THE EFFECT OF SERVICE QUALITY ON ATHLETE SATISFACTION: AN EMPIRICAL RESULTS FROM SPORTS FACILITIES OF PUBLIC ORGANIZATIONS

İlker Günel¹, Mehdi Duyan²
¹Uşak University, Faculty of Sport Sciences, Uşak, Turkey
²Inonu University, Faculty of Sport Sciences, Malatya, Turkey

Abstract:
This study was carried out to examine the effect of service quality on the satisfaction of athletes. Quantitative research patterns the simple random method was used in the study, the sample size consisted of 769 athletes trained in the Provincial Directorates of Youth and Sports and Municipalities in Antalya, Isparta, and Burdur. The Q-Sport-14 scale and customer satisfaction scale were used as data collection tools. Exploratory factor analysis was performed for validity to the scales and the internal consistency coefficient was calculated for reliability. The data were analyzed to measure impact by hierarchical regression, ANCOVA, and structural equation modeling. Athletes got ($\bar{x} = 61.64$) points from the service quality scale. They got ($\bar{x} = 13.19$) points from the satisfaction scale. As a result of the analyzes based on averages, it was observed that the effect of service quality on customer satisfaction is significant and the satisfaction level of athletes and their perceptions of service quality was high.

JEL: L80; L83

Keywords: service quality, athlete satisfaction, sport organizations

1. Introduction

In terms of contributing to the solution of health problems that will arise based on lack of movement, organizations that provide sports and physical activities have important effects on people (Yıldız, Duyan and Günel, 2018). Due to the protective effect of sports
on the mental and physical health of people, sports and physical activity services are accepted as an important sub-activity field of the service sector today (Devecioğlu, 2005). Today's intensely competitive environment forces organizations to develop customer-centered strategies. While successful organizations continue to exist in the competition, unsuccessful ones are withdrawn from the market. Therefore, service quality and customer satisfaction are among the important issues to be considered by organizations that want to be successful (Yıldız and Tüfekçi, 2010). Because service quality and customer satisfaction are also important for the sports service sector (Pool et al., 2016).

Parasuraman, Berry, and Zeithaml (1988) defined service quality as the degree and direction of the difference between customers’ perceptions and expectations. Customer satisfaction has been defined as a cognitive or affective response that occurs based on experience gained through the use of single or long-term service (Hu, Kandampully and Juwaheer, 2009). The feeling that a customer feels as a result of meeting his needs is expressed as customer satisfaction. Meeting or exceeding customer expectations through service quality features provides overall satisfaction with the service (Javadein, Khanlari and Estiri, 2008). As with all service enterprises, one of the most important conditions for sports organizations to ensure customer satisfaction and to exceed customer expectations is to increase their service quality. Therefore, sports organizations have the same responsibility to increase customer service quality and to ensure customer satisfaction (Yüzgenç and Özgül, 2014). In this context, success in service arises according to the level of emotional satisfaction regarding the service received by the customer (İmamoğlu, 1998). In summary, employee labor and performance are essential products and the customer experience with the product consumed is an important output.

On the other hand, in the recreational sports industry, the level of interaction among sports consumers is relatively high and customers influence each other in terms of perceived service quality (Ko and Pastore, 2004). The most effective advertisement for the product and the enterprises is the transfer of customers’ experiences through word-of-mouth communication. Effective advertising attracts more customers to organizations, more customers bring more profits (Yildiz et al., 2018). As in other service enterprises, the products of sports organizations are also intangibles, therefore, they cause significant differences in the quality perception of the customers and hence cannot benefit from tangible concepts (Baş, Çelik and Solak, 2017; Nuviala et al., 2012; Voon et al., 2014). The quality demands of the customers have increased the quality awareness of the service enterprises. The emergence of the need to measure service quality led to the development of measurement tools (Rodrigues et al., 2011). The scales that systematically reveal the variables that measure service quality are SERVQUAL and SERPERF. The first scale developed for the measurement of service quality is SERVQUAL. This scale reveals the quality level according to the difference between customer expectation and perception. Later, a scale called SERPERF was developed and this scale focused only on customer perception. Since SERVPERF assumes that the expectation is already in the mind of the customer, it focuses only on performance and finds it unnecessary to measure the expectation (Carrillat, Jaramillo and Mulki, 2007). Based on the works of Grönroos (1982)
and Bitner (1992), Rust and Oliver (1994) formed the basis of the three-component model. This model focuses on the relationship between service quality, service value, and customer satisfaction (Polyakova and Mirza, 2015). Grönroos (1983) suggested that customers’ perceptions of service quality can be divided into two dimensions: technical quality and functional quality. Technical quality focuses on the quality assessment of the basic service the customer receives from the seller. When this dimension is analyzed in the context of sports, it includes the quality of the sports competition that the sports consumer watches at the event. Functional quality includes the evaluation of the service delivery consisting of the arena, stadium, parking, announcers, cheerleader, staff working during sports events, and other auxiliary services (Kelley and Turley, 2001). All these models are based on the SERVQUAL model, despite the many criticisms (Theodorakis and Alexandris, 2008; Yildiz, 2009).

