

REKREASYONEL SPOR H ZMETLER KAL TE ÖLÇE - 38' N TÜRKÇE VERS YONU GEÇERL K VE GÜVEN RL K ÇALI MASI¹

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ÖZET

Bu çalı manın amacı Rekreatif Spor Hizmetleri Kalite Ölçe inin (The Scale of Service Quality in Recreational Sport: SSQRS) Türkçe uyarlanmasının geçerli ini ve güvenilirli ini test etmektir. Çalı maya 131 bayan (% 43,1), 173 erkek (% 56,9) toplam 304 rekreatif spor hizmeti alan gönüllü katılımcılar katılmış tır.

"Rekreatif Spor Hizmetleri Kalite Ölçe i" bireylerin rekreatif spor hizmetine katılımında kaliteyi ölçen 49 madde ve (a) program çe itlili i, (b) çalı ma zamanı, (c) bilgi, (d) mü teri-çalı an etkile imi, (e) mü teriler arası etkile im, (f) fiziksel de i im, (g) birle im de eri, (h) sosyalle me, (i) ambiyans, (j) tasarım ve (k) malzemeden olu an 11 alt boyuttan olu maktadır. Katılımcılar ölçekte yer alan maddeleri "Hiç Katılmıyorum (1)'den, Tamamen Katılıyorum (7) ekinde 7'li Likert tipi ölçek üzerinde de erlendirmektedir.

SSQRS'in faktör yapısının belirlenmesi için yapılan Temel Bile enler (Principle Component) Analizi varimax dönü türmesi sonuçlarına göre SSQRS-38'in Türkçe versiyonu 10 faktörlü yapıyı desteklemekte ve 38 madde 304 katılımcı için ölçe in % 73'ünü açıklamaktadır. Ölçe in güvenilirli ini test etmek için hesaplanan Cronbach Alpha iç tutarlılık katsayısı 304 rekreatif egzersiz katılımcısı için .72 (çalı ma zamanı) ile .91 (tasarım) arasında bulunmu tur. Elde edilen bulgular do rultusunda, SSQRS-38 ölçe inin Türk rekreatif spor hizmeti alan katılımcıların hizmet kalitesini de erlendirmeleri için geçerli ve güvenilir oldu unu söylemek mümkündür.

Anahtar Kelimeler: Hizmet Kalitesi, rekreatif, spor, geçerlik, güvenilirlik

RELIABILITY AND VALIDITY ANALYSIS OF TURKISH VERSION OF THE SCALE OF SERVICE QUALITY IN RECREATIONAL SPORT-38

ABSTRACT

The purpose of the study was to test the reliability and validity of the "The Scale of Service Quality in Recreational Sport" (SSQRS -38) for Turkish recreational sports participants. 173 male (56.9%) and 131 female (43.1%) exercise participants voluntarily participated in this study. The Scale of Service Quality in Recreational Sport -38 is a 49-item self-report measure of recreational sport service quality and consists of the following eleven subscales: (a) range of programs, (b) operating time, (c) information, (d) client-employee interaction, (e) inter-client interaction, (f) physical change, (g) valance, (h) sociability, (i) ambiance, (j) design ve (k) equipment. Participants were asked to rate each item on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Principle Component Factor Analysis with Varimax Rotation for testing factor structure of Turkish version of SSQRS-38 supported 10 factor structures for 304 exercise participants and 38 items explains 73 % of variance. The internal consistency (Cronbach Alpha) value for 304 exercise participants were ranged from .72 (operating time) to .91 (design). It can be concluded that the SSQRS-38 is a reliable and valid instrument to assess quality in recreational sport services for Turkish participants.

Key Words: Service quality, recreation, sport, reliability, validity

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INTRODUCTION

Over the two decades we have witnessed significant changes in business environment. During this process, quality is one of the important issues and given priority in businesses by management to protect their growth or condition in competitive business environment. Therefore, quality improvement, the highly desired in today's intensely competitive market, while becoming a target, in order to improve the work performance quality management is considered as the primary starting point (8, 21) and it is frequently expressed that, total quality management/total service quality philosophy is an important element of being successful in competitive business environment.

Many researchers continuously were emphasized the importance of quality improvement for gaining competitive advantage and maintaining it (18). Because quality management has been recognized as a driving force for total efficiency, flexibility, and improve job performance (8). It is sufficient evidence to demonstrate the accuracy of this situation, many studies were supported that quality and its all aspects have provided a significant competitive advantage in business environment (5).

