

Evaluation of Service Quality Perceptions of Fitness Center Members

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Abstract

The purpose of this study is to examine the service quality perceptions of sports-fitness center members in Bingol and to identify differences based on demographic variables and usage habits. The survey model, one of the quantitative research methods, was employed, and a total of 344 participants (77 women, 267 men) were included in the study. The mean age of the participants was 28.4 ± 7.6 years, and 56.3% reported using the fitness center three or more times per week. The Service Quality Scale (SQFS) was used as the data collection tool, and the data were analyzed with SPSS 27.0. According to the findings, service quality perceptions differed significantly according to gender, weekly fitness center usage frequency, age, educational status, membership duration, distance to the fitness center, time spent in the fitness center, and exercise purpose ($p < 0.05$). Female participants, individuals attending the fitness center three or more times per week, members with longer membership duration, participants spending more time in the fitness center, and those exercising for health-related purposes reported higher service quality perceptions. In contrast, no significant differences were found according to marital status ($p > 0.05$). In conclusion, it was determined that service quality in sports-fitness centers varies according to gender, frequency of use, educational level, membership duration, and purpose of use. The findings highlight that service quality is a critical factor for customer satisfaction and loyalty.

Keywords: Customer satisfaction, Service quality, Sports-fitness center

Introduction

Articles Nowadays, sports centers have become important service providers that enable individuals to maintain healthy lifestyles, improve their physical fitness, and strengthen their social interactions (García-Fernández et al., 2018). In an increasingly competitive environment, the ability of sports centers to operate sustainably and enhance customer loyalty largely depends on the quality of the services they provide (Howat et al., 1999). Service quality is not only associated with the adequacy of physical facilities but also with multidimensional factors such as staff attitudes, facility hygiene conditions, program diversity, and communication established with members (Parasuraman et al., 1988).

The perception of service quality emerges from the evaluation of the gap between customers' expectations and the actual performance of the services they receive (Grönroos, 1984). Research on service quality in sports centers has shown that a high perception of service quality positively influences outcomes such as customer satisfaction, repurchase intention, and word-of-mouth marketing (Theodorakis et al., 2004). In this context, identifying members' perceptions of service quality provides an important source of data for the strategic planning of sports centers.

In Turkey, the demand for sports centers has been increasing each year, and this growth has further intensified competition focused on service quality (Koçak & Arun, 2015). Therefore, the systematic evaluation of service quality components is of critical importance for both business managers and policymakers.

Improving service quality in sports centers has been widely recognized as a key factor not only in enhancing customer satisfaction but also in fostering long-term customer loyalty (Afthinos et al., 2005). These outcomes highlight the practical importance of service quality for both users and managers in sports service settings. In this context, understanding members' perceptions of service quality becomes crucial for improving service delivery and ensuring effective management practices. Therefore, this study contributes to the existing academic literature by systematically analyzing service quality perceptions of sports center members in the Turkish context. For managers in particular, identifying which dimensions of service quality are prioritized by members will support more efficient resource allocation and more effective strategic decision-making.

Although numerous studies in the international literature have aimed to measure perceptions of service quality in sports centers (Alexandris et al., 2004; Kim et al., 2013; Graikinis-Evaggelinos, 2019; Xiao et al., 2020; Singh et al., 2023; Jacinto et al., 2025), research conducted in the context of Turkey remains limited and is mostly confined to specific cities or single-type sports facilities (Can & Kızılet, 2021; Çalışkan & Erdoğan, 2022; Sever et al., 2023; Koç et al., 2024). Moreover, existing studies predominantly focus on measuring service quality levels, while the examination of how service quality perceptions vary across multiple demographic and usage-related variables remains insufficient. In particular, variables such as membership duration, usage frequency, time spent in the facility, and exercise purpose are not consistently analyzed together in a comprehensive model. This limitation restricts a more detailed understanding of how different member profiles perceive service quality.

In this context, the present study aims to address this gap by providing a more comprehensive analysis of service quality perceptions across a wider set of demographic and behavioral variables. Specifically, the study examines whether service quality perceptions

differ according to gender, age, educational status, membership duration, usage frequency, distance to the sports center, time spent in the facility, and exercise purpose. In doing so, it seeks to identify which service quality dimensions are prioritized by different member groups and to provide practical implications for sports center managers in improving service delivery and resource allocation.

Material and Method

Ethical approval and institutional permission

This study was approved by the Scientific Research and Publication Ethics Committee of Health Sciences at Bingöl University with the decision dated 21.08.2025 and meeting number 08/01.

Research Model

This study was conducted using the descriptive survey model, one of the quantitative research methods. This model involves studies carried out on specific groups to identify participants' opinions about a particular phenomenon or situation and to describe that phenomenon or situation (Karakaya, 2012).

Population and Sample

The population of this study consists of individuals who are members of sports-fitness centers in Bingöl province. The participants were selected using convenience sampling method. To determine the sample size, the G*Power 3.1.9.2 software was used. In the calculation made with the priori power analysis approach, effect size (d) was taken as 0.15, power ($1-\beta$) as 0.89, confidence interval as 95%, and margin of error (α) as 0.05. Accordingly, the minimum target sample size was set at 320 individuals. The study included a total of 344 participants, consisting of 267 men and 77 women, who attended five different fitness centers operating in Bingöl.