When the studies in the field of sports services are analyzed, it is seen that a lot of work has been done in the context of private sports organizations (Açak and Karataş, 2016; Baş et al., 2017; Özkan, 2013; Öztürk, 2014; Yerlisu Lapa and Baştaç, 2012; Yıldız, Onağ and Onağ, 2013; Yıldız and Tüfekçi, 2010; Yıldız, 2008), and public sports organizations (Barsbuga, 2013; Ergin et al., 2011; Saraç, 2018; Yüzgenç and Özgül, 2014), and public and private service sports organizations (Afthinos et al., 2001; Akgül, Sarol, and Gürbüz, 2009; Buğdaycı, 2018; Memiş and Ekenci, 2007; Nuviala et al., 2012; Üzüm et al., 2016). When the literature is examined, it is seen that the studies on public sports services are limited. Therefore, the aim of this study is to determine the relationship between the service quality perceptions and satisfaction levels of the customers who receive the public sports service.

2. Material and Methods

In this quantitative study, which aims to investigate the effect of service quality on customer satisfaction in sports facilities, a simple random sampling model was used (Gürbüz and Şahin, 2018). The study universe is public sports facilities located in Antalya, Isparta, and Burdur provinces, in Turkey. The questionnaire forms were applied to athletes who received sports services by obtaining the necessary permissions from public institution managers. First, 900 questionnaires were distributed to the athletes by the researchers, and then the number of returned forms was 813. In the examination conducted, 87 forms that were filled in incomplete or incorrectly were not evaluated. As a result, 769 scale forms were included in the study and analyzed.

As the data collection tool, the Qsport-14 scale developed by (Yıldız and Kara, 2012) was used to measure service quality, and the satisfaction scale developed by Cronin, Brady, and Hult (2000) was used to measure customer satisfaction. Qsport-14 scale consists of 14 items and 3 sub-dimensions: installations (5 items), staff (5 items), and programme (4 items). Customer satisfaction is one-dimensional and consists of 3 items. The scales are rated as 5-point Likert type (1 = Disagree, 5 = Agree). Statistically descriptive analysis (frequency and percentage), and internal consistency reliability
analyzes were performed. In this research, the percentage and frequency of the participants were calculated by analyzing the demographic characteristics of the participants. In order to determine the validity of the scales, exploratory factor analysis was done, and factor loads of the items were determined. Hierarchical regression was used to determine the impact of service quality on satisfaction, and ANCOVA was used to determine the effect of demographic variables on service quality. Structural equation modeling was used to determine the effect of service quality sub-dimensions on staff, installations, and programme on satisfaction separately. According to the perception of the participants, the service quality scale has a score between 14 and 140, and a satisfaction scale between 3 and 15. In addition, as a result of the normality test, it was shown that the data were normally distributed. Therefore, parametric analyzes were applied to the data.