Therefore, interest on service quality has increasingly continued since the 1980's (15). Because the society's economic advancement leads cultural maturation, an increase in knowledge and social demands for quality service (12). Today, service quality is one of the most important issues in the management and marketing field, while the word quality management has become a part of daily language (16), and increased attention to the service quality has been motivated many researchers to conduct research on the quality. As a result, according to many researchers service quality is not only an important factor in ensuring customer satisfaction (2), but also an important criterion to demonstrate the competitiveness of service organizations (12).

The reasons why quality was becoming an important point in the service sector are as follows: (a) higher market share (20), (b) Increased profitability (1), (c) customer loyalty (25), (d) competitive price (20) and (e) increase the probability of purchase (25). Quality becomes important terms for customer behavior, especially in service sectors in which production and consumption occur simultaneously. Therefore a great number of studies on service quality and customer satisfaction were conducted in different sectors by using same tools in service management literature. A similar trend was seen in sports organizations (17).

Today, sport organizations are emerged as a new field in competitive market. Since the success of the sport organizations vary in a saturated market is depending on quality of services and degree of satisfying customers. However, service quality in the sports industry was not an important research topic until late 1980s (3). Up to the present, service quality researches focused on the determination of the quality dimensions in fitness services, sportive recreative services and sports audience services (12).

As Papadimitriou and Kostantinos (17) indicated that there has been significantly increasing interest in service quality and customer satisfaction in service management literature. Especially, over the last two decades, not only the service quality but also the customer satisfaction has started to conceptualised and examined by researchers from the field of sport management and marketing (22). The reason is that, the increasing number of sport and fitness centres in many countries over the last decade and the competition among them has been continuing to increase (7).

Managers or service providers' tries to find the way of satisfying or meeting the expectations of their customers because of the increasing competition between the sport and fitness organizations. Increasement in the number of sport and fitness centres allows customers to choose the organizations that provide them more benefit. Most of the service providers who see this trend placed their focus on

offering quality services in order to stay cost-effective and gaining advantage over the other organizations (17).

In this situation, customer satisfaction and service quality has received enormous attention from the sport management and marketing researchers (10, 11, 17, 22, 24). Theodorakis et al. (22) conducted to examine relationship between service quality and customer satisfaction and developed a scale titled as SPORTSERV in spectator sports. Greenwell et al. (6) examined service quality factors in the spectator sports with respect to two demographic variables (age and frequency of following the games).

Rushton (19) was explored customers' expectations and perceptions of service delivery in fitness centers. Kelley and Turley (10) carried out a study to examine the perceptions of service quality of fans at sporting events. Fan et al. (4) conducted a study to find out the significance of five dimensions of service quality and customer satisfaction. Wakefield et al. (23) studied stadium quality and executed seven factor structures. Howat et al (9) worked on the four service quality factors "basic services (facility comfort, physical materials), personnel quality (information, service delivery), general facility (cleaning, safe parking area) and secondary services (child care, food and beverage) as "determined.

Ko and Pastore (13) developed an approach which was consisted of four basic and eleven sub-dimensions to measure sport service quality. These four dimensions was formed "program quality, interaction quality, output quality, and the physical environment quality". Lam et al. (14) conducted a study and developed an instrument to measure service quality of health and fitness clubs. This instrument has six dimensions as "staff, program, locker room, physical facility, workout facility and child care".

As it can be seen from literature, several researchers have conducted studies that examine the level of service quality and its dimensions for sport and fitness centers. However, in the last decade in Turkey, it can be said that, although an increase the

number of modern and large sports facilities can easily be realized in private sector and especially municipalities in public sector, research on sport service quality has not reached enough attention by sport management researchers and sports center managers.

The purpose of the study was to test the reliability and validity of the "The Scale of Service Quality in Recreational Sport" (SSQRS -38) for Turkish recreational sports participants and to help researchers and managers in this area who study on service quality and managers who work in a sport centers.

METHODS and PROCEDURE

Participants

The participants of this study constituted of 173 male members (56.9%) and 131 female members (43.1%) who were randomly selected from eight different recreational sports centers in Ankara. Large scale recreational sports centers were selected according to their size, programs, number of staff, and number of members. Members in the sample were from different income, age and profession groups.

Data Collection Instrument

The Scale of Service Quality in Recreational Sport (SSQRS) was developed by Ko and Pastore (13), was used to collect data on members' perceptions of the service quality offered by eight different recreational sports centers in Ankara. Service Quality in Recreational Sport Scale consists of 11 dimensions and 49 items. The dimensions of the scale titled as; (a) range of programs (4 items), (b) operating time (3 items), (c) information (5 items), (d) client-employee interaction (7 items), (e) inter-client interaction (4 items), (f) physical change (5 items), (g) valance (4 items), (h) sociability (4 items), (i) ambience (5 items), (j) design (5 items), and (k) equipment (3 items). Participants were asked to rate each item on a 7-point Likert scale ranging from 1 (least important) to 7 (most important).

