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# EVALUATION OF FITNESS CENTER SERVICE QUALITY THROUGH IMPORTANCE-PERFORMANCE ANALYSIS[i]

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**Abstract:**
Various methods are used to evaluate service quality. This study aimed to evaluate the quality of service in a fitness center through the importance-performance analysis (IPA) by focusing on the fitness center customers. The data were obtained from a commercial fitness center. The Service Quality Scale for Fitness Centers (SQS-FC) for fitness centers developed by Yildiz (2011) was used as a data collection tool. The study result showed that IPA is an effective method to evaluate the service quality of fitness centers. Evaluations were made regarding missing and weak service attributes through IPA.

**Keywords:** fitness center, service quality, importance-performance analysis

## 1. Introduction

In the marketing literature, researchers' interest in service quality, customer satisfaction, and customer loyalty continues to increase in recent years (Abreu, Antonialli, and Andrade, 2019). The reason for this is that service quality, customer satisfaction, and customer loyalty provide a competitive advantage to enterprises in an intensely competitive environment. Today, especially the concept of service quality is still a subject of research in various sectors (Anlatıcı and Biçer, 2019; Li, Canziani, and Barbieri, 2018). Specifically, in the sports sector, there are also researches for sports services (Cepeda-Carrion, Galvez-Ruiz, Sanchez-Oliver, and Grimaldi-Puyana, 2019; Schijns, Caniëls, and Conté, 2016; Serrano and Segado, 2015), sports tourism (Andam, Montazeri, Feizi, and Mehdizadeh, 2015), recreation (Çevik, Şimşek, and Yılmaz, 2017; Dhurup and Mokoena,

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2017) and sports & fitness centers (Albayrak, and Caber, 2014; Arias-Ramos, Serrano-Gomez, and Garcia-Garcia, 2016; Ayar, 2018; Bagci, 2017; Cepeda-Carrion and Cepeda-Carrion, 2018; Esentaş, Yıldız, and Güzel, 2020; Farias, Quaresma, and Vilaça-Alves, 2019; Zopiatis, Theocharous, Constanti, and Tjiapouras, 2017), and today specific researches for these fields is increasing rapidly.

Service quality is defined as "*the difference between the customer's expectation from the enterprise and actual product performance*" (Parasuraman, Zeithaml, and Berry, 1988). Many studies have been conducted in the past to conceptualize service quality (Grönroos, 1984). Especially since the early 1980s, various researches on service quality and measurement have been carried out, and the most striking among them is the successive studies of Parasuraman et al. (1985, 1988, 1994). These researchers have developed the SERVQUAL model to measure service quality and have suggested that this measurement instrument will measure service quality across the all service industry. Later, serious criticisms were made towards this measurement instrument. It is among the most serious criticisms that the five dimensions of SERVQUAL are inadequate in generalization (Carman, 1990), inadequate in representing some service sectors (Babakus and Boller, 1992; Buttle, 1996), and the nature and characteristics of the service sectors may differ from sector to sector (Babakus and Boller, 1992; Teas and DeCarlo, 2004; Yildiz, 2008). Based on these criticisms, researchers have developed special scales for sectors that have unique features in recent years. Since the sports (Angosto-Sánchez, López-Gullón, and Díaz-Suárez, 2016; Galvez-Ruiz et al, 2018; Sanchez, Ruiz, and Alba, 2013; Ramirez, Lorenzo, and Lopez de Subijana, 2017), recreation (Çevik and Şimşek, 2014; Mercanoğlu, Çevik and Şimşek, 2015), and fitness (Calesco, and Both, 2019; Filho, Campos, and Dantas, 2013; Polyakova and Mirza, 2016) enterprises in the service sector have special features, various special measurement instruments have been developed for these services (Yildiz, 2012). Moreover, along with the developed scales, evaluations regarding service quality were made by using various analysis methods such as gap model (Basfirinci and Mitra, 2015; Can, 2016; Priambodo and Bayudhirgantara, 2019), kano model (Leon-Quismondo, García-Unanue, and Burillo, 2020a; Yıldız, Polat, and Güzel, 2018), and importance-performance analysis (IPA) (Leon-Quismondo, Garcia-Unanue, and Burillo, 2020b; Yildiz, 2011). In the sports, recreation, and fitness sector, IPA has been the most interesting of these methods (Ku and Hsieh, 2020; Leon-Quismondo et al., 2020b; Martínez-Caro, Martínez-Caro, and Díaz-Suardíaz, 2014; Maksimovic et al., 2017; Ormanović et al., 2017; Vieira, Ferreira, and Joao, 2019; Yildiz, 2011; Zamorano-Solis and Garcia-Fernandez, 2018).