3. Results and Discussion

| Table 1: Demographic Characteristics of Participants |
|-----------------|---------|--------|--------|
| Variables       | f       | %      | \(\bar{x}\) | sd    |
| Gender          |         |        |        |       |
| Male            | 309     | 40.2   | 1.60   | 0.49  |
| Female          | 460     | 59.8   |        |       |
| Age             |         |        |        |       |
| 20-24           | 225     | 29.3   |        |       |
| 25-29           | 257     | 33.4   | 2.08   | 0.81  |
| 30-34           | 287     | 37.3   |        |       |
| Marital Status  |         |        |        |       |
| Married         | 634     | 82.4   | 1.18   | 0.38  |
| Single          | 135     | 17.6   |        |       |
| Education       |         |        |        |       |
| Primary         | 89      | 11.6   |        |       |
| Secondary       | 293     | 38.1   | 2.46   | 0.79  |
| Undergraduate   | 332     | 43.2   |        |       |
| Graduate        | 55      | 7.2    |        |       |
| Income (monthly, TL) |     |        |        |       |
| 2000 and less   | 181     | 23.5   |        |       |
| 2000-3000       | 255     | 33.2   |        |       |
| 3001-4000       | 187     | 24.3   | 2.47   | 1.20  |
| 4001-5000       | 83      | 10.8   |        |       |
| 5001 and over   | 63      | 8.2    |        |       |
| Participating Time |       |        |        |       |
| 2 months and less | 147   | 19.1   |        |       |
| 3-6 months      | 183     | 23.8   |        |       |
| 6 months-1 year | 208     | 27     | 2.79   | 1.27  |
| 1-2 years       | 144     | 18.7   |        |       |
| 2 years and over | 87     | 11.3   |        |       |
| Sport Branches  |         |        |        |       |
| Artistic Gymnastics | 164   | 21.3   |        |       |
| Fitness         | 185     | 24.1   |        |       |
| Pilates         | 16      | 2.1    |        |       |
| Fencing         | 22      | 2.9    |        |       |
| Judo            | 42      | 5.5    | 6.87   | 5.36  |
| Volleyball      | 76      | 9.9    |        |       |
| Basketball      | 54      | 7      |        |       |
| Wrestling       | 74      | 9.6    |        |       |
| Taekwondo       | 116     | 15.1   |        |       |
| Ping-Pong       | 20      | 2.6    |        |       |
The majority of the participants (59.8%) are female athletes. The average age of the participants is 2.08±0.81; 82.4% of them are married, 43.2% are undergraduate graduates, 33.2% have a monthly income between 2000-3000 TL. Most of the participants are active athletes between 3-6 months (23%). The majority of them (24%) are engaged in fitness sports (Table 1).

Table 2: Validity and Reliability Analysis Results of Q-Sport-14

| Items          | Factor Loading | Variance Explained | Reliability |
|----------------|----------------|--------------------|-------------|
| Staff-3        | 0.751          |                    |             |
| Staff-2        | 0.724          |                    |             |
| Staff-4        | 0.707          | 19.943             | 0.769       |
| Staff-1        | 0.657          |                    |             |
| Staff-5        | 0.648          |                    |             |
| Installations-8| 0.766          |                    |             |
| Installations-9| 0.750          |                    |             |
| Installations-7| 0.748          | 19.213             | 0.777       |
| Installations-10| 0.667         |                    |             |
| Installations-6| 0.604          |                    |             |
| Programme-12   | 0.795          |                    |             |
| Programme-11   | 0.774          |                    |             |
| Programme-13   | 0.724          | 14.904             | 0.617       |
| Programme-14   | 0.715          |                    |             |
| Cumulative % of Variance Explained | 54.060 | 0.811 |
| KMO            | 0.853          |                    |             |
| Bartlett’s Sphericity Chi-Square | 3011.168 | 0.000 |
| Standard Deviation | 91 | |
| P              | 0.000          |                    |             |

Table 2 shows that the factor loads of the Q-Sport-14 scale ranged between 0.715 and 0.868. The factor loads of the satisfaction scale ranged from 0.844 to 0.895. The factor loads of both scales are high. The internal consistency coefficient of the Q-Sport-14 is 0.811, and the internal consistency coefficient of the satisfaction scale is 0.839. These values show that the reliability of both scales is high.

Table 3: Descriptive Analysis of Service Quality and Satisfaction Levels of Participants

| Service Quality | N   | \( \bar{x} \) | sd  |
|-----------------|-----|--------------|-----|
| Staff-1         | 769 | 4.57         | 0.56|
| Staff-2         | 769 | 4.75         | 0.46|
| Staff-3         | 769 | 4.70         | 0.49|
| Staff-4         | 769 | 4.48         | 0.67|
| Staff-5         | 769 | 4.56         | 0.56|
| Installations-6 | 769 | 4.46         | 0.61|
| Installations-7 | 769 | 4.39         | 0.71|
| Installations-8 | 769 | 4.05         | 0.83|
| Installations-9 | 769 | 4.15         | 0.81|
| Installations-10| 769 | 4.07         | 0.88|
| Programme-11    | 769 | 4.48         | 0.59|
| Programme-12    | 769 | 4.47         | 0.62|
Ilker Günel, Mehdi Duyan
THE EFFECT OF SERVICE QUALITY ON ATHLETE SATISFACTION:
AN EMPIRICAL RESULTS FROM SPORTS FACILITIES OF PUBLIC ORGANIZATIONS

Table 3 shows that customers’ perceptions of service quality ($\bar{x}$=61.63) and satisfaction levels ($\bar{x}$=13.19) are high.

