

The Mediating Role of Customer Satisfaction Between Service Quality and Customer Loyalty: A Study in Commercial Sport Organizations*

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Abstract

This study aimed to examine the relationship between service quality, customer satisfaction and customer loyalty in sports organizations. The sample of the study consisted of the customers of commercial sports organizations (fitness centers, health & sports centers and gyms) in a big city in eastern Turkey (n=409). Three scales were used as data collection tools in the study: The QSport-14 developed by Yıldız and Kara (2012), the customer satisfaction scale developed by Cronin, Brady, and Hult (2000), the customer loyalty scale developed by Zeithaml, Berry, and Parasuraman (1996). The data were analyzed with the structural equation model. SPSS and Smart PLS statistical programs were used in the analysis of the data. First of all, the scales were subjected to measurement model analysis. At the measurement model stage, the validity and reliability analyzes of the scales were made. Then, structural model analysis was applied. In the structural model stage, the estimation evaluations of the model were made. Structural equation modeling was applied to test the hypotheses. The results of the analysis showed that service quality had a significant and positive effect on customer loyalty ($\beta=0.898$; $p<0.001$), and customer satisfaction had a significant and positive effect on customer loyalty ($\beta=0.848$; $p<0.001$). Another analysis result indicated that customer satisfaction had a full mediation effect between service quality and customer loyalty ($\beta=0.761$; $p<0.001$).

Keywords: Service Quality, Customer Satisfaction, Customer Loyalty, Sport Organizations

Müşteri Tatmininin Hizmet Kalitesi ve Müşteri Sadakati Arasındaki Aracılık Rolü: Ticari Olarak Faaliyet Gösteren Spor İşletmelerinde Bir Uygulama

Öz

Bu çalışmada spor örgütlerinde hizmet kalitesi, müşteri tatmini ve müşteri sadakati ilişkisinin incelenmesi amaçlanmıştır. Çalışmaya Türkiye'nin doğusunda bulunan bir şehirde ticari olarak faaliyet gösteren spor işletmelerinin (fitness merkezleri, sağlık & spor merkezleri ve spor salonlarının) müşterileri katılmıştır (n=409). Veri toplama aracı olarak; hizmet kalitesini belirlemek için Yıldız ve Kara (2012) tarafından geliştirilen QSport-14, müşteri tatminini belirlemek için Cronin, Brady ve Hult (2000) tarafından geliştirilen müşteri tatmini ölçeği, müşteri sadakatini belirlemek için Zeithaml, Berry ve Parasuraman (1996) tarafından geliştirilen müşteri sadakati ölçeği kullanılmıştır. Verilerin çözümlenmesinde SPSS and Smart PLS istatistik programlarından faydalanılmıştır. Öncelikle ölçekler ölçüm modeli analizine tabi tutulmuştur. Ölçüm modeli aşamasında ölçeklerin geçerlik ve güvenilirlik analizleri yapılmıştır. Daha sonra yapısal model analizi uygulanmıştır. Yapısal model aşamasında modelin tahmin değerlendirmeleri yapılmıştır. Hipotezlerin testi yapısal eşitlik modeli ile belirlenmiştir. Analiz sonucu hizmet kalitesinin müşteri sadakati üzerinde anlamlı ve pozitif yönde bir etkisinin olduğunu ($\beta=0,898$; $p<0,001$) ve müşteri tatmininin müşteri sadakati üzerinde anlamlı ve pozitif bir etkisinin olduğunu ($\beta=0,848$; $p<0,001$) göstermiştir. Diğer bir analiz sonucu, müşteri tatmininin hizmet kalitesi ile müşteri sadakati arasında tam aracılık ettiğini göstermiştir ($\beta=0,761$; $p<0,001$).

Anahtar Kelimeler: Hizmet Kalitesi, Müşteri Tatmini, Müşteri Sadakati, Spor Örgütleri

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INTRODUCTION

Today, intense competition, especially in the service sector, forces organizations to develop effective strategies in order to increase their sales and profitability. These strategies begin with service quality, customer satisfaction, and customer loyalty.

