1,176	-1,560	302,000	0,120
	Yes	143	3,58	1,036			

* p<0,05

When examining Table 5, statistically significant differences were found in favour of non-smokers in the overall scores of the "Perceived Service Quality Scale of Sports and Fitness Centers" for participants based on the smoking status variable in the subdimensions of Interaction Quality and Physical Environment Quality. However, no statistically significant differences were found in the subdimension scores of Output Quality, Exercise Equipment Quality, Program Quality, and Environmental Conditions Quality (p>0.05). Non-smoking participants had higher satisfaction averages than smoking individuals.

Tablo 6. Independent group t-test analysis results for the scale scores and sub-dimension scores based on the variable of renewing the gym membership.

Scale / Dimensions	Groups	N	X	Ss	t testi		
					t	sd	P
PSQSFCC	No	176	3,69	0,641	-4,302	254,132	0,000*
	Yes	128	4,03	0,720			
Quality of Interaction	No	176	3,62	1,039	-2,335	272,729	0,020*
	Yes	128	3,90	1,046			
Output Quality	No	176	3,45	1,046	-1,188	272,744	0,236
	Yes	128	3,59	1,053			
Physical Environment Quality	No	176	3,53	0,825	-2,774	269,953	0,006*
	Yes	128	3,80	0,845			
Exercise Equipment and Gear	No	176	2,56	1,035	-2,021	302,000	0,044*
	Yes	128	2,82	1,232			

Program Quality	No	176	2,91	1,141	-2,085	269,614	0,038*
	Yes	128	3,20	1,171			
Environmental Conditions Quality	No	176	3,57	1,134	-1,928	281,748	0,055*
	Yes	128	3,82	1,075			

* p<0,05

When examining Table 6, statistically significant differences were found in favour of individuals who intend to continue their gym membership for a long time in the overall scores of the "Perceived Service Quality Scale of Sports and Fitness Centers" based on the Membership Renewal Status variable in the subdimensions of Interaction Quality, Physical Environment Quality, Exercise Equipment Quality, Program Quality, and Environmental Conditions Quality (p<0.05). However, no statistically significant difference was found in the Output Quality score averages (p>0.05). Participants who wish to maintain their membership have higher satisfaction averages. The lowest average is seen in Exercise Equipment Quality (X=2.56).

Tablo 7. ANOVA Test Analysis Results Based on Participants' Income Status Variable

Sub-dimension		**N**	**X**	**Ss**	**Source of Variance**	**KT**	**sd**	**KO**	**F**	**P**	**Significance**
Quality of Interaction	Zayıf(1)	99	3,72	1,109	Betwen G.	0,935	2	0,468	0,423	0,656	-
	Orta (2)	143	3,7	1,03	Within G.	333,024	301	1,106			
	İyi (3)	62	3,85	1,006	Total	333,960	303				
	Toplam	304	3,74	1,05							
Output Quality	Zayıf(1)	99	3,49	1,034	Betwen G.	1,534	2	0,767	0,695	0,500	-
	Orta (2)	143	3,57	1,084	Within G.	332,436	301	1,104			
	İyi (3)	62	3,39	0,998	Total	333,970	303				
	Toplam	304	3,51	1,05							
Physical Environment Quality	Zayıf(1)	99	3,59	0,818	Betwen G.	2,945	2	1,472	2,089	0,126	-
	Orta (2)	143	3,6	0,873	Within G.	212,187	301	0,705			
	İyi (3)	62	3,84	0,793	Total	215,132	303				
	Toplam	304	3,64	0,843							
Exercise Equipment and Gear	Zayıf(1)	99	2,48	1,053	Betwen G.	10,199	2	5,100	4,091	0,018*	3-1,2
	Orta (2)	143	2,65	1,152	Within G.	375,245	301	1,247			
	İyi (3)	62	3	1,131	Total	385,444	303				
	Toplam	304	2,67	1,128							
Program Quality	Zayıf(1)	99	2,99	1,093	Betwen G.	3,985	2	1,993	1,486	0,228	-
	Orta (2)	143	2,97	1,224	Within G.	403,686	301	1,341			
	İyi (3)	62	3,26	1,1	Total	407,671	303				
	Toplam	304	3,03	1,16							
Environmental Conditions Quality	Zayıf(1)	99	3,47	1,137	Betwen G.	7,879	2	3,940	3,218	0,041*	3-1,2
	Orta (2)	143	3,71	1,105	Within G.	368,528	301	1,224			
	İyi (3)	62	3,92	1,06	Total	376,408	303				
	Toplam	304	3,68	1,115							