| Programme-13 | 769 | 4.46 | 0.62 |
| Programme-14 | 769 | 4.05 | 1.02 |
| **Total**    | 769 | 61.64 | 5.20 |

| Satisfaction | 769 | 4.35 | 0.68 |
| Satisfaction-2 | 769 | 4.41 | 0.64 |
| Satisfaction-3 | 769 | 4.43 | 0.65 |
| **Total**    | 769 | 13.19 | 1.71 |

Table 4: Hierarchical Regression Analysis Results

| Independent variables | Model 1 | Model 2 |
|-----------------------|---------|---------|
|                       | Beta    | t       | p     | Beta    | t       | p     |
| Gender                | -0.009  | -0.259  | 0.796 | -0.024  | -0.849  | 0.396 |
| Age                   | -0.159  | -4.259  | **0.000** | -0.076  | -2.585  | **0.010** |
| Marital Status        | 0.052   | 1.439   | 0.151 | 0.036   | 1.28    | 0.201 |
| Education             | 0.067   | 1.745   | 0.081 | -0.025  | -0.828  | 0.408 |
| Income                | -0.004  | -0.095  | 0.924 | 0.028   | 0.913   | 0.361 |
| Participating Time    | 0.083   | 2.306   | **0.021** | 0.081   | 2.85    | **0.004** |
| Sport Branches        | 0.57    | 1.594   | 0.111 | 0.140   | 0.482   | 0.630 |
| Service Quality       | 0.620*  | 21.738  | 0.000 |

F $= 5.094$, R$^2 = 0.045$, Adjusted R$^2 = 0.036$

Table 5: ANCOVA Analysis Results

| Source             | Type III Sum of Squares | df | Mean Square | F   | p     | Partial Eta Squared |
|--------------------|-------------------------|----|-------------|-----|-------|---------------------|
| Corrected Model    | 1828.958*               | 11 | 166.269     | 6.658 | 0.000 | 0.088               |
| Intercept          | 1469685.356             | 1  | 1469685.36  | 58849.32 | 0.000 | 0.987               |
| Age                | 96.861                  | 2  | 48.431      | 1.939 | 0.145 | 0.005               |
| Education          | 266.642                 | 3  | 88.881      | 3.559 | 0.014*| 0.014               |
| Age * Education    | 710.495                 | 6  | 118.416     | 4.742 | 0.000**| 0.036               |
| Error              | 18905.091               | 757| 24.974      |
| Total              | 2942152                 | 769|              |
| Corrected Total    | 20734.049               | 768|              |

a R Squared = .088 (Adjusted R Squared = .075)

Table 4 above shows that age variable, which is one of the demographic variables, has a significant and negative effect on customer satisfaction, while the duration of participation in sports has a significant and positive effect. In addition, service quality has a significant positive and high impact on athlete’s satisfaction. The service quality variable explains 40% of the customer satisfaction variable.
Table 5 shows that age variable does not have a significant effect on service quality alone (p>0.05; p=0.145). In addition, it was observed that the educational status alone had a significant effect on service quality (p<0.05; p=0.014), and the age and educational status variables of the athletes had a significant effect (p<0.00; p=0.001). On the other hand, it was observed that the variables of age and education level had a 36% impact on service quality. Age and education status variables explain 75% of service quality (R²=0.75).

Table 6: Averages of Variables

| Age   | Education   | \( \bar{x} \) | sd  | N  |
|-------|-------------|--------------|-----|----|
| 20-24 | Primary     | 62.88        | 3.63| 16 |
|       | Secondary   | 62.32        | 4.84| 72 |
|       | Undergraduate | 63.58     | 4.45| 125|
|       | Graduate    | 60.42        | 5.90| 12 |
| 25-29 | Primary     | 58.00        | 5.21| 20 |
|       | Secondary   | 62.01        | 4.72| 100|
|       | Undergraduate | 61.13     | 5.48| 120|
|       | Graduate    | 62.71        | 5.01| 17 |
| 30-34 | Primary     | 59.26        | 5.36| 53 |
|       | Secondary   | 60.82        | 5.20| 121|
|       | Undergraduate | 60.45     | 5.32| 87 |
|       | Graduate    | 65.81        | 3.70| 26 |
| Total | Primary     | 59.63        | 5.26| 89 |
|       | Secondary   | 61.59        | 4.98| 293|
|       | Undergraduate | 61.87     | 5.23| 332|
|       | Graduate    | 63.67        | 5.07| 55 |

Table 6 shows that as a result of ANCOVA analysis considering the averages between the groups, it can be said that as the ages and educational status of the athletes increase, their satisfaction levels increase.