Customer demands have diversified in recent years and increased competition in the sports sector. Especially, commercial sports organizations try to develop strategies to increase their profitability by ensuring customer satisfaction (Akbulut & Yıldız, 2021). It is a fact that sports organizations are faced with the necessity of developing customer-oriented strategies in order to maintain their existence in the sports sector where an intensely competitive environment is experienced. Firms that are successful in competition survive, while those that fail are forced to withdraw from the market. This situation leads to the development of customer-based efforts such as service quality, customer satisfaction, and customer loyalty (Yıldız & Tüfekci, 2010).

The conceptualization of service quality, customer satisfaction, and customer loyalty has been made by various researchers. Lovelock (2000) defines service as economic activities that create value and benefit for customers at specific times and places. Parasuraman, Zeithaml, and Berry (1988) define service quality as the difference between the customer's expectation from the organization/product and the realized organization/product performance. Oliver (1981) defines customer satisfaction as a summary of the psychological state of emotion resulting from the consumption experience. According to Hansemark and Albinsson (2004), customer satisfaction is an emotional response that occurs between satisfaction or disappointment with the consumption of a product. Customer satisfaction occurs when product performance reaches customer expectations and has a key influence on subsequent purchase behavior. The next step is customer loyalty. Customer loyalty is when the customer repeatedly buys the same product from the same organization when the need arises (Kotler & Armstrong, 2004). After satisfaction, the customer with established loyalty transfers his/her own experiences to other people. This creates the most effective advertisement of the product and business. Effective advertising means more customers, and more customers mean more profits (Ferguson, Paulin, & Leiriao, 2006; Rahi, Ammara, & Qazi, 2021).

When the literature is examined in general, there is a consensus that service quality, customer satisfaction, and customer loyalty have a positive effect on the performance of organizations (Moron et al., 2022; Nejadjavad, & Gilanini, 2016). It is possible to see the same effect on sports organizations (Esentaş, Yıldız, & Güzel, 2020; Farias, Mendes, Nascimento, & Morais, 2022; Freitas & Lacerda, 2019; Tanrikulu & Ekici, 2020; Vieira, Ferreira, & São João, 2022; Yıldız, Duyan, & Günel, 2018; Yıldız, Polat, & Yıldız, 2021; Yıldız, Polat, Sönmezoğlu, & Çokpartal, 2016). In the sports literature, there are many studies that deal with the issues of service quality, customer satisfaction, and customer loyalty in pairs (Çevik & Sevilmiş, 2022; Sevilmiş, Ozdemir, Garcia-Fernandez, & Zhang, 2022). However, there are few studies in the field of sports that deal with these three issues together. In particular, the studies examining the mediating effect of customer satisfaction between service quality and customer loyalty are quite limited (Yıldız & Duyan, 2019). In this respect, a better understanding of the relations among these subjects discussed in this study is important in terms of contributing to the marketing strategy of sports organizations to increase sales and profitability. In this context,

this study focused on service quality, customer satisfaction, and customer loyalty, which are essential issues of service marketing discipline, in order to contribute to the strategies of sports organizations, and more specifically aimed to examine the mediating effect of customer satisfaction between service quality and customer loyalty.

METHOD

Research Method and Samples

This study was carried out according to the survey model. Survey models are research approaches that aim to describe a past or present situation as it exists. The convenience sampling method was used in the model. Such a method was preferred in terms of time limitation and more economical labor. The sample of the study consisted of customers receiving service from sports organizations (fitness centers, health & sports centers, and gyms) in a big city in the east of Turkey. These sports organizations are commercial organizations that offer various exercise and activity programs for a certain fee. Customers are people who buy and participate in certain programs for a certain fee.

With the permission of the sports organizations, the questionnaire forms were distributed to the customers and collected again a week later. Some of the questionnaire forms were collected electronically. After removing the incorrect ones from the returned questionnaire forms, the number of forms found suitable for analysis was 409.

Instruments

Three scales were used as data collection tools in the study: The QSport-14 developed by Yildiz and Kara (2012) to determine the service quality of organizations, customer satisfaction scale developed by Cronin, Brady and Hult (2000) to determine customer satisfaction, customer satisfaction scale developed by Zeithaml, Berry, and Parasuraman (1996) to measure customer loyalty. The statements in the scales were measured with 5-point Likert intervals (1=strongly disagree, 5=strongly agree).