* p<0,05

According to the analysis presented in Table 7, a statistically significant difference was found in the Exercise Equipment (F=4.091; p < 0.05) and Environmental Conditions Quality

(F=3.218; p < 0.05) sub-dimensions of the Sports-Fitness Centers' Perceived Service Quality Scale according to the income status variable. To determine the source of this difference, the LSD test was conducted, and the results showed that this difference was higher for participants with a better financial status compared to those with moderate and poor financial status.

Tablo 8. The results of the ANOVA test based on the participants' duration of gym attendance.

Sub-dimension		N	X	Ss	Source of Variance	KT	sd	KO	F	P	Significance
Quality of Interaction	1-6Ay[(a)]	93	3,62	1,087	Betwen G.	2,132	2	1,066	0,967	0,381	-
	7-12Ay[(b)]	149	3,77	1,029	Within G.	331,828	301	1,102			
	12+[(c)]	62	3,84	1,043	Total	333,960	303				
	Toplam	304	3,74	1,05							
Output Quality	1-6Ay[(a)]	93	3,62	1,083	Betwen G.	1,741	2	0,870	0,789	0,455	-
	7-12Ay[(b)]	149	3,46	1,069	Within G.	332,230	301	1,104			
	12+[(c)]	62	3,45	0,953	Total	333,970	303				
	Toplam	304	3,51	1,05							
Physical Environment Quality	1-6Ay[(a)]	93	3,62	0,871	Betwen G.	0,738	2	0,369	0,518	0,596	-
	7-12Ay[(b)]	149	3,62	0,839	Within G.	214,394	301	0,712			
	12+[(c)]	62	3,74	0,814	Total	215,132	303				
	Toplam	304	3,64	0,843							
Exercise Equipment and Gear	1-6Ay[(a)]	93	2,57	1,174	Betwen G.	1,284	2	0,642	0,503	0,605	-
	7-12Ay[(b)]	149	2,71	1,08	Within G.	384,160	301	1,276			
	12+[(c)]	62	2,71	1,179	Total	385,444	303				
	Toplam	304	2,67	1,128							
Program Quality	1-6Ay[(a)]	93	3,03	1,174	Betwen G.	1,137	2	0,569	0,421	0,657	-
	7-12Ay[(b)]	149	3,08	1,165	Within G.	406,534	301	1,351			
	12+[(c)]	62	2,92	1,135	Total	407,671	303				
	Toplam	304	3,03	1,16							
Environmental Conditions Quality	1-6Ay[(a)]	93	3,76	1,057	Betwen G.	3,920	2	1,960	1,584	0,207	-
	7-12Ay[(b)]	149	3,56	1,17	Within G.	372,488	301	1,238			
	12+[(c)]	62	3,82	1,048	Total	376,408	303				
	Toplam	304	3,68	1,115							

* p<0,05

According to the analysis presented in Table 8, no statistically significant differences were found in the sub-dimensions of Interaction Quality, Output Quality, Physical Environment Quality, Exercise Equipment Quality, Program Quality, and Environmental Conditions Quality of the Sport-Fitness Centers' Perceived Service Quality Scale among the participants. Based on the data obtained in the table, it can be observed that the participants who continued for 12 months or more had higher average scores compared to those who continued for 1-6 months and those who continued for 7-12 months.

Tablo 9. Analysis results of the ANOVA test according to the participants' education level variable.