Table 7: Fit Index Values for the Structural Equation Model

| Fit indices | Perfect | Acceptable | Values of the model |
|-------------|---------|------------|---------------------|
| \( \chi^2/\text{sd} \) | \( \leq3 \) | \( \leq5 \) | 3.44 |
| RMSEA       | 0 < RMSEA ≤0.05 | 0.05 ≤ RMSEA ≤ 0.10 | 0.56 |
| SRMR        | 0 ≤ SRMR <0.05 | 0.05 ≤ SRMR ≤ 0.10 | 0.053 |
| GFI         | 0.95 ≤ GFI ≤ 1 | 0.90 ≤ GFI ≤ 0.95 | 0.94 |
| AGFI        | 0.90 ≤ AGFI ≤ 1 | 0.85 ≤ AGFI ≤ 0.90 | 0.92 |
| NFI         | 0.95 ≤ NFI ≤ 1 | 0.90 ≤ NFI ≤ 0.95 | 0.96 |

Source: Schumacker and Lomax, 1996; Schermelleh-Engel and Moosbrugger, 2003.

Table 7 shows that the fit index values for the structural equation model are among the acceptable fit index values for RMSEA. On the other hand, it shows that the other fit indices have excellent value (SRMR=0.053; GFI=0.94; AGFI=0.92; NFI=0.96).
THE EFFECT OF SERVICE QUALITY ON ATHLETE SATISFACTION: AN EMPIRICAL RESULTS FROM SPORTS FACILITIES OF PUBLIC ORGANIZATIONS

Figure 1: Structural Equation Model Analysis Among Variables

Table 8: Result of Standardized Parameter Estimates, T Values, and Hypotheses

| Hypotheses | Paths | Standardized Parameter Estimates | t values | R² | Result |
|------------|-------|---------------------------------|----------|----|--------|
| H₁         | (ST)→(SAT) | 0.28                           | 5.17     | 0.07 | Accept |
| H₂         | (INS)→(SAT) | 0.27                           | 6.11     | 0.07 | Accept |
| H₃         | (PRO)→(SAT) | 0.33                           | 6.06     | 0.10 | Accept |

Table 8 shows that all the hypotheses in this study are accepted.

4. Discussion of Findings

In this study, the effect of service quality on customer satisfaction was examined through the data obtained from the athletes who received training specific to different sports branches in the sports facilities of Youth and Sports Provincial Directorates and Municipalities, which are public institutions that provide sports services. Since this study is conducted on athletes with various sports branches, we argue that it will contribute to the literature in terms of being different from the researches conducted for a single sports branch in the literature.

The results of our study indicated that perception levels of service quality and satisfaction of the athletes participating in this study are high, and according to this result, the athletes are generally satisfied with the service provided in public sports facilities. The averages in our study were performed by considering the calculations made by Günel (2019) on the athletes trained in the Turkish Olympic Preparation Centers. In our study, it was determined that the Age variable, which is one of the demographic characteristics, had a significant negative effect on satisfaction, and the duration of participation in sports had a significant and positive effect. In other words, as the age of
athletes increases, their satisfaction levels decrease. Younger customers are more satisfied with the service provided, however, as the age increases, the satisfaction levels of the older people decrease over time due to the increase in the habit of the service provided. On the other hand, as customers’ participation time increases, their satisfaction levels increase. However, as the experiences of customers increase, their satisfaction levels increase depending on the increase in their skills for sports. Unlike our study, there are also studies in the literature where there is a significant difference between customer satisfaction and age variable (De Jager and Gbadamosi, 2010; Kim and Trail, 2011; Özsarı et al., 2017). On the other hand, there are also studies that are similar to our study. It was observed that satisfaction levels decreased as the age of athletes increased and there was a positive relationship between the duration of participation in sports and satisfaction levels (Yu et al., 2014). There was no relationship between customer satisfaction and the age variable (Dessemontet et al., 2014; Keskin, 2013), but there was a significant relationship between sports participation time and satisfaction levels (Aksoyulu, 2019; Sabırlı and Yetim, 2019). Age and education level variables have a positive effect on service quality at the same time. Both variables explain 75% of service quality perception. When the averages of the variables are taken into consideration, as the ages and education levels of the customers increase, their perceptions of service quality also increase. Similar studies were encountered in our study in terms of some findings. It was determined that increasing education level had a significant and positive effect on perceived service quality (Jain et al., 2011; Kömür, 2018; Wei and Ramalu, 2011). Unlike our study, no relation was found between the education variable and the perceptions of service quality (Demirel, 2013; Figen, 2005; Yüzgenç and Özgül, 2014). In the literature, there are studies that the quality of service has a positive effect on customer satisfaction (Tsuiji et al., 2007; Suh and Pedersen, 2010; Tsitskari et al., 2014; Thamnopoulos et al., 2012). In our study, together with the perceived service quality, the sub-scales were analyzed separately and their effects on the satisfaction of the athletes were examined. In addition, in the Structural Equation Modeling analysis, it has been determined that the perceptions of customers' service quality have a positive and positive effect on their satisfaction levels (p<0.001). Of these sub-dimensions, the biggest effect belongs to the program (β=.33) dimension. When the effects of other sub-dimensions on satisfaction were examined, “β=.28” value was observed in the staff sub-dimension, and “β=.27” value in installations sub-dimension.