Data Collection Procedure

Translation Procedure: For the translation of the instrument from English to Turkish following procedure was carried out:

3 specialists works in physical education and sport, whose English proficiency level was high, translated SSQRS into Turkish. The researchers collected the three translations and argued the results with the translators to decide upon the most suitable draft. Then this drafted instrument was given to two academicians and an American citizen whose Turkish proficiency level was high to translate the Turkish version of SSQRS back into English. The researcher compared the SSQRS that was translated into Turkish and back again into English, to the original version of the scale, to determine if any differences be situated between original version and translated version. The purpose following this procedure was to make certain that the wording of items in Turkish would be equivalent to the original meaning of items in English.

Application: The SSQRS-T was administrated to recreational sports centers' members in their activity settings especially before the exercise period. Participants who returned incomplete inventories were eliminated from the study. In overall, the data were analyzed for the 304 out of the 390 inventories that were returned from the members.

Data Analysis Procedure

In this study statistical program for social sciences (SPSS 16.0) was used for validity and reliability analyzes of Turkish version of "The Scale of Service Quality in Recreational Sport (SSQRS)-38".

Principal component analysis with varimax rotation was applied to test the factor structure and construct validity of the scale for Turkish participants. In addition, Kaiser-Meyer-Olkin and Bartlett's test was performed for determining whether data were Analysis supported 10 factors structure for the Turkish form of the scale. Name of these factors and number of items in Turkish form were as follows: (a) range of programs 3 items, (b) operating time 2 items, (c) information 4 items, (d) client-

appropriate for statistical analysis. KMO statistic was 0.939. This means sample size was sufficient for this study. Because the higher rate of KMO statistics means better for factor analysis of the data set. Bartlett test results test the suitability of different types of statistical analysis. So it can be said that the data is suitable for factor analysis. According to the total variance, scale was consisted of 38-items and 10 factors and these 10 factors were measured 73% of the desired feature. To test the reliability of sub dimensions of scales' internal consistency Cronbach's alpha values were used.

RESULTS

The participants of this study constituted of 173 male members (56.9%) and 131 female members (43.1%). 74 participants were the age of 25 or under, 101 participants were between the ages of 26-35, 87 participants were between the ages of 36-45, 33 participants were between the ages of 46-55 and 9 participants were between the ages of 56 and above. 35,2% of the respondents were using the facility for 3-4 days in a week, 32,6% of them were using the facility 1- 2 days in a week.

Validity Analysis

In order to test factor structure of the scale for Turkish participants and construct validity of scale Principal Component Analysis was applied with varimax rotation.

According to the results of factor analysis, the scale supports 10-factors structure and 38 items explains 73% of the scale for 304 participants. In social sciences, it is considered that at least 60% of the total variance explained is sufficient.

According to the results of the factor analysis of the original scale which contains 49 items, 11 items (4, 7, 12, 22, 23, 29, 37, 38, 40, 41 and 46) were eliminated from the Turkish version of the scale because of factor loadings below .40.

employee interaction 6 items, (e) inter-client interaction 2 items (f) physical change 5 items, (g) valance 4 items (h) sociability 3 items (i) design 5 items, (j) equipment 4 items. Factor loadings of items were presented in Table 1.

Table 1: Factor Loadings of Items of Service Quality in Recreational Sport Scale (SSQRS -38)

	Factors									
	Client-employee interaction	Desing	Physical change	Information	Sociability	Equipment	Range of programs	Valance	Inter-client interaction	Operating time
I17	0,754									
I15	0,737									
I16	0,706									
I18	0,674									
I14	0,654									
I19	0,584									
I44		0,687								
I43		0,652								
I42		0,609								
I45		0,603								
I34		0,543								
I27			0,689							
I26			0,687							
I24			0,671							
I25			0,655							
I28			0,606							
I9				0,792						
I8				0,767						
I10				0,664						
I11				0,453						
I36					0,717					
I35					0,713					
I33					0,559					
I47						0,695				
I49						0,691				
I48						0,619				
I39						0,465				
I1							0,761			
I2							0,749			
I3							0,605			
I31								0,666		
I32								0,558		
I13								0,548		
I30								0,447		
I21									0,794	
I20									0,734	
I5										0,803
I6										0,726

Factor loads accepted .40 and over.