Sub-dimension		N	X	Ss	Source of Variance	KT	sd	KO	F	P	Significance
Quality of Interaction	Primary Education [(1)]	10	3,66	1,041	**Betwen G.**	11,333	3	3,778	3,513	0,016*	**4-1,2,3**
	High School[(2)]	84	3,82	1,072	**Within G.**	322,627	300	1,075			
	Undergraduate Degree[3]	88	3,6	0,992	**Total**	333,960	303				

	Postgraduate Education (4)	23	4,35	1,06							
	Total	30	3,74	1,05							
Output Quality	Primary Education (1)	10	3,58	1,065	**Betwen G.**	5,023	3	1,674	1,527	0,208	-
	High School(2)	84	3,39	0,994	**Within G.**	328,947	300	1,096			
	Undergraduate Degree3	88	3,44	1,081	**Total**	333,970	303				
	Postgraduate Education (4)	23	3,87	1,014							
	Total	30	3,51	1,05							
Physical Environment Quality	Primary Education (1)	10	3,71	0,809	**Betwen G.**	11,379	3	3,793	10,938	0,300	-
	High School(2)	84	3,60	0,805	**Within G.**	374,065	300	1,247			
	Undergraduate Degree3	88	3,40	0,845	**Total**	385,444	303				
	Postgraduate Education (4)	23	3,55	0,582							
	Total	30	3,64	0,843							
Exercise Equipment and Gear	Primary Education (1)	10	2,7	1,213	**Betwen G.**	11,379	3	3,793	3,042	0,029*	**4-1,2,3**
	High School(2)	84	2,67	1,134	**Within G.**	374,065	300	1,247			
	Undergraduate Degree3	88	2,48	0,971	**Toplam**	385,444	303				
	Postgraduate Education (4)	23	3,26	1,096							
	Total	30	2,67	1,128							
Program Quality	Primary Education (1)	10	2,99	1,198	**Betwen G.**	3,320	3	1,107	0,821	0,483	
	High School(2)	84	3,04	1,113	**Within G.**	404,351	300	1,348			
	Undergraduate Degree3	88	2,99	1,099	**Total**	407,671	303				
	Postgraduate Education (4)	23	3,39	1,373							
	Total	30	3,03	1,16							
Environmental Conditions Quality	Primary Education (1)	10	3,64	1,151	**Betwen G.**	13,300	3	4,433	3,663	0,013*	**4-1,2,3**
	High School(2)	84	3,76	1,071	**Within G.**	363,108	300	1,210			
	Undergraduate Degree3	88	3,48	1,083	**Total**	376,408	303				
	Postgraduate Education (4)	23	4,3	1,02							
	Total	30	3,68	1,115							

* p<0,05

According to the analysis in Table 9, a statistically significant difference was found in the sub-dimensions of Interaction Quality (F=3.513; p<0.05), Exercise Equipment Quality (F=3.042; p<0.05), and Environmental Conditions Quality (F=3.663; p<0.05) of the Sports-Fitness Centers' Perceived Service Quality Scale among the participants. The LSD test results to determine the source of this difference revealed that the satisfaction levels of postgraduate participants were higher than those of participants who completed primary education, high school, and undergraduate education.

Tablo 10. Katılımcıların salona devam nedeni değişkenine göre anova testi analizi sonuçları

Sub-dimension		**N**	**X**	**Ss**	**Source of Variance**	**KT**	**sd**	**KO**	**F**	**P**	**Anlamlı Fark**
Output Quality	Losing Weight (1)	46	3,72	0,958	Betwen G.	9,854	6	1,642	1,505	0,176	-
	Shaping the Body (2)	25	3,36	1,036	Within G.	324,11	297	1,091			
	Gaining Weight (3)	54	3,52	1,112	Total	333,97	303				
	Socializing (4)	82	3,44	1,007							
	For Health Purposes (5)	73	3,36	1,046							
	Proximity to home(6)	14	3,86	1,099							
	Other(7)	10	4,1	1,287							
	Total	30	3,51	1,05							
Program	Losing Weight (1)	46	3,11	1,159	Betwen G.	9,775	6	1,629	1,216	0,298	-
	Shaping the Body (2)	25	2,8	1,08	Within G.	397,89	297	1,340			
	Gaining Weight (3)	54	2,91	1,014	Total	407,67	303				