Research Ethics

Ethical compliance of the study was decided in the number of 370 meetings of Muğla Sıtkı Koçman University Ethics Committee dated 02 December 2021.

Statistical Analysis

Smart PLS statistical programs were used in the analysis of the data. The main reason for using the Smart PLS statistical program is that it allows model evaluation and model analysis stages together, ensures that normality distribution is not needed in the data analysis process (Wong, 2013), shows whether the scale structures are suitable for reflective or formative features, and that the structural equation model is used according to the analysis method. to enable it to run. Cronbach's alpha and rho_A (Demo et al., 2012; Hair et al., 2019) as reliability coefficient in measurement model analysis of scales, composite reliability and average variance extracted for convergent validity, outer loadings for indicator reliability (confirmatory factor analysis),

Fornell Larcker criterion, Heterotrait Monotrait Ratio and Cross Loading analyzes were calculated for discriminant validity. In the structural model analysis process, InnerVIF value was calculated to measure multicollinearity problem, R^2 for model expression rate, Q^2 for model prediction relevance and f^2 for model effect level. Finally, structural equation model analysis and mediating effect analysis were applied in the research.

Research Model

The model of this study, which was conducted to examine the relationship between service quality, customer satisfaction, and customer loyalty in the context of sports organizations, is presented in Figure 1. This model shows the cause-and-effect relationship between the variables, that is, the effect of the independent variable on the mediating variable, the independent variable on the dependent variable, and the mediating variable on the dependent variable.

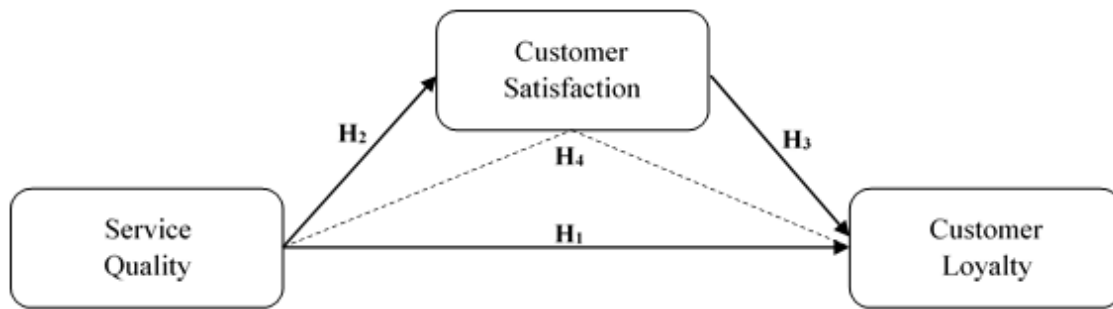


Figure 1. The relationships among service quality, customer satisfaction and customer loyalty

The following hypotheses were developed for the purpose of the study:

H₁: In sports organizations, service quality has a significant and positive effect on customer loyalty.

H₂: In sports organizations, service quality has a significant and positive effect on customer satisfaction.

H₃: In sports organizations, customer satisfaction has a significant and positive effect on customer loyalty.

H₄: In sports organizations, customer satisfaction has a mediating effect between service quality and customer loyalty.

RESULTS

Demographic Properties

The details of the participants in the study are given in Table 1. The most striking features here are that women’s participation in sports is close to men and that more than half of the participants are university students or university graduates.

Table 1. Demographic properties

Variables		<i>f</i>	%
Gender	Male	227	55.5
	Female	182	44.5
Age	Less than 20	35	8.6
	21–25	46	11.2
	26–30	121	29.6
	31–35	134	32.8
	36–40	40	9.8
	More than 41	33	8.1
Marital status	Married	223	54.5
	Single	186	45.5
Education	Middle	29	7.1
	Lycée	146	35.7
Income (TL*)	Undergraduate	234	57.2
	Less than 3000 TL	37	9.0
	3001–5000 TL	53	13.0
	5001–7000 TL	65	15.9
	7001–9000 TL	62	15.2
Working status	More than 9001 TL	192	46.9
	Working	282	68.9
	Not working	127	31.1
Time to participate in sports	Less than 3 months	97	23.7
	3–6 months	104	25.4
	7 months–1 year	93	22.7
	1–2 years	49	12.0
	More than 2 years	66	16.1