Data Analysis

For the statistical analysis and evaluation of the data obtained during the research process, the SPSS 27.0 package program was used. The skewness (Skewness = -0.473) and kurtosis (Kurtosis = -0.592) values for the Perceived Service Quality Scale of Fitness Centers were within the range of -1.5 to +1.5. Based on these results, the data were considered to be normally distributed (Tabachnick & Fidell, 2013). The Cronbach's Alpha coefficient calculated to evaluate the reliability of the scale was found to be 0.942. According to the literature, a Cronbach's Alpha coefficient above 0.70 indicates acceptable reliability, while values of 0.80 and above show a high level of reliability (Pallant, 2017). Thus, the scale used in this study can be regarded as highly reliable. Accordingly, Independent-Samples t-Test was applied to examine the differences between two groups, One Way ANOVA was used for comparisons of more than two groups, and the Tukey test was employed to identify significant differences among groups. The significance level was set at $p < 0.05$ for statistical evaluations.

Data Collection Tools

The Personal Information Form included items to determine the participants' gender, marital status, weekly duration of gym use, age, usage hours during the day, and educational level.

Perceived Service Quality Scale for Sports-Fitness Centers

The SFM-HKÖ (Perceived Service Quality Scale for Sports-Fitness Centers), developed by Uçan (2007), consists of 31 items across 6 dimensions and is based on a five-point Likert scale. These dimensions are: Quality of Environmental Conditions, Program Quality, Quality of Exercise Equipment, Physical Environment Quality, Outcome Quality, and Interaction Quality. The Cronbach’s Alpha reliability coefficient of the scale is 0.95. The reliability coefficients of the dimensions are 0.95, 0.92, 0.85, 0.82, 0.83, and 0.77, respectively.

Findings

Table 1. Comparison of Service Quality Perception by “Gender” Variable

Scales	Gender	n	\bar{x}	SD	t	p	η^2
Physical Environment Quality	Female	77	4.33	0.77	3.59	0.01*	0.036
	Male	267	3.95	0.83			
Environmental Conditions Quality	Female	77	4.45	0.72	5.77	0.01*	0.068
	Male	267	3.87	0.88			
Exercise Equipment Quality	Female	77	4.34	0.78	2.76	0.04*	0.022
	Male	267	4.02	0.92			
Program Quality	Female	77	4.29	0.92	3.72	0.01*	0.039
	Male	267	3.82	1.00			
Interaction Quality	Female	77	4.44	0.62	1.06	0.29	0.003
	Male	267	4.35	0.67			
Output Quality	Female	77	4.47	0.62	-1.49	0.13	0.006
	Male	267	4.58	0.54			
Overall Service Quality	Female	77	4.40	0.55	2.99	0.03*	0.025
	Male	267	4.17	0.602			

* p<0.05

According to the table, Female participants’ perceptions of service quality were significantly higher than those of Male participants in certain dimensions. Female participants scored higher in physical environment quality (\bar{x} =4.33; η^2 =0.036) compared to Male participants (\bar{x} =3.95), in environmental conditions (Female: \bar{x} =4.45; η^2 =0.068 vs. Male: \bar{x} =3.87), in exercise equipment (Female: \bar{x} =4.34; η^2 =0.022 vs. Male: \bar{x} =4.02), and in program quality (Female: \bar{x} =4.29; η^2 =0.039 vs. Male: \bar{x} =3.82) (p <0.05). In contrast, no significant differences were found in interaction quality (Female: \bar{x} =4.44; Male: \bar{x} =4.35; p =0.29; η^2 =0.003) and output quality (Female: \bar{x} =4.47; Male: \bar{x} =4.58; p =0.13; η^2 =0.006). Overall, the service quality perceptions of Female participants (\bar{x} =4.40; η^2 =0.025) were also higher than those of Male participants (\bar{x} =4.17) (p <0.05).

Table 2. Comparison of Service Quality Perception by “Marital Status” Variable

Scales	Marital Status	n	\bar{x}	SD	t	p
Physical Environment Quality	Single	235	4.00	0.88	-1.14	0.25
	Married	109	4.11	0.71		
Environmental Conditions Quality	Single	235	4.01	0.91	0.21	0.83
	Married	109	3.99	0.82		
Exercise Equipment Quality	Single	235	4.11	0.92	0.545	0.58
	Married	109	4.05	0.85		
Program Quality	Single	235	3.93	1.01	0.148	0.88
	Married	109	3.91	0.99		
Interaction Quality	Single	235	4.36	0.69	-.498	0.61
	Married	109	4.40	0.58		
Output Quality	Single	235	4.57	0.58	0.696	0.48
	Married	109	4.53	0.54		

Overall Service Quality	Single	235	4.21	0.62	-.278	0.78
	Married	109	4.23	0.52		

* p<0.05

According to the table, no statistically significant differences were found between Single and Married participants in physical environment quality, environmental conditions, exercise equipment, program quality, interaction quality, and output quality (p>0.05). In the overall evaluation as well, service quality perceptions were found to be at similar levels according to marital status (p>0.05).