IPA is an effective method introduced by Martilla and James (1977) and later used in service sectors. By evaluating the current status of IPA service attributes to evaluate service quality, it determines which attribute is effective compared to others, and reveals the attributes of the service that are strong and need improvement. IPA is a simple and useful technique that examines the difference between "Performance (P)" and "Importance (I)" (Abalo, Varela, and Manzano, 2007). "Performance" means customer perception in the performance of a service by the enterprise. "Importance" is the

reflection of the relative value attributed to the service by the customer. In IPA, the "performance" points are subtracted from the "importance" points (P-I), thus providing information on whether the service offered is approved by the customer. The values obtained are loaded into the IPA matrix. This matrix is divided into 4 quadrants: Low priority, concentrate here, possible overkill, and keep up the good work. All evaluations are made according to this matrix (Yildiz, 2011).

Today, increasing competition conditions force enterprises that offer similar products to focus more on service quality and customer satisfaction in order to survive and profit. Along with the increase in the demand for fitness services, the increase of the enterprises producing these services also caused competition in this sector as in other sectors. It is a fact that today sports enterprises face the obligation to develop customer-oriented strategies in order to sustain their existence. While the enterprises that are successful in the competition survive, those who are unsuccessful have to withdraw from the market. This necessitates the development of effective strategies (Vieira and Ferreira, 2018) and continuous assessment of service quality by enterprises in various ways (Garcia-Fernandez et al., 2014; García Mayor, Vegara Ferri, López Sánchez, and Díaz Suárez, 2016). Hence, to contribute to the marketing literature and enterprise management, this study aimed to evaluate the quality of service in a fitness center through IPA by focusing on fitness center customers.

## 2. Method

### 2.1 Measurement Instrument

In this study, the "Service Quality Scale for Fitness Centers (SQS-FC)" developed by Yildiz (2011) was used as a data collection tool. Scale statements were measured in two sections with a five-point Likert-type scale: The first section attempted to determine the importance of each service attribute (1 = "Unimportant" and 5 = "Very important"). The second section attempted to determine the performance of the fitness center as perceived by the customers (1 = "Strongly disagree" and 5 = "Strongly agree").

### 2.2 Sample Size

The sample of the research consists of a private fitness center operating in Izmir province, Turkey. With the convenience sampling method, by giving importance to privacy, 275 scale was distributed to customers and a week was given for them to fill. The number of scales rotating at the end of one week was determined to be 242. Then, incomplete scales were eliminated and as a result 220 scales were eligible for analysis.

### 2.3 Statistical Analysis

Since the validity study of the scale was conducted in previous studies, only the reliability of the scale was examined in this study. Cronbach's alpha coefficient was calculated for reliability. In order to determine the service quality, differences between importance and

performance have been identified. A "paired sample t-test" was performed to find differences between variables.

## 3. Analysis and Results

### 3.1 Demographic Characteristics

Table 1 shows that male participants (60.5%) are more than women. Among the age group, participants between the ages of 19-25 (30.5%) are more than others. In the case of education, the highest participation belongs to university graduates (47.7%).

**Table 1:** Frequency and Percentage Values of Participants' Demographic Characteristics

| Variables | Categories | f | % |
|---|---|---|---|
| Gender | Male | 133 | 60.5 |
| | Female | 87 | 39.5 |
| Age | Less than 18 | 20 | 9.1 |
| | 19-25 | 67 | 30.5 |
| | 26-30 | 53 | 24.1 |
| | 31-44 | 63 | 28.6 |
| | More than 45 | 17 | 7.7 |
| Education | Middle | 22 | 10 |
| | Lycée | 93 | 42.3 |
| | University | 105 | 47.7 |

### 3.2 Reliability Results of the Scale

In the reliability analysis, the Cronbach's alpha value of the "performance" part of the SQS-FC was 0,892 and the Cronbach's Alpha value of the "importance" part was 0,753. All these values show that the scale is "highly reliable".

### 3.3 Importance – Performance Analysis Results

Table 2 shows the IPA results of the sub-dimensions and items of the SQS-FC scale. Customers perceived the "physical environment", "programme", and "personnel" dimensions of the enterprise at a high degree and the "supporting services" dimension at a moderate level. According to the results of the analysis, there is a statistically significant difference between the importance and performance in "supporting services" and "programme" dimensions. While the highest difference is in the "supporting services" dimension (X= -.48; $p<0.001$), the difference in the "programme" dimension is lower (X= -.14; $p<0.05$). There is no statistically significant difference between the importance and performance in the "personnel" dimension (X= -.10) and the "physical environment" dimension (X= -.05).