*TL= Turkish Lira; Average USD rate at the time of data collection: 1 USD = 9 TL

Measurement Model Analysis

Cronbach’s alpha reliability coefficient was calculated to test the reliability of service quality, customer satisfaction, and customer loyalty scales in the research model. In addition to the Cronbach’s alpha reliability coefficient, the rho_a were also calculated to make the reliability values stronger (Chin, 1998). The rho_a calculates according to the loads between the variables except the correlation results observed between the variables (Demo et al., 2012). In this respect, it differs methodically from the Cronbach’s alpha analysis. Cronbach’s alpha and rho_a reliability values are shown in Table 2.

Table 2. Reliability analysis results

Scales	α	rho_a
Service Quality	0.935	0.937
Customer Satisfaction	0.937	0.939
Customer Loyalty	0.859	0.859

Reliability analysis results showed that the Cronbach’s alpha coefficients of the scales were quite high (0.935 for service quality, 0.937 for customer satisfaction, and 0.859 for customer loyalty). These results revealed that the scales were highly reliable (Hair et al., 2019).

Composite reliability (CR) and averaged variance extracted (AVE) were calculated to calculate convergent validity. Since the CR values of the scales were over 0.60 (Bagozzi & Yi, 1988) and the AVE values were over 0.50 (Fornell & Larcker, 1981), convergent validity was met. Confirmatory factor analysis results were calculated to ensure constructs validity. Since the factor loads of the scales were above 0.50, no items were removed from any scale.

Chi-square, Normed fit index (NFI), Standardized root mean square residual (SRMR), d_ULS, d_G, root mean square error (rms Theta) and Goodness of fit (GoF) values were calculated in the Smart PLS program as model GoF values. The critical values of goodness of model fit and the results obtained in this study are shown in Table 3 in detail.

Table 3. Goodness of model fit scores

Goodness of Model Fit	Scores	Critical values
Chi-Square	1024.716	-
SRMR	0.053	≤0.08
NFI	0.858	≥0.80
Rms Theta	0.146	≥0.12
GoF	0.676	≥0.36
d_ULS	0.715	>0.05
d_G	0.475	>0.05

Chi-square was calculated as 1024.716. The SRMR was less than 0.080 (Hu & Bentler, 1999) and was calculated as 0.053. NFI was higher than 0.80 (Byrne, 1994) and calculated as 0.858. d_ULS was 0.715 and d_G was 0.475, and it was determined that the exact fit criteria were higher (>0.05) than the original values (Dijkstra & Henseler, 2015). The Rms Theta result was higher than 0.12 (Henseler et al., 2014) and was calculated as 0.146. GoF was higher than 0.36 (Tenenhaus, Vinzi, Chatelin & Lauro, 2005) and was calculated as 0.67.

Fornell Larcker criterion, Heterotrait Monotrait Ratio (HTMT) and cross loadings were examined for discriminant validity. Fornell Larcker criterion and HTMT results are shown in detail in Table 4.

Table 4. Fornell Larcker Criterion and HTMT scores

Scales	Fornell Larcker Criterion			HTMT		
	Service Quality	Customer Loyalty	Customer Satisfaction	Service Quality	Customer Loyalty	Customer Satisfaction
Service Quality	0.914					
Customer Loyalty	0.837	0.866		0.835		
Customer Satisfaction	0.798	0.816	0.819	0.897	0.916	

When the results of Fornell Larcker criterion are examined, the value of each scale is higher than the correlation loads with other scales (Fornell & Larcker, 1981). When the results of the Heterotrait Monotrait Ratio analysis are examined, the score between customer loyalty and service quality is 0.835, the score between customer loyalty and customer satisfaction is 0.916, and the score between customer satisfaction and service quality is 0.897. These scores were accepted because they were below 1.00 (Voorhees et al., 2016). Thirdly, cross loadings were

calculated for discriminant validity in the study. The values of each of the scale items among themselves were higher than the correlation loads with the others (Hair et al., 2019).