Quality	Socializing (4)	82	3	1,237							
	For Health Purposes (5)	73	3,03	1,202							
	Proximity to home(6)	14	3,71	1,069							
	Other(7)	10	3,3	1,16							
	Total	30	3,03	1,16							
Environmental Conditions Quality	Losing Weight (1)	46	3,67	0,967	Betwen G.	7,942	6	1,324			
	Shaping the Body (2)	25	3,6	1,323	Within G.	368,46	297	1,241			
	Gaining Weight (3)	54	3,7	1,057	Total	376,40	303				
	Socializing (4)	82	3,74	1,12					1,067	0,382	-
	For Health Purposes (5)	73	3,48	1,215							
	Proximity to home(6)	14	4,21	0,802							
	Other(7)	10	3,9	0,994							
	Total	30	3,68	1,115							
Quality of Interaction	Losing Weight (1)	46	4,37	0,499	Betwen G.	30,086	6	5,014			
	Shaping the Body (2)	25	3,36	0,952	Within G.	303,874	297	1,023			
	Gaining Weight (3)	54	3,6	1,179	Total	333,960	303				
	Socializing (4)	82	3,59	1,069					4,901	0,000*	1-2,3,4
	For Health Purposes (5)	73	3,62	1,082							
	Proximity to home(6)	14	4,29	0,752							
	Other(7)	10	3,85	1,203							
	Total	30	3,74	1,05							
Physical Environment Quality	Losing Weight (1)	46	3,90	0,846	Betwen G.	11,461	6	1,910			
	Shaping the Body (2)	25	3,76	0,765	Within G.	203,670	297	0,686			
	Gaining Weight (3)	54	3,79	0,845	Total	215,132	303				
	Socializing (4)	82	3,52	0,859					2,786	0,012*	1- 2,3,4
	For Health Purposes (5)	73	3,53	0,87							
	Proximity to home(6)	14	3,66	0,569							
	Other(7)	10	3,4	0,966							
	Total	30	3,64	0,843							
Exercise Equipment and Gear	Losing Weight (1)	46	3,79	1,188	Betwen G.	22,953	6	3,826			
	Shaping the Body (2)	25	2,92	0,954	Within G.	362,491	297	1,221			
	Gaining Weight (3)	54	2,67	1,028	Total	385,444	303				
	Socializing (4)	82	2,55	1,068					3,134	0,005*	1-2,3,4
	For Health Purposes (5)	73	2,59	1,177							
	Proximity to home(6)	14	2,63	1,082							
	Other(7)	10	2,2	1,549							
	Total	30	2,67	1,128							

* p<0,05

In Table 10, the analysis revealed statistically significant differences in the sub-dimensions of Interaction Quality (F=4.901; p<0.05), Physical Environment Quality (F=2.786; p<0.05), and Exercise Equipment Quality (F=3.134; p<0.05) of the Perceived Service Quality Scale of Sports-Fitness Centers among the participants. According to the results of the LSD test conducted to determine which groups this difference originates from, it was found that individuals who attend the gym to lose weight have a higher level of satisfaction compared to those attending for body shaping, gaining weight, and socializing purposes.

Discussion and Conclusions

In this study, which examines the role of service quality in customer satisfaction in fitness centres operating in Bayburt province, data obtained according to the gender variable did not reveal statistically significant differences in the sub-dimensions of "Output Quality," "Program Quality," "Environmental Conditions Quality," and "Physical Environment Quality." However, significant differences were found in the sub-dimensions of "Interaction Quality" and "Exercise Equipment Quality," favouring women. Female participants had higher satisfaction rates than male participants (Table 3). According to the results based on

the marital status of the participants, significant differences favouring married individuals were found in the sub-dimensions of "Physical Environment Quality" and "Environmental Conditions Quality." Married individuals were found to have higher satisfaction averages than single participants (Table 4).

According to the analysis results of the "Smoking Status" variable, statistically significant differences have been found in the general score averages of the Perceived Service Quality Scale in Sport-Fitness Centers in favor of non-smokers for the "Interaction Quality" and "Physical Environment Quality" sub-dimensions. It was observed that the satisfaction averages of non-smoking participants were higher than those of smoking individuals (Table 5).