According to Table 2, the number of positive items is very few and the best item is the accessibility of the facility (X= .22). On the other hand, the highest difference is in the "consultation by specialists" item (X= -.77). Therefore, although some customers do not

need support services, it can be said that some customers need some support for their specific needs (eg, child care, first aid).

**Table 2:** Importance – Performance Analysis Scores

| Scale Items | Performance (P) | Importance (I) | P – I | Paired t-value | P |
|---|---|---|---|---|---|
| | Mean | Mean | | | |
| **Physical Environment** | **4.11** | **4.16** | **-.05** | **-1.264** | **.208** |
| 1. Professional looking facility | 3.95 | 4.10 | -.15 | -2.967 | .003** |
| 2. Modern and diversified equipment | 4.02 | 4.33 | -.30 | -1.622 | .106 |
| 3. Cleanliness and airiness | 4.04 | 4.18 | -.13 | -2.324 | .021*** |
| 4. Temperature and illumination | 4.06 | 4.13 | -.06 | -.995 | .321 |
| 5. Locker room and showers | 4.00 | 4.12 | -.11 | -1.722 | .086 |
| 6. Accessibility of facility | 4.39 | 4.16 | .22 | 4.254 | .000* |
| 7. Membership fee | 4.40 | 4.20 | .19 | 3.324 | .001** |
| 8. Security | 4.01 | 4.10 | -.08 | -1.329 | .185 |
| **Programme** | **3.91** | **4.06** | **-.14** | **-2.422** | **.016***** |
| 9. Program diversity | 3.95 | 4.00 | -.05 | -.805 | .422 |
| 10. Rich program content | 3.83 | 4.21 | -.38 | -1.946 | .053 |
| 11. Appropriate timing of programs | 3.99 | 4.04 | -.05 | -.768 | .444 |
| 12. Timely announcements | 3.89 | 4.03 | -.14 | -1.909 | .058 |
| 13. Number of participant groups in the program | 3.91 | 4.02 | -.10 | -1.492 | .137 |
| **Personnel** | **4.08** | **4.18** | **-.10** | **-1.763** | **.079** |
| 14. Personnel's knowledge and skills | 3.90 | 4.36 | -.45 | -2.334 | .021*** |
| 15. Personnel's presentable and neat appearance | 4.10 | 4.18 | -.07 | -1.126 | .261 |
| 16. Personnel's ethical and kind behaviour | 4.20 | 4.20 | .00 | -.080 | .937 |
| 17. Personnel's responsiveness to suggestions and complaints | 4.10 | 4.19 | -.09 | -1.403 | .162 |
| 18. Privacy of membership information | 4.16 | 4.25 | -.09 | -.489 | .625 |
| 19. Providing members with feedback about their development | 4.05 | 4.04 | .01 | .219 | .827 |
| 20. Good motivation for members | 4.04 | 4.05 | -.01 | -.204 | .838 |
| **Supporting Services** | **2.98** | **3.47** | **-.48** | **-8.011** | **.000*** |
| 21. Food and drink services | 3.78 | 3.95 | -.17 | -2.169 | .031*** |
| 22. First aid for ailment | 3.61 | 4.15 | -.54 | -5.656 | .000* |
| 23. Approriate background music | 3.80 | 4.17 | -.37 | -3.576 | .000* |
| 24. Consultation by specialists (doctors, nutritionists) | 2.00 | 2.78 | -.77 | -7.410 | .000* |
| 25. Child care | 1.72 | 2.26 | -.54 | -5.145 | .000* |

*p<0.001, ** p<0.01, *** p<0.05

Figure 1 shows the position of the physical environment, programme, personnel, and supporting services in the matrix. Accordingly, all dimensions are located in the "keep

up the good work" quadrant. However, it is also seen that the supporting services dimension is close to the "concentrate here" quadrant.