Table 3. Comparison of Service Quality Perception by “Weekly Usage Duration” Variable

Scales	Weekly Usage Duration	n	\bar{x}	SD	t	p	η^2
Physical Environment Quality	2 times or less	138	4.04	0.82	0.13	0.89	0.000
	3 times or more	206	4.03	0.84			
Environmental Conditions Quality	2 times or less	138	3.93	0.88	-1.30	0.19	0.005
	3 times or more	206	4.05	0.88			
Exercise Equipment Quality	2 times or less	138	4.08	0.80	-.16	0.86	0.000
	3 times or more	206	4.10	0.96			
Program Quality	2 times or less	138	3.78	1.04	-2.19	0.02*	0.014
	3 times or more	206	4.02	0.96			
Interaction Quality	2 times or less	138	4.21	0.63	-3.84	0.01*	0.041
	3 times or more	206	4.48	0.66			
Output Quality	2 times or less	138	4.39	0.62	-4.49	0.01*	0.056
	3 times or more	206	4.67	0.50			
Overall Service Quality	2 times or less	138	4.12	0.57	-2.58	0.01*	0.019
	3 times or more	206	4.29	0.60			

* p<0.05

According to the table, differences were observed in service quality perceptions based on weekly usage duration. Participants using the fitness center three times or more per week reported significantly higher scores in program quality (\bar{x} =4.02; η^2 =0.014), interaction quality (\bar{x} =4.48; η^2 =0.041), and output quality (\bar{x} =4.67; η^2 =0.056) compared to those using it two times or less (p<0.05). In addition, the overall service quality mean was higher (\bar{x} =4.29; η^2 =0.019). No significant differences were found in the other dimensions (p>0.05).

Table 4. Comparison of Service Quality Perception by “Age” Variable

Scales	Age	n	\bar{x}	SD	F	p	Significant Difference*
Physical Environment Quality	24 and below ^a	164	4.37	0.73	0.32	0.72	
	25–35 between ^b	110	4.36	0.62			
	36 and above ^c	70	4.30	0.68			
Environmental Conditions Quality	24 and below ^a	164	4.06	0.89	0.42	0.65	
	25–35 between ^b	110	3.96	0.87			
	36 and above ^c	70	4.01	0.72			
Exercise Equipment Quality	24 and below ^a	164	4.09	1.00	0.70	0.49	
	25–35 between ^b	110	3.98	1.00			
	36 and above ^c	70	3.94	0.95			
Program Quality	24 and below ^a	164	3.99	1.02	1.35	0.26	
	25–35 between ^b	110	3.86	1.05			
	36 and above ^c	70	3.76	0.95			
Interaction Quality	24 and below ^a	164	4.08	0.90	3.31	0.03*	a>c

	25–35 between ^b	110	3.92	0.96		
	36 and above ^c	70	3.75	0.92		
Output Quality	24 and below ^a	164	4.62	0.56	2.20	0.11
	25–35 between ^b	110	4.50	0.59		
	36 and above ^c	70	4.46	0.68		
Overall Service Quality	24 and below ^a	164	4.25	0.65	1.31	0.27
	25–35 between ^b	110	4.17	0.58		
	36 and above ^c	70	4.12	0.57		

* p<0.05

According to the table, when the sub-dimensions of the perceived service quality scale for fitness centers were examined by age variable, no significant differences were found among age groups in physical environment quality (F=0.32; p=0.72), environmental conditions quality (F=0.42; p=0.65), exercise equipment (F=0.70; p=0.49), program quality (F=1.35; p=0.26), output quality (F=2.20; p=0.11), and overall service quality (F=1.31; p=0.27) (p>0.05). However, a significant difference was observed in the interaction quality dimension (F=3.31; p=0.03). Post-hoc analysis results indicated that the mean score of participants aged 24 and below (\bar{x} =4.08±0.90) was significantly higher than that of participants aged 36 and above (\bar{x} =3.75±0.92).

Table 5. Comparison of Service Quality Perception by “Usage Hours During the Day” Variable

Scales	Usage Hours	n	\bar{x}	SD	F	p	Significant Difference*
Physical Environment Quality	12 and earlier ^a	47	4.41	0.60	0.37	0.77	
	13–17 Between ^b	134	4.34	0.72			
	18–20 Between ^c	116	4.38	0.66			
	21 and later ^d	47	4.28	0.73			
Environmental Conditions Quality	12 and earlier ^a	47	4.09	0.78	1.02	0.38	
	13–17 Between ^b	134	4.09	0.94			
	18–20 Between ^c	116	3.91	0.85			
	21 and later ^d	47	4.02	0.58			
Exercise Equipment Quality	12 and earlier ^a	47	4.12	0.97	0.19	0.89	
	13–17 Between ^b	134	4.01	1.08			
	18–20 Between ^c	116	4.02	0.96			
	21 and later ^d	47	3.97	0.81			
Program Quality	12 and earlier ^a	47	4.14	0.93	2.91	0.03*	a>c
	13–17 Between ^b	134	3.97	1.06			
	18–20 Between ^c	116	3.69	1.07			
	21 and later ^d	47	4.02	0.74			
Interaction Quality	12 and earlier ^a	47	4.08	0.94	1.69	0.16	
	13–17 Between ^b	134	4.06	0.95			
	18–20 Between ^c	116	3.88	0.93			
	21 and later ^d	47	3.78	0.83			
Output Quality	12 and earlier ^a	47	4.53	0.60	0.54	0.65	
	13–17 Between ^b	134	4.51	0.66			
	18–20 Between ^c	116	4.60	0.54			
	21 and later ^d	47	4.54	0.54			
Overall Service Quality	12 and earlier ^a	47	4.27	0.55	0.46	0.70	
	13–17 Between ^b	134	4.21	0.67			
	18–20 Between ^c	116	4.16	0.59			
	21 and later ^d	47	4.16	0.55			

* p<0.05

According to the table, the analysis of service quality sub-dimensions based on gym usage hours showed that there were no significant differences in most of the sub-dimensions ($p > 0.05$). However, a significant difference was found in the Program Quality dimension ($F = 2.91$; $p = 0.03$). Accordingly, the mean score of participants who used the gym at 12:00 or earlier ($\bar{x} = 4.14$) was higher than that of those who used it between 18:00–20:00 ($\bar{x} = 3.69$). No significant differences were observed in the other dimensions depending on usage hours.