Structural Model Analysis

A series of analyzes were carried out in order to make structural model assessment. These analyzes are InnerVIF, R^2 , f^2 and Q^2 are examined on the model in order. When all InnerVIF values were examined, it was determined that there was multicollinearity problem (Hair et al., 2017) as they were between 1-10 (Table 5 and 6).

Table 5. InnerVIF and f^2 scores

Scales	InnerVIF			f^2		
	Service Quality	Customer Loyalty	Customer Satisfaction	Service Quality	Customer Loyalty	Customer Satisfaction
Service Quality		5.144	1.000		0.007	4.144
Customer Loyalty						
Customer Satisfaction		5.144			0.876	

Table 6. R^2 and Q^2 Scores

Scales	R^2	Adj. R^2	Q^2
Service Quality			
Customer Loyalty	0.840	0.840	0.571
Customer Satisfaction	0.806	0.805	0.501

When the coefficient of determination is examined, the disclosure rate of customer loyalty is 0.84 and it is expressed as strong (Henseler, Ringle, & Sinkovics, 2009) because it is above 0.50. The disclosure rate of customer satisfaction was 0.80. Therefore, the disclosure rate of customer satisfaction is strong. When the f^2 results explaining the effect size of the independent variables on the dependent variables are examined, the effect size of service quality on customer loyalty is 0.007. Since this rate is below 0.02, it is considered insufficient (Chin, 1998). The effect size of service quality on customer satisfaction was calculated as 4.144. Since this value was more than 0.35, the effect size was accepted as high. Finally, the effect size of customer satisfaction on customer loyalty was examined and it was found to be 0.876. Since this value was more than 0.35, the effect size was accepted as high.

Model estimation relevance was calculated. As a result of the analysis, the estimated interest level of customer loyalty was 0.571 and since it was higher than 0.35, the estimated interest level was accepted as high (Chin, 1998). Secondly, the estimated customer satisfaction level of interest was 0.501, and similarly, since it was higher than 0.35, the estimated level of interest was accepted as high.

Structural Equation Modeling Results

The covariance-based (CB-SEM) method was used as the method in the structural equation model analysis. Therefore, the analysis was made from the Consistent PLS tab (PLSc) in the Smart PLS statistics program. The bootstrapping method was used in the structural equation model analysis phase. Table 7 shows the values obtained as a result of the analysis and the acceptance/rejection status of the hypotheses.

Table 7. Structural Equation Modeling results

Hypothesis	Beta (β)	\bar{x}	sd	t	p	Result
H ₁ Service Quality → Customer Satisfaction	0.076	0.064	0.130	0.581	0.562	Reject
H ₂ Service Quality → Customer Loyalty	0.898	0.898	0.023	38.466	0.000*	Accept
H ₃ Customer Satisfaction → Customer Loyalty	0.848	0.860	0.132	6.413	0.000*	Accept

* $p < 0.001$

The result of the structural equation model analysis showed that service quality did not have a significant effect on customer loyalty ($\beta=0.076$; $p>0.05$) and therefore the H₁ hypothesis was not accepted. It was observed that service quality had a significant and positive effect on customer satisfaction ($\beta=0.898$; $p<0.001$) and therefore the H₂ hypothesis was accepted. It was concluded that customer satisfaction has a significant and positive effect on customer loyalty ($\beta=0.848$; $p<0.001$), and therefore the H₃ hypothesis was accepted.

Table 8 shows the mediating effect of customer satisfaction, the last hypothesis of the study, between service quality and customer loyalty. The Smart PLS statistical program was used to calculate the mediation effect. The results were calculated by bootstrapping method. Mediation analysis conditions in our study, Zhao et al. (2010) was carried out taking into account the study. Accordingly, if the independent variable does not have a direct effect on the dependent variable, and if there is an indirect effect when the mediating variable is involved, full mediation can be mentioned. Therefore, in order to talk about the mediation effect, the indirect effect analysis should be meaningful. On the other hand, if both direct and indirect effects occur, partial mediation can be mentioned in this case.