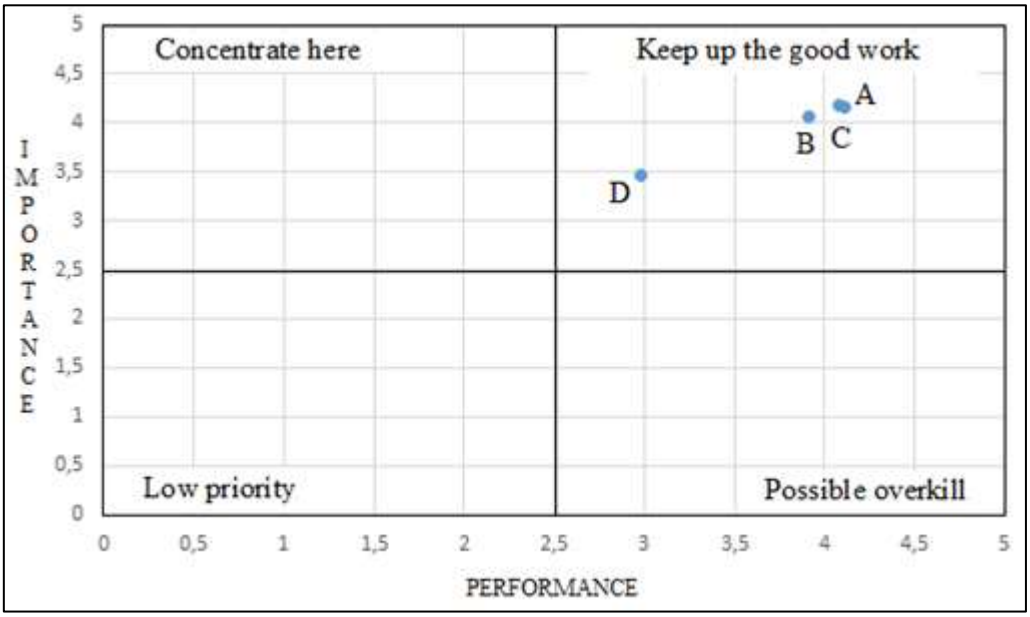


**Figure 1:** IPA matrix of service dimensions
(A=Physical Environment, B=Programme, C=Personnel, D=Supporting Services)

## 4. Conclusion

Measurement and evaluation of service quality, attracting more customers, and retaining existing customers are increasingly important in the fitness industry (Foroughi, Iranmanesh, Gholipour, and Hyun, 2019; Nacar, Şimşek, and Devecioğlu, 2019). While service quality measurement for fitness centers is more subject to academic research (Yıldız, Polat, Sönmezoğlu, and Çokpartal, 2016), studies based on service quality evaluations are few (Filho, Campos, and Dantas, 2015). Therefore, in this study, the quality of service in a fitness center was evaluated through IPA, with a focus on fitness center customers to contribute to the literature and give an idea to enterprise management.

Four dimensions and 25 items were used to evaluate the quality of service in the fitness center (Yildiz, 2011). Thus, it has been determined how the customers perceive the service qualities of the enterprises with their perceptions of performance regarding the qualities of the service offered by the enterprise. The customers perceived the performance of the enterprise's physical environment, programme, and personnel dimensions at a high level, and the performance of the supporting services dimension at a moderate level. The IPA matrix showed that all dimensions are in the "keep up the good work" quadrant. However, it was also observed that the supporting services dimension was close to the "concentrate here" quadrant. Therefore, although some customers do not need supporting services, it can be said that some customers need some support for their special needs (such as consultation by specialists, child care, first aid).

Won Yong and Kyoungho (2018) states that various factors play a role in choosing a fitness center for customers. Physical features, personnel, and program are among these. Freitas and Lacerda (2019) emphasize that physical features and personnel are valued by customers in a fitness center. Franco and Simões (2017) underlined that the staff providing fitness services should be well trained. In summary, there is a consensus in the literature that the attributes of the fitness center are considered important by the customers. On the other hand, Inan and Ozel (2019) stated that customer complaints analysis should be done in fitness centers and the deficiencies should be eliminated. Briefly, researches in the literature underline that the development of enterprises can only be achieved by ensuring customer satisfaction (Miragaia and Constantino, 2019; Ndayisenga, 2019; Pradeep, Vadakepat, and Rajasenan, 2020; Sevilmiş and Şirin, 2019; Suharjo, Fahmi, and Hannan, 2020).

To sum up, this study conducted an empirical analysis of the customers of a private fitness center and provided an understanding of service quality level through IPA. It also showed that the IPA method can be used successfully in fitness centers. Enterprises can identify missing and weaknesses using such methods and can develop more effective marketing strategies by developing missing and weaknesses. Thus, fitness centers can increase customer satisfaction and loyalty and increase their profitability. These efforts will make it easier for enterprises to survive in an intensely competitive environment. As a result, it may be suggested that fitness enterprises make service quality evaluations periodically and use the IPA method in evaluations.

### 4.1 Limitations and Future Research

This study is not generalizable as it was conducted in a private fitness center and on a limited sample. Therefore, the results of this study can be compared with future research results. Future research can be done in the public sector, as in the private sector. In addition, research can be conducted in various sub-sectors of sports.

### About the Author(s)

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