Table 6. Comparison of Service Quality Perception by “Educational Status” Variable

Scales	Educational Status	n	\bar{x}	SD	F	p	Significant Difference*
Physical Environment Quality	Primary School ¹	10	4.70	0.35	1.24	0.29	
	Secondary School ²	28	4.19	0.65			
	High School ³	91	4.40	0.68			
	University ⁴	203	4.33	0.70			
	Postgraduate ⁵	11	4.46	0.72			
Environmental Conditions Quality	Primary School ¹	10	4.74	0.59	4.31	0.02*	1>4
	Secondary School ²	28	4.33	0.88			
	High School ³	91	4.02	0.85			
	University ⁴	203	3.91	0.84			
	Postgraduate ⁵	11	4.42	0.53			
Exercise Equipment Quality	Primary School ¹	10	4.60	0.69	1.36	0.24	
	Secondary School ²	28	4.16	1.09			
	High School ³	91	4.06	0.94			
	University ⁴	203	3.98	0.97			
	Postgraduate ⁵	11	3.72	1.48			
Program Quality	Primary School ¹	10	4.83	0.42	3.67	0.00**	1>3,4
	Secondary School ²	28	4.20	1.01			
	High School ³	91	3.86	0.99			
	University ⁴	203	3.82	1.04			
	Postgraduate ⁵	11	4.36	0.69			
Interaction Quality	Primary School ¹	10	4.60	0.62	2.51	0.04*	1>4
	Secondary School ²	28	4.03	1.11			
	High School ³	91	4.05	0.89			
	University ⁴	203	3.86	0.92			
	Postgraduate ⁵	11	4.36	0.94			
Output Quality	Primary School ¹	10	4.82	0.38	4.15	0.00**	4>2
	Secondary School ²	28	4.25	0.75			
	High School ³	91	4.55	0.55			
	University ⁴	203	4.60	0.53			
	Postgraduate ⁵	11	4.10	0.23			
Overall Service Quality	Primary School ¹	10	4.72	0.33	2.24	0.06	
	Secondary School ²	28	4.22	0.67			
	High School ³	91	4.22	0.59			
	University ⁴	203	4.15	0.62			
	Postgraduate ⁵	11	4.30	0.46			

* $P < 0.05$; ** $P < 0.01$

According to the table, no significant differences were observed in the sub-dimensions of service quality based on educational status for Physical Environment Quality ($F = 1.24$; $p = 0.29$), Exercise Equipment Quality ($F = 1.36$; $p = 0.24$), and Overall Service Quality ($F = 2.24$; $p = 0.06$). In contrast, significant differences were identified in Environmental Conditions Quality ($F = 4.31$; $p = 0.02$; Primary school $\bar{x} = 4.74 >$ University $\bar{x} = 3.91$), Program Quality ($F = 3.67$; $p = 0.00$; Primary school $\bar{x} = 4.83 >$ High school $\bar{x} = 3.86$, University $\bar{x} = 3.82$),

Interaction Quality ($F=2.51$; $p=0.04$; Primary school $\bar{x}=4.60 >$ University $\bar{x}=3.86$), and Output Quality ($F=4.15$; $p=0.00$; University $\bar{x}=4.60 >$ Secondary school $\bar{x}=4.25$).

Table 7. Comparison of Service Quality Perceptions According to the “Distance to the Sports Center” Variable

Scales	Distance to the sports center	n	\bar{x}	SD	F	p	Significant Difference*
Physical Environment Quality	5 km or less ¹	164	4.39	0.67	1.35	0.26	
	5–10 km between ²	126	4.28	0.74			
	More than 10 km ³	54	4.43	0.60			
Environmental Conditions Quality	5 km or less ¹	164	4.04	0.80	2.21	0.11	
	5–10 km between ²	126	3.91	0.97			
	More than 10 km ³	54	4.20	0.66			
Exercise Equipment Quality	5 km or less ¹	164	4.07	0.97	.96	0.38	
	5–10 km between ²	126	3.92	1.08			
	More than 10 km ³	54	4.09	0.79			
Program Quality	5 km or less ¹	164	3.90	1.01	3.76	0.02*	3>2
	5–10 km between ²	126	3.77	1.10			
	More than 10 km ³	54	4.22	0.77			
Interaction Quality	5 km or less ¹	164	4.06	0.87	3.62	0.02*	1>2
	5–10 km between ²	126	3.79	1.02			
	More than 10 km ³	54	4.09	0.83			
Output Quality	5 km or less ¹	164	4.56	0.59	.40	0.67	
	5–10 km between ²	126	4.55	0.56			
	More than 10 km ³	54	4.48	0.69			
Overall Service Quality	5 km or less ¹	164	4.21	0.60	2.15	0.11	
	5–10 km between ²	126	4.10	0.73			
	More than 10 km ³	54	4.30	0.52			

* $P<0,05$

When the table is examined, no significant differences were found among groups in the sub-dimensions of service quality based on distance to the sports center for Physical Environment Quality ($F=1.35$; $p=0.26$), Environmental Conditions Quality ($F=2.21$; $p=0.11$), Exercise Equipment Quality ($F=0.96$; $p=0.38$), Output Quality ($F=0.40$; $p=0.67$), and Overall Service Quality ($F=2.15$; $p=0.11$). In contrast, significant differences were identified in Program Quality ($F=3.76$; $p=0.02$; more than 10 km $\bar{x}=4.22 >$ 5–10 km $\bar{x}=3.77$) and Interaction Quality ($F=3.62$; $p=0.02$; 5 km or less $\bar{x}=4.06 >$ 5–10 km $\bar{x}=3.79$).