According to the variable of membership renewal status, statistically significant differences were found in favour of individuals who intended to continue their sports activities for a longer duration in the sub-dimensions of "Interaction Quality," "Physical Environment Quality," "Exercise Equipment Quality," "Program Quality," and "Environmental Conditions Quality" within the "Perceived Service Quality Scale of Sports-Fitness Centers" (Table 6).

The physical environment, exercise equipment, and interaction quality of the gyms play an important role not only in customer satisfaction but also in customer retention in the gym. It was determined that participants with a good income level had a higher level of satisfaction in the sub-dimensions of "Exercise Equipment Quality" and "Environmental Conditions Quality" compared to participants with moderate and poor income levels (Table 7).

While no statistically significant difference was found between groups in terms of participants' gym attendance durations, it was observed that the average scores of participants who continued going to the fitness centre for 12 months or more were higher compared to those who continued for 1-6 months and 7-12 months, according to the data obtained (Table 8).

According to the analysis based on the participants' educational backgrounds, it was determined that the satisfaction levels of postgraduate participants were higher compared to those with primary education, high school, and undergraduate degrees (Table 9).

According to the "Reason for Continuing at the Fitness Center" variable, it was found that individuals who came to the gym to lose weight had higher average scores in the "Interaction Quality," "Physical Environment Quality," and "Exercise Equipment Quality" sub-dimensions compared to those who came to shape their bodies, gain weight, or socialize (Table 10).

Based on the data obtained, the variables used in the study play a significant role in the quality of service provided in fitness centres and customer satisfaction. A fitness centre that provides quality service will better meet the needs of its customers, exceed their expectations, and help them maintain a healthy lifestyle. Customer satisfaction is vital for fitness centres. Satisfied customers enhance the centre's reputation, provide positive feedback, and attract potential customers to the centre. Therefore, fitness centres must provide quality service to increase customer satisfaction.

Among the services offered in fitness centres are the approach of instructors and other staff to customers, the quality and maintenance of exercise equipment, cleanliness and hygiene, and group classes. The quality of these services is the most important factor that must meet the expectations of customers. Instructors should teach customers how to exercise correctly,

follow their movements, provide motivation, help them achieve their goals, and ensure their safety. The quality and maintenance of exercise equipment ensure that customers can exercise comfortably and safely. Cleanliness and hygiene protect customers' health and instil confidence. Group classes help customers socialize and make their workouts more enjoyable.

Today, the level of competition has significantly increased in various industries, much like in the sports sector. In this environment, sports businesses make great efforts to ensure their sustainability, increase their earnings, retain their customers, and add new ones to their existing customer base. Sports businesses that know their customers well can meet their expectations and provide quality services to gain a competitive advantage. However, to achieve all these advantages, businesses must embrace Total Quality Management (TQM) practices. Therefore, in the Total Quality Management approach, continuous improvement, customer satisfaction, and quality concepts are considered common elements (Alpullu et al., 2008).

As mentioned by Afthinos and other researchers (2005), the state of staying healthy and fit is rapidly evolving worldwide. While there have been many studies in the healthcare sector concerning service quality and management, most of the research has primarily focused on traditional healthcare services (Rondeau & Wagar, 1998; Ennis & Harrington, 1999; Yasin & Alavi, 1999; Lagrosen, & Largosen, 2000; Turan vd. 2008). The fitness industry is a rapidly growing sector (Tawse & Keogh, 1998). This situation underscores the increasing significance of service quality within the industry (Papadimitriou & Karteroliotis, 2000). In recent years, there has been a growing focus on "service quality" and "customer satisfaction." It is essential to delve into the concepts of "Quality," "Service," "Service quality," and "Customer satisfaction." Fitness centres are service-oriented businesses that place the customer at the centre, and as such, they must strive to satisfy their customers. Fitness centres provide customer-centric services, and ensuring customer satisfaction is critically important for the survival of these businesses. Customer retention, in terms of customers returning to the establishment, is crucial for increasing business revenue, and therefore, fitness businesses, like other industries, prioritize customer satisfaction. Failing to provide quality service can lead to customer loss, underscoring the importance for businesses to ensure customer satisfaction (Ergin et al., 2011, p. 197).