5. Conclusion

The results of our research have shown that the quality of service offered in public sports facilities has a huge impact on customer satisfaction (β=.620). Therefore, precautions for high quality and increasing this phenomenon in sports facilities belonging to public institutions can be realized by taking into consideration the quality perceptions and expectations of the customers. This approach can not only ensure the promotion policy in the marketing mix but also increase the loyalty of the customers. Thus, the perception
of quality will create an effective advertisement with word of mouth communication. In our study, the effect the program sub-dimension of service quality with a higher value on customer satisfaction necessitates the further development of training programs implemented by coaches in public sports facilities. At the same time, it is important to make the programs scientific and to improve their knowledge and skills by giving in-service training to the coaches working in the institution. Thus, it can further increase the customers’ perception of quality and satisfaction levels.

About the Author(s)
Dr. İlker Günel is Assistant Professor in the Faculty of Sport Sciences at Uşak University, Turkey. His research area is sports management.
Dr. Mehdi Duyan is Assistant Professor in the Faculty of Sport Sciences at Inonu University, Turkey. His research area is sports management.

References
Açak, M. and Karataş, Ö. (2016). Investigation of the level of meeting the expectations of individuals attending sports centers in Malatya from sports and sports centers. Electronic Turkish Studies, 11(18), 215-226.
Aftinios, Y., Costa, G., Theodorakis, N. and Gargalianos, D. (2001, September). Assessing service quality in public and private fitness centers in Greece. In Proceedings of the Ninth Congress of the European Association for Sport Management (pp. 19-23).
Akgül, B. M., Sarol, H. and Gürbüz, B. (2009). Determination of service quality in recreational sport organizations. Gazi Journal of Physical Education and Sports Sciences, 14(3), 33-39.
Aksoylu, M. E. (2019). Evaluation of sports center members’ expectations and perceptions about service quality and customer satisfaction: Kozawos the club sports center example. Master Thesis, Health Sciences Institute, Department of Coaching Education, Sports Management Sports Science, Istanbul Gelişim University, İstanbul.
Barsbuga, Y. (2013). Measuring the quality of sporting service of municipalities from local government units (Konya example). Master Thesis, Institute of Health Sciences, Department of Sports Management Selcuk University, Konya.
Baş, M., Çelik, A. and Solak, N. (2017). A research on perceived service quality in sports enterprises. Gaziantep University Journal of Sports Sciences, 2(4), 1-11.
Buğdaycı, S. (2018). Examination of the Service Quality Perception in Private and Public Sports Centers (Konya Example). Turkish Journal of Sport and Exercise, 20(3), 220-223.
Carrillat, F. A., Jaramillo, F. and Mulki, J. P. (2007). The validity of the SERVQUAL and SERVPERF scales: A meta-analytic view of 17 years of research across five continents. International Journal of Service Industry Management, 18(5), 472-490.
Cronin, J. J., Brady, M. K. and Hult, G. T. M. (2000). Assessing the effects of quality, value and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76, 193–218.

De Jager, J. and Gbadamosi, G. (2010). Specific remedy for specific problem: Measuring service quality in South African higher education. *Higher Education*, 60, 251-267.

Demirel, H. (2013). *Rekreasyonel spor/fitnes programı sunan işletmelerde hizmet kalitesi*. Doktora Tezi, Sağlık Bilimleri Enstitüsü, Beden Eğitimi ve Spor Anabilim Dalı, Gazi Üniversitesi, Ankara.

Dessemontet, R. S., Morin, D. and Crocker, A. G. (2014). Exploring the relations between in-service training, prior contacts and teachers’ attitudes towards persons with intellectual disability. *International Journal of Disability Development and Education*, 61(1), 16-26.

Devecioğlu, S. (2005). Türkiye’de spor sektörü stratejilerinin geliştirilmesi. *Verimlilik Dergisi*, 2, 117-134.