Table 8. Comparison of Service Quality Perceptions According to the “Time Spent in the Gym” Variable

Scales	Time Spent in the Gym	n	\bar{x}	SD	F	p	Significant Difference*
Physical Environment Quality	60 minutes or less ¹	143	4.23	0.71	4.59	0.01*	3>2
	Between 60–90 minutes ²	142	4.41	0.70			
	More than 90 minutes ³	59	4.52	0.53			
Environmental Conditions Quality	60 minutes or less ¹	143	3.99	0.89	0.82	0.43	
	Between 60–90 minutes ²	142	4.00	0.89			
	More than 90 minutes ³	59	4.15	0.64			
Exercise Equipment Quality	60 minutes or less ¹	143	4.02	0.93	0.45	0.63	
	Between 60–90 minutes ²	142	3.98	1.06			

	More than 90 minutes ³	59	4.12	0.97		
Program Quality	60 minutes or less ¹	143	3.85	0.98	1.50	0.22
	Between 60–90 minutes ²	142	3.87	1.09		
	More than 90 minutes ³	59	4.11	0.91		
Interaction Quality	60 minutes or less ¹	143	3.91	0.93	0.42	0.65
	Between 60–90 minutes ²	142	4.01	0.97		
	More than 90 minutes ³	59	3.98	0.84		
Output Quality	60 minutes or less ¹	143	4.53	0.59	1.78	0.16
	Between 60–90 minutes ²	142	4.51	0.65		
	More than 90 minutes ³	59	4.68	0.48		
Overall Service Quality	60 minutes or less ¹	143	4.14	0.63	2.16	0.11
	Between 60–90 minutes ²	142	4.20	0.62		
	More than 90 minutes ³	59	4.33	0.51		

*P<0,05

When the table is examined, a significant difference was found only in the Physical Environment Quality sub-dimension according to the variable of time spent in the gym ($F=4.59$; $p=0.01$). Accordingly, participants who spent 90 minutes or more in the gym had a higher mean score ($\bar{x}=4.52$) compared to those who spent 60–90 minutes ($\bar{x}=4.41$). In contrast, no significant differences were observed among groups in the other sub-dimensions or in Overall Service Quality ($p>0.05$).

Table 9. Comparison of Service Quality Perceptions According to the “Purpose of Exercise” Variable

Scales	Purpose of Exercise	n	SS	df	X ²	p	Post-Hoc
Physical Environment Quality	Aerobic ¹	11	132.86	4	.405	.667	
	Health ²	154	177.07				
	Physical Appearance ³	146	171.67				
	Competition ⁴	12	158.71				
	Recreation ⁵	21	173.40				
Environmental Conditions Quality	Aerobic ¹	11	165.23	4	2.680	.002*	2>3
	Health ²	154	192.06				
	Physical Appearance ³	146	147.56				
	Competition ⁴	12	199.42				
	Recreation ⁵	21	190.93				
Exercise Equipment Quality	Aerobic ¹	11	132.23	4	3.148	.012*	2>3
	Health ²	154	184.59				
	Physical Appearance ³	146	155.55				
	Competition ⁴	12	188.17				
	Recreation ⁵	21	213.76				
Program Quality	Aerobic ¹	11	149.77	4	4.589	.002*	2>3
	Health ²	154	191.68				
	Physical Appearance ³	146	149.13				
	Competition ⁴	12	172.13				
	Recreation ⁵	21	206.40				
Interaction Quality	Aerobic ¹	11	149.18	4	3.410	.001*	2>3
	Health ²	154	193.26				
	Physical Appearance ³	146	149.11				
	Competition ⁴	12	163.42				
	Recreation ⁵	21	200.24				
Output Quality	Aerobic ¹	11	119.91	4	.891	.161	
	Health ²	154	175.65				

	Physical Appearance ³	146	178.74				
	Competition ⁴	12	146.21				
	Recreation ⁵	21	148.57				
	Aerobic ¹	11	129.64				
	Health ²	154	190.14				
Overall Service Quality	Physical Appearance ³	146	155.97	4	1.003	.019*	2>3
	Competition ⁴	12	158.33				
	Recreation ⁵	21	188.64				

*P<0,05

When the table is examined, no significant differences are observed in the sub-dimensions of service quality according to the purpose of exercise for Interaction Quality ($\chi^2=0.405$; $p=0.667$) and Output Quality ($\chi^2=0.891$; $p=0.161$). In contrast, significant differences are identified in Physical Environment Quality ($\chi^2=2.680$; $p=0.002$; Health > Physical Appearance), Exercise Equipment Quality ($\chi^2=3.148$; $p=0.012$; Health > Physical Appearance), Program Quality ($\chi^2=4.589$; $p=0.002$; Health > Physical Appearance), Environmental Conditions Quality ($\chi^2=3.410$; $p=0.001$; Health > Physical Appearance), and Overall Service Quality ($\chi^2=1.003$; $p=0.019$; Health > Physical Appearance).