Table 8. Result of the mediating effect of customer satisfaction between service quality and customer loyalty

Hypothesis	Beta (β)	\bar{x}	sd	t	p	Result
H ₄ SQ → CS → CL	0.761	0.773	0.128	5.942	0.000*	Accept

SQ= Service quality, CS=Customer satisfaction, CL= Customer loyalty, * $p < 0.001$

According to the results of the analysis, customer satisfaction mediates between service quality and customer loyalty ($\beta=0.761$; $p<0.001$). As a result of the structural equation model, it can be said that customer satisfaction has a full mediation effect since service quality does not have a significant and positive effect on customer loyalty and the mediation effect status is significant. The VAF (Variance Accounted For) value was calculated in order to verify the H₄ hypothesis. Accordingly, the VAF value for H₄ was calculated as “0.90”. Thus, since the VAF value of the H₄ hypothesis is above 0.80, it has been confirmed that it is full mediation (Hair et al., 2017). According to this result, hypothesis H₄ was accepted.

DISCUSSION AND CONCLUSION

The aim of this study was to examine the relationship among service quality, customer satisfaction, and customer loyalty in sports organizations. The results of the study showed that service quality had a significant and positive effect on customer loyalty, and customer satisfaction had a significant and positive effect on customer loyalty. It also showed that customer satisfaction had a full mediating effect between service quality and customer loyalty.

There are studies on these subjects in the literature, but the studies on sports organizations in which three variables are handled together and especially in which customer satisfaction is the mediating variable are quite limited (Yildiz & Duyan, 2019). Therefore, we argue that the results obtained in this study will contribute to the marketing literature in general and the sports marketing literature in particular.

Studies conducted in various sectors show that service quality has a significant and positive effect on both customer satisfaction (Oh, 1999) and customer loyalty (Lee, 2017). In the studies conducted to determine the mediating effect of customer satisfaction between service quality and customer loyalty, some studies have a full mediation effect (Caruana, 2022) and some have a partial mediation effect (Mosahab, Mahamad, & Ramayah, 2010).

When the researches in the sports sector are examined, it is seen that service quality has a significant and positive effect on customer satisfaction (Alexandris et al., 2004), similarly, customer satisfaction has a significant and positive effect on customer loyalty (Bodet & Bernache-Assollant, 2011) and future intention (Çevik & Sevilmiş, 2022). Researches dealing with the mediating variable relationship of customer satisfaction are quite limited. Yıldiz and Duyan (2019) examined the relationships between three variables on customers in the sports and physical activity sector. In this study, partial mediation effect of customer satisfaction was found between service quality and customer loyalty. Therefore, both service quality and customer satisfaction have caused the formation of customer loyalty. In our study, the full mediation effect of customer satisfaction was observed. Our study revealed that in order to achieve customer loyalty, first service quality and then customer satisfaction must occur.

To sum up, our study revealed that not only the service quality but also customer satisfaction should be increased in order to create loyalty of the customers who receive service from sports organizations. Customer loyalty is very important for sports organizations like every service organization. Because the loyal customer provides the organization with the opportunity to make continuous income and profit by buying the same product from the same organization whenever his needs arise. In order to obtain a sustainable income and to maintain their existence, sports organizations should consider customer loyalty, and they should know that first service quality and then customer satisfaction are the source of this formation.

Finally, it can be suggested that sports organizations that want to achieve competitive advantage should adopt the strategy of ensuring customer loyalty, especially in today's rapidly increasing competition. The first stage of customer loyalty formation is service quality. In order to increase service quality, it is necessary to meet customer expectations in terms of physical facilities, personnel, and program dimensions. For this, sports organizations should

periodically measure service quality. The strengths that emerge as a result of these measurements should be preserved, and the weaknesses should be improved rapidly.

Conflict of Interest: There is no personal or financial conflict of interest within the scope of the study.

Researchers' Statement of Contribution Rate: Research design-ST, SMY; Statistical analysis-ST; Preparation of the article-ST, SMY; Data collection-ST.

Information on Ethics Committee Permission

Committee: Ethics Committee of Mugla Sitki Kocman University, Turkey.

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