Factor loadings of items are over .45 a good measure for item selection. But, in practice, limit value for screening the items can be reduced at .30. In this study

explanatory factor analysis factor load was accepted .40. Factor loadings of items in this study were ranged from .447 to .803.

Reliability Analysis

Reliability refers to the accuracy and precision of a measurement procedure and it answers the question “how well does the instrument measure what is intended to measure. For this purpose, to test the

reliability levels of the sub-dimensions of the scale internal consistency of Cronbach's alpha values was examined.

The Cronbach Alpha values for the Turkish version of the (SSQRS)-38” was given in Table 2.

Table 2: Internal Consistency of Dimensions

Sub Dimensions	Item Numbers	Reliability coefficient
Client-employee interaction	6	0,90
Desing	5	0,91
Physical change	5	0,85
Information	4	0,84
Sociability	3	0,87
Equipment	4	0,84
Range of programs	3	0,86
Valance	4	0,79
Inter-client interaction	2	0,78
Operating time	2	0,72
Total	38	

The reliability coefficient takes values between 0.00 and 1.00. Value of reliability coefficient close to 1.00 is expected. In researchs, it is expected that reliability coefficient value is over the .70. Cronbach's alpha value for 304 recreational sport service participants was found between .72 (operating time) and .91 (design). Reliability coefficients is providing the information for internal consistency. In this study internal consistency of 10 sub-dimensions was over the acceptable level.

DISCUSSION

The purpose of the study was to investigate the reliability and validity of the “The Scale of Service Quality in Recreational Sport” (SSQRS -38) for Turkish recreational sports participants.

Principal component analysis with varimax rotation was used to test the factor structure of scale for Turkish participants and construct validity of scale. Variance explanation percentage was considered to determine the factors. According to the factor analysis results 11 items were extracted from Turkish version of the scale, because of factor loadings below the .40. Items that were eliminated from 6 sub-

dimensions are as follows; item 4 (range of programs), item 7 (operating time), item 12 (information), item 22 and item 23 (inter-client interaction), item 29 (valance), item 37, item 38, item 40 and item 41 (ambiance), item 46 (equipment). Validity analysis of the scale was repeated after removal of these eleven items. During this process, the reliability of the scale and description percentages of factors was taken into consideration. Names and item numbers of 10 factors of Turkish version of scale are as follows; (a) range of programs (3 items), (b) operating time (2 items), (c) information (4 items), (d) client-employee interaction (6 items), (e) inter-client interaction (2 items), (f) physical change (5 items), (g) valance (4 items), (h) sociability (3 items) (i) design (5 items), (j) equipment (4 items).

Turkish version of “The Scale of Service Quality in Recreational Sport” (SSQRS -38) was supported 10 factor structure and explained 73% of the scale for 304 participants according to the Principal Component Analysis. In general scale supports 10 factor structures, but for dimensions it was revealed different factor structure. The obtained data were put forward that “The Scale of Service Quality in Recreational Sport” was reliable.

To test the internal consistency of the scale Cronbach Alpha value was determined.

consistency of the scale was examined, 38 items in 10 sub-dimensions of scale were above acceptable level. Factor coefficients of the scale was ranged between .72 to .91. These values were indicated that scale has high reliability. Coefficient values were obtained from the scale show that scale acceptance level was high. These values which were obtained from Turkish exercise participants were also high acceptance level.

The model of "The Scale of Service Quality in Recreational Sport" (SSQRS -38) could be offered some suggestions for recreational sport service centers and employees who is working in administrative position.

Model first provides a basis for various organizations in recreational sport service sector and to conduct researches to develop increasing the general satisfaction level of services. The dimensions of recreational sport service models' basic concepts can be used to clear and specify the managerial strategies of sport service organizations. For example, department of recreational sports activities management

When Cronbach's Alpha coefficient of internal

of a university can analyze the general concepts of their services or evaluate whole process and results for maksimizing the costumers' needs. In addition to these, special concepts which were composed in the sub-dimensions can be used to improve administration daily tactics and used to improve design of administrative works. Customers' perspective and performance evaluation results can be used to develop service quality in future and can be used to allocate basis for budget and resources. In general, the proposed service quality model can provided managers to evaluate strategic concepts and to support daily operations of sport organizations.

As a result, according to the results of analyzes the Turkish version of the "The Scale of Service Quality in Recreational Sport" (T-SSQRS -38)" is a valid and reliable scale to measure perceived service quality of the Turkish participants. Validity and reliability is an ongoing process, so to reach the final results, it is needed to research on different groups and the more participants. This study was to identify factors that produce service quality in recreational sport services, and will work to help people who are studying in this field and serve as a basis to evaluate the quality perceived by customers.

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