Table 10. Comparison of Service Quality Perceptions According to the “Membership Duration” Variable

Scales	Membership Duration	n	SS	df	X ²	p	Post-Hoc
Physical Environment Quality	1 month ^a	18	217.28	4	1.621	.001*	e>b
	Between 1–6 months ^b	134	153.50				
	Between 6 months–1 year ^c	99	171.80				
	Between 1–2 years ^d	56	172.60				
	More than 2 years ^e	37	221.23				
Environmental Conditions Quality	1 month ^a	18	183.11	4	1.840	.032*	e>b.c
	Between 1–6 months ^b	134	166.77				
	Between 6 months–1 year ^c	99	158.43				
	Between 1–2 years ^d	56	177.86				
	More than 2 years ^e	37	217.62				
Exercise Equipment Quality	1 month ^a	18	178.36	4	3.105	.005*	e>c
	Between 1–6 months ^b	134	166.04				
	Between 6 months–1 year ^c	99	153.54				
	Between 1–2 years ^d	56	188.05				
	More than 2 years ^e	37	220.26				
Program Quality	1 month ^a	18	177.22	4	1.665	.163	
	Between 1–6 months ^b	134	178.69				
	Between 6 months–1 year ^c	99	154.54				
	Between 1–2 years ^d	56	170.84				
	More than 2 years ^e	37	198.36				
Interaction Quality	1 month ^a	18	182.81	4	1.562	.116	
	Between 1–6 months ^b	134	169.08				
	Between 6 months–1 year ^c	99	160.04				
	Between 1–2 years ^d	56	174.62				
	More than 2 years ^e	37	210.03				
Output Quality	1 month ^a	18	193.92	4	.161	.230	
	Between 1–6 months ^b	134	171.78				
	Between 6 months–1 year ^c	99	161.33				
	Between 1–2 years ^d	56	168.88				
	More than 2 years ^e	37	200.07				

Overall Service Quality	1 month ^a	18	201.11	4	.916	.024*	e>c
	Between 1–6 months ^b	134	166.34				
	Between 6 months–1 year ^c	99	158.47				
	Between 1–2 years ^d	56	173.78				
	More than 2 years ^e	37	216.50				

*P<0,05

When the table is examined, no significant differences are observed in the sub-dimensions of service quality according to membership duration for Program Quality ($\chi^2=1.665$; $p=0.163$), Interaction Quality ($\chi^2=1.562$; $p=0.116$), and Output Quality ($\chi^2=0.161$; $p=0.230$). In contrast, significant differences are found in Physical Environment Quality ($\chi^2=1.621$; $p=0.001$; ≥ 2 years $\bar{x}=221.23 > 1-6$ months $\bar{x}=153.50$), Environmental Conditions Quality ($\chi^2=1.840$; $p=0.032$; ≥ 2 years $\bar{x}=217.62 > 1-6$ months $\bar{x}=166.77$, 6 months–1 year $\bar{x}=158.43$), Exercise Equipment Quality ($\chi^2=3.105$; $p=0.005$; ≥ 2 years $\bar{x}=220.26 > 6$ months–1 year $\bar{x}=153.54$), and Overall Service Quality ($\chi^2=0.916$; $p=0.024$; ≥ 2 years $\bar{x}=216.50 > 6$ months–1 year $\bar{x}=158.47$).

Discussion and Conclusion

This study examined the service quality perceptions of sports-fitness center members in Bingöl province and revealed significant differences across demographic characteristics, usage patterns, and motivational factors. Rather than merely identifying statistical differences, the findings provide important insights into how user characteristics shape service quality perception in sports service settings.

The finding that female members reported higher service quality perceptions than male members may be explained by differing expectations and evaluation criteria between genders. Women are often more sensitive to environmental conditions such as cleanliness, safety, and program organization, which are key components of perceived service quality in fitness settings. This is consistent with Theodorakis et al. (2004), who emphasized that female users tend to evaluate service environments more critically based on comfort and safety dimensions. However, the inconsistency with Yavaşer & Yurtsizoğlu (2022) may be attributed to contextual differences such as athlete-based samples versus general fitness center users, indicating that user type plays a moderating role in service perception.

The lack of significant difference between single and married participants suggests that marital status may not directly influence service expectations in recreational sport environments. This supports Koçak and Arun (2015), who argue that demographic variables such as marital status have limited explanatory power compared to behavioral factors such as usage intensity and motivation. In fitness services, experiential factors may outweigh static demographic characteristics.

The result that frequent users (three or more times per week) reported higher service quality perceptions can be interpreted through the lens of familiarity and engagement theory. Increased usage enhances interaction with staff and other members, which strengthens emotional attachment and perceived service value. García-Fernández et al. (2018) similarly highlighted that repeated service exposure increases customer loyalty and strengthens positive evaluations of service quality dimensions. Therefore, usage frequency appears to function not only as a behavioral variable but also as a mechanism that shapes perception through accumulated experience.

Age-related differences, particularly higher interaction quality perceptions among younger participants, may reflect generational differences in expectations and social engagement preferences. Younger users tend to prioritize social interaction and dynamic environments, whereas older users may have more stable and expectation-based evaluations. This aligns with service expectation theory (Parasuraman et al., 1988), which suggests that expectations vary across demographic groups and directly influence perceived quality.