Ergin, B. M., İmamoğlu, A.F., Tunç, T., Akpınar, S. and Çon, M. (2011). A study on perception and importance of the dimensions of service quality at university sports centers. *Journal of Sports and Performance Research*, 2(1), 41-49.

Figen, Ü. (2005). Measuring perceived service quality of higher education. *Eurasian Journal of Educational Research*, 21, 248-259.

Günel, İ. (2019). *Athletes of perceived service quality sports specific effects of achievement motivation: An application on Turkey education field athlete of Olympic preparation centers*. Ph.D., Institute of Health Sciences, Physical Education and Sports, Mugla Sıtkı Kocman University, Mugla.

Gürbüz, S. and Şahin, F. (2018). *Sosyal bilimlerde araştırma yöntemleri* (5.Basım), Ankara: Seçkin Yayıncılık.

Hu, H. H., Kandampully, J. and Juwaheer, T. D. (2009). Relationships and impacts of service quality, perceived value, customer satisfaction, and image: An empirical study. *The Service Industries Journal*, 29(2), 111-125.

İmamoğlu, A. F. (1998). Sports services in terms of total quality management approach. *Gazi Physical Education and Sports Science Journal*, 3(2), 51-62.

Jain, R., Sinha, G. and Sahney, S. (2011). Conceptualizing service quality in higher education. *Asian Journal on Quality*, 12(3), 296-314.

Javadein, S. R. S., Khanlari, A. and Estiri, M. (2008). Customer loyalty in the sport services industry: the role of service quality, customer satisfaction, commitment and trust. *Journal of Human Sciences*, 5(2), 1-19.

Kelley, S. W. and Turley, L. W. (2001). Consumer perceptions of service quality attributes at sporting events. *Journal of Business Research*, 54(2), 161-166.

Keskin, M. (2013). *Employees perceptions of service quality in hospitality industry: An application of accommodation enterprises in Sinop province*. Master Thesis, Institute of Social Sciences, Tourism Management, Adnan Menderes University, Aydın.
Kim, Y. K. and Trail, G. (2011). A conceptual framework for understanding relationships between sport consumers and sport organizations: A relationship quality approach. *Journal of Sport Management, 25*, 57-69.

Ko, Y. J. and Pastore, D. L. (2004). Current issues and conceptualizations of service quality in the recreation sport industry. *Sport Marketing Quarterly, 13*(3), 159-166.

Kömür, Z. (2018). The effect of quality of service offered by golf clubs on the customer satisfaction: The case of Belek destination. Master Thesis, Institute of Social Sciences, Tourism and Hospitality Management, Düzce University, Düzce.

Memiş, U. A. and Ekenci, G. (2007). Customer satisfaction in sports centers (A sample in Ankara). *Gazi Physical Education and Sports Science Journal, 12*(1), 33-48.

Nuviala, A., Grao-Cruces, A., Perez-Turpin, J.A. and Nuviala, R. (2012). Perceived service quality, perceived value and satisfaction in groups of users of sports organizations in Spain. *Kinesiology, 44*(1), 91-103.

Özkan, S .E. (2013). *Investigation of service quality expectations of fitness centers in Turkey*. Master Thesis, Institute of Social Sciences, Sports Management Master Program, Bahçeşehir University, İstanbul.

Özsarı, A., Fişekcioğlu, İ. B. and Altın, M. (2017). A research on the service quality perception of the Syrian refugees took part in the youth center activities. *Journal of Sport Sciences Researches, 2*(1), 31-44.

Öztürk, M. A. (2014). *Examination and comparison of recreational activities of private sports enterprises in İzmir and Manisa provinces in terms of service quality*. Ph.D. Thesis, Institute of Health Sciences, Department of Physical Education and Sports, Gazi University, Ankara.

Parasuraman, A., Zeithaml, V. A. and Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing, 64*(1), 12–40.

Polyakova, O. and Mirza, M. (2015). Perceived service quality models: Are they still relevant? *The Marketing Review, 15*(1), 59-82.

Pool, J. K., Dehghan, A., Jamkhaneh, H. B., Jaberi, A. and Sharifkhani, M. (2016). The effect of e-service quality on football fan satisfaction and fan loyalty toward the websites of their favorable football teams. *International Journal of E-Business Research, 12*(1), 43-57.

Rodrigues, L. L., Barkur, G., Varambally, K. V. M. and Motlagh, F. G. (2011). Comparison of SERVQUAL and SERVPERF metrics: An empirical study. *The TQM Journal, 23*(6), 629-643.