Customer satisfaction can be defined as the fulfilment of a customer's needs and desires (Zeithaml & Bitner, 2003). According to this definition, customer satisfaction is an outcome of the interaction between the business and the customer. As the business meets the customer's needs, customer satisfaction increases, and the relationship between the business and the customer strengthens. However, customer satisfaction is not solely influenced by the interaction between the business and the customer. Factors such as weather events and personal circumstances can also affect customer satisfaction. Therefore, businesses should consider external factors in their customer satisfaction strategies in addition to addressing customer needs.

Researchers in the sports and recreational sector emphasize that service quality is associated with environmental factors and cannot be generalized (Howat et al., 1996). In this sector, service quality can be influenced by environmental factors such as the location of the facility, the physical environment, weather conditions, and other factors. Therefore, when evaluating the service quality of a facility, environmental factors need to be taken into consideration. In the context of the fitness industry, research primarily focuses on concrete data (Alexandris et al., 2007). Among these data are elements such as the physical structure of the gym, the

quality and availability of equipment, hygiene and cleanliness levels, and the expertise and friendliness of the staff. These data are crucial for measuring service quality in the fitness sector.

In addition to the quality of the service provided, the communication and interaction that the service establishment develops with its customers are also crucial and can significantly impact customer satisfaction (Şahin & Şen, 2017, p. 1183). For example, a business that produces a very high-quality product loses its significance if it presents the product with a gloomy attitude and poor communication. Therefore, both quality products and quality presentation are necessary. This is especially emphasized in fitness businesses. Along with the high quality of the service provided, the communication and interaction that the service establishment develops with its customers are also essential and can positively or negatively influence customer satisfaction (Şahin & Şen, 2017, p. 1183). For example, a business producing a high-quality product loses its significance if it presents the product with a gloomy attitude and poor communication. Hence, both quality products and quality presentations are required. This aspect is particularly emphasized in fitness businesses.

Different researchers have addressed various aspects of service quality. The importance of service quality in achieving customer satisfaction began to be recognized in the service sector in 1940. Subsequently, it has shown rapid development and growth. Nowadays, service quality definitions are generally customer-oriented. Service quality can be defined as the perception resulting from the extent to which the level of service provided meets customer expectations (Grönroos, 1984; Kızgın, 2002; Parasuraman et al., 1994).

Service quality affects customer satisfaction in sports businesses. For example, a study conducted by Şahin (2018) concluded that service quality has an impact on customer satisfaction. Based on this, it can be stated that the provision of quality services will lead to customer satisfaction and loyalty. When customer satisfaction is achieved, customers will start recommending the business to their acquaintances, which will strengthen the business. Customers pay attention to the quality of service, hygiene conditions, equipment quality, staff behaviour, class quality, and many other factors when they visit fitness centres. Therefore, fitness centres should provide high-quality services to meet the needs of their customers.

Sports businesses which operate in the sports sector should aim to increase customer experiences by focusing on customer satisfaction, meeting their needs, and exceeding their expectations. Customer satisfaction in this context refers to the level of contentment customers derive from the products or services they receive. In the sports sector, customer satisfaction is directly related to various factors such as easy access to facilities, providing a clean and safe environment, having experienced and helpful trainers, offering affordable memberships, and the quality of customer service. Sports businesses should identify their customers' needs, provide personalized services, offer high-quality equipment and services, and continuously make improvements by taking customer feedback into account to enhance customer satisfaction. As a result, customer loyalty will increase, and the business's reputation will rise as it engages in positive word-of-mouth marketing.

In conclusion, the quality of services provided in fitness centres has a significant impact on customer satisfaction. Fitness centres that offer high-quality services will meet their customers' needs, satisfy them, and encourage them to return. Therefore, fitness centres should strive to provide quality services to enhance customer satisfaction.

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