The influence of education suggests that higher education is associated with more critical evaluation standards. As education level increases, individuals tend to develop higher expectations and more analytical judgment of service environments. This explains why university graduates reported lower perceptions in some dimensions. Parasuraman et al. (1988) also support this interpretation, noting that service expectations become more complex with higher cognitive awareness.

The influence of distance on service quality perceptions shows a mixed pattern, indicating that proximity does not have a linear relationship with satisfaction. While closer users may benefit from frequent access and familiarity, distant users may evaluate services based on planned rather than habitual experiences, which may reduce expectation–reality gaps. This explains the variation in environmental and program quality dimensions.

Longer duration of membership being associated with higher perceptions can be explained through relationship marketing theory. Over time, members develop trust, familiarity, and emotional attachment to the facility, which positively influences perceived quality (Afthinos et al., 2005). This indicates that retention strategies in fitness centers play a crucial role in shaping service perceptions.

Finally, health-oriented motivation leading to higher service quality perception suggests that intrinsic motivation positively shapes evaluation processes. Individuals exercising for health purposes are more goal-oriented and may perceive services as more supportive of their personal well-being goals. Kim et al. (2013) similarly found that health motivation strengthens positive service evaluations compared to appearance-based motivation.

Overall, the findings suggest that service quality perception is not only a function of service delivery itself but also a product of user characteristics, motivation, and engagement level. This highlights the importance of segmenting users and tailoring service strategies accordingly in fitness center management.

In conclusion, this study revealed that service quality perceptions in sports-fitness centers differ according to gender, frequency of use, education level, membership duration, and purpose of exercise. It was found that women, frequent and long-term users, and younger participants perceived service quality more positively, while higher education levels were associated with more critical evaluations. In addition, members exercising for health purposes reported more favorable perceptions compared to those exercising for physical appearance. These findings highlight the importance of considering target group characteristics in strategies aimed at improving service quality in sports-fitness centers.

Recommendations

The fact that female members' perceptions of service quality are higher than those of males indicates that their expectations are also greater. Therefore, enhancing hygiene, safety, program diversity, and offering women-specific practices may increase customer satisfaction.

Members aged 24 and under are more sensitive to environmental conditions; music, social areas, and rest spaces can be arranged accordingly.

Service perception is higher before noon but lower during peak evening hours. During busy times, staff and equipment should be increased, and reservation systems or alternative programs should be implemented.

Memberships of two years or more positively affect service perception; long-term memberships should be encouraged through discounts and special benefits.

Members exercising for health purposes have more positive perceptions; therefore, health-focused approaches should be emphasized in promotions and programs.

Limitations

This study has some limitations that should be considered when interpreting the findings. First, the sample was limited to members of fitness centers located in Bingöl province. Therefore, the results may not be fully generalizable to individuals attending fitness centers in other regions of Türkiye with different socio-demographic and cultural characteristics. Second, the study employed a convenience sampling method, which may limit the representativeness of the sample. Finally, the data were collected using self-report measures; therefore, participants' responses may have been influenced by subjective evaluations and response bias. Future studies are recommended to include participants from different regions of Türkiye and to employ more diverse sampling methods to enhance the generalizability of the findings.

REFERENCES

- Afthinos, Y., Theodorakis, N. D., & Nassis, P. (2005). Customers' expectations of service in Greek fitness centers: Gender, age, type of sport center, and motivation differences. *Managing Service Quality*, 15(3), 245–258. <https://doi.org/10.1108/09604520510597809>
- Alexandris, K., Zahariadis, P., Tsorbatzoudis, C., & Grouios, G. (2004). An empirical investigation of the relationships among service quality, customer satisfaction and psychological commitment in a health club context. *European Sport Management Quarterly*, 4(1), 36–52. <https://doi.org/10.1080/16184740408737466>
- Aras, H.; Çimen, K. & Bal, F. (2019). “Fiziksel Egzersiz Hizmetlerinde Algılanan Hizmet Kalitesinin Değerlendirilmesi: Ankara Bfit Örneği”, *Journal Of Social, Humanities and Administrative Sciences*, 5(21): 1323-1332
- Bayram, V., & Atasayar, Y. (2024). Hizmet Kalitesi Algısının Müşteri Memnuniyeti Üzerine Etkisi: Bahçelievler Belediyesi Spor Tesisleri Üzerine Bir Araştırma. *Global Social Sciences Bulletin(GSSB)* 1(1), 37-55.
- Çalışkan, M. Y., & Erdoğan, M. (2022). Spor merkezlerinden hizmet alan üyelerin hizmet kalitesi algılarının ve beklentilerinin karşılanma düzeyinin incelenmesi. *Türk Spor Bilimleri Dergisi*, 5(1), 49-63.
- Can, E., & Kızılet, A. (2021). Düzenli olarak antrenman yapan bireylerin spor salonlarına yönelik hizmet kalitesi algılarının spora bağlılığa etkisi. *Spor Eğitim Dergisi*, 5(3), 87-97.
- García-Fernández, J., Gálvez-Ruiz, P., Fernández-Gavira, J., Vélez-Colón, L., Pitts, B., & Bernal-García, A. (2018). The effects of service convenience and perceived quality on perceived value, satisfaction and loyalty in low-cost fitness centers. *Sport Management Review*, 21(3), 250–262. <https://doi.org/10.1016/j.smr.2017.07.003>
- Graikinis-Evaggelinos, P., Tsitskari, E., Kourtesis, T., & Alexandris, K. (2019). Exploring service quality perceptions and satisfaction of athletes in Greek disability sports clubs. *Journal of Physical Education and Sport*, 19, 2139-2146.
- Grönroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36–44. <https://doi.org/10.1108/EUM0000000004784>
- Howat, G., Absher, J., Crilley, G., & Milne, I. (1999). Measuring customer service quality in sports and leisure centres. *Managing Leisure*, 4(2), 77–89. <https://doi.org/10.1080/136067199375996>
- Jacinto, M., Margarido, C., Sousa, M., Marques, J., Varela, J., Amaro, N., & Antunes, R. (2025). Perceived Quality, Overall Service Quality, Overall Service Satisfaction, Perceived Service Value and Future Intentions of a sport event: Portuguese triathlete perceptions. *Cuadernos de Psicología del Deporte*, 25(1), 14-29.
- Karakaya, İ. (2012). Bilimsel Araştırma Yöntemleri. İçinde A. Tanrıoğen (Eds). Bilimsel Araştırma Yöntemleri: s.:59, Ankara: Anı.