Sabırlı, T. N. and Yetim, A. A. (2019). Examination of the satisfaction levels of consumers benefiting from recreational sports services offered by municipalities according to their gender and duration of participation in activities. *GSI Journals Serie A: Advancements in Tourism, Recreation and Sport Sciences, 1 (2), 27-39.

Saraç, Y. (2018). *Investigation of factors affecting the satisfaction of individuals receiving service from public sports enterprises (Example of Beşiktaş Municipality)*. Master Thesis, Institute of Social Sciences, Business Administration, Gelisim University, İstanbul.
Schermelleh-Engel, K., Moosbrugger, H. and Müller, H. (2003). Evaluating the fit of structural equation models: tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8(2), 23-74.

Schumacker, R. E. and Lomax, R. G. (1996). *A beginner’s guide to structural equation modeling*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.

Suh, Y. I. and Pedersen, P. M. (2010). Participants' service quality perceptions of fantasy sports websites: The relationship between service quality, customer satisfaction, attitude, and actual usage. *Sport Marketing Quarterly*, 19(2), 78-87.

Thamnopoulos, Y., Tzetzis, G. and Laios, S. (2012). The Impact of Service Quality and Satisfaction on Customers’ Future Intentions, in the Sport Spectators' Context. *The Sport Journal*, 15(1), 1-14.

Theodorakis, N. D. and Alexandris, K. (2008). Can service quality predict spectators' behavioral intentions in professional soccer?. *Managing Leisure*, 13(3), 162-178.

Tsitskari, E., Antoniadis, C.H. and Costa G. (2014). Investigating the relationship among service quality, customer satisfaction and psychological commitment in Cyprian fitness centres, *Journal of Physical Education and Sport*, 14(4), 514-520.

Tsuji, Y., Bennet, G. and Zhang, J. (2007). Consumer satisfaction with an action sports event. *Sport Marketing Quarterly*, 16(4), 199-208.

Üzüm, H., Yeşildag, B., Karlı, Ü., Ünlü, H., Parlar, F., Çokpartal, C. and Tekin, N. (2016). Investigation of service quality perceptions of public and private sport centre customers. *Bolu Abant Izzet Baysal University Journal of Graduate School of Social Sciences*, 16(3), 167-180.

Voon, B. H., Lee, N. and Murray, D. (2014). Sports service quality for event venues: evidence from Malaysia. *Sport, Business and Management: An International Journal*, 4(2), 125-141.

Wei, C. C. and Ramalu, S. S. (2011). Students satisfaction towards the university: Does service quality matters?, *International Journal of Education*, 3(2), 1-15.

Yerlisu Lağça, T. and Baştaç, E. (2012). Examination of service quality evaluations of individuals who attend fitness centers in Antalya according to their age, gender and education. *Pamukkale Journal of Sport Sciences*, 3(1), 42-52.

Yıldız, S. M. (2008). Spor hizmetleri kalitesini değerlendirmede kullanılabilecek hizmet kalitesi modelleri ve ölçüm araçları. *Gazi Beden Eğitimi ve Spor Bilimleri Dergisi*, 13(3), 35-48.

Yıldız, S. M. (2009). Service quality models in participant sports services. *Ege Academic Review*, 9(4), 1213-1224.

Yıldız, S. M. and Kara, A. (2012). A re-examination and extension of measuring perceived quality in physical activity and sport centers: The Q-Sport-14 scale. *International Journal of Sports Marketing & Sponsorship*, 13(3), 189-208.

Yıldız, S. M. ve Tüfecki, Ö. (2010). Fitness merkezi müşterilerinin hizmet kalitesine yönelik beklenti ve algılanın değerlendirilmesi. *Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 13(24), 1-11.
Yıldız, S., Duyan, M., and Günel, İ. (2018). The effect of service quality on customer satisfaction: An empirical study on fitness centers’ customers. *Journal of Sport Sciences Researches, 3*(1), 1-8.

Yıldız, Y., Onağ, Z., and Onağ, A. O. (2013). Investigating of perceived service quality in sport and recreation services: A sample of fitness center. *International Refereed Journal of Humanities and Academic Sciences, 2*(3), 114-130.

Yu, H. S., Zhang, Z. Z., Kim, D. H., Chen, K. K., Henderson, C., Min, S. D. and Huang, H. (2014). Service quality, perceived value, customer satisfaction, and behavioral intention among fitness center members aged 60 years and over. *Social Behavior and Personality, 42*(5), 757-768.

Yüzgenç, A. A. and Ö zgül, S. A. (2014). Sports service quality in local governing bodies (A case of youth centers and family life youth centers). *Hacettepe Journal of Sport Sciences, 25*(2), 79-93.