- Kim, D., Magnusen, M., & Andrew, D. P. S. (2013). Sport consumer perceptions of service quality: A cross-cultural comparison. *Sport Marketing Quarterly*, 22(1), 20–32.
- Kim, M., Trail, G., Woo, B., & Zhang, J. (2013). Sport consumer behavior: A test for group differences on structural constraints. *International Journal of Sport Management, Recreation & Tourism*, 11, 1–20. <https://doi.org/10.5199/ijsmart-1791-874X-11a>
- Koç, K., Yıldız, S., & Yüce, M. S. (2024). spor tesislerinden yararlanan bireylerin hizmet kalitesi algılarına yönelik bir araştırma. *Sivas Cumhuriyet Üniversitesi Spor Bilimleri Dergisi*, 5(1), 44-51.
- Koç, K., Yıldız, S., & Yüce, M. S. (2024). Spor Tesislerinden Yararlanan Bireylerin Hizmet Kalitesi Algılarına Yönelik Bir Araştırma. *Sivas Cumhuriyet Üniversitesi Spor Bilimleri Dergisi*, 5(1): 44-51.
- Koçak, M. S., & Arun, Ö. (2015). Spor merkezlerinde müşteri memnuniyeti ve sadakati: Hizmet kalitesi algısının etkisi. *Pamukkale Journal of Sport Sciences*, 6(2), 1–15.
- Pallant, J. (2017). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS* (6th ed.). McGraw-Hill Education.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.
- PJ, S., Singh, K., Kokkranikal, J., Bharadwaj, R., Rai, S., & Antony, J. (2023). Service quality and customer satisfaction in hospitality, leisure, sport and tourism: An assessment of research in web of science. *Journal of Quality Assurance in Hospitality & Tourism*, 24(1), 24-50.
- Sever, A. S., Karaküçük, S., & Silik, C. E. (2023). Spor Turizmi Hizmet Kalitesi Algılarının Demografik Değişkenler Yönünden İncelenmesi: Futbol Kulüpleri Kapsamında Bir İnceleme. *Gazi Journal of Physical Education and Sport Sciences*, 28(3), 196-205.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Pearson, Boston.
- Theodorakis, N. D., Alexandris, K., & Ko, Y. J. (2004). A service quality framework in the context of fitness centres: A revisiting study. *Managing Service Quality*, 14(3), 245–257. <https://doi.org/10.1108/09604520410528567>
- Theodorakis, N. D., Alexandris, K., Tsigilis, N., & Karvounis, S. (2004). Predicting spectators' behavioural intentions in professional football: The role of satisfaction and service quality. *Sport Management Review*, 7(2), 145–167. [https://doi.org/10.1016/S1441-3523\(04\)70048-9](https://doi.org/10.1016/S1441-3523(04)70048-9)
- Uçan Y, (2007). Spor ve Fitness merkezlerinin algılanan hizmet kalitesi ölçeğinin geliştirilmesi. Doktora Tezi, Abant İzzet Baysal Üniversitesi Sosyal Bilimler Enstitüsü, Bolu.

Xiao, Y., Ren, X., Zhang, P., & Ketlhoafetse, A. (2020). The effect of service quality on foreign participants' satisfaction and behavioral intention with the 2016 Shanghai International Marathon. *International Journal of Sports Marketing and Sponsorship*, 21(1), 91-105.

Yavaşer, G., & Yurtsızoğlu, Z. (2022). Sporcuların spor hizmetlerine yönelik algı ve beklentilerinin araştırılması (İğdır il örneği). *Spor Ve Performans Araştırmaları Dergisi*, 13(2), 133-148. <https://doi.org/10.17155/omuspd.1131376>

Zengin, S., Yetiş, Ü., & Gayretli, Z. (2022). Spor Tesislerini Kullanan Bireylerin Algıladıkları Hizmet Kalite Düzeyleri: Ankara İli Örneği. *Mediterranean Journal of Sport Science*, 5(Özel Sayı 1), 117-129. <https://doi.org/10.38021/asbid.1207114>

Zorba, E. (2024). Spor Bilimleri Fakültesi Öğrencilerinin Spora Bağlılık İle Hizmet Kalitesi Arasındaki İlişki. *Sportive*, 7(2), 204-218. <https://doi.org/10.53025/sportive.1517722>